

添付資料 5：供与機材および機材調達関連資料

添付資料 5-1：現有機材リスト（GCT FSD 校 2016 年）

Sr.#	現有器材名	保有台数	仕様	製造元	タイプ	調達機関	振付年度	現状	備考
1)	METAL SHOP (30x50) square ft.								
1)-4	DRILLING MACHINE	1					1970		
1)-12	POWER HACKSAW	1					1970		
1)-13	SHEAR CUTTER MACHINE	1					1970		
1)-14	Bench Vices	20					1970		
1)-15	Buff Grinding machine	1					1970		
1)-16	SHEET Rolling machine	1					1970		
1)-17	Spot Welding machine	1					1970		
1)-18	PRESS	1					1970		
1)-19	WORK BENCHES	13					1970		
2)	MATERIAL TESTING LAB (30x40) square ft.								
2)-8 a	BRINELL hardness tester	1	3000 kg capacity		electronic power		1971	out of order	need to be changed due to inaccuracy
2)-8 b	ROCKWELL hardness tester	1	150 kg capacity		manual		1970	out of order	need to be changed due to inaccuracy
3)	ADVANCE MACHINE SHOP (30x40) square ft.								
3)-1	Universal milling machine	4	Length Stroke 40 inches	PMTF	k-400220, k-400221, k-44219, k-400297	PMTF	1978	Medium	Very Old machine and not sufficient as per the strength of the students
3)-8	Vertical milling machine	3	K-400001 Length Stroke 40 inches	PMTF	k-4-B	PMTF	1978	Medium	Very Old machine and not sufficient as per the strength of the students
6)	WELDING SHOP (30x70) square ft.								
6)-1	Electric Arc Welding Transformer	2	volt 220 amp 35-300	miller	air cooled	USA	2002	ok	insufficient as per strength of the students
6)-2	Welding Rectifiers	5	volt 30-60 amp 20-300	miller	air cooled	USA	2002	ok	insufficient as per strength of the students
6)-6	SPOT WELDING MACHINE (WATER COOLED)	1	15 x 15 mm maximum weld	ahung china	water cooled	china	1973	out of order	repair and maintenance
7)	FOUNDRY SHOP (30x50) square ft.								
7)-1	Pedestal grinding machine	1							Does not exit
7)-2	Core baking oven	1	L×W×H =26×21×24 inch				1970	out of order	wear & tear
7)-3	Crucible pit furnace (Gas fired)	1	1.5 hp	JC PEACOCK			1970	working	Old & outdated
7)-6	Air Compressor	1	0-30 kg/cm ²	BLITZ COMPRESSOR			1970	out of order	repairable
7)-7	Permeability METER	1	standard orifice rapid reading				1975	out of order	Old & outdated
7)-8	Sand compression testing machine	1					1975	Not working	repairable
7)-14	MOLDING BOXES	20					1973	working	Old & outdated
8)	BASIC MACHINE SHOP (30x70) square ft.								
8)-1	LATHE MACHINES	18	4 feet length	PECO, lahore & Nawab Brothers	BL-115, General purpose lathe	PECO, lahore & Nawab Brothers	1982	Rough	Not accurate
8)-2	GRINDER MACHINES	4	16 inches, 8 inches wheel	Bright Lahore, KEF/ELEDELL	PSD-5, PSD-10	Bright Lahore, KEF/ELEDELL	1975	Satisfactory	
8)-3	DRILL MACHINES	2	6,10 inches Spindle	Standard drill Nawab bros	Bench drill column drill	Standard drill Nawab bros	1975	Normal	
8)-4	WORKING TABLES	2	5x3 feet	Pakistani	Local Wood	Pakistani	1972	Normal	
8)-5	VICES	3	4 inch jaw	Fukung, china		China	1975	Normal	
8)-6	SHAPER MACHINES	3	1 feet stroke length	Endmann, Denmark	s-h-450	Endmann, Denmark	1986	Ok	
8)-8	POWER HACKSAW	1	12 inch blade,	Saw mill			1986	ok	
10)	METROLOGY LAB (30x60) square ft.								
10)-6	VERNIER HEIGHT GAUGE	3							
10)-13	HOLE GAUGE / 3 POINT MICROMETER	2							
10)-14	Cast-Iron Surface Plate	1							These Equipments are very less as per the strength of the students
10)-15	Granite Surface Plate	1							
10)-16	SPIRIT LEVEL	1							
11)	HYDRAULIC LAB (30x30) square ft.								
11)-1	Fluid friction in pipes with hydraulic	1		EDIBON			2004	OK	Existing is Insufficient as per the strength of the students
11)-2	Hydraulic bench	1	0.5 KW	EDIBON			1982	OK	Existing is Insufficient as per the strength of the students
11)-3	Orifice Discharge apparatus	1					1982	OK	Existing is Insufficient as per the strength of the students
11)-4	Energy Losses in Bends apparatus	1		TECH EQUIPMENT			1982	OK	Existing is Insufficient as per the strength of the students
11)-5	Centrifugal Pump apparatus	1	10 hp	KSB	MOTOR POWERED		1972	OK	Existing is Insufficient as per the strength of the students
11)-6	Reciprocating Pump apparatus	1	0.5 hp 1480 rpm	SENCO	MOTOR POWERED		1972	OK	Existing is Insufficient as per the strength of the students
11)-7	Pelton Turbine	1	1 hp 1290 rpm head 200'	GILKES			1982	OK	Existing is Insufficient as per the strength of the students
11)-8	Reaction Turbine	1	2 hp head 67' 30 GPM	GILKES			1982	OK	Existing is Insufficient as per the strength of the students
12)	HEAT ENGINE LAB (30x30) square ft.								
12)-1	Barometer	1		Budsburg	Manual	England	1975	Not in working condition	Not in working condition
12)-2	Thermometers Thermocouples(Different Ranges)	1	K-Type	Local	Manual	Pakistan	1990	Not in working condition	Not in working condition
12)-3	Water Tube Boiler (Model)	1							
12)-4	Steam Turbine (Model)	1	375 Watt	GreenBat	Steam	England	1974	ok	
12)-5	Working models of Petrol Engine	1	Two stroke	Huhm	Manual	Germany	1972	Ok	Insufficient for the students
12)-6	Working models of Diesel Engine	1	Four Stroke		Manual		1972	ok	Insufficient for the students
12)-7	Air Compressor	1	Two Stage	Csake Japan	Electric		1986	ok	Ok
12)-8	Locomotive Boiler Model	1	Model	Engg Design Model	England	Water tube	1972	ok	Insufficient for the students
12)-9	Automatic Gas Fired super heater	1		G.Cussions			1990		

添付資料 5-2：調達機材リスト

LIST OF MACHINERY , GCT FAISALABAD MECHANICAL DEPTT.

JICA Portion			
Sr.#.	Name of Machinery	Qty	Example/Model I (referenced Japanese Specification)
1	METAL SHOP (30x58) square ft		
1-1)	PILLAR DRILLING MACHINE with standard accessories	1	Main unit:ESD-460 (Enshu Industrial Co., Ltd) Vise: BETA-A100 (Nabeya) Table:SB-2 (Sakac) SPECIFICATION •Drilling capacity: 4~23mm •Incl. drill chuck and drill chuck arbor
1-2)	ELECTRIC HAND DRILL	2	DF030DWSP (Makita)
1-3)	TWIST DRILL SET	5	SET25 (Mitsubishi Material)
1-4)	SURFACE PLATE (Cast Iron)	2	FC-5050 (CHUO PRECISION INDUSTRIAL CO., LTD)
1-5)	VERNIER HEIGHT GAUGE:-	4	VHK-30 ((Niigata Seiki Co., Ltd) SPECIFICATION •range (mm) = 0-300. •Resolution (mm) = 0.02.
1-6)	ANGLE PLATE:-	2	RA104 Obishi Keiki Seisakusho Co, Ltd) SPECIFICATION •175×150×150×19
1-7)	SURFACE GAUGE:-	2	SURFACE GAUGE Stock No: 58 (Obishi Keiki Seisakusho Co, Ltd) SPECIFICATION •PG104 300mm (300×85×66×27)
1-8)	TRAMMEL POINTS	10	STEEL BEAM TRAMMEL Stock No: 901 (Obishi Keiki Seisakusho Co, Ltd) SPECIFICATION •300mm 400×27×6
1-9)	TIN SNIP (FLAT)	15	HSLD0033 (Morimitsu)
1-10)	TIN SNIP (CURVED)	5	HSLD-0127 (Morimitsu)
1-13)	Bench Vices	24	Made of Cast Iron, Hardended Jaws, Gun metal Nut, Square Threaded spindle.900419 (NABEYA Co.,Ltd) SPECIFICATION •Jaw Width - 152mm •Maximum Opening - 200mm •Jaw Depth - 90mm •Weight - 31 kgs Width of Jaws = 125 mm Jaws Opening = 150 mm
2	MATERIAL TESTING LAB (30x40) square ft		
2-1)	Ultrasonic flaw detector with standard accessories complete in all respects.	1	A&D Company, Limited AD-3213EX 1. Display : LCD, 4 inches 2. Gain : 0-100 dB 3. Velocity : 100-19.999m/sec 4.Measuring Range : 2.5-10.000mm 5. Damping : 25/50/100/400Ω

2-3)	Magnetic particle testing equipment with standard accessories	1	<p>(Eishin Kagaku Co., Ltd.)</p> <ul style="list-style-type: none"> • Body: Handymagna A-1 • BlackLight: S-35LC • Fluorescent Magnetic Powder: SY-7500 • Dispersing Agent: Blendex-B • Corrosion Inhibitor: Resmine • Sedimentation Measure of Piriform <p>SPECIFICATION</p> <p>Yoke Method</p> <ul style="list-style-type: none"> • Rated Current: 40A(50Hz) • Total Magnetic Flux: 0.8mWb(50Hz) • Inter Magnetic Pole: 140mm • Cross section Size of Magnetic Pole: 25×25 • Removable Universal Yoke • Single phase, 230V, 50Hz <p>BlackLight</p> <ul style="list-style-type: none"> • Fluorescent Magnetic Powder • Dispersing Agent • Corrosion Inhibitor • Sedimentation Measure of Piriform • Single phase, 230V, 50Hz
2-4)	Heat treatment Furnace with standard accessories	1	<p>Nabertherm GmbH</p> <p>N 7/H</p> <ol style="list-style-type: none"> 1. Type : Tabletop for annealing/hardening of metals 2. Insulation : By refractory bricks 3. Chamber capacity : 7 liters 4. Max. temperature : 1,280°C 5. Power consumption : 3.0 kw 6. Outer dimensions : 720(w) x 640 (D) x 510 (H)mm
2-5)	Specimen Mounting Press with standard accessories	1	<p>XQ-2B (ASLI) Specimen dia: Ø22×15mm, Ø30×15mm, Ø45×18mm; Heater: 650W, 220V; Dimensions: 34 × 27 × 40 cm; Temperature adjusting range: 100-180 °C</p>
2-6)	Metallurgical Microscope with standard accessories	1	<p>Meiji Techo Co., Ltd.</p> <p>EMZ-13/PKL-2</p> <ol style="list-style-type: none"> 1. Type : Stereo microscope 2. Zoom ratio : 1:7 3. Zoom range : 1 to 7 4. Eyepiece : x10(2 pcs.) x 30 (2 pcs.) 5. Interpupillary distance : 54-75 mm 6. Power requirement : AC220V, 50Hz, Single phase 7. Supplementary objective lens : 1 pc. x 2.0
2-7)	Maintenance and Repair Tool kit	1	<p>TSX950 (TONE CO., LTD)</p>
2-8)	UNIVERSAL HARDNESS TESTING MACHINE FOR BRINELL, ROCKWELL AND VICKERS HARDNESS TEST	1	<p>Test area (height & Depth): 379 mm x 150 mm; Dimensions: 600 x 1100 x 400 mm; Power Supply: 3 A single phase, 240/120V switchable</p>
3	ADVANCE MACHINE SHOP (30x40) square ft		
3-2)	Pillar Drill machine with standard accessories	1	<p>Main unit:ESD-460 (Enshu Industrial Co., Ltd)</p> <p>Visc: BETA-A100 (Nabeya)</p> <p>Table:SB-2 (Sakae)</p> <p>SPECIFICATION</p> <ul style="list-style-type: none"> • Drilling capacity: 4-23mm • Incl. drill chuck and drill chuck arbor
3-4)	Power hacksaw with standard accessories	1	<p>Hydraulic Power Hacksaw, variable cutting. pressure, quick return of frame, with coolant supply attachment</p> <ul style="list-style-type: none"> • Capacity round bar (mm) = 250-280. • Capacity square bar (mm) = 230 x 230. • Capacity round bar miter 45 degree (mm) = 190. • Strokes per mint = 40, 65, 80, 120. • Blade size (mm) = 450x38x2. • Motor power = 1.25-1.5 Kw. • Adjustable material stand (mm) = 450 -650.
3-5)	Surface grinding machine with standard accessories	1	<p>Working surface (LxW) = 200x550 to 210x560</p> <p>Maximum Traverse of table (LxC) = 680x240</p> <p>Spindle speed (inverter control) = 0-2500 r.p.m.</p> <p>Dimension of Electro Magnetic chuck = 500x200x70</p> <p>Least input increment 0.1µm.</p> <p>Mass of work piece = 200-250 kg</p> <p>Spindle motor 3-Ph/440V/50Hz = 2 to 2.25 Kw</p> <p>Display = TFT color LCD Screen(Touch Panel)</p> <p>vertical and cross Pulse generator hand wheel in manual mode.</p>
3-6)	Universal tool & cutter grinding machine with standard accessories	1	<p>Swing: 280mm; Max. job weight for cylindrical grinding: 15 kg; Longitudinal Travel of Table: 510 mm</p>

3-7)	Vertical differential type Gear Hobbing machine with standard accessories	1	Module = maximum 02 Diameter of gear = 30-160 Number of teeth = 12-480 Axial travel of Hob = 160 mm. Maximum size of Hob = 52x50 mm. Hob spindle speed = 200-1800 r.p.m. Electric source= AC, 440V,3-Phase,50Hz. (3-3.5 Kw.) Change gears set with storage cabinet,Hob Arbor, hydraulic tail stock. Machine light, Operation amanual. Approximate weight of machine = 1100-1250 kg
3-9)	Involute spur gear cutter set, 02 module, 20 degree pressure angle (Set of 08	1	INGC MP2 (No. 1~8)
3-11)	Involute spur gear cutter set, 2.5 module, 20 degree pressure angle (Set of 08	1	INGC MP2.5 (No. 1~8)
3-12)	Lathe Machine with standard accessories	2	Pakistan Machine Tool Factory (Ovt) LTD. C4C 1. Distance between center : 1000mm 2. Swing over Bed : 365 mm 3. Spindle bore : 35 mm 4. Width of Bed : 254 mm 5. Electric source : AC 400 V±5%, 3-phase, 50HZ 6. Legs are provided for main unit Included Optional Accessories: Face Plate with Holes / Traversing Stop / Rear Tool Post / Quick Change Tool Post / Taper Turning Attachment / Revolving Centre / Drill Chuck
3-17)	Machine Vise for milling machine	5	5 inch for milling machine
4	CNC LAB (30x20) square ft		
4-1)	CNC Vertical Machining Center 3-Axis with standard Accessories.	1	α-D14MiB (FANUC) X-axis-travel= 500 mm or more Y-axis-travel= 400 mm or more Z-axis-travel= 330 mm or more Table top to spindle nose= 150-480 mm or wider Table working space= X630 x Y400 mm or more Max. spindle speed= 10,000 rpm or more Rapid traverse rate= 48,000 mm/min (X,Y,Z) or more Tool shank= BT30 or more Tool storage capacity of turret= 14 tools or more Max. tool diameter of turret= 80 mm or more Control unit=To be produced by own company Max. simultaneously controlled axes= 4 axes or more Display of control unit= color, 10.4 inch or more Least input increment= 0.001mm or less Step-down transformer= To be equipped (If necessary) Coolant unit with chip flush by spot gun= To be equipped (Tank capacity should be 100 L or more) Automatic oil lubricating system= To be equipped LED illumination= To be equipped Top cover= To be equipped Fast data server= To be equipped (Flush memory should be 4 GB or more)
4-2)	CNC Turning Center 2 Axis with standard Accessories.	1	TX-75 (Kitamura) X,Z Axis Stroke (φ160mm x 210mm) more X,Z Axis Motor Power(0.75kw x 1.2kw) Spindle speed Max6,000rpm(Step-less) Spindle Motor Power 3.7/5.5kw more Chuck size φ80mm more (Chuck Work),φ25mm more (Bar Work) Spindle Roundness 0.5μless Turret Tool 8 Position more,Index time 0.5s less,Tool size □16mm more Least input increment 0.0001mm Cnc control FANUC series Machine light,Coolant Unit(250W more),High Pressure Coolant Unit(400W 1.0Mpa more) With Standard accessories
4-3)	Air Compressor	1	
4-4)	Air Drier	1	
4-5)	Compressed air Storage Tank	1	ST230A-100 (MEIJI AIR COMPRESSOR MFG.CO.,LTD)
4-6)	G.I Pipe Line Fitting system	1	
4-11)	Tooling for CNC Vertical Machining Center	1	To refer attached tooling sheet
5	AUTO CAD/ CAD CAM LAB		
5-1)	Computer	50	Computers Core i-7 4th Generation 4GB DDR3-1333 RAM, 500GB SATA HARD DISC, DVD/RW SUPER DRIVE, X4500 HD GRAPHICS, ETHERNET 10/ 100/1000, DELL KEY BOARD, OPTICAL MOUSE, DELL 20 INCH LED MONITOR, WINDOWS 7 PROFESSIONAL TOWER.

5-2)	SERVER SYSTEM	1	DELL COMPUTER SERVER,DELL POWER EDGE T110 TOWER SERVER 2.4 GH,4GB RAM, 1000 GB HARD DISC, DVD/RW.
5-3)	SOFT WARE AUTO DESK INVENTER, FEATURE CAM	50	Already DEMANDED AT 5-4 AND 5-5
5-4)	Auto CAD Softwar	50	Auto CAD Software 2012 or Latest
5-5)	Multi Media Projector	1	NEC MULTI MEDIA PROJECTOR MODEL M-300X (3000 LUMENS XGA)
5-6)	Computer Tables	50	COMMERCIAL VENIER, 3X2X2.5 FT
5-7)	Computer Chairs	50	STANDARD CHAIR WITH 05 COASTER WHEELS
6	WELDING SHOP (30x70) square ft		
6-1)	Electric Arc Welding Transformer with standard accessories	1	YK-305AG1YFA (Panasonic Welding Systes Co., Ltd) Power rated input= 15 Kw ore more Rated Utilization = 30% Out put current = 60 - 300 A or more Rated no load voltage =80V or more Power Supply=AC240V,50Hz,Single Phase Welding rod dia=2.6-6.0mm Safety device=Buily-in electric shock preventive function Welding cable 10 meter long, Welding Torch,Complete in all respects and operation manual
6-2)	Welding Rectifiers with standard accessories	1	YD-300DS1 Power rated input= 11 Kw or more Rated Utilization = 40% DC out put current = 300 A or more Rated no load voltage =75V or more Power Supply=AC440V,50Hz,Three Phase Welding rod dia=1.6-6.0mm Safety device=Buily-in electric shock preventive function Welding cable 10 meter long, Welding Torch,Complete in all respects and operation manual
6-3)	TIG WELDING UNIT with standard accessories	1	YC-300WX4T00 (Panasonic Welding Systes Co., Ltd) Power rated input= 12 KVA or more Rated Utilization = 40% DC out put current = 4 - 300A or more AC out put current =10-300A or more DC output voltage=Approx.15 - 20V AC output voltage=Approx.15-20V Rated no load voltage =.60V or more Power Supply=AC440V,50Hz,Three Phase Welding cable 10 meter long, Welding Torch,Complete in all respects and operation manual
6-4)	MIG WELDING UNIT with standard accessories	1	YD-350KR2 (Panasonic Welding Systes Co., Ltd) Power rated input= 16.2 Kw Rated Utilization = 50% Out put Current = 60-350 Amp. Rated no load voltage =16-36 V Current Control = Crater On and Off Welding cable 10 meter long, Welding Torch,Complete in all respects and operation manual
6-5)	PLAZMA ARC CUTTING MACHINE with standard accessories	1	Rated input = 5.3 Kw. Rated Utilization = 40% out put Current = 35 amp. Coo;ing Method = Air Cooling Out Put Control Method = Invertor Type Cutting Torch = Curved Type With Tip for short. Along with suitable air compressor and cable, complete in all respects and operational manual.
6-6)	SPOT WELDING MACHINE (WATER COOLED) with standard accessories	1	YR-150SA2 15KVA (Panasonic Welding Systes Co., Ltd) Input Capacity: 16 kVA; Duty Cycle %: 20; Dimension: 820×380×1160mm
7	FOUNDRY SHOP (30x50) square ft		
7-2)	Core baking oven with standard accessories	1	FP311 (Yamato Scientific Co., Ltd)
7-8)	SMALL ELECTRIC FURNACE	1	TL 5Y (Thermal) Small Electric Furnace Crucible Type (20 KG Capacity) with Transformer & other Accessories

7-9)	MOISTURE TELLER with standard accessories	1	NC-CBT-1 (Nakayama Co., Ltd) Complete with 3-deep drying pan: Temp: 100-375F;220 volt, 50 Hz AC
7-12)	THERMO COUPLE PYRO METER	2	
7-13)	SAND RIDDLING MACHINE with standard accessories	1	KC-77 (Kansaikiki Seisakusyo)
7-14)	SAND MIXER	1	NSB-2 (Nakagawa Chuki Co.,Ltd)
9	METROLOGY LAB (30x60) square ft		
9-1)	VERNIER CALIPER DIGITAL	20	DS-150 (Niigata Seiki Co., Ltd) SPECIFICATION • Measuring Range = 0-150 mm. • Resolution = 0.01mm
9-2)	Outside Micrometer DIGITAL	20	MCD130-25 (Niigata Seiki Co., Ltd)
9-3)	THREAD MICROMETER	20	(INSIZE) 3581-25AC, 7381-T15 SPECIFICATION • Digital
9-4)	DEPTH GAUGE	10	CDS-15 (Niigata Seiki Co., Ltd) SPECIFICATION • Measuring Range = 150 mm. • Resolution = 0.05mm
9-5)	VERNIER HEIGHT GAUGE	7	VIK-30 (Niigata Seiki Co., Ltd) SPECIFICATION • range (mm) = 0-300. • Resolution (mm) = 0.02.
9-6)	DIAL INDICATOR WITH MEGNATIC STAND	5	(Niigata Seiki Co., Ltd) • Main unit: DI-3058 • Magnetic stand: SB-6B SPECIFICATION • Measuring range= 0-30 mm • Resolution = 0.01 mm • Repeatability = 5µm
9-9)	ELECTRICAL COMPARATORS with standard accessories	2	(Niigata Seiki Co., Ltd) • Main unit: Digital Indicator DEI-WKS2 • Steel Comparator Stand: SC-80C
9-10)	GAUGE BLOCK SET	5	GBS0-103 (Niigata Seiki Co., Ltd) SPECIFICATION 1 Block = 1.005 49 blocks = 1.01-1.49 (Step 0.01) 49 blocks = 0.5-24.5 (step 0.5) 4 Blocks = 25-100 (Step 25) GRADE ZERO
9-11)	SINE BAR	5	NH102 (Obishi Keiki Seisakusho Co., Ltd)
9-13)	Surface Plate(Cast-Iron)	1	FC-5050 (CHUO PRECISION INDUSTRIAL CO., LTD)
9-14)	Surface Plate(Granite)	1	ST-5050J1 (CHUO PRECISION INDUSTRIAL CO., LTD)
9-15)	SPIRIT LEVEL	4	AD301 (Obishi Keiki Seisakusho Co., Ltd) SPECIFICATION • Resolution: 0.02mm/m • Over all length: 300mm
10	HYDRAULIC LAB (30x30) square ft		
10-5)	Centrifugal Pump apparatus	1	Armfield/UK F1-27-A
10-20)	Pressure Switch (Model)	1	13205M (MEGACHEM CO., LTD)
10-21)	Piston Accumulator (Model)	1	13206M (MEGACHEM CO., LTD)
10-22)	Gear Pump (Transparent Model)	1	310 (MEGACHEM CO., LTD)
10-23)	Vane Pump (Model)	1	300 (MEGACHEM CO., LTD)
10-24)	Dead Weight Master gage Calibrator	1	Armfield/UK F1-11
11	HEAT ENGINE LAB (30x30) square ft		

11-1)	Barometer	1	BN-PG40A-10K-8A (NIHONSEIKI CO.,LTD)
11-2)	Thermometers Thermocouples(Different Ranges)	1	• Analog thermometer: CAT-1 (Custom) • K-Thermo-couple Thermometer: AD-5602A (A&D)
11-3)	Steam boiler experiment apparatus (Model)	1	Steam engine with light D18 (WileSCO)
11-4)	Steam Turbine (Model)	1	Steam turbine (WileSCO)
11-5)	Working models of Petrol Engine	1	VB/Italy VB7200
11-6)	Working models of Diesel Engine	1	VB/Italy VB7000
13	General Item		
13-1)	Generator	1	DGM600MK-PD (Sindaiwa Kogyo) SPECIFICATION • 50kVA (3 phase) • Tank: 420L
13-2)	Multi Media Projector	2	MODEL: NP-M300X Display Technology 0.63 LCD w/MLA Light Output (Lumens) 3000 normal / Eco = approx. 80% of normal mode Resolution Native XGA 1024 x 768 Maximum UXGA 1600 x 1200 Contrast Ratio (up to) 2000:1 Lamp Type 180W AC/ 145W eco Lamp Life (up to) 5000 hours normal / 6000 hours eco Screen Size (diagonal) 25 to 300 in. / 0.64 to 7.6m Throw Ratio 1.3 to 2.2 Projection Distance 1.9 to 45.3 ft./ 0.6 to 13.8m Projector Angle 6.5 to 6.8°tele/10.7 to 11.4°wide Lens Zoom 1.7 Focus Manual Manual F number, fnumber F=1.7 to 2.1, f=17.5 to 29mm Keystone Correction Automatic or manual +/- 30°
13-3)	Generator for Stand by	1	25KVA Gasoline engine Sindawa kogyo DMG250MK

LIST OF MACHINERY , GCT FAISALABAD MECHANICAL DEPTT.

TEVTA PORTION			
Sr.#.	Name of Machinery	Qty	Example/ Model
1 METAL SHOP			
1-11	POWER HACKSAW with standard accessories	1	Hydraulic Power Hacksaw, variable cutting. pressure, quick return of frame, with coolant supply attachment <ul style="list-style-type: none"> • Capacity round bar (mm) = 250-280. • Capacity square bar (mm) = 230 x 230. • Capacity round bar miter 45 degree (mm) = 190. • Strokes per mint = 40, 65, 80, 120. • Blade size (mm) = 450x38x2. • Motor power = 1.25-1.5 Kw. • Adjustable material stand (mm) = 450 -650.
1-12	SHEARING MACHINE (Pedestal Type)	1	Blade made of high speed steel hardened and ground <ul style="list-style-type: none"> • Working length (mm) =2000- 2060. • Maximum thickness (mm) = 3 • Front gauge (mm) = 1000-1030 • Back gauge (mm) = 600 • Motor power 3ph = 3.5-4Kw • Stroke per mint = 20 or Greater
1-15	WORK BENCHES	5	
1-16	sheet Bending machine	1	
1-17	Pedestal Grinding Machine	1	
2 METAL TESTING LAB			
2-2	Specimen Cutoff Machine with standard accessories	1	size: 250mm dia; Arbor size: 32mm dia; Rotational Speed: 3450 rpm;
2-9	Torsion testing machine with standard accessories	1	Type= Table top type Torsion Capability = 30 N-m. size of test sample = 750mm Measurement parameter = torsion, angle of twist, display = Digital
2-10	fatigue testing machine with standard accessories	1	Type = Table top type Motor speed = 2800 r.p.m. Neck Dia. = 4 mm Safety device is to be provided Display = Digital, for revolution count and applied force.
2-11	Universal testing Machine with standard accessories	1	
2-12	Sample polishing Machine	1	
2-13	Pedestal Grinding Machine	1	Ball bearing mounted spindle, suitable for tool grinding, eye protection shield plastic or glass. <ul style="list-style-type: none"> • Grinding wheel Al2O3.No.A40 and A60. (mm) = 300 x50 x25. • Distance between grinding wheel (mm) = 400- 500. • Spindle speed (rpm) = 1400. • Motor power 3ph = 1.5 kw. • Suitable pedestal MS sheet = 14 swg.
3 ADVANCE MACHINE SHOP			
3-1	Universal milling machine with standard accessories	1	Table size = 1000x200 to 1000x250 mm Swivel of work table = ± 45° Longitudinal travel of work table = 600-650 mm. Cross travel of work table = 190-200 mm Vertical travel of work table = 300 -325 mm Spindle taper = ISO 30 or ISO 40. Spindle speed = 40-1800 r.p.m. Number of Longitudinal and Cross feeds = 6 or more Main motor rating (3-Phase/440V/50Hz) = 2.25-3 Kw. Alongwith Independent feed motor, coolant pump motor,Standard Milling arbor, Stub Arbor,Arbor support, Dividing head, Vertical Head, Slottting head, Rotary Table, Machine vice,Maintenance tool kit and operational
3-3	Pedestal tool grinder	0	Ball bearing mounted spindle, suitable for tool grinding, eye protection shield plastic or glass. <ul style="list-style-type: none"> • Grinding wheel Al2O3.No.A40 and A60. (mm) = 300 x50 x25. • Distance between grinding wheel (mm) = 400- 500. • Spindle speed (rpm) = 1400. • Motor power 3ph = 1.5 kw. • Suitable pedestal MS sheet = 14 swg.
3-8	Vertical milling machine with standard accessories	1	Longitudinal travel (x-axis) = 600-675 mm Cross Travel (Y-axis) = 290-310 mm Knee travel (Z-axis) = 390-405 mm Spindle taper = No. 30 Ram Travel = 400-450 mm Quill Travel = 125 mm Spindle motor (3-phase/440V/50Hz) = 3 HP or 2.25 Kw. Spindle speeds(16) = 70-4530 r.p.m. Over Arm Swivel = 360° Head tilt front to back = 0°-40° Head tilt left to right = 0°-90° With Milling chuck, rolllets, draw-in, bolt, Machine vice, X Y Z axis power feed and operational manual
3-10	Involute spur gear cutter set, 2-25 module, 20 degree pressure angle (Set of 08 Cutters)	1	Involute spur gear cutter set, 2-25 module, 20 degree pressure angle (Set of 08 Cutters)made of HSS hardened and Tempered
3-15	Tooling for Lathe	1	
3-16	Tooling for milling machine	1	

4	CNC LAB		
4-8	Horizontal Metal Cutting Band Saw	1	
4-12	Tooling for CNC Turning Center	1	
6	WELDING SHOP		
6-7	SEAM WELDING MACHINE with standard	1	Load: 100 kVA; Welding Current: 19,000 Amp
6-8	Electric Pre heating Furnace with standard accessories	1	maximum Temperature = 1280°C Connected Load (3 Phase/440V/50 Hz) = 15 Kw Three sides heating system, Parallel swing doors, Pesestal stand, operation manual, complete in all respects.
6-9	Pedesta grinding machine	1	Ball bearing mounted spindle, suitable for tool grinding, eye protection shield plastic or glass. • Grinding wheel Al2O3.No.A40 and A60. (mm) = 300 x50 x25. • Distance between grinding wheel (mm) = 400- 500. • Spindle speed (rpm) = 1400. • Motor power 3ph = 1.5 kw. • Suitable pedestal MS sheet = 14 swg.
6-10	Oxy Acetylene Gas mani fold system (10 work stations)	1	Gas = Oxygen and acetylene Type = parallel (Suitable for 10 work stations)
6-11	Oxygen Gas regulators	10	
6-12	Acetylene Gas Regulators	10	
6-13	Gas welding torcehes	10	Gas= Acetylene and Oxygen Nozzles = No. 200 to No. 500 Welding Capacity = 1.5 mm to 5.0 mm.
6-14	Gas cutting torches	2	Gas= Oxygen and Acetylene Number of Nozzles = 03 Cutting cpacity = 50 mm
7	FOUNDRY SHOP		
7-1	Pedestal grinding machine	0	Ball bearing mounted spindle, suitable for tool grinding, eye protection shield plastic or glass. • Grinding wheel Al2O3.No.A40 and A60. (mm) = 300 x50 x25. • Distance between grinding wheel (mm) = 400- 500. • Spindle speed (rpm) = 1400. • Motor power 3ph = 1.5 kw. • Suitable pedestal MS sheet = 14 swg.
7-3	Air Compressor with standard accessories	0	Max Pressure: 11 bar; Nominal Power: 2.2kW; Piston displacement: 290 l/min; LxWxH: 162x68x122cm
7-4	Permeability METER with standard accessories	1	Machine size: 25 x 24 x 30 cm; Electronic type, 220 volt
7-5	MOLD HARDNESS TESTING MACHINE with standard accessories	1	Dial Indicator: 0-100 No
7-6	GRAIN FINENESS TESTOR with standard accessories	1	Mesh Diameter: 18" with Mesh No 20, 16, 12, 10;
7-7	SQUEEZING AND JOLTING MACHINE	1	Jolt squeeze load: 150 kg; Squeezing Pressure: 7000 kg; Table size: 625x380mm
7-10	Universal Sand Strength Testing Machine.	1	
7-11	OPTICAL PYRO METER	2	
7-15	co-2 MOULDING APPRATUS	1	
8	BASIC MACHINE SHOP		
8-2	PILLER DRILL MACHINE with standard accessories	0	Drilling Capacity in Mild Steel= 18-20 mm Spindle Rotational Speed= 300 to 2400 R.P.M. No. of spindle speeds = 05 Diameter of Quill= 65-70 mm. Spindle taper = MT-3 Distance between spindle axis to Pillar axis= 270-280 mm. Vertical Movement of the work table= 700-750 mm. Height from spindle nose to Base Plate= 800-900 Spindle motor (3 phase/440 v/50Hz)= 0.75 to 1.00 Kw.
8-3	POWER HACKSAW with standard accessories	1	Hydraulic Power Hacksaw, variable cutting, pressure, quick return of frame, with coolant supply attachment • Capacity round bar (mm) = 250-280. • Capacity square bar (mm) = 230 x 230. • Capacity round bar miter 45 degree (mm) = 190. • Strokes per mint = 40, 65, 80, 120. • Blade size (mm) = 450x38x2. • Motor power = 1.25-1.5 Kw. • Adjustable material stand (mm) = 450 -650.
9	METROLOGY LAB		
9-7	SURFACE ROUGHNESS TESTER	1	Type = Flat Surface Processing = Paper Finish,Grinding, Shaping,Milling.
9-12	HOLE GAUGE / 3 POINT MICROMETER	1	
9-16	Small hole gage set	5	Set of four pieces Range = 3-5,5-7,5,7,5-10,10-13 mm with ratchet stop.
9-17	Telescopic Gage Set	5	set of six pieces range = 8-12,7,12,7-19,19-32,32-54,54-90,90-150 mm With ratchet stop
9-18	Inside Micrometer (Rod Type)	10	Measuring range = 50-150 mm. Extension rods = 50-75,75-100,100-125,125-150 mm. Resolution = 0.01 mm.

9-19	Inside Micrometer (Caliper Type)	10	Measuring range= 5-30 mm Resolution = 0.01 mm. Accuracy = ± 0.005 mm Display Digital, Carbide measuring surfaces, Spindle High carbon chrome steel,ratchet stop, Frame thermal protection.
9-20	Dial Thickness Gage	5	Measuring range = 10 mm Throat depth = 30 mm Resolution = 0.01 mm suitable to measure paper , card board, tin sheet and square stock.
9-21	Universal Bevel Protractor	10	Blade length = 300 mm Least count = 1/12° Accute angle attachment. Fine adjusting screw, Magnifying glass for easy and faster readings. Paked in suitable box.
9-22	steel protractor	22	Semi circular head, graduated in degrees with central indicating arm 150-200 mm long, locking screw
9-23	Radius Gage	5	Composition = 34 pcs measuring Range = 1.0 to 3.0 R---0.25 steps 3.5 to 7.0 R---0.5 step
9-24	Fillet Gage	5	Measuring range = 3-R to 12-R made of corrosion resistant steel
9-25	Thread pitch gage	5	Composition = Inch system and mm system Inch type = 4-42 TPI (30 Leaf 55°) mm Type = 0.4 to 7 mm. (18 Leaf 60°)
9-26	Snap gage	5	Type = Single ended Type Size = 10 mm, 20 mm, 30 mm. Finish and Accuracy = H7
9-27	Plug Gage	5	Set of four pieces 12,15,18,20 mm. made of corrosion resistant steel
9-28	Digital Height Gage	10	Working Range = 0-300 mm resolution = 0.01 mm Digital Display = LCD 06 Digits With carbide tip sciber, Clamp holder,mm to inch conversion, Power ON-OFF and zero setting, Raised edges of beam, fine adjusting screw.
9-29	Digital Depth Gage	5	Range = 0-30 mm Display = Digital Indicator Range = 0-12 mm Indicator resolution = 0.01 mm Hardened stainless steel base 03 Rods with spherical ends = 0-10,10-20,20-30 mm.
9-30	Standard Wire gage	10	SWG non- ferrous metal Range = 0-36 SHEET METAL GAGE Range = 0-36 Hardened and chrome finish.
9-31	Gear Tooth Vernier Caliper	10	
10	HYDRAULLIC LAB		
10-1	Fluid friction Appratus	1	Distance between tapping = 1.0 m No. of tapping points = 34 Inner diameter of smooth bore pipe = within 6.5-26.5 mm Inner diameter of artificially roughened pipe = 17 mm Composition of variable cross-section and bends = 90° bend (small and large radii), 90° Elboe, 90° Mitter Sudden enlargement / Contraction, Gate valve, Globe Valve, Ball valve, In line strainer, perspex Venturi, Perspex orifice meter, perspex pipe section with pitot tube and static tapping. SOURCE OF WATER SUPPLY = shall be compatible with hydraulic bench Pedestal for main unit = 740 mm.
10-2	Hydraulic bench	1	Type = Mobile, Floor standing Material of top portion = Plastic moulding, Fiber Glass reinforced with polyester. Material of Base portion = Glass reinforced plastic, Fiber Glass reinforced with polyester Volumetric tank capacity = 7 lit/low flow Sump tank capacity = 165 lit maximum flow = 81 liters/mint Complete in all respects.
10-3	Orifice Discharge apparatus	1	
10-4	Energy Losses in Bends apparatus	1	
10-6	Reciprocating Pump apparatus	1	Bore = 34 mm stroke = 25 mm maximum head = 60 m Maximum flow = 5.3 lit./mint. Source of water supply = Compatible with centrifugal pump appratus, comoposition 1 Multi test Rig Pedestal for main unit = 740 mm height.
10-7	Axial Pump Appratus (Transparent Model)	1	Casing = Clear acryl Maximum flow = 100 lit Maximum head = 1.8 m Source of water supply = Compatible with centrifugal pump appratus Pedestal for main unit = 740 mm height.

10-8	Axial flow turbine	1	Maximum Power = 35 W Maximum speed = 7000 r.p.m. Maximum torque = 0.15 Nm Water reservoir = Clear acrylic 25-28 liters. Three phase pump capacity = 20 liters/minute. Electric flow meter = Paddle wheel Type.
10-9	Ball Valve (Sectional Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism Connecting method = Flange Maximum pressure = 1.0 bar
10-10	Globe Valve (Sectional Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism
10-11	Gate Valve (Sectional Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism
10-12	Butter fly valve (Sectional Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism
10-13	No return valve (Sectional Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism
10-14	Relief Valve (Sectional Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism
10-15	Throttle valve (Sectional Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism
10-16	Bernoulli's Theorem Apparatus	1	Throat diameter = 20 mm Up stream diameter = 25 mm Stream taper = 10° up and 20° down Manometer range = 0-470 mm. Number of manometers = 8 Source of water supply = Compatible with hydraulic bench
10-17	Reciprocating Piston Pump (Transparent working Model)	1	Type = Manual Table top type Purpose = To learn Operational mechanism
10-18	Hydraulic Control Equipment Set	1	Experiments = Pressure relief valve function, directional control valve function, Flow control valve function. COMPONENTS = Pressure relief valve, Pressure manifold (supply manifold), Tank manifold (return manifold), 4/3 Directional control valve lever operated, 4/2 directional control valve lever operated, Bi-directional motor, flow meter, one way flow control flow valve, Double acting cylinder, Load weight. Type = Portable.
10-19	RIG TESTING MACHINE	1	
11	HEAT ENGINE LAB		
11-8	Locomotive Boiler Model	1	Demonstration Model
11-9	Simple vertical boiler and Cochran boiler models	2	Demonstration Model
11-10	Ignition point Testing Machine	1	Type = Pensky-Martens Flash Tester Temperature range = Ambient to 400 C° Cooling Method = By water Ignition = By Gas Safety device Provided. Data Storage = 200 results Pedestal for main unit 740 mm
11-11	Gas Turbine Testing Machine	0	type – bench top mounted on steel plinth fuel tank capacity = 05 Litres Engine speed = 105000 r.p.m. Measured parameter = Rotation, Thrust, Temperature and pressure. Thrust = 200 N typical Fuel Type = Paraffin, Jet A-1, JP-4 Kerosene Exhaust gas Temperature = 800 C° Mass Flow rate = 0.9 Kg/Sec. Ignition system by Glow Plug. Compressor type = Single stage radial. Turbine Type = Single stage low mass axial flow. Pedestal for main unit. 740 mm.(H).
11-12	AC system Trainer (Heating and Cooling)	1	
11-13	Spring Loaded Valve (Transparent Model)	1	
11-14	Check Valve (Transparent Model)	1	
11-15	Dead weight Valve (Transparent Model)	1	
11-16	Pressure Relief Valve (Transparent Model)	1	

添付資料 5-3：インスペクションシート（LOT-A，LOT-B）

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.:	Lot A	1-1	Name: Metal Shop	Code No.:	Lot A	1-1	Name: Metal Shop	
Name of Sub Item:	PILLAR DRILLING MACHINE with standard accessories			Name of Sub Item:	PILLAR DRILLING MACHINE with standard accessories			
Qty:	1 set			Qty:	1 set			
Country of Origin:	-			Country of Origin:	JAPAN			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Drilling machine: 1 set	KID-420 (KIDIA Industrial Co., Ltd.)			Drilling machine: 1 set	KID-420 (KIDIA corporation)			
Drill chuck: 1 set	TTO-30000 (Tosumi Koki)			Drill chuck: 1 set	TMD-42T (YUKIWA SEIKO INC.)			
Drill chuck arbor: 1 set	TCA-32V (TRUSCO)			Drill chuck arbor: 1 set	TCA-32V (TRUSCO)			
Vise: 1 set	BETA-AT01 (Nabeya)			Vise: 1 set	BETA-A100 (Nabeya)			
Drilling machine table: 1 set	DS-3 (Daiwa)			Drilling machine table: 1 set	DS-3 (Daiwa)			
Required Specifications				Offered Specifications				Check
-Drilling machine Work table type= Square table Drilling capacity in S45C= φ4-19 mm or wider Spindle rotational speed= 16 to 1750 R.P.M. or wider No. of spindle speed= 1 or more Spindle taper= MT2 Distance between spindle axis to work table= 425 mm or more Height from spindle axis to base Plate= 433 mm or more Height of machine= 1200 mm or more Spindle Motor= 0.75 kW or more -Drill chuck Chucking capacity: 1.3-13 mm or wider Jaws taper= No.6 -Drill chuck arbor No= 275 Shank= MT2 -Vise Jaw width=103 mm or more Jaw depth= 26.3 mm or more Jaw opening= 18 mm or more -Drilling machine table Drilling machine table				-Drilling machine Work table type= Square table Drilling capacity in S45C= φ4-19 mm Spindle rotational speed= 170-1750rpm No. of spindle speed= 8 Spindle taper= MT2 Distance between spindle axis to work table = 425 Height from spindle axis to base Plate= 720mm Height of machine= 1270mm Spindle Motor= 0.75kw -Drill chuck Chucking capacity: 1.2-13mm Jaws taper= No.6 -Drill chuck arbor No= 275 Shank= MT2 -Vise Jaw width=110 mm Jaw depth= 26.3 mm Jaw opening= 18 mm Drilling machine table				✓
COMMENTS: Approved								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Mirhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor Asif</i>
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	<i>Takuya Sei</i>
4. Witness	Date:		Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	<i>Yukio Utsumi</i>

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.:	Lot A	1-2	Name: Metal Shop	Code No.:	Lot A	1-2	Name: Metal Shop	
Name of Sub Item:	ELECTRIC HAND DRILL			Name of Sub Item:	ELECTRIC HAND DRILL			
Qty:	2 sets			Qty:	2 sets			
Country of Origin:	-			Country of Origin:	JAPAN			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Cordless hand drill: 1 set	DFD30DWS (Makita)			Cordless hand drill: 1 set	FDS14DGL (Hitachi Koki)			
Battery set: 1 set	-			Battery set: 1 set	-			
Required Specifications				Offered Specifications				Check
-Cordless drill Drilling Capacity in Steel = 10 mm or more Spindle speed= 0 - 1250 r.p.m (High speed) or more -Battery set Contents: 1) Rechargeable battery x 1 set or more 2) Charger x 1 set or more 3) Case= Soft case or hard case, x 1 set				-Cordless drill Drilling Capacity in Steel = 10 mm Spindle speed= 0 - 1350 r.p.m -Battery set Contents: 1) Rechargeable battery x 1 set 2) Charger x 1 set 3) Case= hard case, x 1 set				✓
COMMENTS: 1. Country of Origin is china instead of Japan. 2. RPMs are less than the offered one.(1250).								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Mirhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor Asif</i>
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	<i>Takuya Sei</i>
4. Witness	Date:		Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	<i>Yukio Utsumi</i>

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check		
Code No.:	Lot A	1-2	Name:	Metal Shop	Code No.:	Lot A	1-2	Name:	Metal Shop	
Name of Sub Item:	ELECTRIC HAND DRILL			Name of Sub Item:	ELECTRIC HAND DRILL					
Qty:	2 sets			Qty:	2 sets					
Country of Origin:	-			Country of Origin:	JAPAN					
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)					
Cordless hand drill: 1 set	Reference Models (Manufacturers)			Cordless hand drill: 1 set	Offered Models (Manufacturers)					
Battery set: 1 set	Reference Models (Manufacturers)			Battery set: 1 set	Offered Models (Manufacturers)					
Required Specifications				Offered Specifications				Check		
-Cordless drill Drilling Capacity in Steel = 10 mm or more Spindle speed= 0 - 1250 r.p.m (High speed) or more -Battery set Contents: 1) Rechargeable battery x 1 set or more 2) Charger x 1 set or more 3) Case= Soft case or hard case, x 1 set				-Cordless drill Drilling Capacity in Steel = 10 mm Spindle speed= 0 - 1350 r.p.m -Battery set Contents: 1) Rechargeable battery x 1 set 2) Charger x 1 set 3) Case= hard case, x 1 set				✓		
COMMENTS: 1. Country of Origin is china instead of Japan. 2. RPMs are less than the offered one.(1250).										
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	[Signature]		
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	[Signature]		
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	[Signature]		
4. Witness	Date:		Name		Designation:		Signature:			
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	[Signature]		

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check		
Code No.:	Lot A	1-3	Name:	Metal Shop	Code No.:	Lot A	1-3	Name:	Metal Shop	
Name of Sub Item:	TWIST DRILL SET			Name of Sub Item:	TWIST DRILL SET					
Qty:	5 sets			Qty:	5 sets					
Country of Origin:	-			Country of Origin:	THAILAND					
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)					
Drill set: 1 set	Reference Models (Manufacturers)			Drill set: 1 set	Offered Models (Manufacturers)					
Required Specifications				Offered Specifications				Check		
-Drill set Material of drill= HSS Number contained= 25 pcs or more Cutting diameter range= 1-13 mm or wider (Interval size= 0.5 mm)				-Drill set Material of drill= HSS Number contained= 25 pcs Cutting diameter range= 1-13 mm (Interval size= 0.5 mm)				✓		
COMMENTS: 1. Country of Origin and model number is not mentioned on the product. 2. Manufacturer Certificate is required.										
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	[Signature]		
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	[Signature]		
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	[Signature]		
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:			
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	[Signature]		

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	1-4	Name: Metal Shop		Code No.: Lot A	1-4	Name: Metal Shop		
Name of Sub Item:	SURFACE PLATE (Cast Iron)			Name of Sub Item:	SURFACE PLATE (Cast Iron)			
Qty:	2 sets			Qty:	2 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Surface plate: 1 set	PC-5050 (CHUO PRECISION INDUSTRIAL CO., LTD) BC-109 (Obiichi Kenki Seisakusho Co, Ltd)			Surface plate: 1 set	BC-109 (Obiichi Kenki Seisakusho Co, Ltd)			
Required Specifications				Offered Specifications				Check
-Surface plate Material= Cast iron Dimension= W500 x D500 x H120mm or more Flatness= 0.015mm or better				-Surface plate Material= Cast iron Dimension= W500 x D500 x H120mm Flatness= 0.015mm				OK
COMMENTS: 1. Country of origin and model is not verified on the actual plate delivered. 2. Manufacturer Certificate is required.								
1. Supplier BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Mithas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector GCT Faisalabad	Date:	Thursday, February 1, 2018	Name:	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif
3. Inspector JICA Islamabad	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	清卓
4. Witness TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	1-5	Name: Metal Shop		Code No.: Lot A	1-5	Name: Metal Shop		
Name of Sub Item:	VERNIER HEIGHT GAUGE			Name of Sub Item:	VERNIER HEIGHT GAUGE			
Qty:	4 sets			Qty:	4 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Vernier height gauge: 1set	VHK-30 (Niigata Seiki Co., Ltd) HS-30 (Mitutoyo)			Vernier height gauge: 1set	VHK-30 (Niigata Seiki Co., Ltd)			
Required Specifications				Offered Specifications				Check
-Vernier height gauge Material of scriber= Carbide tipped Measuring range= 0-300 mm or wider Resolution= 0.02 mm or less Accuracy= ± 0.04 mm or better				-Vernier height gauge Material of scriber= Carbide tipped Measuring range= 0-300 mm Resolution= 0.02 mm Accuracy= ± 0.04 mm				OK
COMMENTS: Country of Origin is china instead of Japan.								
1. Supplier BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Mithas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector GCT Faisalabad	Date:	Thursday, February 1, 2018	Name:	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif
3. Inspector JICA Islamabad	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	清卓
4. Witness TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海






Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	1-6	Name:	Metal Shop	Code No.: Lot A	1-6	Name:	Metal Shop	
Name of Sub Item:	ANGLE PLATE			Name of Sub Item:	ANGLE PLATE			
Qty:	2 sets			Qty:	2 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components	Reference Models (Manufacturers)			Components	Offered Models (Manufacturers)			
Angle plate: 1 set	RA104 (Obiichi Keiki Seisakusho Co, Ltd) LMA-167-4 (New strong)			Angle plate: 1 set	RA104 (Obiichi Keiki Seisakusho Co, Ltd)			
Required Specifications				Offered Specifications				Check
-Angle plate Material= Cast iron Base and upright surface= scrap finished Dimension= L150 x W125 x H125 x t18mm or wider Number of slotted hole= 3 pcs				-Angle plate Material= Cast iron Base and upright surface= scrap finished Dimension= L175 x W150 x H150 x t19mm Number of slotted hole= 3 pcs				SA
COMMENTS: Country of Origin, Manufacturer and model number is not mentioned on the product. Manufacturer certificate is required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	清卓也
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	1-7	Name:	Metal Shop	Code No.: Lot A	1-7	Name:	Metal Shop	
Name of Sub Item:	SURFACE GAUGE			Name of Sub Item:	SURFACE GAUGE			
Qty:	2 sets			Qty:	2 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components	Reference Models (Manufacturers)			Components	Offered Models (Manufacturers)			
Surface gauge: 1set	Stock No: 58 PG104 (Obiichi Keiki Seisakusho Co, Ltd) TK-300 (Obiichi Keiki Seisakusho Co, Ltd)			Surface gauge: 1set	Stock No: 58 PG104 (Obiichi Keiki Seisakusho Co, Ltd)			
Required Specifications				Offered Specifications				Check
-Surface gauge Marking needle tip= Hardened One side of marking needle = 90° Length= 300 mm or more				-Surface gauge Marking needle tip= Hardened One side of marking needle = 90° Length= 300 mm				SA
COMMENTS: Model Number is not mentioned and needs to be verified.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	清卓也
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No:	Lot A	1-8	Name: Metal Shop	Code No:	Lot A	1-8	Name: Metal Shop	
Name of Sub Item:	TRAMMEL POINT			Name of Sub Item:	TRAMMEL POINT			
Qty:	10 sets			Qty:	10 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components	Reference Models (Manufacturers) Stook No: 901 300 (Obishi Keiki Seisakusho Co, Ltd) OS-163 No.1 (Obishi Keiki Seisakusho Co, Ltd)			Components	Offered Models (Manufacturers) Stook No: 901 300 (Obishi Keiki Seisakusho Co, Ltd)			
Required Specifications				Offered Specifications				Check
-Beam trammel Graduation= 1mm interval or less Material of beam= Hardened steel Nominal measurement= 300 mm or more Dimension= L390 x W23 x H4 mm or more Needle length= 70 mm or more Micro motion instrument for adjustment= Equipped				-Beam trammel Graduation= 1mm interval Material of beam= Hardened steel Nominal measurement= 300 mm Dimension= L400 x W27 x H6 mm Needle length= 70 mm Micro motion instrument for adjustment= Equipped				
COMMENTS: Country of Origin , company name and model number is not verified on delivered item. Manufacturer certificate is required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
BINARY ENGINEERING								
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
GCT Faisalabad								
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
JICA Islamabad								
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
TEVTA, JICA coordination								
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	
JICA Consultants (OPC)								

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No:	Lot A	1-9	Name: Metal Shop	Code No:	Lot A	1-9	Name: Metal Shop	
Name of Sub Item:	TIN SNIP (PLAT)			Name of Sub Item:	TIN SNIP (PLAT)			
Qty:	15 sets			Qty:	15 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components	Reference Models (Manufacturers) HSLD-0033 (Morimitsu) SLD8134 (Tsumitsu)			Components	Offered Models (Manufacturers) HSLD-0033 (Morimitsu)			
Required Specifications				Offered Specifications				Check
-Tin snip Type of blade= Flat Blade size= 92 mm or more Over length= 350 mm or more				-Tin snip Type of blade= Flat Blade size= 92 mm Over length= 350 mm				
COMMENTS: Approved								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
BINARY ENGINEERING								
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
GCT Faisalabad								
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
JICA Islamabad								
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
TEVTA, JICA coordination								
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	
JICA Consultants (OPC)								

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	1-10	Name:	Metal Shop	Code No.: Lot A	1-10	Name:	Metal Shop	
Name of Sub Item:	TIN SNIP (CURVED)			Name of Sub Item:	TIN SNIP (CURVED)			
Qty:	5	sets		Qty:	5	sets		
Country of Origin:				Country of Origin:	JAPAN			
Components:		Reference Models (Manufacturers)		Components:		Offered Models (Manufacturers)		
Tin snip: 1 set		HSLD-0127 (Morimitsu)		Tin snip: 1 set		HSLD-0127 (Morimitsu)		
		SLD8112 (Tosimitsu)						
Required Specifications				Offered Specifications				Check
-Tin snip Cutting capacity in stainless plate= 0.5mm or more Type of blade= Curved Blade size= 65mm or more				-Tin snip Cutting capacity in stainless plate= 0.5mm Type of blade= Curved Blade size= 67mm				CP
COMMENTS: Approved.								
1. Supplier	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
BNARY ENGINEERING								
2. Inspector	Date:	Thursday, February 1, 2018	Name:	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif Noor
GCT Faisalabad								
3. Inspector	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	清卓也
JICA Islamabad								
4. Witness	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
TEVTA, JICA coordination								
5. Witness	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海
JICA Consultants (OPC)								

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	1-11	Name:	Metal Shop	Code No.: Lot A	1-11	Name:	Metal Shop	
Name of Sub Item:	Bench Vices			Name of Sub Item:	Bench Vices			
Qty:	24	sets		Qty:	24	sets		
Country of Origin:				Country of Origin:	JAPAN			
Components:		Reference Models (Manufacturers)		Components:		Offered Models (Manufacturers)		
Bench Vices : 1 set		LEAD125 (Nabeysa Co., Ltd)		Bench Vices : 1 set		LEAD125 (Nabeysa Co., Ltd)		
		66987 (RIDGID)						
Required Specifications				Offered Specifications				Check
-Bench Vice Jaw width=125 mm or more Max. Jaw opening= 155 mm or more Jaw height= 80 mm or more				-Bench Vice Jaw width=125 Max. Jaw opening= 155mm Jaw height= 80 mm				CP
COMMENTS: Company name, Model number and country of origin is not verified. Manufacturer certificate is required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
BNARY ENGINEERING								
2. Inspector	Date:	Thursday, February 1, 2018	Name:	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif Noor
GCT Faisalabad								
3. Inspector	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	清卓也
JICA Islamabad								
4. Witness	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
TEVTA, JICA coordination								
5. Witness	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海
JICA Consultants (OPC)								

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	2-1	Name: Advance Machine Shop		Code No.: Lot A	2-1	Name: Advance Machine Shop		
Name of Sub Item:	PELLAR DRILLING MACHINES with standard accessories			Name of Sub Item:	PELLAR DRILLING MACHINES with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components	Reference Models (Manufacturers)			Components	Offered Models (Manufacturers)			
Drilling machine: 1 set	KID-460 (KIDA Industrial Co., Ltd)			Drilling machine: 1 set	KID-430 (KIDA corporation)			
Drill chuck: 1set	IIMQ-4JT (YUKIWA SEIKO INC.)			Drill chuck: 1set	IIMQ-4JT (YUKIWA SEIKO INC.)			
Drill chuck arbor: 1 set	TCA-3Y (TRUSCO)			Drill chuck arbor: 1 set	TCA-3Y (TRUSCO)			
Vise: 1 set	BETA-A100 (Nabeys)			Vise: 1 set	BETA-A100 (Nabeys)			
Drilling machine table: 1 set	SB-2 (Sakar)			Drilling machine table: 1 set	SB-2 (Sakar)			
Required Specifications				Offered Specifications				Check
-Drilling machine Work table type: Square table Cutting capacity in S45C: ϕ 4-19 mm or wider Spindle rotational speed: 170 to 1750 R.P.M. or wider No. of spindle speeds: 5 or more Spindle taper: MT2 Distance between spindle axis to work table: 425 mm or more Height from spindle nose to base flange: 455 mm or more Height of machine: 1200 mm or more Spindle Motor: 0.75 kW or more -Drill chuck Chucking capacity: 1.3-13 mm or wider Jacobs taper: No.6 -Drill chuck arbor Nissen: J75 Shank: MT2 -Vise Jaw width: 103 mm or more Jaw depth: 26.5 mm or more Jaw opening: 98 mm or more -Drilling machine table Table size: 1200mm x 600mm				-Drilling machine Work table type: Square table Cutting capacity in S45C: ϕ 4-19 mm Spindle rotational speed: 170-1750rpm No. of spindle speeds: 6 Spindle taper: MT2 Distance between spindle axis to work table = 425 Height from spindle nose to base flange: 720mm Height of machine: 1270mm Spindle Motor: 0.75kw -Drill chuck Chucking capacity: 1.3-13mm Jacobs taper: No.6 -Drill chuck arbor Nissen: J75 Shank: MT2 -Vise Jaw width: 110 mm Jaw depth: 26.5 mm Jaw opening: 100 mm -Drilling machine table Table size: 1200mm x 600mm				Check
COMMENTS: Approved.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor</i>
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	<i>清也</i>
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Usami	Designation:	JICA Expert	Signature:	<i>Yusami</i>

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	2-2	Name: Advance Machine Shop		Code No.: Lot A	2-2	Name: Advance Machine Shop		
Name of Sub Item:	Power hacksaw with standard accessories			Name of Sub Item:	Power hacksaw with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	CHINA			
Components	Reference Models (Manufacturers)			Components	Offered Models (Manufacturers)			
Main unit : 1 set	TY-128 (Daigun Hatan Machine Tools Co., Ltd)			Main unit : 1 set	TY-128 (Daigun Hatan Machine Tools Co., Ltd)			
Required Specifications				Offered Specifications				Check
-Main unit Max Cutting capacity: 1) 90° ϕ 125 mm (Round) or more, 128 x 150 mm (Square) or more 2) 45° ϕ 95 mm (Round), 75 x 95 mm (Square) or more Blade speed: 30 to 50 m/min or wider Blade size: 0.6 x 12.5 x 163 mm or more Motor: 0.35 kW or more				-Main unit Max Cutting capacity: 1) 90° ϕ 125mm(round), 128*150mm(square) 2) 45° ϕ 95mm(round), 75*95mm(square) Blade speed: 30 to 50m/min Blade size: 0.6*12.5*163mm Motor: 0.37kw				Check
COMMENTS: 1. Country of origin and manufacturer to be confirmed through manufacturer certificate. 2. Original manuals or proof of originality of already provided manuals required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor</i>
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	<i>清也</i>
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Usami	Designation:	JICA Expert	Signature:	<i>Yusami</i>

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.:	Lot A	2-3	Name: Advance Machine Shop	Code No.:	Lot A	2-3	Name: Advance Machine Shop	
Name of Sub Item:	Surface grinding machine with standard accessories			Name of Sub Item:	Surface grinding machine with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	CHINA			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Main unit :	M7130 (Jiangsu Hosten Machine Tools Co., Ltd) TS-104 (AMADA Machine Tool)			Main unit :	M7130 (Jiangsu Hosten Machine Tools Co., Ltd)			
Required Specifications				Offered Specifications				Check
-Main unit Maximum Grinding Capability (LxWxD)= 1000 x 400 x 100 mm or more Max. Longitudinal Travel of Worktable= 1100 mm or more Speed of Worktable (Steps)= 3 - 27 m/min or wider Max. Load of Worktable= Approx. 500 kg or more Max. Distance from the Spindle Center to the Table Surface= 575 mm or more Spindle speed= 1400 r/min or more				-Main unit Maximum Grinding Capability (LxWxD)= 1000*400*100mm Max. Longitudinal Travel of Worktable= 1100mm Speed of Worktable (Steps)= 3-27 mm/min Max. Load of Worktable= 500kg Max. Distance from the Spindle Center to the Table Surface= 575mm Spindle speed= 1400r/min				
COMMENTS: 1. Country of origin and manufacturer to be confirmed through manufacturer certificate along with Manufacturing date of machine. 2. Original manuals or proof of originality of already provided manuals required. 3. Speed of work table and Maximum longitudinal travel are less than offered specifications. 4. Maximum load of worktable needs to be clarified. 5. JICA observed that GCT thinks the machine is old/used/rebuilt but supplier reject opinion of GCT.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.:	Lot A	2-4	Name: Advance Machine Shop	Code No.:	Lot A	2-4	Name: Advance Machine Shop	
Name of Sub Item:	Universal tool & cutter grinding machine with standard accessories			Name of Sub Item:	Universal tool & cutter grinding machine with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	CHINA			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Main unit :	OM635 (Jiangsu Hosten Machine Tools Co., Ltd) GL-350F (Iida Tekko Corporation)			Main unit :	OM635 (Jiangsu Hosten Machine Tools Co., Ltd)			
Required Specifications				Offered Specifications				Check
-Main unit Longitudinal stroke= 340 mm or more Lateral stroke= 170 mm or more Grinding height= 150 mm or more Grinding wheel diameter= 100 mm or more Power motor= 0.4kW or more				-Main unit Longitudinal stroke= 340mm Lateral stroke= 170mm Grinding height= 150mm Grinding wheel diameter= 100mm Power motor= 0.4kw				
COMMENTS: 1. Country of origin and manufacturer to be confirmed through manufacturer certificate. 2. Original manuals or proof of originality of already provided manuals required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check	
Code No:	Lot A	2-5	Name: Advance Machine Shop	Code No:	Lot A	2-5	Name: Advance Machine Shop		
Name of Sub Item: Vertical differential type Gear Hobbing machine with standard accessories				Name of Sub Item: Vertical differential type Gear Hobbing machine with standard accessories					
Qty: 1 set				Qty: 1 set					
Country of Origin: CHINA				Country of Origin: CHINA					
Components: Reference Models (Manufacturers) Y3150 (Okeya Machinery Co., Ltd)				Components: Offered Models (Manufacturers) Y3150 (Okeya Machinery Co., Ltd)					
Main unit: 1 set				Main unit: 1 set					
Required Specifications				Offered Specifications				Check	
-Main unit Hob maximum diameter= 120 mm or more Axial travel of hob head= 180 mm or more Max. diameter of hob= 120mm or more Max. hob spindle speed= 275 rpm or more Main motor power= 3 kW or more Weight= 1200 kg or more Involute spur gear cutter (1) Material= SK201 Module pitch= 2 Pressure angle= 20° Number of outer= 12 or more Number of teeth of cut gear: 125 mm, 15 - 124, 15 - 24, 26 - 24, 21 - 25, 17 - 20, 14 - 16, 12 - 13 mm, x 1 pc / each (2) Material= SK201 Module pitch= 2.5 Pressure angle= 20° Number of outer= 12 or more Number of teeth of cut gear: 125 mm, 15 - 124, 15 - 24, 26 - 24, 21 - 25, 17 - 20, 14 - 16, 12 - 13 mm, x 1 pc / each -Accessories: (1) Involute spur gear cutter set, 02 module, 20 degree pressure angle (Set of 08 Cutters), 1 set (2) Involute spur gear cutter set, 2.5 module, 20 degree pressure angle (Set of 08 Cutters), 1 set				-Main unit Hob maximum diameter= 500mm Axial travel of hob head= 240mm Max. diameter of hob= 120mm Max. hob spindle speed= 275rpm Main motor power= 3kW or more Weight= 2000kg Involute spur gear cutter (1) Material= SK201 Module pitch= 2 Pressure angle= 20° Number of outer= 12 Number of teeth of cut gear: 125 mm, 15 - 124, 15 - 24, 26 - 24, 21 - 25, 17 - 20, 14 - 16, 12 - 13 mm, x 1 pc / each (2) Material= SK201 Module pitch= 2.5 Pressure angle= 20° Number of outer= 12 Number of teeth of cut gear: 125 mm, 15 - 124, 15 - 24, 26 - 24, 21 - 25, 17 - 20, 14 - 16, 12 - 13 mm, x 1 pc / each -Accessories: (1) Involute spur gear cutter set, 02 module, 20 degree pressure angle (Set of 08 Cutters), 1 set (2) Involute spur gear cutter set, 2.5 module, 20 degree pressure angle (Set of 08 Cutters), 1 set					
COMMENTS: 1. Original manuals or proof of originality of already provided manuals required. 2. Country of origin and manufacturer to be confirmed through manufacturer certificate along with manufacturing date of machine. 3. Hob maximum diameter is less than offered specifications (440mm). 4. According to the on site measurement, the distance from the center of hob to the surface of machine was 62mm. GCT asks supplier to confirm it and supplier agreed with it. 5. Involute spur gear for hobbing shall be provided. (1) Material= SK201 Module pitch= 2 Pressure angle= 20° Number of outer= 12 Number of teeth of cut gear: 125 mm, 15 - 124, 15 - 24, 26 - 24, 21 - 25, 17 - 20, 14 - 16, 12 - 13 mm, x 1 pc / each (2) Material= SK201 Module pitch= 2.5 Pressure angle= 20° Number of outer= 12 Number of teeth of cut gear: 125 mm, 15 - 124, 15 - 24, 26 - 24, 21 - 25, 17 - 20, 14 - 16, 12 - 13 mm, x 1 pc / each 6. Accessories to be supplied. 7. JICA observed that GCT thinks the supplier is not responsible for supplier report violation of GCT.									
1. Supplier	INARY ENGINEERING	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
2. Inspector	GCT Faisalabad	Date:	Thursday, February 1, 2018	Name:	Noor Anif Noor	Designation:	Head of Department (Mechanical)	Signature:	
3. Inspector	JICA Islamabad	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	
4. Witness	TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness	JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check	
Code No:	Lot A	2-6	Name: Advance Machine Shop	Code No:	Lot A	2-6	Name: Advance Machine Shop		
Name of Sub Item: Lathe Machine with standard accessories				Name of Sub Item: Lathe Machine with standard accessories					
Qty: 2 sets				Qty: 2 sets					
Country of Origin: CHINA				Country of Origin: CHINA					
Components: Reference Models (Manufacturers) G4D (Pakistan Machine Tool Factory)				Components: Offered Models (Manufacturers) CD636A/1000 (XI AN AMCO Machine Tools)					
Main unit: 1 set				Main unit: 1 set					
Required Specifications				Offered Specifications				Check	
-Main unit Distance between centres= 1000 mm or more Height of centre= 179 mm or more Width of Bed= 187 mm or more Swing over bed= 358 mm or more Swing over cross slide= 200 mm or more Swing in gap= 502 mm or more Cross travel= 160 mm or more Tool slide travel= 95 mm or more Spindle taper= 5 Morse or more Hole through spindle= 35 mm or more Spindle speed= 70 to 1600 r.p.m or wider Longitudinal feed ranges= 0.066 to 1.392 mm/min or wider Cross feed range= 0.033 to 0.380 mm/min or wider Metric threads= 0.4 to 7 mm or wider Tailstock barrel diam= 35 mm or wider				-Main unit Distance between centres= 1000 mm Height of centre= 179 mm Width of Bed= 187 mm Swing over bed= 358 mm Swing over cross slide= 200 mm Swing in gap= 502 mm Cross travel= 160 mm Tool slide travel= 95 mm Spindle taper= 5 Morse Hole through spindle= 35 mm Spindle speed= 70 to 1600 r.p.m Longitudinal feed range= 0.066 to 1.392 mm/min Cross feed range= 0.033 to 0.380 mm/min Metric threads= 0.4 to 7 mm Tailstock barrel diam= 35 mm					
COMMENTS: 1. Original manuals or proof of originality of already provided manuals required.									
1. Supplier	INARY ENGINEERING	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
2. Inspector	GCT Faisalabad	Date:	Thursday, February 1, 2018	Name:	Noor Anif Noor	Designation:	Head of Department (Mechanical)	Signature:	
3. Inspector	JICA Islamabad	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	
4. Witness	TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness	JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	2-7	Name: Advance Machine Shop		Code No.: Lot A	2-7	Name: Advance Machine Shop		Check
Name of Sub Item:	Machine Vice for milling machine			Name of Sub Item:	Machine Vice for milling machine			
Qty:	5 sets			Qty:	5 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Main unit: 1 set	VO-125 (Tosakoma)			Main unit: 1 set	VO-125 (Tosakoma)			
	TK-12SHVS (Tosakoma)							
Required Specifications				Offered Specifications				Check
-Machine vice Jaw width = 125 mm or more Max. jaw opening width = 85mm or more Jaw height = 40 mm or more				-Machine vice Jaw width = 125mm Max. jaw opening width = 100mm Jaw height = 45mm				
COMMENTS: 1. Unit is not as per offered model and manufacturer. 2. Jaw height is less than offered (41.5mm).								
1. Supplier	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector	Date:	Thursday, February 1, 2018	Name:	Noor Anif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor</i>
3. Inspector	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	<i>清純</i>
4. Witness	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	<i>内海</i>

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	4-1	Name: Welding Shop		Code No.: Lot A	4-1	Name: Welding Shop		Check
Name of Sub Item:	Electric Arc Welding Transformer with standard accessories			Name of Sub Item:	Electric Arc Welding Transformer with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components:	Reference Models (Manufacturers)			Components:	Offered Models (Manufacturers)			
Main unit: 1 set	YS-300AD177FA (Furukawa Electric Co., Ltd)			Main unit: 1 set	BS-300M (DABEIN Corporation)			
Earth clamp: 1 set	BS-300M (DABEIN Corporation)			Earth clamp: 1 set	-			
Cable for earth clamp: 1 set	-			Cable for earth clamp: 1 set	-			
Torch with cable: 1 set	-			Torch with cable: 1 set	-			
Material side cable: 1 set	-			Material side cable: 1 set	-			
Required Specifications				Offered Specifications				Check
Power rated input= 14.4 kW or more Rated Utilization= 30 % Output current= 65 to 300 A or wider Rated no load voltage = 80 V or more Welding rod dia=2.6-6.0 mm or wider Safety device=Busby-in electric shock preventive function Welding cable= 10 meter or more Welding Torch= To be equipped				Power rated input= 14.4 kW Rated Utilization= 30 % Output current= 65 to 300 A Rated no load voltage = 80 V Welding rod dia=2.6-6.0 mm Safety device=Busby-in electric shock preventive function Welding cable= 10 meter Welding Torch= To be equipped				
COMMENTS: 1. Welding Cable is less than 10 meter. 2. Original manual or proof of originality of already delivered manual is required								
1. Supplier	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector	Date:	Thursday, February 1, 2018	Name:	Noor Anif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor</i>
3. Inspector	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	<i>清純</i>
4. Witness	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	<i>内海</i>

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check	
Code No: Lot A 4-2	Name: Welding Shop	Code No: Lot A 4-2	Name: Welding Shop						
Name of Sub Item: Welding Rectifiers with standard accessories		Name of Sub Item: Welding Rectifiers with standard accessories							
Qty: 1	sets	Qty: 1	sets						
Country of Origin:		Country of Origin: JAPAN							
Components		Components		Offered Models (Manufacturers)					
Main unit: 1 set	Reference Models (Manufacturers) YD-35001 (Panasonic Welding System Co., Ltd) AR-SB300 (DAIHEN Corporation)	Main unit: 1 set		VR-400 (DAIHEN Corporation)					
Earth clamp: 1 set	-	Earth clamp: 1 set							
Cable for earth clamp: 1 set	-	Cable for earth clamp: 1 set							
Torch with cable: 1 set	-	Torch with cable: 1 set							
Material side cable: 1 set	-	Material side cable: 1 set							
Required Specifications				Offered Specifications				Check	
Power rated input= 11 kW or more Rated Utilization= 40 % DC output current= 300 A or more Rated no load voltage= 63 V or more Welding rod dia= 1.6 to 6.0 mm or wider Safety device= Built-in electric shock preventive function Welding cable= 10 meter or more Welding Torch= To be equipped				Power rated input= 11 kW Rated Utilization= 40 % DC output current= 300 A Rated no load voltage= 63 V Welding rod dia= 1.6 to 6.0 mm Safety device= Built-in electric shock preventive function Welding cable= 10 meter Welding Torch= To be equipped					mpd
COMMENTS: 1. Welding Cabel is less than 10 meter . 2. Original manual or proof of originality of already delivered manual is required									
1. Supplier BINARKY ENGINEERING	Date: Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:			
2. Inspector GCT Faisalabad	Date: Thursday, February 1, 2018	Name	Noor Atif Noor	Designation:	Head of Department (Mechanical)	Signature:			
3. Inspector JICA Islamabad	Date: Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:			
4. Witness TEVTA, JICA coordination	Date: Thursday, February 1, 2018	Name		Designation:		Signature:			
5. Witness JICA Consultants (OPC)	Date: Thursday, February 1, 2018	Name	Yuki Utsumi	Designation:	JICA Expert	Signature:			

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check	
Code No: Lot A 4-3	Name: Welding Shop	Code No: Lot A 4-3	Name: Welding Shop						
Name of Sub Item: TIG WELDING UNIT with standard accessories		Name of Sub Item: TIG WELDING UNIT with standard accessories							
Qty: 1	sets	Qty: 1	sets						
Country of Origin:		Country of Origin: JAPAN							
Components		Components		Offered Models (Manufacturers)					
Welding power source: 1 set	Reference Models (Manufacturers) YD-35001 (Panasonic Welding System Co., Ltd) AVP-300 (DAIHEN Corporation)	Welding power source: 1 set		ACCUTIG 300P (DAIHEN Corporation)					
TIG welding torch: 1 set	-	TIG welding torch: 1 set							
Material side cable: 1 set	-	Material side cable: 1 set							
Torch cable: 1 set	-	Torch cable: 1 set							
Earth cable: 1 set	-	Earth cable: 1 set							
Input cable: 1 set	-	Input cable: 1 set							
Cable for cooling: 1 set	-	Cable for cooling: 1 set							
Shield gas hose: 1 set	-	Shield gas hose: 1 set							
Cooling water circulation device: 1 set	-	Cooling water circulation device: 1 set							
Required Specifications				Offered Specifications				Check	
Power rated input= 11.1 KVA or more Rated Utilization= 40 % DC output current = 4 to 300 A or wider AC output current =10 to 300 A or wider Rated no load voltage= 60 V or more Welding cable= 10 meter or more Welding Torch= To be equipped				Power rated input= 11.1 KVA Rated Utilization= 40 % DC output current = 4 to 300 A AC output current =10 to 300 A Rated no load voltage= 60 V Welding cable= 10 meter Welding Torch= To be equipped					mpd
COMMENTS: 1. Welding Cabel is less than 10 meter . 2. Original manual or proof of originality of already delivered manual is required									
1. Supplier BINARKY ENGINEERING	Date: Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:			
2. Inspector GCT Faisalabad	Date: Thursday, February 1, 2018	Name	Noor Atif Noor	Designation:	Head of Department (Mechanical)	Signature:			
3. Inspector JICA Islamabad	Date: Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:			
4. Witness TEVTA, JICA coordination	Date: Thursday, February 1, 2018	Name		Designation:		Signature:			
5. Witness JICA Consultants (OPC)	Date: Thursday, February 1, 2018	Name	Yuki Utsumi	Designation:	JICA Expert	Signature:			

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No: Lot A	4-4	Name: Welding Shop		Code No: Lot A	4-4	Name: Welding Shop		
Name of Sub Item:	MIG WELDING UNIT with standard accessories			Name of Sub Item:	MIG WELDING UNIT with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components	Reference Models (Manufacturers)			Components	Offered Models (Manufacturers)			
Welding power source : 1 set	YD-3550R3-YKA (Panasonic Welding System Co. Ltd)			Welding power source : 1 set	XD3508-II (DAIHEN Corporation)			
Supply device for welding wire : 1 set	WB-F150 (DAIHEN Corporation)			Supply device for welding wire : 1 set				
Welding Torch : 1 set				Welding Torch : 1 set				
Cable for supply device for welding wire : 1 set				Cable for supply device for welding wire : 1 set				
Control cable : 1 set				Control cable : 1 set				
Co2 gas adjustment device : 1 set				Co2 gas adjustment device : 1 set				
Required Specifications				Offered Specifications				Check
Power rated input= 16 kW or more Rated Utilization= 60 % Output Current= 30 to 350 A or more Welding cable= 10 meter or more Welding Torch= To be equipped				Power rated input= 16 kW Rated Utilization= 60 % Output Current= 30 to 350 A Welding cable= 10 meter Welding Torch= To be equipped				mpd
COMMENTS: 1. Welding Cabel is less than 10 meter. 2. Original manual or proof of originality of already delivered manual is required								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
2. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
GCT Faisalabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
3. Inspector	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	
JICA Islamabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No: Lot A	4-5	Name: Welding Shop		Code No: Lot A	4-5	Name: Welding Shop		
Name of Sub Item:	PLAZMA ARC CUTTING MACHINE with standard accessories			Name of Sub Item:	PLAZMA ARC CUTTING MACHINE with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	JAPAN			
Components	Reference Models (Manufacturers)			Components	Reference Models (Manufacturers)			
Main unit: 1 set	YD3507-YKA (Panasonic Welding System Co. Ltd)			Main unit: 1 set	C-70 (DAIHEN Corporation)			
Cutting torch with cable: 1 set	A-70 (DAIHEN Corporation)			Cutting torch with cable: 1 set				
Air compressor: 1 set				Air compressor: 1 set				
Air tank: 1 set				Air tank: 1 set				
Required Specifications				Offered Specifications				
-Main unit Rated Utilization = 60 % Out put Current= 60 A or more Cooling Method= Air Cooling Max. cutting capacity=35 mm or more (mild steel) Cutting Torch = Curved Type With Tip for short. Cutting torch cable= 10 meter or more -Air compressor Type= Reciprocating, Pressure switch Motor output = 2.2 kW or more Max. operating pressure = 0.8 - 0.98 MPa or wider Free air delivery = 245 m3/min or more -Air tank Capacity= 95 L or more Operating pressure= 0.98 MPa or more				-Main unit Rated Utilization = 60 % Out put Current= 60 A Cooling Method= Air Cooling Max. cutting capacity=35 mm (mild steel) Cutting Torch = Curved Type With Tip for short. Cutting torch cable= 10 meter -Air compressor Type= Reciprocating, Pressure switch Motor output = 2.2 kW Max. operating pressure = 0.8 - 0.96 MPa Free air delivery = 165 L/min -Air tank Capacity= 95 L Operating pressure= 0.96 MPa				mpd
COMMENTS: 1. Welding Cabel is less than 10 meter . 2. Original manual or proof of originality of already delivered manual is required								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
2. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
GCT Faisalabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
3. Inspector	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	
JICA Islamabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	4-6	Name: Welding Shop		Code No.: Lot A	4-6	Name: Welding Shop		
Name of Sub Item:	SPOT WELDING MACHINE (WATER COOLED) with standard accessories			Name of Sub Item:	SPOT WELDING MACHINE (WATER COOLED) with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	JAPAN			
Comments:	Reference Models (Manufacturers): YR-1505A2 (Panasonic Welding System Co., Ltd) SLAJ50-601 (DABEN Corporation)			Comments:	Reference Models (Manufacturers): SLAJ50-601 (DABEN Corporation)			
Main unit:	1 set			Main unit:	1 set			Check
Required Specifications				Offered Specifications				
Input Capacity= 15 KVA or more Duty Cycle= 12.0 % or more Arm spacing= 200 x 400 mm or more Cooling water volume= 2 L/min or more Max. pressure= 4.9 kN or more				Input Capacity= 15 KVA Duty Cycle= 12.0 % Arm spacing= 200 x 400 mm Cooling water volume= 2 L/min Max. pressure= 4.9 kN				
COMMENTS: 1. Duty Cycle is less than offered specification. 2. Delivered model is SLAJ50-601 while offered model is SLAJ50-601. 3. Original manual or proof of originality of already delivered manual is required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector	Date:	Thursday, February 1, 2018	Name:	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif
3. Inspector	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	清純
4. Witness	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	5-1	Name: Foundry Shop		Code No.: Lot A	5-1	Name: Foundry Shop		
Name of Sub Item:	Core holding oven with standard accessories			Name of Sub Item:	Core holding oven with standard accessories			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	JAPAN			
Comments:	Reference Models (Manufacturers): FP9112 (Yamato Scientific Co., Ltd) PLW2222A (Advantech Toys)			Comments:	Offered Models (Manufacturers): FP9112 (Yamato Scientific Co., Ltd)			
Main unit:	1 set			Main unit:	1 set			Check
Required Specifications				Offered Specifications				
-Muffle Furnace Temperature range= 100 to 1150 °C or wider Temperature control accuracy= ± 1.5 °C (at 1150 °C) or better Furnace material= Ceramic fiber Temperature controller= PID control by microprocessor Internal capacity= 7.5L or more -Exhaust unit Flexible duct: 1.5m or more -Wagon Dimension= Approx. W750 x D500 x H880 mm Shaft= 2 or more, 50 mm pitch stage change Draw= To be equipped Universal castor= 4 or more (with 2 stopper or more), nylon urethane Withstanding load= 150 kg or more -Accessories 1) Tong, x 1 set Heat resistant temperature= 1150 °C or more 2) Heat-resistant gloves, x 1 set Type= 3 fingers				-Muffle Furnace Temperature range= 100-1150 °C Temperature control accuracy= ± 1.00 °C (at 1150 °C) Furnace material= Ceramic fiber Temperature controller= PID control by microprocessor Internal capacity= 7.5L -Exhaust unit Flexible duct: 1.5m -Wagon Dimension= W750 x D500 x H880 mm Shaft= 3, 50 mm pitch stage change Draw= To be equipped Universal castor= 4 (with 2 stopper), nylon urethane Withstanding load= 150 kg -Accessories 1) Tong, x 1 set Heat resistant temperature= 1150 °C 2) Heat-resistant gloves, x 1 set Type= 3 fingers				
COMMENTS: 1. Original English manual issued by the manufacturer is required. 2. 50mm pitch stage change is not provided.								
1. Supplier	Date:	Thursday, February 1, 2018	Name:	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector	Date:	Thursday, February 1, 2018	Name:	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif
3. Inspector	Date:	Thursday, February 1, 2018	Name:	Takuya Sei	Designation:	Representative	Signature:	清純
4. Witness	Date:	Thursday, February 1, 2018	Name:		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name:	Yukio Utsumi	Designation:	JICA Expert	Signature:	内海

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	S-3	Name: Foundry Shop		Code No.: Lot A	S-3	Name: Foundry Shop		
Name of Sub Item: MOISTURE TELLER with standard accessories				Name of Sub Item: MOISTURE TELLER with standard accessories				
Qty: 1 sets				Qty: 1 sets				
Country of Origin:				Country of Origin: TURKEY				
Components		Reference Models (Manufacturers)		Components		Offered Models (Manufacturers)		
Moisture Content Tin with Lid: 1 set		UTGH-1410 (UTEST) TGH-1410 (Cooper)		Moisture Content Tin with Lid: 1 set		UTGH-1410 (UTEST)		
Digital balance: 1 set		UTW-0640 (UTEST) GF-3000 (A&D)		Digital balance: 1 set		UTW-0640 (UTEST)		
Required Specifications				Offered Specifications				Check
-Moisture Content Tin with Lid Material= Aluminium Size= Approx. φ80 mm x H 45 mm				-Moisture Content Tin with Lid Material= Aluminium Size= Approx. φ80 mm x H 45 mm				✓
-Digital balance Capacity= 3000 g or more Readability= 0.01 g or better				-Digital balance Capacity= 3000 g Readability= 0.01 g				
COMMENTS: 1. Company name , model number and country of origin needs confirmation for UTGH-1410(UTEST). 2. Different model is received from manufacturer for UTW-0640.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	清卓
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsami	Designation:	JICA Expert	Signature:	内海

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	S-2	Name: Foundry Shop		Code No.: Lot A	S-2	Name: Foundry Shop		
Name of Sub Item: SMALL ELECTRIC FURNACE				Name of Sub Item: SMALL ELECTRIC FURNACE				
Qty: 1 sets				Qty: 1 sets				
Country of Origin:				Country of Origin: TURKEY				
Components		Reference Models (Manufacturers)		Components		Offered Models (Manufacturers)		
Main unit: 1 set		UTD-1462 (UTEST Turkey-Europe) BF1131BC (Blastogler & Co., Inc.)		Main unit: 1 set		UTD-1462 (UTEST Turkey-Europe)		
Required Specifications				Offered Specifications				Check
-Main unit Type= Muffle furnace Max. temperature= 1200 °C or more Capacity= 5 liters or more Control System= PID digital control system (Working temperature and time can be programmed) or equivalent Heater= 2 kW or more				-Main unit Type= Muffle furnace Max. temperature=1200 °C Capacity= 5 L Control System= PID digital control system Heater=2KW				✓
COMMENTS: 1. Company name and model number is different than the offered one. 2. Original manual or proof of originality of already delivered manual is required. 3. Type "Muffle furnace" needs clarification.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
2. Inspector	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor Asif
3. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	清卓
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name	Yukio Utsami	Designation:	JICA Expert	Signature:	内海

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	5-4	Name: Foundry Shop		Code No.: Lot A	5-4	Name: Foundry Shop		
Name of Sub Item: THERMO COUPLE PYRO MITER				Name of Sub Item: THERMO COUPLE PYRO MITER				
Qty: 2 sets				Qty: 2 sets				
Country of Origin:				Country of Origin: TURKEY				
Components				Components				
Reference Models (Manufacturers)				Offered Models (Manufacturers)				
Mainbody: 1 set				Mainbody: 1 set				Check
UT07-1350 (UTEST) AD-5601A (A&D)				UT07-1350 (UTEST)				
Required Specifications				Offered Specifications				Check
-Mainbody Purpose of use= For monitoring of temperature development of mass concrete Range= -50 to 1300 °C or wider Connectors= Equipped Cable= Approx. 1 meter				-Mainbody Purpose of use= For monitoring of temperature development of mass concrete Range= -50 to 1300 °C Connectors= Equipped Cable= 1 meter				
COMMENTS: 1. The manufacturer will provide certificate regarding target temperature achievement. 2. Model number, manufacturer and country of origin is different then the provided equipment. 3. Original manual or proof of originality of already delivered manual is required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor
2. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	清純
GCT Faisalabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
3. Inspector	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	明海
JICA Islamabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	5-5	Name: Foundry Shop		Code No.: Lot A	5-5	Name: Foundry Shop		
Name of Sub Item: SAND RIDDLING MACHINE with standard accessories				Name of Sub Item: SAND RIDDLING MACHINE with standard accessories				
Qty: 1 set				Qty: 1 set				
Country of Origin:				Country of Origin: UK				
Components				Components				
Reference Models (Manufacturers)				Offered Models (Manufacturers)				
Mainbody: 1 set				Mainbody: 1 set				Check
SV003 (Impact Test Equipment Ltd) A-334 (Mishinohashi)				SV003 (Impact Test Equipment Ltd)				
Required Specifications				Offered Specifications				Check
-Sieve shaker Function of time adjustment= To be equipped Dia. of sieve frame= 200 mm or more -Sieve Set Diameter= 200 mm Mesh size= 31.5, 22.4, 16, 11.2, 8, 5.6, 4, 2, 1, 0.5, 0.25, 0.125, 0.063 mm, x 1 po/teach Pan and cover= To be equipped				-Sieve shaker Function of time adjustment= To be equipped Dia. of sieve frame= 200 mm -Sieve Set Diameter= 200 mm Mesh size= 31.5, 22.4, 16, 11.2, 8, 5.6, 4, 2, 1, 0.5, 0.25, 0.125, 0.063 mm, x 1 po/teach Pan and cover= To be equipped				
COMMENTS: 1. Supplier has to give original manual or proof of originality of already provide manual. 2. Company of origin and company name is not mentioned. Manufacturer certificate from supplier is required.								
1. Supplier	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	Usama
BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	Noor
2. Inspector	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	清純
GCT Faisalabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
3. Inspector	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	明海
JICA Islamabad	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
4. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	

Inspection Sheet GCT Faisalabad (Lot-A)

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	5-6	Name: Foundry Shop		Code No.: Lot A	5-6	Name: Foundry Shop		
Name of Sub Item:	SAND MIXER			Name of Sub Item:	SAND MIXER			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	UK			
Components	Reference Models (Manufacturers)			Components	Offered Models (Manufacturers)			
Mainbody: 1 set	TG-0130 (Cooper) MS-158 (AICOH)			Mainbody: 1 set	TG-0130 (Cooper)			X
Required Specifications				Offered Specifications				
-Mainbody Capacity= 10 liters or more Planetary speed= 50 to 240 rpm or wider Number of steps for variable speed= 4 or more Stainless bowl= To be equipped Whisk= To be equipped Power= 550W or more				-Mainbody Capacity= 10 liters Planetary speed= 10 to 240 rpm Number of steps for variable speed= 4 Stainless bowl= To be equipped Whisk= To be equipped Power= 550W				
COMMENTS: 1. Clarification regarding RPM is needed from supplier. 2. Original English manual issued by the manufacturer is required.								
1. Supplier BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector GCT Faisalabad	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor</i>
3. Inspector JICA Islamabad	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	<i>清卓</i>
4. Witness TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	<i>内海</i>

Inspection Sheet GCT Faisalabad (Lot-A)



Planned Equipment				Delivered Equipment				Check
Code No.: Lot A	6-1	Name: General Item		Code No.: Lot A	6-1	Name: General Item		
Name of Sub Item:	Generator			Name of Sub Item:	Generator			
Qty:	1 sets			Qty:	1 sets			
Country of Origin:				Country of Origin:	US			
Components	Reference Models (Manufacturers)			Components	Offered Models (Manufacturers)			
Generator: 1 set	SDQ-605-7AS (Hokutsu Industries Co., Ltd) DE55 (Caterpillar)			Generator: 1 set	DE55 (Caterpillar)			X
Required Specifications				Offered Specifications				
-Generator Rated Output= 50 KVA or more No. of phase= 3-phase, 4-wire Power factor= 80 % or more Fuel= Diesel Fuel Oil Rated Speed= 1,500 rpm or more Fuel Tank Capacity= 219 L or more Fuel Consumption= 11.5 L/hr or less				-Generator Rated Output= 50 KVA No. of phase= 3-phase, 4-wire Power factor= 80 % Fuel= Diesel Fuel Oil Rated Speed= 1,500 rpm Fuel Tank Capacity= 219 L Fuel Consumption= 11.5 L/hr				
COMMENTS: 1. Confirmation of fuel tank capacity and fuel consumption is required. 2. Yet to be tested on load. 3. Model Number is different.								
1. Supplier BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	<i>Usama</i>
2. Inspector GCT Faisalabad	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	<i>Noor</i>
3. Inspector JICA Islamabad	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	<i>清卓</i>
4. Witness TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	<i>内海</i>




Inspection Sheet GCT Faisalabad (Lot-A)



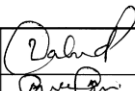
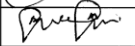
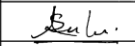

Planned Equipment				Delivered Equipment				Check
Code No.: Lot A 6-2	Name: General Item			Code No.: Lot A 6-2	Name: General Item			
Name of Sub Item: Multi Media Projector				Name of Sub Item: Multi Media Projector				
Qty: 2 sets				Qty: 2 sets				
Country of Origin:				Country of Origin: CHINA				
Components:	Reference Models (Manufacturers)			Offered Models (Manufacturers)				
Projector: 1 set	PT-LB 300 (Panasonic) NP-M322X (NEC)			PT-LB 300 (Panasonic)				
Required Specifications				Offered Specifications				Check
-Projector Light Output (Lumens)= 3100 or more Resolution= 1024 x 768 pixels or more Screen size= 0.76 to 7.6 m or wider Wall mount screen with mounting bracket= To be equipped				-Projector Light Output (Lumens)= 3100 Resolution= 1024 x 768 pixels Screen size= 0.76 to 7.62 m Wall mount screen with mounting bracket= To be equipped				
COMMENTS: Approved								
1. Supplier BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
2. Inspector GCT Faisalabad	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
3. Inspector JICA Islamabad	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
4. Witness TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	



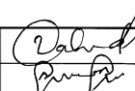
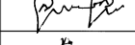
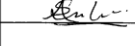
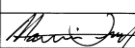
Inspection Sheet GCT Faisalabad (Lot-A)



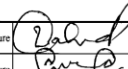
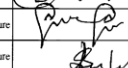
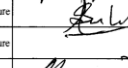
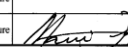
Planned Equipment				Delivered Equipment				Check
Code No.: Lot A 6-3	Name: General Item			Code No.: Lot A 6-3	Name: General Item			
Name of Sub Item: Generator for Standby				Name of Sub Item: Generator for Standby				
Qty: 1 sets				Qty: 1 sets				
Country of Origin:				Country of Origin: US				
Components:	Reference Models (Manufacturers)			Offered Models (Manufacturers)				
Generator: 1 set	SDO-255-7B1 (Hokutsu Industries Co., Ltd) DE22 (Caterpillar)			DE22 (Caterpillar)				
Required Specifications				Offered Specifications				Check
				-Generator Rated Output= 20 KVA No. of phase= 3-phase, 4-wire Power factor= 80 % Fuel= Diesel Fuel Oil Rated Speed= 1,500 rpm Fuel Tank Capacity= 66 L Fuel Consumption= 5.3 L/hr				
COMMENTS: 1. Confirmation of fuel tank capacity and fuel consumption is required. 2. Model Number is different. 3. Original manual or proof of originality of manual is required.								
1. Supplier BINARY ENGINEERING	Date:	Thursday, February 1, 2018	Name	Usama Shafiq Minhas	Designation:	Electrical Engineer	Signature:	
2. Inspector GCT Faisalabad	Date:	Thursday, February 1, 2018	Name	Noor Asif Noor	Designation:	Head of Department (Mechanical)	Signature:	
3. Inspector JICA Islamabad	Date:	Thursday, February 1, 2018	Name	Takuya Sei	Designation:	Representative	Signature:	
4. Witness TEVTA, JICA coordination	Date:	Thursday, February 1, 2018	Name		Designation:		Signature:	
5. Witness JICA Consultants (OPC)	Date:	Thursday, February 1, 2018	Name	Yukio Utsumi	Designation:	JICA Expert	Signature:	



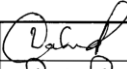
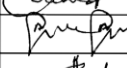
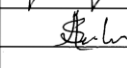
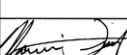
Inspection Sheet							
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE							
Planned Equipment			Delivered Equipment			Check	
Code No.: Lot B	I-1	Name: Material Testing Lab	Code No.: Lot B	I-1	Name: Material Testing Lab		
Name of Sub Item: Ultrasonic flaw detector with standard accessories complete in all respects.			Name of Sub Item: Ultrasonic flaw detector with standard accessories complete in all respects.				
Qty: 1 sets			Qty: 1 sets				
Country of Origin: Japan			Country of Origin: Japan				
Components			Components				
Reference Models (Manufacturers)			Offered Models (Manufacturers)				
Main unit : 1 set			Main unit : 1 set				
AD-3213EX (A&D Company, Limited)			AD-3213EX (A&D Company, Limited)				
UI-27 (Ryoden shonan electronics corporation)			UI-27 (Ryoden shonan electronics corporation)				
Required Specifications			Offered Specifications				Check
-Main Unit Test Range= 2.5 to 10,000 mm or wider Velocity= 100 to 15,000 m/s or wider Gain= 0 to 100 dB (in step of 0.1 or 6 dB) Band Width= 0.5 to 10 MHz or wider (adjustable) Wave form selections= DC, DC+, DC-, RF or more Vertical Linearity= ±3 % or better Display= 4 inches or more, TFT colour LCD Number of gate= 2 or more Data Memory= 100 or more Interface= RS-232C or USB Power supply= AC adapter or rechargeable battery			-Main Unit Test Range= 2.5 to 10,000 mm Velocity= 100 to 19,999 m/s Gain= 0 to 100 dB (in step of 0.1 or 6 dB) Band Width= 0.5 to 10 MHz (adjustable) Wave form selections= DC, DC+, DC-, RF Vertical Linearity= ±3 % Display= 4 inches, TFT colour LCD Number of gate= 2 Data Memory= 100 Interface= RS-232C Power supply= AC adapter or rechargeable battery				<input checked="" type="checkbox"/>
COMMENTS							
1) English Manual needed							
1. Supplier:	Date	25/8/17	Name	Zahid Ali	Position	Branch head	
Technology Links (Pvt) Ltd						Signature	
2. Inspector	Date	25/8/17	Name	NOOR ASIF NOOR	Position	HOD (Mech.)	
GCT Faisalabad						Signature	
3. Inspector	Date	25/8/17	Name	AIZAL Ghani	Position	Sr. Procurement officer	
JICA Islamabad						Signature	
4. Witness	Date		Name		Position		
TEVTA, JICA Coordination						Signature	
5. Witness	Date	25/8/17	Name	MASAMI TSUYUKI	Position	JICA consultant	
JICA Consultants (OPC)						Signature	



Inspection Sheet							
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE							
Planned Equipment			Delivered Equipment			Check	
Code No.: Lot B	I-2	Name: Material Testing Lab	Code No.: Lot B	I-2	Name: Material Testing Lab		
Name of Sub Item: Magnetic particle testing equipment with standard accessories			Name of Sub Item: Magnetic particle testing equipment with standard accessories				
Qty: 1 sets			Qty: 1 sets				
Country of Origin: Japan			Country of Origin: Japan				
Components			Components				
Reference Models (Manufacturers)			Offered Models (Manufacturers)				
Handymagna A-1 (Eshin Kagaku Co., Ltd)			Handymagna A-1 (Eshin Kagaku Co., Ltd)				
S-35LC (Eshin Kagaku Co., Ltd)			S-35LC (Eshin Kagaku Co., Ltd)				
LB-104 (DENSHIHIKI INDUSTRY CO., LTD)			LB-104 (DENSHIHIKI INDUSTRY CO., LTD)				
LED black light			LED black light				
Welding test pieces for magnetic particle inspection: 1 set			Welding test pieces for magnetic particle inspection: 1 set				
Magnetic particle inspection materials: 1 set			Magnetic particle inspection materials: 1 set				
Required Specifications			Offered Specifications				Check
-Portable magnetic flux detector Magnetizing power= 2400 AT or more Magnetic flux= 0.8 mWb or more Yoke= Detachable variable universal yoke Yoke pole leg spacing= 140 mm or more Magnetic pole section size 25 x 25 mm or more -LED black light UV intensity= 4000 µw/cm2 or more (at between 381 to 400 mm) -Welding test piece for magnetic particle inspection Contents: 1) Level 1 (Flat plate) x 1 set 2) Level 2 (Curved surface, T welding) x 1 set -Magnetic particle inspection materials Contents: 1) Magnetic particle (1 kg) x 1 can Particle size= 0.5 µm or wider 2) Dispenser x (18 L) x 1 can Type= Regular type, well suspended type Can= UN can 3) Rust preventive (18 L) x 1 can Application for use= For general steel materials Can= UN can 4) Precipitation meter x 1 set Type= Pinform Stand= Equipped			-Portable magnetic flux detector Magnetizing power= 2400 AT Magnetic flux= 0.8 mWb Yoke= Detachable variable universal yoke Yoke pole leg spacing= 140 mm Magnetic pole section size 25 x 25 mm -LED black light UV intensity= 4500 µw/cm2 (at 381 mm) -Welding test piece for magnetic particle inspection Contents: 1) Level 1 (Flat plate) x 1 set 2) Level 2 (Curved surface, T welding) x 1 set -Magnetic particle inspection materials Contents: 1) Magnetic particle (1 kg) x 1 can Particle size= 0.5 µm 2) Dispenser x (18 L) x 1 can Type= Regular type, well suspended type Can= UN can 3) Rust preventive (18 L) x 1 can Application for use= For general steel materials Can= UN can 4) Precipitation meter x 1 set Type= Pinform Stand= Equipped				<input checked="" type="checkbox"/>
COMMENTS							
1) Manual in English Required. 2) Testing not done because GCT Facility not ready							
1. Supplier:	Date	25/8/17	Name	Zahid Ali	Position	Branch head	
Technology Links (Pvt) Ltd						Signature	
2. Inspector	Date	25/8/17	Name	NOOR ASIF NOOR	Position	HOD	
GCT Faisalabad						Signature	
3. Inspector	Date	25/8/17	Name	AIZAL Ghani	Position	Sr. Proc. Officer	
JICA Islamabad						Signature	
4. Witness	Date		Name		Position		
TEVTA, JICA Coordination						Signature	
5. Witness	Date	25/8/17	Name	MASAMI TSUYUKI	Position	JICA consultant	
JICA Consultants (OPC)						Signature	



Inspection Sheet								
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE								
Planned Equipment			Delivered Equipment			Check		
Code No.: Lot B 1-3	Name: Material Testing Lab		Code No.: Lot B 1-3	Name: Material Testing Lab				
Name of Sub Item: Heat treatment Furnace with standard accessories			Name of Sub Item: Heat treatment Furnace with standard accessories					
Qty: 1 sets			Qty: 1 sets					
Country of Origin:			Country of Origin: Germany					
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)				
Main Unit: 1 set	N 7H (Nabertherm GmbH) TL 4Y (Thermal)		Main Unit: 1 set	N 7H (Nabertherm GmbH)				
	Required Specifications			Offered Specifications				
-Main Unit Maximum Temperature= 1100 °C or more Inner Dimensions= 210(W) x 250(D) x 120(H) mm or more Power= 3.0 kW or more Type= Desktop			-Main Unit Maximum Temperature= 1280 °C Inner Dimensions= 250(W) x 250(D) x 120(H) mm Power= 3.0 kW Type= Desktop					
COMMENTS 1) English manual required 2) Operation not done due to GCT facility not ready								
1. Supplier: Technology Links (Pvt) Ltd	Date	25/8/17	Name	Zahid Ali	Position	Branch head	Signature	
2. Inspector GCT Faisalabad	Date	25/8/17	Name	Noor Asif	Position	HOD	Signature	
3. Inspector JICA Islamabad	Date	25/8/17	Name	Aizaz Gul	Position	Sr. pro. officer	Signature	
4. Witness TEVTA, JICA Coordination	Date		Name		Position		Signature	
5. Witness JICA Consultants (OPC)	Date	24/08/17	Name	Masami Tsuyuki	Position	JICA consultant	Signature	




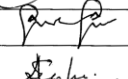
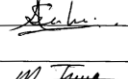
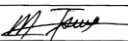
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THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE								
Planned Equipment			Delivered Equipment			Check		
Code No.: Lot B 1-4	Name: Material Testing Lab		Code No.: Lot B 1-4	Name: Material Testing Lab				
Name of Sub Item: Specimen Mounting Press with standard accessories			Name of Sub Item: Specimen Mounting Press with standard accessories					
Qty: 1 sets			Qty: 1 sets					
Country of Origin:			Country of Origin: China					
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)				
Main Unit: 1 set	XQ-2B (ASLI) CinoPress-30 (Struers)		Main Unit: 1 set	XQ-2B (ASLI)				
	Required Specifications			Offered Specifications				
-Main Unit Mounting Method= Manual Mold Diameter= 22/30/45 mm or more Heater= 650W or more			-Main Unit Mounting method= Manual Mold diameter= 22/30/45 mm Heater= 650 W					
COMMENTS 1) Approved as a whole								
1. Supplier: Technology Links (Pvt) Ltd	Date	25/8/17	Name	Zahid Ali	Position	Branch head	Signature	
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	Noor Asif Noor	Position	HOD	Signature	
3. Inspector JICA Islamabad	Date	25/8/17	Name	Aizaz Gul	Position	Sr. pro. officer	Signature	
4. Witness TEVTA, JICA Coordination	Date		Name		Position		Signature	
5. Witness JICA Consultants (OPC)	Date	25/8/17	Name	Masami Tsuyuki	Position	JICA consultant	Signature	


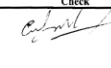
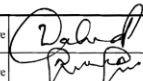
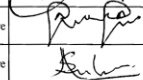
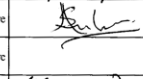
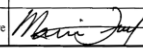
Inspection Sheet								
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE								
Planned Equipment		Delivered Equipment			Check			
Code No.: Lot B	Name: Material Testing Lab	Code No.: Lot B	Name: Material Testing Lab					
Name of Sub Item: Maintenance and Repair Tool kit		Name of Sub Item: Maintenance and Repair Tool kit						
Qty: 1 sets		Qty: 1 sets						
Country of Origin:		Country of Origin: Japan						
Components	Reference Models (Manufacturers)	Components	Offered Models (Manufacturers)					
Tool set: 1 set	TSX90 (TONE CO., LTD) SK59310XX (KTC)	Tool set: 1 set	TSX90 (TONE CO., LTD)					
Required Specifications		Offered Specifications						
Tool set Total quantity= 86 pcs or more Contents: 1) SOCKET (6pt.)= 18 pcs or more 2) DEEP SOCKET (6pt.)= 4 pcs or more 3) HEXAGON SOCKET= 4 pcs or more 4) RATCHET HANDLE= 9.5 mm x 1 pc or more 5) SPINNER HANDLE= 1 pc or more 6) EXTENSION BAR= 9.5 mm x 2 pcs or more 7) BALL JOINT= 1 pc or more 8) ADAPTOR= 1 pc or more 9) OFFSET WRENCH= 9 pcs or more 10) ADJUSTABLE WRENCH= 1 pc or more 11) COMBINATION PLIERS= 1 pc or more Capacity of cutting diameter= 2.6 mm or more 12) NEEDLE NOSE PLIERS= 1 pc or more Capacity of cutting diameter= 1.2 mm or more 13) DIAGONAL CUTTING PLIERS= 1 pc or more Capacity of cutting diameter= 1.2 mm or more 14) POWER GRIP SCREWDRIVER (THROUGH TYPE)= 6 pcs or more 15) COMBINATION HAMMER= 1 pc or more 16) LONG BALL POINT HEX KEY WRENCH SET Width across flat= 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm, x 1 pc/each or more Holder= To be submitted		Tool set Total quantity= 86 pcs Contents: 1) SOCKET (6pt.)= 18 pcs 2) DEEP SOCKET (6pt.)= 6 pcs 3) HEXAGON SOCKET= 7 pcs 4) RATCHET HANDLE= 9.5 mm x 1 pc, 12.7 mm x 1 pc 5) SPINNER HANDLE= 1 pc 6) EXTENSION BAR= 9.5 mm x 2 pcs, 12.7 mm x 3 pcs 7) BALL JOINT= 2 pcs 8) ADAPTOR= 2 pcs 9) OFFSET WRENCH= 10 pcs 10) ADJUSTABLE WRENCH= 2 pcs 11) COMBINATION PLIERS= 1 pc Capacity of cutting diameter= 3 mm 12) NEEDLE NOSE PLIERS= 1 pc Capacity of cutting diameter= 1.2 mm 13) DIAGONAL CUTTING PLIERS= 1 pc Capacity of cutting diameter= 1.2 mm 14) POWER GRIP SCREWDRIVER (THROUGH TYPE)= 6 pcs 15) COMBINATION HAMMER= 1 pc 16) LONG BALL POINT HEX KEY WRENCH SET Width across flat= 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm, x 1 pc/each Holder= Equipped						
COMMENTS								
1) Approved as a whole								
1. Supplier:	Date	Name	Position	Signature				
Technology Links (Pvt) Ltd	25/8/17	Zahid Ali	Branch head					
2. Inspector	Date	Name	Position	Signature				
GCT Faisalabad	25/08/2017	NOOR ASIF NOOR	HOD					
3. Inspector	Date	Name	Position	Signature				
JICA Islamabad	25/8/17	Aizab Ghani	SR: p20: office					
4. Witness	Date	Name	Position	Signature				
TEVTA, JICA Coordination								
5. Witness	Date	Name	Position	Signature				
JICA Consultants (OPC)	25/8/17	MASAMI TSUYUKI	JICA consultant					

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment		Delivered Equipment			Check	
Code No.: Lot B	Name: Material Testing Lab	Code No.: Lot B	Name: Material Testing Lab			
Name of Sub Item: Metallurgical Microscope with standard accessories		Name of Sub Item: Metallurgical Microscope with standard accessories				
Qty: 1 sets		Qty: 1 sets				
Country of Origin:		Country of Origin: Japan				
Components	Reference Models (Manufacturers)	Components	Offered Models (Manufacturers)			
Main Unit: 1 set	EZ-N-13/PKL-2 (Meiji Techno) SZX72 (OLYMPUS)	Main Unit: 1 set	EZ-N-13/PKL-2 (Meiji Techno)			
Stand: 1 set	-	Stand: 1 set	-			
Eye-piece: 1 set	-	Eye-piece: 1 set	-			
Optional lens: 1 set	-	Optional lens: 1 set	-			
Required Specifications		Offered Specifications				
Main unit Zoom Ratio= 7:1 Zoom Range= 1.0X - 5.6X or wider Zoom Control= Dual, graduated, bilateral mount Field of View= 22 to 3.1 mm or wider (with eyepiece) Working Distance= 90 mm or more Eyetube inclination= 45° Interpupillary Distance= 50 to 75 mm or wider Dioptic Adjustment= Dual Extended Working Distance= 171 mm with optional lens or more Extended Field of View= 55 to 7.8 mm with optional lens or wider		Main unit Zoom Ratio= 7:1 Zoom Range= 1.0X - 7.0X Zoom Control= Dual, graduated, bilateral mount Field of View= 23 to 3.2 mm (with eyepiece) Working Distance= 90 mm Eyetube inclination= 45° Interpupillary Distance= 54 to 75 mm Dioptic Adjustment= Dual (+5 diopters) Extended Working Distance= 230 mm with optional lens Extended Field of View= 73.8 to 4.4 mm with optional lens				
COMMENTS						
1) Manual in english need						
2) Clarification on 'Extended field of view needed'						
1. Supplier:	Date	Name	Position	Signature		
Technology Links (Pvt) Ltd	25/8/17	Zahid Ali	Branch head			
2. Inspector	Date	Name	Position	Signature		
GCT Faisalabad	25/08/2017	NOOR ASIF NOOR	HOD			
3. Inspector	Date	Name	Position	Signature		
JICA Islamabad	25/8/17	Aizab Ghani	SR: p20: office			
4. Witness	Date	Name	Position	Signature		
TEVTA, JICA Coordination						
5. Witness	Date	Name	Position	Signature		
JICA Consultants (OPC)	25/8/17	MASAMI TSUYUKI	JICA consultant			

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No. Lot B	1-7	Name: Material Testing Lab	Code No. Lot B	1-7	Name: Material Testing Lab	
Name of Sub Item: UNIVERSAL HARDNESS TESTING MACHINE FOR BRINELL, ROCKWELL AND VICKERS HARDNESS TEST			Name of Sub Item: UNIVERSAL HARDNESS TESTING MACHINE FOR BRINELL, ROCKWELL AND VICKERS HARDNESS TEST			
Qty: 1 sets			Qty: 1 sets			
Country of Origin:			Country of Origin: China			
Components			Components			
Reference Models (Manufacturers)			Offered Models (Manufacturers)			
SHR-187.5 (Sinowon)			SHR-187.5 (Sinowon)			
Hardness testing machine : 1 set			Hardness testing machine : 1 set			
Required Specifications			Offered Specifications			
Hardness testing machine Measuring function= Brinell, Rockwell and Vickers in one unit. Rockwell testing force= Approx. 588.4 N, 980.7 N, 1471 N Brinell testing force= Approx. 306.5 N, 612.9 N, 1839 N Vickers testing force= Approx. 294.2 N, 980.7 N Magnification of microscope= 37.5 x, 75 x or more Max. height of specimens= 170 mm or more			Hardness testing machine Measuring function= Brinell, Rockwell and Vickers in one unit. Rockwell testing force= 588.4 N, 980.7 N, 1471 N Brinell testing force= 306.5 N, 612.9 N, 1839 N Vickers testing force= 294.2 N, 980.7 N Magnification of microscope= 37.5 x, 75 x Max. height of specimens= 170 mm			
COMMENTS			COMMENTS			
1) Approved as a whole						
1. Supplier:	Date	25/08/17	Name	Zahid Ali	Position	Branch head
Technology Links (Pvt) Ltd						
2. Inspector	Date	25/08/2017	Name	NOOR ASIF NOOR	Position	HOD
GCT Faisalabad						
3. Inspector	Date	26/08/17	Name	AIZAN GHANI	Position	Sr. Pro. Office
JICA Islamabad						
4. Witness	Date		Name		Position	
TEVTA, JICA Coordination						
5. Witness	Date	25/08/17	Name	Masumi Syulki	Position	JICA Consultant
JICA Consultants (OPC)						

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No. Lot B	2-1	Name: Auto CAD/CAD CAM Lab	Code No. Lot B	2-1	Name: Auto CAD/CAD CAM Lab	
Name of Sub Item: Computer			Name of Sub Item: Computer			
Qty: 50 sets			Qty: 50 sets			
Country of Origin:			Country of Origin: Malaysia			
Components			Components			
Reference Models (Manufacturers)			Offered Models (Manufacturers)			
Optiplex 7040MT (DELL)			Optiplex 7040MT (DELL)			
Mainbody 1 set each			Mainbody 1 set each			
Required Specifications			Offered Specifications			
Computer CPU- Core i7 6700 (3.4GHZ) or equivalent RAM- 16 GB or more Hard disk- 1TB SATA or more Graphic card- nVidia Quadro K620 or equivalent Drive- DVD/RW or equivalent OS- Windows 10 pro or equivalent - Mouse- To be equipped - Keyboard- To be equipped - Monitor- LED, 20 inch or more - UPS Capacity = 600 VA or more - Table (Veneer)- to be equipped - Chair (5 casters)- to be equipped - Following Software to be installed (1) Auto Desk Inventor Professional 2017 (Genuine Version) (2) Feature CAM (Genuine Version) (3) AUTO CAD 2017 Professional (Genuine Version)			Computer CPU- Core i7 6700 (3.4GHZ) RAM- 16 GB Hard disk- 1TB SATA Graphic card- nVidia Quadro K620 or nVidia GT750 or equivalent Drive- DVD/RW OS- Windows 10 pro - Mouse- Equipped - Keyboard- Equipped - Monitor- LED, 20 inch - UPS Capacity of UPS- 600 VA - Table (Veneer)- Equipped - Chair (5 casters)- Equipped - Following Software are installed (1) Auto Desk Inventor Professional 2017 (Genuine Version) (2) Feature CAM (Genuine Version) (3) AUTO CAD 2017 Professional (Genuine Version)			
COMMENTS			COMMENTS			
(1) Inspection pending till installation of software and accessories (2) Training Manual in english for following required i) Auto Desk Inventor Professional 2017 (Genuine Version) ii) Feature CAM (Genuine Version) iii) AUTO CAD 2017 Professional (Genuine Version)						
1. Supplier:	Date	25/08/17	Name	Zahid Ali	Position	Branch head
Technology Links (Pvt) Ltd						
2. Inspector	Date	25/08/2017	Name	NOOR ASIF NOOR	Position	HOD
GCT Faisalabad						
3. Inspector	Date	25/08/2017	Name	AIZAN GHANI	Position	Sr. Pro. Office
JICA Islamabad						
4. Witness	Date		Name		Position	
TEVTA, JICA Coordination						
5. Witness	Date	25/08/17	Name	Masumi Syulki	Position	JICA Consultant
JICA Consultants (OPC)						

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 2-2	Name: Auto CAD/CAD CAM Lab		Code No.: Lot B 2-2	Name: Auto CAD/CAD CAM Lab		
Name of Sub Item: SERVER SYSTEM			Name of Sub Item: SERVER SYSTEM			
Qty: 1 sets			Qty: 1 sets			
Country of Origin:			Country of Origin: Malaysia			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Mainbody: 1 set	Poweredge T130 (DELL)		Mainbody: 1 set	Poweredge T130 (DELL)		
Mouse: 1 set	HPE ProLiant ML30 Gen9 (HP)		Mouse: 1 set			
Keyboard: 1 set			Keyboard: 1 set			
Monitor: 1 set			Monitor: 1 set			
UPS: 1 set			UPS: 1 set			
Required Specifications			Offered Specifications			Check
Mainbody CPU= Xeon E3-1220 v5 (3.0GHz) or equivalent RAM= 8 GB or more Hard disk= 1TB SATA or more Drive= DVD/RW or equivalent OS= Windows Server 2012 R2 or equivalent - Mouse= To be equipped - Keyboard= To be equipped - Monitor= LED, 19.5 inch or more - UPS Capacity= 1000 VA or more			Mainbody CPU= Xeon E3-1220 v5 (3.0GHz) RAM= 8 GB Hard disk= 1TB SATA Drive= DVD/RW OS= Windows Server 2012 R2 - Mouse= Equipped - Keyboard= Equipped - Monitor= LED, 20 inch - UPS Capacity of UPS= 1000 VA			
COMMENTS 1) Inspection pending till installation of software and accessories						
1. Supplier:	Date	Name	Position	Signature		
Technology Links (Pvt) Ltd	25/8/17	Zahid Ali	Branch head			
2. Inspector	Date	Name	Position	Signature		
GCT Faisalabad	25/08/2017	Noor ASIF Noor	HOD			
3. Inspector	Date	Name	Position	Signature		
JICA Islamabad	25/8/17	Aziz Ghani	Sr. Pso. officer			
4. Witness	Date	Name	Position	Signature		
TEVTA, JICA Coordination						
5. Witness	Date	Name	Position	Signature		
JICA Consultants (OPC)	25/8/17	Masoom Tazuki	JICA consultant			

Inspection Sheet							
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE							
Planned Equipment			Delivered Equipment			Check	
Code No.: Lot B 2-3	Name: Auto CAD/CAD CAM Lab		Code No.: Lot B 2-3	Name: Auto CAD/CAD CAM Lab			
Name of Sub Item: Multi Media Projector			Name of Sub Item: Multi Media Projector				
Qty: 1 sets			Qty: 1 sets				
Country of Origin:			Country of Origin: Japan				
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)			
Projector: 1 set	PT-LB 300 (Panasonic)		Projector: 1 set	PT-LB 300 (Panasonic)			
	NP-M322X (NEC)						
Required Specifications			Offered Specifications				Check
Projector Light Output (Lumens)= 3100 or more Resolution= 1024 x 768 pixels or more Screen size= 0.76 to 7.6 m or wider Wall mount screen with mounting bracket= To be equipped			Projector Light Output (Lumens)= 3100 Resolution= 1024 x 768 pixels Screen size= 0.64 to 7.6 m Wall mount screen with mounting bracket= Equipped				
COMMENTS 1) Approved as a whole.							
1. Supplier:	Date	Name	Position	Signature			
Technology Links (Pvt) Ltd	25/8/17	Zahid Ali	Branch head				
2. Inspector	Date	Name	Position	Signature			
GCT Faisalabad	25/08/2017	Noor ASIF Noor	HOD				
3. Inspector	Date	Name	Position	Signature			
JICA Islamabad	25/8/2017	Aziz Ghani	Sr. Pso. officer				
4. Witness	Date	Name	Position	Signature			
TEVTA, JICA Coordination							
5. Witness	Date	Name	Position	Signature			
JICA Consultants (OPC)	25/08/2017	Masoom Tazuki	JICA consultant				

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No. Lot B	3-1	Name: Metrology Lab	Code No. Lot B	3-1	Name: Metrology Lab	✓
Name of Sub Item:	VERNIER CALIPER DIGITAL		Name of Sub Item:	VERNIER CALIPER DIGITAL		
Qty:	20 sets		Qty:	20 sets		
Country of Origin:			Country of Origin:	China		
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Digital caliper: 1 set	DS-150 (Niigata Seiki Co., Ltd) CD-15CX (Mitutoyo)		Digital caliper: 1 set	DS-150 (Niigata Seiki Co., Ltd)		
Required Specifications			Offered Specifications			Check
-Digital caliper Measuring range = 0-150 mm or wider Resolution = 0.01 mm or less Accuracy = ± 0.03 mm or better Display = Digital Hold function = To be equipped Electric source = Battery			-Digital caliper Measuring range = 0-150 mm Resolution = 0.01 mm Accuracy = ± 0.03 mm Display = Digital Hold function = Equipped Electric source = Battery			✓
COMMENTS						
1) Manual in English required						
1. Supplier:	Date	25/8/17	Name	Zahid Ali	Position	Branch head
Technology Links (Pvt) Ltd						Signature
2. Inspector	Date	25/08/2017	Name	Noor-Asif Noor	Position	HOD
GCT Faisalabad						Signature
3. Inspector	Date	25/08/2017	Name	Aziz Ghani	Position	Sr. Pw Officer
JICA Islamabad						Signature
4. Witness	Date		Name		Position	
TEVTA, JICA Coordination						Signature
5. Witness	Date	25/08/2017	Name	MASAMI Tsuyuki	Position	JICA Consultant
JICA Consultants (OPC)						Signature

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No. Lot B	3-2	Name: Metrology Lab	Code No. Lot B	3-2	Name: Metrology Lab	✓
Name of Sub Item:	Outside Micrometer DIGITAL		Name of Sub Item:	Outside Micrometer DIGITAL		
Qty:	20 sets		Qty:	20 sets		
Country of Origin:			Country of Origin:	China		
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Digital outside micrometer: 1 set	MCD130-25 (Niigata Seiki Co., Ltd) MDC-255X (Mitutoyo)		Digital outside micrometer: 1 set	MCD130-25 (Niigata Seiki Co., Ltd)		
Required Specifications			Offered Specifications			Check
-Digital outside micrometer Measuring range= 0-25 mm or wider Resolution = 0.001 mm or less Accuracy = ± 4 µm or better Display = Digital Ratchet stop = To be equipped Electric source = Battery			-Digital outside micrometer Measuring range= 0-25 mm Resolution = 0.001 mm Accuracy = ± 4 µm Display = Digital Ratchet stop = Equipped Electric source = Battery			✓
COMMENTS						
1) Manual in english required						
1. Supplier:	Date	25/8/17	Name	Zahid Ali	Position	Branch head
Technology Links (Pvt) Ltd						Signature
2. Inspector	Date	25/08/2017	Name	Noor ASIF NOOR	Position	HOD
GCT Faisalabad						Signature
3. Inspector	Date	25/08/2017	Name	Aziz Ghani	Position	Sr. Pw Officer
JICA Islamabad						Signature
4. Witness	Date		Name		Position	
TEVTA, JICA Coordination						Signature
5. Witness	Date	25/08/2017	Name	MASAMI Tsuyuki	Position	JICA Consultant
JICA Consultants (OPC)						Signature

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 3-3	Name: Metrology Lab		Code No.: Lot B 3-3	Name: Metrology Lab		✓
Name of Sub Item: THREAD MICROMETER			Name of Sub Item: THREAD MICROMETER			
Qty: 20 sets			Qty: 20 sets			
Country of Origin:			Country of Origin: China			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Digital screw thread micrometer: 1 set	3581-25AC (INSIZE) TMC-25MX (Mitutoyo)		Digital screw thread micrometer: 1 set	3581-25AC (INSIZE)		
Measuring tips for screw thread micrometer: 1 set	7381-T15 (INSIZE) M4 (Mitutoyo)		Measuring tips for screw thread micrometer: 1 set	7381-T15 (INSIZE)		
Required Specifications			Offered Specifications			Check
Digital screw thread micrometer Measuring range= 0-25 mm or wider Resolution = 0.001 mm or less Ratchet stop= To be equipped Electric source = Battery Measuring tips for screw thread micrometer Range of metric pitch mm = 2.0-3.0 mm or wider			Digital screw thread micrometer Measuring range= 0-25 mm Resolution = 0.001 mm Ratchet stop= Equipped Electric source = Battery Measuring tips for screw thread micrometer Range of metric pitch mm = 2.0-3.0 mm			✓
COMMENTS 1) Manual in english required 2) Model title 3581-25AC (offered) and 3581-25AJ (supplied) are different. Supplier will clarify this point.						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/8/17	Name: Zahid Ali	Position: Branch head	Signature: Zahid		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: Noor Asif Noor	Position: HSD	Signature: Noor		
3. Inspector JICA Islamabad	Date: 25/8/17	Name: Aizaz G. Khan	Position: Sr. pro. officer	Signature: Aizaz		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/8/17	Name: Masami Tsuyuki	Position: JICA consultant	Signature: Masami		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 3-4	Name: Metrology Lab		Code No.: Lot B 3-4	Name: Metrology Lab		✓
Name of Sub Item: DEPTH GAUGE			Name of Sub Item: DEPTH GAUGE			
Qty: 10 sets			Qty: 10 sets			
Country of Origin:			Country of Origin: China			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Vernier depth gauge: 1 set	CDS-15 (Niigata Seiki Co., Ltd) VDS-15 (Mitutoyo)		Vernier depth gauge: 1 set	CDS-15 (Niigata Seiki Co., Ltd)		
Required Specifications			Offered Specifications			Check
Vernier depth gauge Measuring range= 0-150 mm or wider Resolution = 0.05 mm or less			Vernier depth gauge Measuring range= 0-150 mm Resolution = 0.05 mm			✓
COMMENTS 1) Manual in english required						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/8/17	Name: Zahid Ali	Position: Branch head	Signature: Zahid		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: Noor Asif Noor	Position: HSD	Signature: Noor		
3. Inspector JICA Islamabad	Date: 25/08/2017	Name: Aizaz G. Khan	Position: Sr. Procurement officer	Signature: Aizaz		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masami Tsuyuki	Position: JICA consultant	Signature: Masami		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B	3-5	Name: Metrology Lab	Code No.: Lot B	3-5	Name: Metrology Lab	/
Name of Sub Item:	VERNIER HEIGHT GAUGE		Name of Sub Item:	VERNIER HEIGHT GAUGE		
Qty:	7 sets		Qty:	7 sets		/
Country of Origin:			Country of Origin:	China		
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		/
Vernier height gauge: 1 set	VHK-30 (Niigata Seiki Co., Ltd) HS-30 (Mitutoyo)		Vernier height gauge: 1 set	VHK-30 (Niigata Seiki Co., Ltd)		
Required Specifications			Offered Specifications			Check
-Vernier height gauge Material of scriber= Carbide tipped Measuring range= 0-300 mm or wider Resolution= 0.02 mm or less Accuracy= ± 0.04 mm or better			-Vernier height gauge Material of scriber= Carbide tipped Measuring range= 0-300 mm Resolution= 0.02 mm Accuracy= ± 0.04 mm			/
COMMENTS						
1) Manual in english required						
1. Supplier: Technology Links (Pvt) Ltd	Date	25/8/17	Name	Zahid Ali	Position	Branch head
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	NOOR ASIF NOOR	Position	HOD
3. Inspector JICA Islamabad	Date	25/08/2017	Name	Aizaz Guani	Position	Sr. Pro. Officer
4. Witness TEVTA, JICA Coordination	Date		Name		Position	
5. Witness JICA Consultants (OPC)	Date	24/08/2017	Name	MASAMI TSUKI	Position	JICA consultant

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B	3-6	Name: Metrology Lab	Code No.: Lot B	3-6	Name: Metrology Lab	/
Name of Sub Item:	DIAL INDICATOR WITH MEGNATIC STAND		Name of Sub Item:	DIAL INDICATOR WITH MEGNATIC STAND		
Qty:	5 sets		Qty:	5 sets		/
Country of Origin:			Country of Origin:	China		
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		/
Dial gauge: 1 set	DI-3058 (Niigata Seiki Co., Ltd) 3052S-19 (Mitutoyo)		Dial gauge: 1 set	DI-3058 (Niigata Seiki Co., Ltd)		
Magnetic stand: 1 set	SB-6B (Niigata Seiki Co., Ltd) 7010-11 (Mitutoyo)		Magnetic stand: 1 set	SB-6B (Niigata Seiki Co., Ltd)		
Required Specifications			Offered Specifications			Check
-Dial gauge Measuring range= 0-30 mm or wider Graduation= 0.01 mm or less Backlash error= 7 µm or better Repeatability = 5 µm or better			-Dial gauge Measuring range= 0-30 mm Graduation= 0.01 mm Backlash error= 7 µm Repeatability = 5 µm			/
-Magnetic stand Fine adjustment= Equipped Magnetic force= Approx. 600N or more Stem holder= φ6, φ8 mm or more			-Magnetic stand Fine adjustment= Equipped Magnetic force= Approx. 800N Stem holder= φ6, φ8 mm			/
COMMENTS						
1) Manual in english required						
1. Supplier: Technology Links (Pvt) Ltd	Date	25/08/2017	Name	Zahid Ali	Position	Br. Manager
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	NOOR ASIF NOOR	Position	HOD
3. Inspector JICA Islamabad	Date	25/08/2017	Name	Aizaz Guani	Position	Sr. Pro. Officer
4. Witness TEVTA, JICA Coordination	Date		Name		Position	
5. Witness JICA Consultants (OPC)	Date	24/08/2017	Name	MASAMI TSUKI	Position	JICA consultant

Inspection Sheet								
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE								
Planned Equipment			Delivered Equipment			Check		
Code No.: Lot B 3-7	Name: Metrology Lab		Code No.: Lot B 3-7	Name: Metrology Lab		✓		
Name of Sub Item: ELECTRICAL COMPARATORS with standard accessories			Name of Sub Item: ELECTRICAL COMPARATORS with standard accessories					
Qty: 2 sets			Qty: 2 sets			✓		
Country of Origin:			Country of Origin: China					
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		✓		
Digital indicator: 1 set	DEI-WKS2 (Niigata Seiki Co., Ltd)		Digital indicator: 1 set	DEI-WKS2 (Niigata Seiki Co., Ltd)				
Steel comparator stand: 1 set	SC-80C (Niigata Seiki Co., Ltd)		Steel comparator stand: 1 set	SC-80C (Niigata Seiki Co., Ltd)		✓		
	BSB-20X (Mitutoyo)							
Required Specifications			Offered Specifications			Check		
Digital indicator Measuring range= 0-12.5 mm or wider Resolution = 0.001 mm or less Max. error= 3 µm or better Repeatability= 2 µm or better Measuring force= 0.65 N or less Display = Digital Electric source = Battery Steel comparator stand Material of base= Cast iron Vertical effective stroke of head= 0-150 mm or more Dimension of base= 80 x 80 mm or more Flatness of base= 3 µm or better Mounting hole for indicator= ø8 mm or more			Digital indicator Measuring range= 0-12.5 mm Resolution = 0.001 mm Max. error= 3 µm Repeatability= 2 µm Measuring force= 0.65-0.9 N Display = Digital Electric source = Battery Steel comparator stand Material of base= Cast iron Vertical effective stroke of head= 0-150 mm Dimension of base= 80 x 80 mm Flatness of base= 3 µm Mounting hole for indicator= ø8 mm			Check		
COMMENTS 1) Manual in english required for digital indicator Model DEI-WKS2(Niigata Seiki Co, Ltd)								
1. Supplier: Technology Links (Pvt) Ltd	Date	25/08/17	Name	Zahid Ali	Position	Box Manager	Signature	[Signature]
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	Noor Asif Noor	Position	HOD	Signature	[Signature]
3. Inspector JICA Islamabad	Date	25/8/17	Name	Aizaz Ghani	Position	Sr. pro. officer	Signature	[Signature]
4. Witness TEVTA, JICA Coordination	Date		Name		Position		Signature	
5. Witness JICA Consultants (OPC)	Date	25/08/2017	Name	Masami Tsuyuki	Position	JICA Consultant	Signature	[Signature]

Inspection Sheet								
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE								
Planned Equipment			Delivered Equipment			Check		
Code No.: Lot B 3-8	Name: Metrology Lab		Code No.: Lot B 3-8	Name: Metrology Lab		✓		
Name of Sub Item: GAUGE BLOCK SET			Name of Sub Item: GAUGE BLOCK SET					
Qty: 5 sets			Qty: 5 sets			✓		
Country of Origin:			Country of Origin: China					
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		✓		
Block gauge set: 1 set	GBS0-103 (Niigata Seiki Co., Ltd)		Block gauge set: 1 set	GBS0-103 (Niigata Seiki Co., Ltd)				
Required Specifications			Offered Specifications			Check		
Block gauge set Grade= JIS (Grade 0) Standard or better Material= High carbon high chromium steel Contents: 1) Nominal size= 1.005 mm, x 1 pc or more 2) Nominal size= 1.01-1.49 mm, x 49 pcs (step 0.01 mm) or more 3) Nominal size= 0.5-24.3 mm, x 49 pcs (step 0.5 mm) or more 4) Nominal size= 25-100 mm, x 4 pcs (step 25 mm) or more			Block gauge set Grade= JIS (Grade 0) Standard Material= High carbon high chromium steel Contents: 1) Nominal size= 1.005 mm, x 1 pc 2) Nominal size= 1.01-1.49 mm, x 49 pcs (step 0.01 mm) 3) Nominal size= 0.5-24.3 mm, x 49 pcs (step 0.5 mm) 4) Nominal size= 25-100 mm, x 4 pcs (step 25 mm)			Check		
COMMENTS 1) Manual in english required 2) Two pieces of No. 3.5 and 10 of box no. 4975846395954 (bar code) are missing								
1. Supplier: Technology Links (Pvt) Ltd	Date	25/08/17	Name	Zahid Ali	Position	Box Manager	Signature	[Signature]
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	Noor Asif Noor	Position	HOD	Signature	[Signature]
3. Inspector JICA Islamabad	Date	25/08/2017	Name	Aizaz Ghani	Position	Sr. Pro. officer	Signature	[Signature]
4. Witness TEVTA, JICA Coordination	Date		Name		Position		Signature	
5. Witness JICA Consultants (OPC)	Date	25/08/2017	Name	Masami Tsuyuki	Position	JICA Consultant	Signature	[Signature]

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 3-9	Name: Metrology Lab		Code No.: Lot B 3-9	Name: Metrology Lab		✓
Name of Sub Item: SINE BAR			Name of Sub Item: SINE BAR			
Qty: 5 sets			Qty: 5 sets			✓
Country of Origin:			Country of Origin: Japan			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Sine bar: 1 set	NH102 (Obishi Keiki Seisakusho Co., Ltd) RSB-200 (RIKEN KEIKI SEISAKUJO Co.)		Sine bar: 1 set	NH102 (Obishi Keiki Seisakusho Co., Ltd)		
	Required Specifications			Offered Specifications		Check
Sine bar	The upper surface= Lapping finishing Roller center distance= 200 mm ± 0.003 or more Parallelism= 3.0 μm or better		Sine bar	The upper surface= Lapping finishing Roller center distance= 200 mm ± 0.003 Parallelism= 3.0 μm		✓
COMMENTS						
1) Manual in english required						
2) model name (NH102) is not mention on any SINE BAR						
1. Supplier:	Date	Name	Position	Signature		
Technology Links (Pvt) Ltd	25/8/17	Zahid Ali	Branch head			
2. Inspector	Date	Name	Position	Signature		
GCT Faisalabad	25/08/2017	NOOR ASIF NOOR	HOD			
3. Inspector	Date	Name	Position	Signature		
JICA Islamabad	25/08/2017	Aizaz Ghani	Sr. Pm. office			
4. Witness	Date	Name	Position	Signature		
TEVTA, JICA Coordination						
5. Witness	Date	Name	Position	Signature		
JICA Consultants (OPC)	25/08/2017	Masami Tsuyuki	JICA Consultant			

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 3-10	Name: Metrology Lab		Code No.: Lot B 3-10	Name: Metrology Lab		✓
Name of Sub Item: Surface Plate (Cast-Iron)			Name of Sub Item: Surface Plate (Cast-Iron)			
Qty: 1 sets			Qty: 1 sets			✓
Country of Origin:			Country of Origin: Japan			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Surface plate: 1 set	FC-5050 (CHUO PRECISION INDUSTRIAL BC-109 (Obishi Keiki Seisakusho Co, Ltd)		Surface plate: 1 set	FC-5050 (CHUO PRECISION INDUSTRIAL CO, LTD)		
	Required Specifications			Offered Specifications		Check
Surface plate	Material= Cast iron Dimension= W 500 x D500 x H120mm or more Flatness= 0.020mm or better		Surface plate	Material= Cast iron Dimension= W 500 x D500 x H120mm Flatness= 0.015mm		✓
COMMENTS						
1) Approved as a whole						
1. Supplier:	Date	Name	Position	Signature		
Technology Links (Pvt) Ltd	25/8/17	Zahid Ali	Branch head			
2. Inspector	Date	Name	Position	Signature		
GCT Faisalabad	25/08/2017	NOOR ASIF NOOR	HOD			
3. Inspector	Date	Name	Position	Signature		
JICA Islamabad	25/8/17	Aizaz Ghani	Sr. Pm. office			
4. Witness	Date	Name	Position	Signature		
TEVTA, JICA Coordination						
5. Witness	Date	Name	Position	Signature		
JICA Consultants (OPC)	25/8/17	Masami Tsuyuki	JICA Consultant			

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 3-11	Name: Metrology Lab		Code No.: Lot B 3-11	Name: Metrology Lab		✓
Name of Sub Item: Surface Plate (Granite)			Name of Sub Item: Surface Plate (Granite)			
Qty: 1 sets			Qty: 1 sets			✓
Country of Origin:			Country of Origin: Japan			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Surface plate: 1 set	ST-5050J1 (CHUO PRECISION INDUSTRIAL S17-103 (Mitutoyo))		Surface plate: 1 set	ST-5050J1 (CHUO PRECISION INDUSTRIAL CO. LTD)		
Required Specifications			Offered Specifications			Check
Surface plate Material= Gabbro Grade= JIS (Grade 1) Standard or better Dimension= W500 x D500 x H100 mm or more Flatness= 0.01 mm or better			Surface plate Material= Gabbro Grade= JIS (Grade 1) Standard Dimension= W500 x D500 x H100 mm Flatness= 0.01 mm			✓
COMMENTS						
1) Damaged						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/8/17	Name: Zahid Ali	Position: Branch head	Signature: Zahid		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: NOOR ASIF NOOR	Position: HOD	Signature: Noor		
3. Inspector JICA Islamabad	Date: 25/8/17	Name: Aizun Ghani	Position: Sr. pro. officer	Signature: Aizun		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/17	Name: MASAMI Tsuyuki	Position: JICA Consul/Head	Signature: Masami		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 3-12	Name: Metrology Lab		Code No.: Lot B 3-12	Name: Metrology Lab		✓
Name of Sub Item: SPIRIT LEVEL			Name of Sub Item: SPIRIT LEVEL			
Qty: 4 sets			Qty: 4 sets			✓
Country of Origin:			Country of Origin: Japan			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Flat level: 1 set	506-B AD301 (Obitsu Keiki Seisakusho Co. RFL-A3005 (RIKEN KEIKI SEISAKUJO Co.))		Flat level: 1 set	506-B AD301 (Obitsu Keiki Seisakusho Co. Ltd)		
Required Specifications			Offered Specifications			Check
Flat level Size= 300 mm or more Sensitivity= 0.02 mm/m or less			Flat level Size= 300 mm Sensitivity= 0.02 mm/m			✓
COMMENTS						
1) Approved as a whole						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/8/17	Name: Zahid Ali	Position: Branch head	Signature: Zahid		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: NOOR ASIF NOOR	Position: HOD	Signature: Noor		
3. Inspector JICA Islamabad	Date: 25/08/2017	Name: Aizun Ghani	Position: Sr. Pro. officer	Signature: Aizun		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: MASAMI Tsuyuki	Position: JICA Consul/Head	Signature: Masami		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 4-1	Name: Hydraulic Lab		Code No.: Lot B 4-1	Name: Hydraulic Lab		for mai
Name of Sub Item: Centrifugal Pump apparatus			Name of Sub Item: Centrifugal Pump apparatus			
Qty: 1 sets			Qty: 1 sets			for mai
Country of Origin:			Country of Origin: UK			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Main unit: 1 set	F1-27-A (Armfield)		Main unit: 1 set	F1-27-A (Armfield)		
Basic Hydraulic Bench: 1 set	FME13 (EDIBON)		Basic Hydraulic Bench: 1 set	F1-10 (Armfield)		
	Required Specifications			Offered Specifications		
-Main unit Type of pump= Centrifugal type Max. head of pump= 20 m H2O or more Max. flow rate of pump= 1.30 l/sec or more Motor rating= 0.36 kW or more Speed controller= PWM inverter -Basic Hydraulic Bench Type of pump= Centrifugal type Max. head of pump= 20 m H2O or more Max. flow rate of pump= 1.30 l/sec or more Sump tank capacity= 160 Liters or more High flow volumetric tank= 40 Liters or more Low flow volumetric tank= 6 Liters or more Height of working surface= 1 Metre above floor level			-Main unit Type of pump= Centrifugal type Max. head of pump= 21 m H2O Max. flow rate of pump= 1.35 l/sec Motor rating= 0.36 kW Speed controller= PWM inverter -Basic Hydraulic Bench Type of pump= Centrifugal type Max. head of pump= 21 m H2O Max. flow rate of pump= 1.35 l/sec Sump tank capacity= 250 Liters High flow volumetric tank= 40 Liters Low flow volumetric tank= 6 Liters Height of working surface= 1 Metre above floor level			
COMMENTS						
1) Not supplied yet						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/08/17	Name: Zahid Ali	Position: Branch Head	Signature: Zahid Ali		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: Noor Asif Noor	Position: HOD	Signature: Noor Asif Noor		
3. Inspector JICA Islamabad	Date: 25/08/2017	Name: Arizans Ghani	Position: Sr. Proj. Officer	Signature: Arizans Ghani		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masumi Suppli	Position: JICA Consultant	Signature: Masumi Suppli		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 4-2	Name: Hydraulic Lab		Code No.: Lot B 4-2	Name: Hydraulic Lab		for mai
Name of Sub Item: Pressur Switch (Model)			Name of Sub Item: Pressur Switch (Model)			
Qty: 1 sets			Qty: 1 sets			for mai
Country of Origin:			Country of Origin: Japan			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Pressur Switch (Cut model): 1 set	13205M (MEGACHEM CO., LTD)		Pressur Switch (Cut model): 1 set	13205M (MEGACHEM CO., LTD)		
	Required Specifications			Offered Specifications		
-Pressur Switch (Cut model) Type= Table top type The base= To be equipped with rubber foot Dimension= Approx. W300 x D300 x H300 mm Inside of cut model= To be devided by color paint to learn operational mechanism			-Pressur Switch (Cut model) Type= Table top type The base= Equipped with rubber foot Dimension= W300 x D300 x H300 mm Inside of cut model= Devided by color paint to learn operational mechanism			
COMMENTS						
1) Manual in english required						
2) Dimension need to be clarfy by the supplier						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/08/17	Name: Zahid Ali	Position: Proj Manager	Signature: Zahid Ali		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: Noor Asif Noor	Position: HOD	Signature: Noor Asif Noor		
3. Inspector JICA Islamabad	Date: 25/8/2017	Name: Arizans Ghani	Position: Sr. Proj. Officer	Signature: Arizans Ghani		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masumi Suppli	Position: JICA Consultant	Signature: Masumi Suppli		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 4-3	Name: Hydraulic Lab	Code No.: Lot B 4-3	Name: Hydraulic Lab			for mpa
Name of Sub Item: Piston Accumulator (Model)		Name of Sub Item: Piston Accumulator (Model)				
Qty: 1 sets		Qty: 1 sets				
Country of Origin:	Reference Models (Manufacturers)	Country of Origin: Japan	Offered Models (Manufacturers)			
	13206M (MEGACHEM CO., LTD)		13206M (MEGACHEM CO., LTD)			
	F326 (FC Design)					
Required Specifications			Offered Specifications			Check
Piston Accumulator (Cut model) Type= Table top type The base= To be equipped with rubber foot Dimension= Approx. W400 x D400 x H400 mm Inside of cut model= To be devided by color paint to learn operational mechanism			Piston Accumulator (Cut model) Type= Table top type The base= Equipped with rubber foot Dimension= W400 x D400 x H400 mm Inside of cut model= Devided by color paint to learn operational mechanism			for mpa
COMMENTS 1) Manual in english required 2) Dimension need to be clarfy by the supplier						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/8/17	Name: Zahid Ali	Position: Branch and	Signature: Zahid		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: Noor ASIF Noor	Position: HOD	Signature: Noor		
3. Inspector JICA Islamabad	Date: 25/8/17	Name: Aizaz Ghani	Position: Sr. pro. officer	Signature: Aizaz		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masumi Tsuyuki	Position: JICA Consultant	Signature: Masumi		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 4-4	Name: Hydraulic Lab	Code No.: Lot B 4-4	Name: Hydraulic Lab			for mpa
Name of Sub Item: Gear Pump (Model)		Name of Sub Item: Gear Pump (Model)				
Qty: 1 sets		Qty: 1 sets				
Country of Origin:	Reference Models (Manufacturers)	Country of Origin: Italy	Offered Models (Manufacturers)			
	310 (MEGACHEM CO., LTD)		310 (MEGACHEM CO., LTD)			
	F310 (FC Design)					
Required Specifications			Offered Specifications			Check
Gear pump (Cut model) Type= Table top type The base= To be equipped with rubber foot Dimension= Approx. W250 x D200 x H300 mm Shaft= To be possible to rotate to learn the movement of the inside gear Inside of cut model= To be devided by color paint to learn operational mechanism			Gear pump (Cut model) Type= Table top type The base= Equipped with rubber foot Dimension= W250 x D200 x H300 mm Shaft= Possible to rotate to learn the movement of the inside gear Inside of cut model= Devided by color paint to learn operational mechanism			for mpa
COMMENTS 1) Manual in english required 2) Dimension need to be clarfy by the supplier						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/08/2017	Name: Zahid Ali	Position: For Manager	Signature: Zahid		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: Noor ASIF Noor	Position: HOD	Signature: Noor		
3. Inspector JICA Islamabad	Date: 25/8/17	Name: Aizaz Ghani	Position: Sr. pro. officer	Signature: Aizaz		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masumi Tsuyuki	Position: JICA Consultant	Signature: Masumi		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 4-5	Name: Hydraulic Lab		Code No.: Lot B 4-5	Name: Hydraulic Lab		for mpc
Name of Sub Item: Vane Pump (Model)			Name of Sub Item: Vane Pump (Model)			
Qty: 1 sets			Qty: 1 sets			
Country of Origin:	Reference Models (Manufacturers)		Country of Origin: Italy	Offered Models (Manufacturers)		
Vane Pump (Cut model): 1 set	300 (MEGACHEM CO., LTD) F300 (FC Design)		Vane Pump (Cut model): 1 set	300 (MEGACHEM CO., LTD)		
Required Specifications			Offered Specifications			Check
-Vane Pump (Cut model) Type= Table top type The base= To be equipped with rubber foot Dimension= Approx. W150 x D150 x H200 mm Unit= To be possible to rotate to learn the inside movement Inside of cut model= To be divided by color paint to learn operational mechanism			-Vane Pump (Cut model) Type= Table top type The base= Equipped with rubber foot Dimension= W150 x D150 x H200 mm Unit= Possible to rotate to learn the inside movement Inside of cut model= Divided by color paint to learn operational mechanism			for mpc
COMMENTS 1) Manual in english required 2) Dimension need to be clarified by the supplier						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/08/17	Name: Zahid Ali	Position: For Manager	Signature: Zahid Ali		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: NOOR ASIF NOOR	Position: HOD	Signature: Noor Asif Noor		
3. Inspector JICA Islamabad	Date: 25/08/2017	Name: Arzob Ghani	Position: Sr. Pro. Officer	Signature: Arzob Ghani		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masami Tsuyuki	Position: JICA Consultant	Signature: Masami Tsuyuki		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 4-6	Name: Hydraulic Lab		Code No.: Lot B 4-6	Name: Hydraulic Lab		for mpc
Name of Sub Item: Dead Weight Master gage Calibrator			Name of Sub Item: Dead Weight Master gage Calibrator			
Qty: 1 sets			Qty: 1 sets			
Country of Origin:	Reference Models (Manufacturers)		Country of Origin: UK	Offered Models (Manufacturers)		
Mainbody: 1 set	F1-11 (Armfield) FME10 (EDIBON)		Mainbody: 1 set	F1-11 (Armfield)		
Required Specifications			Offered Specifications			Check
Mainbody Pressure gauge= Bourdon tube Range of gauge= 0 to 200 KN/m ² (KPa) or wider Mass of piston= 0.5 kg or more Ancillary masses= 0.5, 1.0, 2.5 kg or more			Mainbody Pressure gauge= Bourdon tube Range of gauge= 0 to 200 KN/m ² (KPa) Mass of piston= 0.5 kg Ancillary masses= 0.5, 1.0, 2.5 kg			for mpc
COMMENTS 1) Not supplied yet						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/08/2017	Name: Zahid Ali	Position: For Manager	Signature: Zahid Ali		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: NOOR ASIF NOOR	Position: HOD	Signature: Noor Asif Noor		
3. Inspector JICA Islamabad	Date: 25/08/2017	Name: Arzob Ghani	Position: Sr. Pro. Officer	Signature: Arzob Ghani		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masami Tsuyuki	Position: JICA Consultant	Signature: Masami Tsuyuki		

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 5-1	Name: Heat Engine Lab		Code No.: Lot B 5-1	Name: Heat Engine Lab		for ma
Name of Sub Item: Barometer			Name of Sub Item: Barometer			
Qty: 1 sets			Qty: 1 sets			for ma
Country of Origin:			Country of Origin: Taiwan			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Barometer: 1 set	BN-PG40A-10K-8A (NIHONSEKI CO.,LTD)		Barometer: 1 set	BN-PG40A-10K-8A (NIHONSEKI CO.,LTD)		
Required Specifications			Offered Specifications			Check
-Barometer Diameter of indicator= 40mm or more Size of connection= R1/4 Working pressure= 0-1 Mpa or wider			-Barometer Diameter of indicator= 40 mm Size of connection= R1/4 Working pressure= 0-1 Mpa			for ma
COMMENTS						
1) Approved as a whole						
1. Supplier: Technology Links (Pvt) Ltd	Date	25/08/2017	Name	Zehid Ali	Position	For Manager
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	Noor Asif Noor	Position	HOD
3. Inspector JICA Islamabad	Date	25/08/2017	Name	Aziz Ghani	Position	Sr. Pw. Officer
4. Witness TEVTA, JICA Coordination	Date		Name		Position	
5. Witness JICA Consultants (OPC)	Date	25/08/2017	Name	Nasami Tsuyuki	Position	JICA Consultant

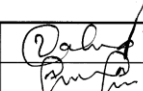
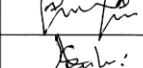
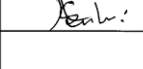
Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 5-2	Name: Heat Engine Lab		Code No.: Lot B 5-2	Name: Heat Engine Lab		for ma
Name of Sub Item: Thermometers Thermocouples(Different Ranges)			Name of Sub Item: Thermometers Thermocouples(Different Ranges)			
Qty: 1 sets			Qty: 1 sets			for ma
Country of Origin:			Country of Origin: China			
Components	Reference Models (Manufacturers)		Components	Offered Models (Manufacturers)		
Analog thermometer: 1 set	CAT-1 (Custom)		Analog thermometer: 1 set	CAT-1 (Custom)		
Thermocouple thermometer: 1 set	AD-5602A (A&D)		Thermocouple thermometer: 1 set	AD-5602A (A&D)		
Required Specifications			Offered Specifications			Check
-Analog thermometer Sensor type= Glass Measurement range= - 30 to + 50 °C or wider Accuracy= ± 2 °C or better Magnet= To be equipped			-Analog thermometer Sensor type= Glass Measurement range= - 30 to + 50 °C Accuracy= ± 1 °C Magnet= Equipped			for ma
-Thermocouple thermometer Display range= - 50 to + 1300 °C or wider Min. display = 0.1 °C or less Measurement accuracy= ±(0.5 % + 1 °C) (at over 100 °C) or better Temperature measurement channel number= 1 or more Contents: 1) K thermocouple sensor x 2 sets or more Measurement range= - 40 to + 200 °C or wider 2) Protective case x 1 set or more			-Thermocouple thermometer Display range= - 50 to + 1300 °C Min. display = 0.1 °C Measurement accuracy= ±(0.5 % + 1 °C) (at over 100 °C) Temperature measurement channel number= 2 Contents: 1) K thermocouple sensor x 2 sets Measurement range= - 50 to + 200 °C 2) Protective case x 1 set			
COMMENTS						
1) Manual in english required for thermocouple (model AD 5602A)						
1. Supplier: Technology Links (Pvt) Ltd	Date	25/08/17	Name	Zehid Ali	Position	For Manager
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	Noor Asif Noor	Position	HOD
3. Inspector JICA Islamabad	Date	25/08/2017	Name	Aziz Ghani	Position	Sr. Personnel officer
4. Witness TEVTA, JICA Coordination	Date		Name		Position	
5. Witness JICA Consultants (OPC)	Date	25/08/2017	Name	Nasami Tsuyuki	Position	JICA Consultant

Inspection Sheet						
THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 5-3	Name: Heat Engine Lab	Code No.: Lot B 5-3	Name: Heat Engine Lab	for mpc		
Name of Sub Item: Steam boiler experiment apparatus (Model)	Name of Sub Item: Steam boiler experiment apparatus (Model)	Name of Sub Item: Steam boiler experiment apparatus (Model)	Name of Sub Item: Steam boiler experiment apparatus (Model)			
Qty: 1 sets	Qty: 1 sets	Qty: 1 sets	Qty: 1 sets			
Country of Origin:	Country of Origin: Germany	Country of Origin: Germany	Country of Origin: Germany			
Components	Reference Models (Manufacturers)	Components	Offered Models (Manufacturers)			
Steam engine experiment apparatus: 1 set	Steam engine D18 (Wileco)	Steam engine experiment apparatus: 1 set	Steam engine D18 (Wileco)			
Steam turbine experiment apparatus: 1 set	SR-MansSteam (Karsten Steam Engines)	Steam turbine experiment apparatus: 1 set	Steam turbine T125 (Wileco)			
Required Specifications			Offered Specifications			Check
-Steam engine experiment apparatus Diameter of flywheel= 60 mm or more Cylinder action= Single or double Cylinder stroke= 16 mm or more Type= Bench-top Dry spirit tablets= Approx. 4 g x 20 pcs or more -Steam turbine experiment apparatus Rotating speed= 10,000 rpm or more Dynamo= Equipped Type= Bench-top			-Steam engine experiment apparatus Diameter of flywheel= 80 mm Cylinder action= Double Cylinder stroke= 16 mm Type= Bench-top Dry spirit tablets= 4 g x 20 pcs -Steam turbine experiment apparatus Rotating speed= 10,000 rpm Dynamo= Equipped Type= Bench-top			for mpc
COMMENTS						
1) Manual in english required for steam engine D18						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/08/17	Name: Zahid Ali	Position: Pr. Manager	Signature: Zahid Ali		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: NOOR ASIF NOOR	Position: HOD	Signature: Noor Asif Noor		
3. Inspector JICA Islamabad	Date: 25/8/17	Name: AIZAZ GHANI	Position: Sr. pro. officer	Signature: Aizaz Ghani		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masami Tsuyuki	Position: JICA Consultant	Signature: Masami Tsuyuki		

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THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE						
Planned Equipment			Delivered Equipment			Check
Code No.: Lot B 5-4	Name: Heat Engine Lab	Code No.: Lot B 5-4	Name: Heat Engine Lab	for mpc		
Name of Sub Item: Working models of Petrol Engine	Name of Sub Item: Working models of Petrol Engine	Name of Sub Item: Working models of Petrol Engine	Name of Sub Item: Working models of Petrol Engine			
Qty: 1 sets	Qty: 1 sets	Qty: 1 sets	Qty: 1 sets			
Country of Origin:	Country of Origin: Italy	Country of Origin: Italy	Country of Origin: Italy			
Components	Reference Models (Manufacturers)	Components	Offered Models (Manufacturers)			
4-stroke petrol engine (Cut model) : 1 set	VB7200 (VB/Italy)	4-stroke petrol engine (Cut model) : 1 set	VB7200 (VB/Italy)			
Required Specifications			Offered Specifications			Check
4-stroke petrol engine (Cut model) Type= Table top type Inside of cut model= To be devided by color paint to learn operational mechanism Operation= The engine should be operated manually through a crank handle.			4-stroke petrol engine (Cut model) Type= Table top type Inside of cut model= Devided by color paint to learn operational mechanism Operation= The engine is operated manually through a crank handle.			
COMMENTS						
1) Approved as a whole						
1. Supplier: Technology Links (Pvt) Ltd	Date: 25/08/17	Name: Zahid Ali	Position: Pr. Manager	Signature: Zahid Ali		
2. Inspector GCT Faisalabad	Date: 25/08/2017	Name: NOOR ASIF NOOR	Position: HOD	Signature: Noor Asif Noor		
3. Inspector JICA Islamabad	Date: 25/08/2017	Name: AIZAZ GHANI	Position: Sr. Pro. officer	Signature: Aizaz Ghani		
4. Witness TEVTA, JICA Coordination	Date:	Name:	Position:	Signature:		
5. Witness JICA Consultants (OPC)	Date: 25/08/2017	Name: Masami Tsuyuki	Position: JICA Consultant	Signature: Masami Tsuyuki		

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THE PROJECT FOR STRENGTHENING DIPLOMA OF ASSOCIATE ENGINEER (DAE) IN MECHANICAL TECHNOLOGY AT GOVERNMENT COLLEGE OF TECHNOLOGY IN PUNJAB PROVINCE

Planned Equipment		Delivered Equipment		Check				
Code No.: Lot B 5-5	Name: Heat Engine Lab	Code No.: Lot B 5-5	Name: Heat Engine Lab	for mpc				
Name of Sub Item: Working models of Diesel Engine		Name of Sub Item: Working models of Diesel Engine						
Qty: 1 sets		Qty: 1 sets						
Country of Origin:		Country of Origin: Italy						
Components	Reference Models (Manufacturers)	Components	Offered Models (Manufacturers)					
4-stroke diesel engine (Cut model) : 1 set	VB7000 (VB/Italy) KCE-200D (Kyonan electric Co., Ltd)	4-stroke diesel engine (Cut model) : 1 set	VB7000 (VB/Italy)					
Required Specifications		Required Specifications		Check				
4-stroke diesel engine (Cut model) Type= Table top type Inside of cut model= To be devided by color paint to learn operational mechanism Operation= The engine should be operated manually through a crank handle.		4-stroke diesel engine (Cut model) Type= Table top type Inside of cut model= Devided by color paint to learn operational mechanism Operation= The engine is operated manually through a crank handle.		for mpc				
COMMENTS								
1) Approved as a whole								
1. Supplier: Technology Links (Pvt) Ltd	Date	25/8/17	Name	Zahid AB	Position	Branch Head	Signature	
2. Inspector GCT Faisalabad	Date	25/08/2017	Name	Noor Asif Noor	Position	HOD	Signature	
3. Inspector JICA Islamabad	Date	25/08/2017	Name	Ahsan Ghani	Position	Sr. Asst. Officer	Signature	
4. Witness TEVTA, JICA Coordination	Date		Name		Position		Signature	
5. Witness JICA Consultants (OPC)	Date	25/08/2017	Name	Masumi Tsuguchi	Position	JICA Consultant	Signature	