Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
7) Steam, feed water pipes and steam vessels a. Steam and feed water pipes	i. Scale and deposits - Location/Condition - Appearance (pictures if necessary) - Thickness and quantity - Sampling and chemical analysis ii. Cracks and corrosion especially on welded parts iii. Damages of flange iv. Bolts and nuts v. Pipe hangers, supporters and restraint vi. Thickness measurement of contracting and bending parts, if necessary.		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
b) Steam vessels	i. Accumulation of deposits - Location/Condition - Appearance (pictures if necessary) - Thickness and quantity - Sampling and chemical analysis	i. Corrosion,,erosion and cracks - Welded parts - Manhole - Nozzle neck and drain hole ii. Damages of manhole seat iii. Liquid penetrant test of welded parts, if necessary.	
8) Compressed air system			
a) Air compressor (Instrument and station service air compressor)	i. Deposits and fouling ii. Measurement of each clearance.	i. Suction and discharge valves - Wearing out, cracks and damage of valve plate, seat and valve spring. - Valve seat fitting, if necessary - Wearing out of valve guide - Unloader mechanism	i. Hydraulic test of oil cooler, intercooler and after cooler. ii. Performance test of safety valve.

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
		ii. Piston and cylinder - Wearing out, cracks and damage of oscillating parts. - Clearance between piston and cylinder - Looseness of cylinder top nut - Gland Defective metalic packing and gland packing ring should be replaced. - Wearing out and cracks of piston ring - Fouling of cylinder jacket - Measurement of sizes of cylinder liner, piston, piston rod, piston ring slot, piston ring, metalic packing and spring - Measurement of piston rod strain	

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
		iii. Crosshead, cranckshaft and connecting rod - Wearing out and crack - Measurement of clearance - Wearing out of bearing - Separation of white metal - Looseness of bolts iv. Oil pump, lubricator and oil cooler - Tooth contact and damage - Measurement of oiler pin and oiler sleep - Fouling of oil filter and replacement of filter - Lubricator - Oil cooler - Relief valve	

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
		v. Crankcase - Deterioration of lubricating oil and replacement of oil, analysis if necessary. vi. Intercooler and after cooler - Deposits and damage of cooling coil - Deposits and damage of outer cylinder - Safety valve drain trap - Drain separator vii. Air filter - Fouling, foreign matter and damage	

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
b) Air receiver	i. Scale and deposits ii. Crack and corrosion - Stain inside receiver - Welded parts - Nozzle neck and drain hole - Liquid penetrant test of welded parts, if necessary iii. Damage of manhole and seat iv. Function of safety valve and drain trap.		
c) Dehumidifier	i. Dehumidification agent (silica gel or activated alumina) ii. Clogging of filter iii. Wearing out and damage of control valve	i. Loss and grading of dehumidification agent (silica gel and activated alumina) ii. Insulation and conductivity of heater iii. Wearing out and damage of control valve moving parts	i. Normal level of dehumidification agent ii. Measurement of dew point of dehumidified air.

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
9) Other valve and piping			
a) Regulating valve (control valve including piston valve)	i. Wearing out of valve body inner wall. ii. Inner valve and valve seat contact, and fitting and liquid penetrant test, if necessary iii. Each welded part		i. Air tightness test ii. Performance test
b) Safety valve	i. Corrosion, damage and crack of valve body ii. Nozzle and disc contact, and fitting and liquid penetrant test, if necessary. iii. Curvature and wearing out of spindle iv. Spring		i. Performance test
c) Reducing valve	i. Corrosion, damage and crack of valve body ii. Valve seat contact iii. Wearing out of moving parts.		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
d) General use valve	i. Corrosion, damage and crack of valve body. ii. Valve seat contact iii. Crack, curvature, wearing out and corrosion of valve stem. iv. Seal ring, packing and flange. v. Bolts and nuts.		
2. Turbine and Auxiliaries			
1) Turbine proper	i. Centering		Check items described in item -During/After dismantling should be repeated in detail, if necessary. i. Deterioration of bolts and nuts. ii. Expansion and moving parts. The following items should be confirmed at unit restart-up.
a) Turbine	ii. Rotor, Chest and pedestal iii. Clearances - Thrust bearing and each journal bearing - Bucket, stationary blade and diaphragm - Tip clearance of bucket - Gland seal		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	- Sealing strips and oil seal - Others iv. Alignment v. Level of each portion vi. Deposits and scale vii. Discoloration and stain viii. Entry of foreign matter ix. Crack, damage, flaw, deformation and curvature x. Contact between rotating parts and slationary parts. xi. Corrosion and erosion xii. Wearing out xiii. Steam leakage ivx. Looseness of bolts and nuts		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
b) Chest	i. Deposits and scale of chest inside ii. Corrosion and erosion of each portion iii. Tightening portion iv. Crack and casting - Steam inlet - Flange - Inner and outer bend - Corner - Reinforcing rib - Complicated configuration parts - Welded parts v. Horizontal upper and lower joint surface vi. Engagement vii. Contact viii. Moving part		Check items described in item - During and After Dismantling should be repeated in detail, if necessary i. Contact and clearance of horizontal upper and lower joint surface ii. Leveling of horizontal upper and lower joint surface iii. Deformation and displacement of chest

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	ix. Looseness of each portion - Tightening and caulking x. Crack, wearing out and seizure of bolts and nuts. xi. Crack and damage of washer. xii. Contact, wearing out, curvature, crack and erosion of fin		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
c) Stationary Blade and Nozzle	i. Deposits ii. Corrosion and erosion iii. Contact iv. Damages due to foreign matter v. Engagement vi. Nozzle and welded parts vii. Crack viii. Seal ring ix. Horizontal joint surface x. Deformation xi. Wearing out, damage and contact of fin xii. Key and key slot, contact of pin xiii. Deterioration of spring ivx. Looseness and crack of lockout bolt vx. Clearance to rotor.		Check item described in item During/After Dismantling should be repeated in detail, if necessary.

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
d) Bucket	i. Deposits and scale ii. Damage due to foreign matter iii. Corrosion and erosion iv. Contact v. Crack vi. Looseness of tenon vii. Dovetail - Motor blading - Riveting pipe - Gap between moving blade and stationary blade viii. Shroud - shroud ring - tenon ix. Separation and damage of lacing wire, damping wire and silver soldering parts		Check item described in item During/After dismantling should be repeated in detail, if necessary.

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	x. Separation, crack and erosion of strip, stellite and silver soldering parts. xi. Seal ring xii. Wearing out, discoloration, curvature, crack and corrosion of sealing fin. xiii. Engagement and clearance ivx. Clearance of bucket vx. Dovetail hook		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
e) Rotor	i. Centering ii. Rotor position iii. Alignment iv. Deflection of rotor v. Leveling of rotor vi. Scale and deposits vii. Corrosion and erosion viii. Contact ix. Heat groove and labyrinth groove x. Journal and thrust collar xi. Rotor grounding device xii. Engagement xiii.		Check items described in item During/After dismantling should be repeated in detail, if necessary. i. Gap and clearance ii. Lubricating oil flow

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
f) Shaft coupling	i. Coupling ii. Expansion of centering bolts. iii. Centering iv. Coupling bolts v. Coupling surface and spigot joint vi. Spacer engagement vii. Turning gear viii. Shrink fitting ix. Setscrew of bolt cover x. Flexible type coupling - Sludge - Wearing out of engagement - Seizure - Tooth damage xi. Crack and galvanic corrosion		Check items described in item During/After dismantling should be repeated in detail, if necessary.

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
g) Steam gland	i. Loss and looseness of dovetail fin ii. Discoloration, wearing out and corrosion of fin iii. Damage of retaining ring iv. Tightness of packing case v. Clearance of packing vi. Damage and looseness of tieback hardware vii. Crack, damage, fatigue and elasticity of spring viii. Crack, damage, fatigue and elasticity (in case of spring back system) ix. Engagement of rotating part and stationary part, and tightning ring (in case of barrel type radial packing)		Check item described in item During/After dismantling should be repeated in detail, if necessary. i. Spring tension (in case of spring back system. ii. Movable allowance (in case of radial packing system)

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
h) Bearing	i. Movement of shaft ii. Gap between bearing and oil iii. Contact with shaft coupling iv. Damage, abrasion, discoloration, crack, separation of babbit v. Parallelism with journal vi. Thrust gap vii. Contact surface of thrust bearing pad viii. Back face gap ix. Damage of bearing and adjusting ring x. Bearing position adjusting pad xi. Galvanic corrosion xii. Looseness of each bearing xiii. Deposits in oil passage		Check items described in item During/After dismantling should be repeated in detail, if necessary. i. Circumference of bearing ii. Modification of white metal iii. Engagement and interference of insert bush iv. Bearing position adjusting pad and shim liner v. Tightening torque of bearing holder vi. Levelness of pedestal vii. Dislocation of alignment viii. Looseness of anchor bolts

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	xiv. Foreign matter, stain and oil leak in pedestal xv. Contact, wearing out, deformation and deposits of flingers.		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
i) Turning device			
Mechanical type	i. Clogging and foreign matter in oil passage		
	ii. Wearing out and expansion of driving chain or V-belt		
	iii. Wearing out and play of bearing and bush		
Hydraulic type	i. Contact of pinion and spur gear		
	ii. Kick lever		
	iii. Clearance of nozzle and rotor		
2) Major valves (MVS, RSV, ICV and GOV)	i. Valve, valve seat, valve stem and contact of back seat		Check item described in item During/After dismantling should be repeated in detail, if necessary.
	ii. Crack, erosion, wearing out and seizure of valve stem		i. Gap between bush and valve stem
	iii. Deposits and scale on valve stem		ii. Curvature and hardness of valve stem
	iv. Wearing out and erosion of gland packing and bush sleeve		iii. Fatigue and expansion of bolts for high temperature parts)

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	v. Wearing out of high temperature moving parts vi. Looseness of engaging parts vii. Crack, erosion and corrosion of valve casing Especially drain hole, corner and welded parts should be checked carefully. viii. Crack and erosion on welded parts and stellite building parts ix. Steam leak from tightning parts and flange x. Crack, wearing out, fatigue and brittle fracture of bolts and nuts. xi. Looseness, crack, erosion and fatigue of pin xii. Coupling xiii. Crack and fatigue of spring		iv. Compression of packing v. Tightning of valve casing vi. Clearance and position of each parts vii. Working condition and characteristics

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	xiv. Damage and wearing out of cylindrical piston and cylinder xv. Damage and wearing out of servo motor and pilot valve xvi. Wearing out of pin joint xvii. Play and wearing out of lever link mechanism xviii. Can, crosshead and bearing.		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
3) Governing unit a) Speed governor	i. Fatigue, crack and deformation of bellows and diaphragm ii. Sludge and foreign matters in oil orifice, strainer ballcheck iii. Wearing out of moving parts such as servo-motor, pilot bush and valve iv. Wearing out of lever, pin stopper and spindle v. Wearing out, deformation and damage of spring and bearing vi. Clearance and position vii. Looseness of each portion		Check items described in item During/After dismantling should be repeated in detail, if necessary.

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
b) Emergency tripping device	i. Wearing out, deformation and clearance of latching unit, and wearing out of link and backstop. ii. Trip lever pin and lock bolt. iii. Fatigue and deformation of spring iv. Damage and corrosion of moving parts of spindle and bush v. Looseness of spring and adjusting bolts. vi. Clearance and position of each portion vii		Check items described in item During/After dismantling should be repeated in detail, if necessary
c) Bled steam pressure control device	i. Wearing out and looseness of pin and lockpin ii. Wearing out and damage of piston and cylinder in hydraulic mechanism iii. Oil leakage iv. Foreign matter and deposits		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	v. Clearance and position of each portion		
d) Control device	i. Wearing out and deformation of connecting pin, bearing stopper and split pin		
	ii. Wearing out of servo-motor and pilot		
	iii. Friction of lever and linkage		
	iv. Looseness of lever and cam mechanism		
	v. Decomposition of rolling and seal packing.		
	vi. Clearance and position		
e) Electric Hydraulic governing device	i. Oil quantity check of servo operated valve		
	ii. Dynamic and static characteristics of EHG.		
	iii. Wearing out and deformation of connecting pin, bearing, stopper and split pin		
	iv. Wearing out of servo-motor and pilot.		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	v. Friction of lever and linkage.		
	vi. Looseness of lever and cam mechanism		
	vii. Decomposition of rolling and seal packing		
	viii. Clearance and position		
4) Lubricating and control oil system			
a) Oil	i. Oil quality and deterioration tendency		
	- total acid number		
	- Kinetic viscosity		
	- deterioration		
	- Others		
b) Oil tank	i. Kinds and quantity of deposits at tank bottom.		Check items described in item During/After dismantling should be repeated in detail, if necessary.
	ii. Separation of inner painting, deterioration and stain.		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	iii. Looseness of lock bolt of tank inside		
	iv. Deterioration and wear-out of packing		
	v. Foreign matter, stain and damage on oil strainer and filter.		
	vi. Opening and deformation of inspection hole		
	vii. Oil level gauge		
	viii. Oil tank tightness		
c) Oil cooler	i. Cooling water quantity - Fouling, kind and quantity of deposits - Crack, corrosion and erosion - Crack of separating plate - Separation of inner wall coating		Check items described in item During/After dismantling should be repeated, if necessary.
	ii. Cooling tube and tube plate		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	- Clogging of cooling tube outside and inside. - Kinds and quantity of deposits - Corrosion and erosion - Crack of expansion iii. Packing iv. Consumption of corrosion protection zinc plate		
d) Oil pump	i. Centering ii. Contact, corrosion, erosion, wearing out and crack of inpeller and runner iii. Mouth ring and bush iv. Damage and wearing out of gland packing v. Deflection and wearing out of rotor vi. Contact and damage of bearing		Check items described in item During/After dismantling should be repeated, if necessary. i. Clearance between inpeller, liner and casing. ii. Gap of mouth ring and bush iii. Deflection of rotor iv. Gap between bearing and rotor v. Thrust bearing

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	vii. Damage of inner casing viii. Tooth contact and wearing out of gear pump, and damage of piston, cylinder and rod ix. Shaft coupling x. Looseness of engaging parts, and fretting xi. Flange xii. Fouling and clogging of oil passage xiii. Electrolytic corrosion		vi. Clearance of labyrinth packing. vii. Engagement viii. Centering

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
e) Oil purifier	i. Centrifuge - Cone damage - Belt tension - Fouling of separating plate ii. Bowzer - Deposits - Fouling of filter bag and cartridge filter - Deterioration of lubricating oil - Fouling and deposits of filter - Lubricating oil leakage		Chech items described in item During/After dismantling should be repeated in detail, if necessary.
f) Other oil passage	i. Foreign matter and damage of strainer ii. Sludge in pipe line and looseness of coupling iii. Deterioration of packing iv. Operating condition and wearing out of non-return valve v. Damage, wearing out and stucking-up of diverter valve		Cheak items described in item During/After dismantling should be repeated in detail, if necessary.

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
g) Oil flushing	vi. Oil pressure regulator vii. Fire protection counter-measure viii. Oil pressure setting		i. Inspection of cleanliness in oil passage during oil system flushing after reassembling - Foreign matter in bearing oil supply strainer - Foreign matter in return oil strainer to tank - Foreign matter in each portion ii. Oil quality check at completion of oil flushing iii. Confirmation of operating condition

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
5) Condenser			
a) Condenser Shell	i. Corrosion and deposits in cooling water tube outside ii. Deformation, corrosion and erosion - Shell plate - Stair pipe - Expansion joint - Buffle plate - Tube support plate - Strainer - Support spring	i. Corrosion and erosion and crack of shell plate, piping, expansion joint on drain injection nozzle and welded parts. ii. Damage on drain injection nozzle inside iii. Looseness between intermediate shell plate and clamping bolts iv. Damage due to vibration on tube support v. Ammonia attack on air cooling parts vi. Erosion of cooling tubes due to drain injection (start-up by pass line)	
b) Water box and tubesheet	i. Deposits and scale on water box and tubesheet	i. Separation and damage of anticorrosive paint and lining. ii. Corrosion of partition tubesheet iii. Consumption of corrosion protection zinc plate	

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
		iv. Abnormality on electrolytic protection device - Anticorrosive plate - Deposition due to overcurrent - Insulation resistance	
		v. Tubesheet settling bolts	
c) Cooling tube	i. Abnormality of tube ends ii. Foreign matter, deposits and scale on tube inside	i. Corrosion and erosion of tube inside ii. Tube rolling iii. Tube plugging	Leakage should be checked carefully after water filling in cooling tube
d) Condenser cleaning device	i. Brush cleaning system - damage on basket - wearing out of washing brush ii. Ball cleaning system - clogging and damage of ball collector - Valve related to ball collection		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	- Damage check (in case of anticorrosive treatment)		
6) Heat Exchanger			
a) Feed water heater	i. Deposits and scale on baffle plate	i. Corrosion and erosion of water chamber	No leak should be confirmed by hydraulic test.
	ii. Deformation and discoloration	ii. Damage on water chamber corner, diaphragm corner, water chamber baffle plate and water box welded parts	
	iii. Damage, corrosion and erosion	iii. Tube leakage	
	iv. Leakage from bolt-tightened diaphragm gasket seal	iv. Damage of tube plate end	
		v. Plugged Tube	
		vi. Damage of heating tube due to drain flow and drain velocity (HP/LP heater)	
		vii. Damage of heating tube protector	
		viii. Damage due to ammonia attack (LP heater)	

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
b) Air Ejector	i. Corrosion and erosion of nozzle and diffuser ii. Deposits, scale, discoloration and stain iii. Corrosion, erosion and crack of tube plate and water chamber	i. Foreign matter and erosion of tube. ii. Tube rolling iii. Clogging and damage of strainer iv. Damage of cooling tube due to ammonia attack	No leak should be confirmed by air leak or hydraulic test.
c) Gland Steam Condenser			
c-1. Gland Steam Condenser	i. Deposits and scale of cooling water tube ii. Damage and leakage from tube rolling iii. Spring, valve stem and guide of water chamber by-pass system iv. Corrosion, erosion and scale of cooling tube		No leak should be confirmed by hydraulic test.
c-2. Gland Steam Exhauster	i. Deflection, wearing out and moving part of rotor ii. Contact, wearing out and crack of impeller and runner		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	iii. Wearing out of brush iv. Abnormality of bearing v. Damage of casing inside vi. Damage and wearing out of gland packing		
d) Deaerator	i. Deposits and scale ii. Deformation, corrosion and erosion - Tank and deaerating chamber inside - Inner piping and feed water distribution piping - Distributor, baffle-plate, pass partition plate, tray and tray support plate - Nozzle and seat ring	i. Corrosion, erosion, crack and damage ii. Nozzle, seat ring, spring and tray iii. Foreign matter, erosion and crack of feed water, heating and balancing pipings iv. Tube plate and tube rolling (in case of vent condenser)	

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
7) Auxiliary Pumps			
a) Condensate Pump	i. Damage due to foreign matter and seizure ii. Clearance of each parts iii. Corrosion and erosion iv. Rotor, bearing and journal v. Gland	i. Crack, wearing out, erosion and damage of runner, guide and casing ii. Deflection and curvature of rotor iii. Looseness of guide and sleeve iv. Contact and wearing out of bearing v. Levelness measurement of bedplate	i. Movement measurement of main rotor ii. Casing inside iii. Tightening of casing gasket and bolts iv. Bearing and engagement v. Tightening of shaft seal vi. Centering vii. Test running
b) Circulating water pump	i. Deposits and scale of casing and suction pipe inside and outside ii. Damage due to foreign matter and seizure iii. Clearance iv. Corrosion and erosion v. Abnormality of rotor, bearing and journal vi. Damage of gland vii. Loss and consumption of anticorrosive plate and zinc plate.	i. Crack, corrosion, erosion and wearing out of runner, rotor, sleeve and casing ii. Looseness of sleeve and runner iii. Curvature of rotor iv. Connecting pin of vertical type shaft pump fixture sleeve	i. Measurement of movement and thrust bearing of rotor ii. Casing inside iii. Tightening of casing, gasket and bolts iv. Bearing and engagement v. Setting and tightening of shaft seal vi. Shaft coupling and lubricating oil for gear coupling

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	viii. Corrosion of suction pipe and baffleplate ix. Abnormality of reverse washing valve and water chamber linkage valve x. Uneven settlement of circulating water pipe - Deformation of rubber expansion - Separation and damage of lining		vii. Centering viii. Test run
c) General use pumps (Vertical Type)	i. Centering ii. Shaft coupling - Bolts and bush iii. Shaft seal - Leakage - cooling condition iv. Bearing - Fouling of lubricating oil - Leakage from bearing casing	i. Rotor - Erosion, wearing out and crack of runner - Damage, wearing out and crack of bush - Deflection measurement of rotor - Gap measurement of bush, etc.. ii. Shaft seal - Wearing out of rotor sleeve	i. Movement measurement of rotor ii. Casing inside iii. Tightening of casing, gasket and bolt iv. Bearing engagement v. Tightening of shaft seal vi. Centering vii. Test run

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	v. Casing - Leakage from casing contacting surface vi. Rotor movement measurement vii. Levelness measurement of bedplate	- damage of packing iii. Bearing - Wearing out and damage of bearing - Measurement of bearing clearance iv. Casing - Erosion and crack - Casing contacting surface of bolts v. Shaft coupling - Wearing out and damage of bolts and bush - Engagement	

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
d) General use pump (Horizontal type)	i. Centering ii. Shaft coupling Gear Coupling - Abnormal sound and grease or oil leakage - Tightening of bolts and packing Flange type coupling - Tightening of bolts and bush iii. Shaft seal - leakage - cooling condition iv. Bearing - Fouling of lubricating oil - Leakage from bearing casing v. Casing - Leakage from casing contacting surface	i. Rotor - Erosion, wearing out and crack of runner - Damage, wearing out and crack of bush - Welded parts and setting bolts - Gap measurement of bush, etc. - Deflection measurement of rotor ii. Shaft seal - Wearing out of rotor sleeve - Damage of packing - Contact and damage of O-ring of mechanical seal	i. Measurement of rotor movement and rotor position ii. Casing inside iii. Tightening of casing, gasket and bolts iv. Bearing engagement v. Tightening and setting of shaft seal vi. Shaft coupling, and lubricating oil of gear coupling vii. Centering viii. Test run

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	vi. Rotor movement measurement	iii. Bearing - Wearing out and damage of ball bearing, and deformation of oil ring - Wearing out, damage, crack and contact of sleeve and bearing - Wearing, damage and crack of thrust bearing, and contact of pivot and pad - Measurement of bearing clearance iv. Casing - Erosion and crack - Casing contacting surface and bolts v. Shaft coupling - Wearing out and crack of gear coupling and tooth contact - Deterioration of gear coupling and O-ring, and damage of bolts.	

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
		- Wearing out and damage of flange type coupling, bush and bolts - Engagement of shaft and coupling - Deterioration of grease and oil	

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
8) Pressure reducer and attemperator	i. Contact of disc ii. Crack, erosion, wearing out and seizure of disc spindle iii. Deposits and oxide on disc spindle and bush iv. Runout and wearing out of moving parts v. Looseness of engagement vi. Crack and erosion of casting iron valve body - Edge parts - Nozzle vii. Crack and erosion of welded parts and stellite building parts viii. Erosion of nozzle and reducer, and injecting condition ix. Erosion of throttling plate, perforated plate and thermal sleeve x. Separation of lining		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	xi. Steam leak and erosion of tightening parts and flange		
	xii. Crack and wearing out of bolts and nuts		
	xiii. Connecting parts		
9) Bar Screen and Rotating Screen	i. Deposits and shells		
	ii. Damage of screen		
	iii. Corrosion, erosion and deformation		
	iv. Wearing out		
	v. Accumulation of soil and sand		
	vi. Expansion of linkage chain		
	vii. Wearing out of link and pin		
	viii. Wearing out of chainwheel and sprocket		
	ix. Wearing out and abnormality of rotor and bearing		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	x. Deformation of bucket and net frame		
	xi. Backlash of gear		
	xii. Looseness of key		
	xiii. Damage and consumption of anticorrosive zinc plate		
3 Generator and Exciter			
1) Generator proper			
a) Rotor	i. Rotor blade		
	ii. Fan holddown bolt		
	iii. Oil contamination and flaws on the journals		
	iv. Rust discoloration of tees		
	v. Wedge		
	vi. Runout of wedge		
	vii. Gas duct		
	viii. Incrustation of dust on retaining ring		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	ix. Deformation of coil end x. Slackened coil end block xi. Damage to insulating materials xii. Dislocation of slot underlay xiii. Gasket for coil bushing xiv. Position and locking state of balance weight xv. Measurement of insulation resistance - Generator rotor field only - Generator field with connections - Generator stator only - Generator stator with isolated phase bus - Generator end (collector end)		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
b) Stator Frame	- Generator steady bearing - AC exciter bearing - Pilot exciter bearing - Oil deflectors - Seal casing i. Oil leakage within machine ii. Contamination of ventilation pipe iii. State of RTD mounting and leads iv. Rust development on ledges v. Gasket gland fastening conditions vi. Header pipe mounting conditions vii. Internal contamination of hydrogen gas cooler		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
c) Stator Core			
	i. Tightness of gap baffle mounting stubs		
	ii. Slackened core ends		
	iii. State of epoxy-resin-treated core ends		
	iv. Slackened rib holddown bolts		
	v. Slackened coil end support bolts and fittings		
	vi. Rust development		
	vii. Fouling of gas duct		
	viii. Slackened compression ring		
	ix. State of inner cage support.		
d) Stator Coil			
	i. Coil end contamination		
	ii. Coil end support conditions		
	iii. State of coil insulation		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	iv. Dislocation of slot underlay v. Slackened stator coil wedge vi. Damaged or slackened connections		
e) Terminal Box			
	i. Oil leakage ii. Coil bushing connection (overheat and other abnormalities in insulation materials) iii. Bushings iv. Cracks in support perclain insulators v. State of gaskets for terminal board and bushings vi. High voltage bushings and gaskets		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
f) Bearings			
	i. Contamination		
	ii. Fitness of bearing metal		
	iii. Cracks		
	iv. Bearing metal lock		
g) Collector ring			
	i. Contamination		
	ii. Marks or wearing out		
	iii. Bus ring tightness		
	iv. Measurement of insulation resistance		
h) Brushes			
	i. Contact		
	ii. Chips and cracks		
	iii. Discoloration of pig-tails		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
i) Brush Holder			
	i. Slack		
	ii. Abnormalities on brush slideways		
j) Seal Casing			
	i. Measurement of gap between seal ring and journal		
	ii, Seal ring and ID		
	iii. Wearing out and discoloration of seal ring slideways		
	iv. Rust, crack and wearing out of springs		
k) Air Deflcetor			
	i. Electrolytic corrosion at joint		
l) BCT			
	i. Filter		
	ii. Leads and conduit pipe		
	iii. Upper gasket		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
m) Gas Cooler			
	i. Defects on tube sheet side walls		
	ii. Fouled fins		
	iii. Cracks in cooling pipe		
	iv. Air detraining pipe		
N) Fan Nozzle			
	i. Electrolytic corrosion at the joint		
	ii. Fan baffle mounting studs		
2) Exciter	i. Centering		
	- Runout check		
	ii. Measurement of insulation resistance		
	- Exciter statof		
	- Exciter rotor		
	- Pilot exciter		
	- Exciter bearings		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	iii. Oil deflectors - Oil leakage - Measurement of gaps of oil deflector iv. Bearing metals - Measurement of side gap - Conditions of white metals - Orifice diameter of oil inlet v. Collector ring - Conditions of dust - Contact surface - Wearing out of brushes - Conditions of brush c hippings - Conditions of pigtails - Wearing out of brush holders		

Equipment/Machine	III - Inspection items		
	During/After dismantling	After cleaning	During/After reassembling
	- Clearance of brush and holder boxes - Fixing bolts - Wearing out of ring - Conditions of ring film - Mechanical abrasion vi. Protective covers - Measurements of air deflector gaps vii. Rotor Fan - Fan bolts and rotor fan viii. Exciter rotor - Oil leakage - Dust and rust - Core - Stator wedge - Temperature detectors and leads - Measurement of insulation resistance of stator coil		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
c) H_2 seal oil unit			
	i. Vacuum pump and motor		
	- Stator and rotor		
	- Alignment between vacuum pump and motor		
	- Coupling		
	- Ball bearing		
	- Grease and oil		
	ii. Measurement of insulation resistance		
	iii. Temperature, vibration and abnormal sound		
	iv. Seal oil pump		
	- Ball bearing		
	- Stator and rotor		
	- Grease and oil		
	- Measurement of insulation resistance		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
	- Temperature, vibration and abnormal sound v. Piping system -Oil leakage vi. Tanks -H_2 detaining tank -Air detaining tank -Vacuum tank -Float trap -Oil filter -Pipings -Relief values -Oil pressure regulating valve vii. Hydrogen gas control panel -Activated alumina or silica gel of H2 gas drying chemicals		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
	- Teflon gasket - Leak test - Measurement of insulation resistance of heater viii. Storage tank ix. Filters x. Y-type strainer xi. Strainer on outlet of deionizer		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
4. Electrical equipments and control system			
1) Electrical equipments			
a) Transformer(main transformer and station auxiliary transformer)	i. Cleanning of transformer and sccesaries ii. Cooling fans and oil pumps iii. Alarm device iv. Relief device v. Terminal box and blocks vi. Fire fighting device vii. Bushings viii. Bushing connection parts ix. Tightness of conductor connection x. Valves, heat discharger and welded parts xi. Control cubicle		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
	xii. Measurement - Insulation resistance - Oil insulation resistance - Oil oxidation		
b) Circuit breakers	i. Insulator and bushing - Bushing - Conductor connection ii. Control unit - Control and link mechanism - Cable and terminal blocks iii. Control air pipings - Air leakage - Air filter iv. Disconnecting parts - Contacts		i. Measurement - Insulation resistance - Open - close test - Minimum pressure working test
c) Disconnecting switch	i. Bushing - Bushing and connecting parts - Looseness of conductor connecting parts		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
	ii. Control unit - Control and link mechanism iii. Disconnector - Disconnecting parts - Cable and terminals block - Earthing device and earthing wire iv. Actuator - Air supply system - Air leakage v. Measurement - Insulation resistance - Open - close test		
d) Surge absorber	i. Bushing and connecting parts ii. Conductor connecting parts iii. Lightning arrestor		

Equipment/Machine	III - Inspection Items		
	During/After dismantling	After cleaning	During/After reassembling
e) Neutral grounding equipment	i. Transformer ii. Reactor iii. Resistor iv. Conductor connecting parts v. Measurement - Resistance - Insulation resistance		
f) Cubicle		i. Instrumenets and protection relays ii. Adjustment of instruments mounted on cubcle iii. Cable, wire and terminal block	
g) Power supply unit		i. Removable mechanism ii. Primary and secondary conductors iii. Cable, wire and terminal block iv. Control circuit v. Interlock system vi. Conductor connecting parts vii. Electromagnetic contactor	