

第7章 建設工程

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7-1 建設工事の実施体制

7-1-1 基本方針

製鉄プラントの建設期間非常に長く、一般に機器の供給契約から稼動までに要する時間は30～40ヶ月である。さらに基本設計、入札契約に必要な時間を加えるとプロジェクト実施の決定がなされてから製品の生産開始までには50～60ヶ月が必要となる。

プロジェクトは二度と同一条件下で実施できるものではなく、またプロジェクトを実施する過程は必ずしも自己規制の利く機構とはなっていない。不確実でかつ変り易い条件のもとであらかじめ決められた予算と工程をキープしながらプロジェクトを実施するためには強力な推進力と問題を効率的に解決していく組織体制が必要となる。発注者とコンサルタントエンジニアが、この役割を担う。

本プロジェクトは既存工場をあらかじめ立案されていたプランにもとずいて拡張するもので、プロジェクトの実施による経済的、財務的効果は非常に高く、できる限り早い時機にプロジェクトを完成させることが望まれている。

7-1-2 コンサルタントエンジニアリング

コンサルタントエンジニアは近代製鉄所の計画、建設に経験と実績がありかつ完成後工場の操業指導についても能力を有する会社が望ましい。エルディーケーラ製鉄所は現在日本人スタッフとエジプト人スタッフが協同してマネジメントにあたっているが、マネジメント契約は1991年にターミネートされ、拡張プロジェクトが完成する時期には日本人スタッフはゼロとなっている。この時機には既に技術移転がなされておりマネジメントスタッフは不要と考えられるが、立上り後の初期トラブルに対応するため従来のマネジメント業務の一部をエンジニアリングのスコープに組み入れることにした。

本プロジェクトのコンサルタントエンジニアリングの範囲は下記のとおりとする。

- (1) 基本設計
- (2) 調達業務
- (3) 設計図の作成(土木・建築構造物)
- (4) 建設工事管理
- (5) 操業指導(立上り直後)

7-1-3 事前準備段階

本プロジェクトはプライベートセクターであるANSDK社のエルディケラ製鉄所拡張プロジェクトであるが、本プロジェクトがエジプトにおけるRe-barの不足を補うため実施されるもので、プロジェクトの実現によって生じる外貨流出の抑制、雇用機会の増大、関連産業の発展等の波及効果並びにエジプト経済への貢献を考慮し、エジプトにおけるナショナルプロジェクトとして推進する必要がある。特にプロジェクトが実施に移される事前準備段階ではエジプト政府ならびにその下部機構、及び多くの関連するパブリックセクターからの強力な支援が必要となろう。事前準備段階で策定しなければならない項目には下記のものが含まれる。

- 政府又はパブリックセクターよりの建設資金の導入
- 国際金融機関よりのファイナンスに対する政府機関の承認、保証
- 借入金返済及び原・材料購入に対する外貨の割当て
- 電力、天然ガス、工業用水の確保と価格の協定
- 建設及び操業に必要な輸入資材・機械に対する関税の免除・低減

これらの問題を早期に解決し、プロジェクトの実現を図るため関係者によってエルディケラ拡張プロジェクト推進委員会(EI Dikheila Expansion Project Steering Committee)を設立することを提案する。ANSDK社が当事者として委員会を司り、諸問題の解決に当ることによってプロジェクトの早期実現が可能となろう。

7-1-4 ベーシックエンジニアリングの実施

事前準備段階で実施すべきもうひとつの重要事項はベーシックエンジニアリングの実施である。フェージビリティスタディを発展、具体化させることが目的であり、

F Sで提案された代案や假定条件の詳細な検討、具体案に対する裏付けを行う。したがってベーシックエンジニアリングでは市場調査のトレース、製造プロセスの決定、実現可能な詳細工程の立案、建設費、操業コストのアップデート、財務・経済的分析などすべてを網羅したものでなければならない。

ベーシックエンジニアリングの結果がエジプト政府や出資者あるいは海外の公的ファイナンス機関、例えば世銀、O E C F、輸出入銀行などの拡張プロジェクト実施に対する最終承認を得るための決め手となる。

7-1-5 入札準備

プロジェクトが公的機関（例えば世銀、O E C Fなど）の融資によって実施される場合は、機器あるいは工事の調達に対し、これら金融機関のルールが適用される。入札の公示、入札に参加するビッドターの資格審査、入札書類及び落札者に対する承認の取得などが主な項目であり、ベーシックエンジニアリングに引続いて実施すべき重要な業務である。

7-2 建設工程

7-2-1 基本方針

(1) メインプラントの稼動

D.R.P、S.M.PおよびR.M.Pのスタートアップ時期について、各プラントがフル操業に達するまでに要する熟練期間と鉄源のバランスを考慮して次のように計画した。

R.M.P の スタートアップをプロジェクトマンス1とする

S.M.P を プロジェクトマンス3ヶ月目にスタートさせる

D.R.P を プロジェクトマンス4ヶ月目にスタートさせる

他の付帯設備についてはメインプラントのスタートアップに支障を与えないようスタートアップさせることにした。

(2) 建設期間

C I F契約からスタートアップまでに要する期間をD.R.P 30ヶ月、S.M.P 32ヶ月、R.M.P 28ヶ月とした。拡張プロジェクトではS.M.P がクリティカルワークである。

(3) 入札期間

本プロジェクトはすべての契約を国際入札によって実施することを前提としておりI T Bの発行から契約までを8ヶ月として計画した。

(4) 事前準備期間

プロジェクトの実施に対する意志決定(7-1-3 参照)、ベーシックエンジニアリング(7-1-4 参照)および入札準備(7-1-5 参照)に必要な期間をF S終了後16ヶ月とした。

7-2-2 総合工程

(1) 工程表

以上の前提条件にもとずいた拡張プロジェクトの総合工程を表7-2-2-1に示す。メインプラントの稼動予定日は次のように想定される。

R.M.P	1992年5月1日
S.M.P	1992年7月1日
D.R.P	1992年8月1日

第8章 建設費の算定

第8章 建設費の算定

8-1 調達区分および調達方法

プロジェクトの実施に必要な機器及び工事はすべて国際入札によって調達することを原則とし調達区分毎のスコープオブワークを下記のように設定した。

(1) 機器の供給

機器及びその付属品、架台、レンガ、ケーブル、パイピング材及び稼動後6ヶ月分の消耗品、稼動後1年分の予備品の供給でC I F Alexandria 港渡しとする。

なお据付工事に対するスーパーバイズを含む。

(2) 機器の内陸輸送

機器及び資材の通関業務、アレキサンドリア港からサイトまでの機器及び資材の輸送、サイト内ボンデッドエリアへの荷卸し、保管、ボンデッドエリアから各建設現場への運搬、引渡し。

(3) 機器の据付工事

機器の組立、据付および配線、配管工事。

機器の試運転に対するサポートサービス。

(4) 土木建築工事

基礎工事、工場建家、事務所、倉庫及び道路、下水工事。

8-2 建設費の算定

8-2-1 機器の調達

建設費は1987年現在の国際価格レベルとした。但しエスカレーションケースについては1987年以降建設時までの価格変動を織り込んだ。

第1期工事の入札には日本をはじめEC諸国が参加しており、その入札金額は当時の国際価格のレベルを示していると考えられる。今回のF Sに際しては、この入札金額を参考に、その後の経年変化による価格の変動要素、主として賃金及び工業製品の価格の上昇と通貨の交換比率の変動を加味し、更に数社のメーカー、コントラクターから参考見積を取り、建設費を算定した。

Note :

(1) 機器および工事の調達先

第1期工事では世銀を通じて世界各国にプロジェクトへの参加を通知したが、実際に入札に参加した国は日本およびECメンバーの数ヶ国であった。従って2期工事においても本プロジェクトに参加する可能性のある国は1期とほぼ同様であろうと想定した。

(2) 本F Sに適用した価格レベル

通貨交換率の変動、物価の上昇を考慮した現在の価格レベル(1987年)は1983年当時に対し1.7~2倍の範囲にあると想定される。既に述べたように本F Sでは1期の入札金額をベースとし、現在の交換率を用いてUSドルに換算している。

8-2-2 現地工事

機器の内陸輸送、機器の据付工事および土木建築工事については現地調査の結果と一期の施工実績から工事項目毎の単価を設定し、B Q方式によって全体工事費を積算した。

建設用重機、仮設資材はエジプト国内でも調達可能であることが判明したが、建設のタイミング、工程がタイトなことを考慮して、一部を除き海外より持込むことを前提に積算した。

8-2-3 予 備 費

本プロジェクトの建設費に対し下記の予備費を計上した。

(1) 輸 入 関 税

機器の輸入に対する関税は法第186/1986にもとずきC I F価格の5%とした。土工事に使用する永久資材(素材及加工品)に係る関係はCustoms Tariff, Arab Republic of Egypt, Sep. 1986により算定した。主要資材の税率は下記のとおりである。尚課税額はC I F価格を公定レートによりエジプトポンドに換算し算定されるものとした。(本レポートでは1 USD = 2 LEとして算定している。)

鋼 材	型 鋼	20%
	鋼 板	15%
	シームレスパイプ	15%
	その他の鋼管	30%
	鉄屑及び鋼材加工品	50%
	ボルト及びナット	20%
ガ ラ ス	3 mm以下、ワイヤ入ガラス	20%
	3 ~ 5 mm	30%
	5 mm以上	50%
木 材	製 材	50%
衛生陶器		60%
建物床材		60%
ペイント		15%

注 : 建設用機器ならびに仮設用資材は再輸出を前提として関税は課税されないものとした。

(2) 物 価 上 昇

エスカレーションケースについては1987年以降の物価上昇を織り込み建設費を算定した。物価上昇は国際価格水準で年3%とした。尚エジプト国内価格は年1.2%程度の上昇が予想されるがエジプトポンドの対ドル交換レートの変動と物価変動が見合うと考え、ドルベースではゼロとした。

(3) その他の予備費

建設費算定の精度を補完する目的で、機器購入費、機器の内陸輸送、据付および土工工事に対してそれぞれ5%を計上した。

8-3 建設費総括表

上記の仮定に基づいて算定した拡張工事の建設費を表8-3-1に示す。通貨はすべてUSドルで内貨、外貨別に表示してある。尚エジプトポンドから米ドルへの換算率は1米ドル=2LEとした。

表8-3-1及び8-3-2に示すように、本プロジェクトの建設費はエスカレーションなしで約3億1千万ドル、エスカレーションケースで約3億4千万ドルである。

1期建設工事の対外債務残高や、エジプトポンドがドルに対して今後とも下落していく傾向にあることを考えると、出来る限りローカルポーションを増やし、外貨分を減らすことが拡張計画実現への一つのかぎである。例えば、土木建築工事のローカルポーションは約20%と予測しているが、仮にビルディングの鉄骨をすべてローカルで製作するとすれば約50%までこの比率を引き上げることが可能である。

同様に、機器の購入においても、鉄骨架台やシンプルな機器のローカル化可能性も残されている。

しかしながら、本プロジェクトの実施において品質の保証、納期の確保が最も重要な要素であり、ローカルポーションの増加もこうしたことを十分に検討して決定すべきであろう。

ベーシックエンジニアリング実施の際、この点についての詳細な検討が望まれる。

表8-5-1 建設費總括表 (Without escalation case)

UNIT: 1000 USD

	Equipment & Spares (CIF)			Installation of Equipment			Civil & Buildings			Total		
	FOREIGN	LOCAL	TOTAL	FOREIGN	LOCAL	TOTAL	FOREIGN	LOCAL	TOTAL	FOREIGN	LOCAL	TOTAL
D.R.P.	76,100	—	76,100	7,021	1,999	9,020	4,753	2,334	7,087	87,874	4,333	92,207
S.M.P.	80,767	—	80,767	4,267	1,234	5,501	16,034	3,720	19,754	101,068	4,954	106,022
R.M.P.	21,847	—	21,847	2,166	607	2,773	6,995	1,274	8,269	31,008	1,881	32,889
U.T.	8,067	—	8,067	1,699	464	2,163	2,118	896	3,014	11,884	1,360	13,244
S.S.	2,655	—	2,655	655	174	839	436	324	760	3,756	498	4,254
Trp. F	6,883	—	6,883	390	100	490	3,082	869	3,951	10,355	969	11,324
M/I	1,534	—	1,534	65	15	80	88	75	163	1,687	90	1,777
Adm. F	—	—	—	—	—	—	445	365	810	445	365	810
Total	197,853	—	197,853	16,273	4,593	20,866	33,951	9,857	43,808	248,077	14,450	262,527
Eng. Fees	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	22,603	350	22,953
Contingency:	—	—	—	—	—	—	—	—	—	—	—	—
Price C.	—	—	—	—	—	—	—	—	—	—	—	—
Physical C.	10,056	—	10,056	826	233	1,059	1,709	495	2,204	12,591	728	13,319
Imp. Tax	—	9,892	9,892	—	—	—	—	2,500	2,500	—	12,392	12,392
Total	10,056	9,892	19,948	826	233	1,059	1,709	2,995	4,704	35,194	13,470	48,664
Grand Total	207,909	9,892	217,801	17,099	4,826	21,925	35,660	12,852	48,512	283,271	27,290	311,191

表8-3-2 建設費総括表 (With escalation case)

UNIT: 1000 USD

	Equipment & Spare (CIF)			Installation of Equipment			Civil & Buildings			Total		
	FOREIGN	LOCAL	TOTAL	FOREIGN	LOCAL	TOTAL	FOREIGN	LOCAL	TOTAL	FOREIGN	LOCAL	TOTAL
D.R.P.	76,100	—	76,100	7,021	1,999	9,020	4,753	2,334	7,087	87,874	4,333	92,207
S.M.P.	80,767	—	80,767	4,267	1,234	5,501	16,034	3,720	19,754	101,068	4,954	106,022
R.M.P.	21,847	—	21,847	2,166	607	2,773	6,995	1,274	8,269	31,008	1,881	32,889
U.T.	8,067	—	8,067	1,699	464	2,163	2,118	896	3,014	11,884	1,360	13,244
S.S.	2,655	—	2,655	655	174	839	436	324	760	3,756	498	4,254
Trp. F	6,883	—	6,883	390	100	490	3,082	869	3,951	10,355	969	11,324
A/I	1,534	—	1,534	65	15	80	88	75	163	1,687	90	1,777
Adm. F	—	—	—	—	—	—	445	365	810	445	365	810
Total	197,853	—	197,853	16,273	4,593	20,866	33,951	9,857	43,808	248,077	14,450	262,527
Eng. Fees	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	N.A	22,603	350	22,953
Contingency:												
Price C.	25,140	—	25,140	2,070	—	2,070	4,272	—	4,272	31,482	—	31,482
Physical C.	10,056	—	10,056	826	233	1,059	1,709	495	2,204	12,591	728	13,319
Imp. Tax	—	9,892	9,892	—	—	—	—	2,500	2,500	—	12,392	12,392
Total	35,196	9,892	45,088	2,896	233	3,129	5,981	2,995	8,976	66,676	13,470	80,146
Grand Total	233,049	9,892	242,941	19,169	4,826	23,995	39,932	12,852	52,784	314,753	27,920	342,673

第9章 原価・財務分析

第9章 原価・財務分析

9-1 製造原価の算定

9-1-1 原価計算の前提

(1) 原価計算の方法

イ) 工程別総合原価計算

工程別総合原価計算を採用し、製造部門として直接還元 (DRP)・石灰焼成 (LCP)・製鋼 (SMP)・棒鋼圧延 (BMP)・線材圧延 (RMP) の 5 工程を、補助部門として電力・天然ガス・圧縮空気・酸素窒素・水・構内運搬・分析検査・メンテナンスショップ・工程管理・カーメンテナンスの 10 工程を設定した。

ロ) 補助部門費の配賦方法

補助部門費の配賦規準は、表 9-1 に示したとおりである。またユーティリティー各工程間における相互配賦はおこなわないこととした。

表 9-1 補助部門費配賦規準

工 程	規 準
電 力	A
天 然 ガ ス	A
圧 縮 空 気	A
酸 素 ・ 窒 素	A
水	A
メンテナンスショップ	B
構 内 運 搬	C
分 析 ・ 検 査	C
工 程 管 理	C
カーメンテナンス	D

A：使用用役の数量に比例して配賦
 B：工程別の固定資産取得価額に比例して配賦
 C：製造部門5工程に等しく配賦
 D：全額を構内運搬に配賦

(イ) 変動費・固定費の区分

変動費・固定費の区分は表9-2に示したとおりである。

表9-2 変動費・固定費区分

変動費	原料費、耐火物等の操業用材料費、副産物費、ユーティリティー費
固定費	労務費、減価償却費、特別修繕費、修繕費(メンテナンスショップ費及び修繕用消耗品費)、構内運搬費、工程管理費

(2) 為替レート

イ) 1986年12月31日現在における、既存プラントの取得価額算出にあたっては、1US\$ = 1.35LEを用いた。

ロ) 1987年1月1日以降については、1US\$ = 2LE = 150円を用いた。

(3) 物価水準

原価計算で用いる物価水準は、現地調査、カウンターパートとの討議及び世界的趨勢を考慮して次の通りとした。

a) Without Escalation Case

一切のインフレーションを考慮せず、1987年3月の現地調査時点における物価水準を使用して原価計算・財務分析をおこなうケース。

b) With Escalation Case

現地調査時点における物価水準をベースに、拡張プラントが操業を開始する1992年までの当初5年間、表9-3に示したレートのインフレーションをおりこんで原価計算・財務分析をおこなうケース。

表9-3 エスカレーションレート(年率)

	Case IV	Case V	Case VI
Domestic Expenses	0 %	0 %	0 %
Imported Goods	3 %	3 %	3 %
Product Sales Price	0 %	1.5 %	3 %

国内費用については、過去の趨勢及び内外の情勢からしてエジプト国内のインフレ率とエジプトポンドの対US\$交換レートの下落率がほぼ等しいと考え、US\$ベースではエスカレ率0%とした。

輸入品については、日本・西独・アメリカ・イタリア・イギリスにおける過去の物価上昇傾向からして3%とした。

製品販売価格については、0%・1.5%・3%の3通りについて計算した。

(4) 原料価格

原料価格については原則としてANSDKの1987年度予算等現地調査で得られたデータに従ったが、具体的には表9-4に示すとおりである。

表9-4 原料価格一覧

	輸入・国内別	単 位	価 格
Pellet	輸 入	トン	34165US\$
Lump Iron Ore	"	"	32295
Lime Stone	国 内	"	12
Scrap	"	"	57855
Scrap	輸 入	"	11343
Fluorspar	"	"	2059
Fe-Mn	"	"	35736
Fe-Si	国 内	"	518805
Aluminum	"	"	7665
Coke Breeze	"	"	97125
Electrode	輸 入	"	204582
Fettling Materials	"	"	427
Furnace Brick	"	"	1207
Ladle Brick	"	"	747
Tundish Brick	"	"	713

(5) 副 産 物

イ) 製鋼プラント・棒鋼圧延プラント・線材圧延プラントで回収されるリターンスクラップの価格は、エジプト国内スクラップの炉前価格と同一とした。

ロ) スケール・ライムファイン等の外販については、運搬処理費と外販価格がみあうと考えた。

(6) 労 務 費

賃金・給料・賞与・福利厚生費等の労務費については、現地調査結果に従い表9-5のように推定した。なおボーナスは年間で基本賃金の4ヶ月分とし、会社負担の社会保険料についても考慮した。

表9-5 クラス別労務費 (US\$/人・年)

Department Manager	7,800
Section Manager	6,030
Assistant Section Manager	4,290
Specialist, Clerk, Engineer	3,010
Foreman, Assistant Foreman, Worker	1,760

(7) 減 価 償 却 費

イ) 固定資産は、製造部門プラント・補助部門プラント・工場建屋・工具及び器具・車輛・オフィス建屋及び社宅・土地の7つに分類した。

ロ) 償却法は定額法を採用した。

ハ) 取得価額及び償却期間については、表9-6(既存設備)、表9-7(拡張設備: Without Escalation Case)、表9-8(拡張設備: With Escalation Case)に示したように推定した。

ニ) 工具及び器具・車輛については償却期間を4年と考えたが、4年ごとに再投資するものとした。

ホ) 減価償却済の固定資産については、エジプト国の会計原則に従いリプレイスの特別償却をとることとした。なお償却率は通常の減価償却費の50%とした。

表9-6 固定資産(既存設備)

(単位:千US\$)

	償却期間(年)	取得価額	年間償却費
製造部門プラント	15	330,787	22,052
補助部門プラント	10	55,074	5,507
工場建屋	33	44,473	1,348
工具・器具	4	6,020	1,505
車輛	4	12,111	3,028
オフィス建屋・社宅	50	75,324	1,506
土地		29,589	
合計		553,378	34,946

表9-7 固定資産(拡張設備: Without Escalation Case)

(単位:千US\$)

	償却期間(年)	取得価額	年間償却費
製造部門プラント	15	252,751	16,850
補助部門プラント	10	30,623	3,062
工場建屋	33	26,726	810
オフィス建屋・社宅	50	1,091	22
合計		311,191	20,744

表9-8 固定資産(拡張設備: With Escalation Case)

(単位:千US\$)

	償却期間(年)	取得価額	年間償却費
製造部門プラント	15	278,491	18,566
補助部門プラント	10	33,571	3,357
工場建屋	33	29,423	892
オフィス建屋・社宅	50	1,188	24
合計		342,673	22,839

(8) 修繕費

各工程の修繕費は、それぞれ修繕用材料費・労務費等からなるが、各工程の機器価額の3%が年間所要修繕費用であると推定した。

また稼働開始後20年間経過した設備については、6%とした。

(9) ユーティリティ

単価は表9-9に示したが、算出方法は次のとおりである。

イ) 電力

電力の購入価格は、現地調査に従い、0.016US\$/kWhとしたが、これにサブステーションの減価償却費・修繕費及び労務費等を付加して電力単価を算出した。

ロ) 天然ガス

ANSDKとEgyptian General Petroleum Corporation間の天然ガス契約価格は2.3US\$/百万BTUであり(但し支払は、支払時の為替レートに従いEgyptian Poundでおこなわれる)、これをNm³当りにすると0.08707US\$/Nm³となる。よってこの価格を採用することとし、これに設備の減価償

却費・修繕費及び労務費等を付加して炉前価格を計算した。しかしながら

○天然ガスの産油国における国内工業用価格が0.3~1.0US\$/百万BTU であること

○パイプラインによる国外輸出価格も1.0US\$/百万BTU 程度であること

等を考えあわせ、1.5US\$/百万BTU (変動相場移行前のLE支払額ベースで、0.05775US\$/Nm³) と1.0US\$/百万BTU(0.03786US\$/Nm³) の場合についても計算した。

ハ) 水

補給水の購入価格は現地調査に従い、0.075US\$/m³ としたが、これに水処理設備の減価償却費・修繕費及び労務費等を付加して単価を算出した。

ニ) 酸素・窒素

酸素プラントに要する全費用と酸素及び窒素発生量とを勘案して単価を算出した。なお副次的に発生する窒素と酸素のコストを区分することは困難であるので、同一価格として評価した。

ホ) 圧縮空気

コンプレッサープラントに係わる全費用と圧縮空気発生量とを勘案して単価を算出した。

表9-9 ユーティリティ単価(Without Escalation Case)

	1992年			1993年		
	購入費	設備・労務費	合計	購入費	設備・労務費	合計
Electricity(US\$/kWh)	0.0160	0.0039	0.0199	0.0160	0.0034	0.0194
Natural Gas(US\$/Nm ³)	0.08707	0.00043	0.0875	0.08707	0.00043	0.0875
	0.05775	0.00045	0.0582	0.05775	0.00035	0.0581
	0.03786	0.00044	0.0383	0.03786	0.00034	0.0382
Make-up Water(US\$/m ³)	0.0750	0.8707	0.9457	0.0750	0.7541	0.8291
O ₂ /N ₂ (US\$/Nm ³)	—	0.1131	0.1131	—	0.0985	0.0985
Compressed Air(US\$/Nm ³)	—	0.0167	0.0167	—	0.0153	0.0153

(注) Make-up Water の単価のうち、設備・労務費分を循環水含みベースで計算すると、0.8707 US\$/m³、0.7541 US\$/m³ がそれぞれ0.0396 US\$/Nm³、0.0343 US\$/Nm³となる。

(10) その他の補助部門費用

その他の補助部門費用も、労務費・減価償却費・修繕費等現地調査で得られたデータをもとに推定した。

9-1-2 生産計画

(1) 会計年度の設定

拡張設備のうち線材圧延プラントのスタートアップは、1992年5月と予想している。よってこの分析では、線材圧延プラントのスタートアップが拡張後会計年度のスタートとなるよう、会計年度を毎年5月から翌年4月までとした。なお1987会計年度については、1986年12月末におけるANSDKのバランスシートを1987会計年度のスターティングバランスとして用いるため、1987年1月から翌年4月までの16ヶ月間とした。

(2) 拡張しない場合

拡張しない場合の生産計画は、表9-10のごとく推定した。

表9-10 生産計画（拡張しない場合）

（単位：千トン）

	1987年	1988年	1989年	1990年以降
DRI	845	716	716	716
Burnt Lime	37	33	34	34
Billet	892	798	821	821
Bar	446	418	425	425
Rod	178	293	319	320

(3) 拡張する場合

拡張する場合の生産計画は、表 9-11 のごとく推定した。

第9-11 生産計画（拡張する場合）

（単位：千トン）

	1987年	1988年	1989年	1990年	1991年	1992年	1993年 以降
DRI	845	716	716	716	716	1,119	1,327
Burnt Lime	37	33	34	34	34	44	50
Billet	892	798	821	821	821	1,082	1,231
Bar	446	418	425	425	425	427	427
Rod	178	293	319	320	320	571	693

(4) 余剰 D R I

D R I の外販については、その可能性及び価格が未だ十分に明らかになっていないので、D R I の生産量については、余剰が発生せぬよう調整した。

9-1-3 製造原価

この Feasibility Study では、それぞれ前提条件のことなる非常に多くのケースを取り扱っている。よって製造原価について述べる前に、対象とした各ケースについて一覧表にまとめ、ケースごとの前提条件の相違を明確にしておく。

表 9-1-2 分析・計算モデル一覧表

モデル名	Without Escalation Case									With Escalation Case		
	Case I-1	I-2	I-3	II-1	II-2	II-3	III-1	III-2	III-3	Case IV	V	VI
天然ガス 購入価格	0.08707 \$/Nm ³	0.08707 \$/Nm ³	0.08707 \$/Nm ³	0.05775 \$/Nm ³	0.05775 \$/Nm ³	0.05775 \$/Nm ³	0.03786 \$/Nm ³	0.03786 \$/Nm ³	0.03786 \$/Nm ³	0.08707 \$/Nm ³	0.08707 \$/Nm ³	0.08707 \$/Nm ³
Bar-Rod 販売価格	250\$/T	260\$/T	270\$/T	250\$/T	260\$/T	270\$/T	250\$/T	260\$/T	270\$/T	250\$/T	250\$/T	250\$/T
Billet 販売価格	200\$/T	205\$/T	210\$/T	200\$/T	205\$/T	210\$/T	200\$/T	205\$/T	210\$/T	200\$/T	200\$/T	200\$/T
販売価格 エスカレ率	0	0	0	0	0	0	0	0	0	0	1.5%	3%

2期拡張後の製造原価については、以上述べてきた条件にしたがって計算したが、基本的な項目は表9-13 (Case I)、表9-14 (Case II)、表9-15 (Case III)、表9-16 (Case IV)に示したとおりである。

すなわちフル生産となる1993年のトン当り製造原価は、Case Iでバー210.7 US\$、ロッド209.2 US\$、Case IIでバー200.7 US\$、ロッド199.3 US\$、ケースIIIでバー193.9 US\$、ロッド192.5 US\$となり、Natural Gas購入価格の差が、製造原価に大きなインパクトをあたえることがわかる。ちなみにNatural Gas購入価格が、最も高いCase Iと最も安いCase IIIのトン当り製造原価の差は、バーで16.8 US\$、ロッドで16.7 US\$となる。

なおアウトプットレポートを表9-17 (Case I)、表9-18 (Case II)、表9-19 (Case III)、表9-20 (Case IV)として添付した。

表9-13 工程別製造原価 (Case I)

(単位: US\$/Ton)

		1992年	1993年	1994年	1995年	1996年
D R P	固定費	17.7	16.2	16.2	16.2	16.2
	変動費	75.5	75.3	75.3	75.3	74.9
	合計	93.2	91.5	91.5	91.5	91.1
L C P	固定費	52.5	46.1	46.1	46.1	44.9
	変動費	33.0	32.5	32.5	32.5	32.2
	合計	85.5	78.6	78.6	78.6	77.1
S M P	固定費	45.2	42.3	42.3	42.3	42.1
	変動費	140.3	140.4	140.4	140.4	138.8
	合計	185.5	182.7	182.7	182.7	180.9
B M P	固定費	63.3	60.8	60.8	60.8	60.4
	変動費	150.0	149.9	149.9	149.9	148.0
	合計	213.3	210.7	210.7	210.7	208.4
R M P	固定費	64.2	59.0	59.0	59.0	58.7
	変動費	150.5	150.2	150.2	150.2	148.2
	合計	214.7	209.2	209.2	209.2	206.9

(注) ここでいう製造原価には、一般管理費及び販売費、支払金利・為替差損等の営業外費用は含まれていない。

表9-14 工程別製造原価 (Case II)

(単位:US\$/Ton)

		1992年	1993年	1994年	1995年	1996年
DRP	固定費	17.7	16.2	16.2	16.2	16.2
	変動費	67.6	67.4	67.4	67.4	67.0
	合計	85.3	83.6	83.6	83.6	83.2
LCP	固定費	52.4	46.1	46.1	46.1	44.9
	変動費	30.5	30.0	30.0	30.0	29.7
	合計	82.9	76.1	76.1	76.1	74.6
SMP	固定費	45.2	42.2	42.2	42.2	42.1
	変動費	131.9	131.7	131.7	131.7	130.0
	合計	177.1	173.9	173.9	173.9	172.1
BMP	固定費	63.4	60.8	60.8	60.8	60.4
	変動費	140.3	139.9	139.9	139.9	138.0
	合計	203.7	200.7	200.7	200.7	198.4
RMP	固定費	64.2	59.0	59.0	59.0	58.8
	変動費	140.9	140.3	140.3	140.3	138.2
	合計	205.1	199.3	199.3	199.3	197.0

(注) ここでいう製造原価には、一般管理費及び販売費、支払金利・為替差損等の営業外費用は含まれていない。

表9-15 工程別製造原価 (Case III)

(単位:US\$/Ton)

		1992年	1993年	1994年	1995年	1996年
DRP	固定費	17.7	16.2	16.2	16.2	16.2
	変動費	62.2	62.0	62.0	62.0	61.6
	合計	79.9	78.2	78.2	78.2	77.8
LCP	固定費	52.4	46.1	46.1	46.1	44.9
	変動費	28.8	28.3	28.3	28.3	28.0
	合計	81.2	74.4	74.4	74.4	72.9
SMP	固定費	45.2	42.3	42.3	42.3	42.1
	変動費	126.2	125.7	125.7	125.7	124.1
	合計	171.4	168.0	168.0	168.0	166.2
BMP	固定費	63.3	60.7	60.7	60.7	60.4
	変動費	133.8	133.2	133.2	133.2	131.2
	合計	197.1	193.9	193.9	193.9	191.6
RMP	固定費	64.2	59.0	59.0	59.0	58.7
	変動費	134.4	133.5	133.5	133.5	131.5
	合計	198.6	192.5	192.5	192.5	190.2

(注) ここでいう製造原価には、一般管理費及び販売費、支払金利・為替差損等の営業外費用は含まれていない。

表9-16 工程別製造原価 (Case IV)

(単位:US\$/Ton)

		1992年	1993年	1994年	1995年	1996年
D R P	固定費	18.5	17.1	17.1	17.1	17.0
	変動費	82.3	82.1	82.1	82.1	81.7
	合計	100.8	99.2	99.2	99.2	98.7
L C P	固定費	53.1	46.8	46.8	46.8	45.6
	変動費	33.1	32.5	32.5	32.5	32.2
	合計	86.2	79.3	79.3	79.3	77.8
S M P	固定費	47.0	44.2	44.2	44.2	44.0
	変動費	152.7	153.0	153.0	153.0	151.4
	合計	199.7	197.2	197.2	197.2	195.4
B M P	固定費	65.4	63.0	63.0	63.0	62.6
	変動費	162.9	163.1	163.1	163.0	161.1
	合計	228.3	226.1	226.1	226.0	223.7
R M P	固定費	66.9	61.6	61.6	61.6	61.4
	変動費	163.5	163.3	163.3	163.3	161.2
	合計	230.2	224.9	224.9	224.9	222.6

(注) ここでいう製造原価には、一般管理費及び販売費、支払金利・為替差損等の営業外費用は含まれていない。

9-1-4 感 度 分 析

ケースI-1を対象とし、以下の各項目につき製造原価（固定費+変動費）の変化を調べ、その結果を表9-17にまとめた。

イ) 電力購入価格に次のような優遇レートを用いる。なおこれは一部国営企業に適用されていると推定される価格である。

	通常レート	優遇レート
電 力	0.016US\$/kWh	0.0075US\$/kWh

ロ) 拡張設備稼働開始後の生産量を次表のごとく5%アップさせる。

	1992年	1993年以降
バ ー	448千トン	448千トン
ロ ッ ド	600	728
ピ レ ッ ト	1,136	1,293

ハ) 拡張設備稼働開始後の生産量を次表のごとく5%ダウンさせる。

	1992年	1993年以降
バ ー	406千トン	406千トン
ロ ッ ド	543	658
ピ レ ッ ト	1,028	1,170

ニ) 国内スクラップ価格を10%アップの63,641US\$/トンとする。

ホ) 国内スクラップ価格を20%アップの69,426US\$/トンとする。

ヘ) 労務費を20%アップさせる。

表9-17 感度分析 (Case 1-1 を対象とする)

(単位: US\$)

		1992年	1993年
イ	バ	△ 8.2	△ 8.3
	ロ ッ ド	△ 8.6	△ 8.6
	ビ レ ッ ト	△ 7.2	△ 7.3
ロ	バ	△ 3.4	△ 3.3
	ロ ッ ド	△ 3.5	△ 3.2
	ビ レ ッ ト	△ 2.5	△ 2.4
ハ	バ	3.7	3.6
	ロ ッ ド	3.8	3.6
	ビ レ ッ ト	2.8	2.5
ニ	バ	0.7	0.5
	ロ ッ ド	0.8	0.6
	ビ レ ッ ト	0.8	0.6
ホ	バ	1.4	0.9
	ロ ッ ド	1.5	1.1
	ビ レ ッ ト	1.7	1.2
ヘ	バ	0.6	0.5
	ロ ッ ド	0.5	0.5
	ビ レ ッ ト	0.4	0.3

(注) マイナス表示はコストダウンを、プラス表示はコストアップを意味し、それぞれCase 1-1のコストに対する変化を示している。

表9-18 工程別製造原価 (Case I: With Expansion)

DRP COST ACCOUNTING SHEET PHASE 2		1987	1988	1989	1990	1991	1992	1993
*<VARIABLE COST>**								
<RAW MATERIALS>								
PELLET UNIT PRICE	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650
PELLET UNIT CONSUMP	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150
PELLET COST PER DRI	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775
IRON ORE UNIT PRICE	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950
IRON ORE UNIT CONSU	.4350	.4350	.4350	.4350	.4350	.4350	.4350	.4350
IRON ORE COST PER D	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483
B. LIME UNIT PRICE	34.8437	34.1258	34.0536	34.0520	34.0520	34.0520	33.0290	32.4470
B. LIME UNIT CONSUM	.0007	.0007	.0007	.0007	.0007	.0007	.0007	.0007
B. LIME COST PER DR	.0244	.0239	.0238	.0238	.0238	.0238	.0231	.0227
SUB TOTAL	48.7502	48.7497	48.7496	48.7496	48.7496	48.7496	48.7489	48.7485
<BYPRODUCT>								
OXIDE FINE UNIT PRI	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000
OXIDE FINE UNIT OUT	.0450	.0450	.0450	.0450	.0450	.0450	.0450	.0450
FINE MINUS COST PER	.4950	.4950	.4950	.4950	.4950	.4950	.4950	.4950
SUB TOTAL	.4950	.4950	.4950	.4950	.4950	.4950	.4950	.4950
<UTILITY>								
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
ELEC. COST PER DRI	2.4040	2.2935	2.2787	2.2786	2.2786	2.2786	2.1883	2.1353
GAS UNIT PRICE	.0879	.0878	.0878	.0878	.0878	.0878	.0875	.0875
GAS UNIT CONSUMPTIO	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000
GAS COST PER DRI	23.7246	23.6943	23.6932	23.6932	23.6932	23.6932	23.6307	23.6123

AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
AIR COST PER DRI	.1939	.1411	.1359	.1358	.1170	.1070

O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
O2 N2 COST PER DRI	.1854	.1570	.1534	.1534	.1131	.0985

WATER UNIT PRICE	.7893	.6841	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000
WATER COST PER DRI	1.0261	.8893	.8746	.8746	1.2294	1.0779

SUB TOTAL	27.5339	27.1752	27.1358	27.1356	27.2784	27.0310

VARIABLE COST T	75.7891	75.4299	75.3905	75.3902	75.5323	75.2846

*<FIXED COST>***						
PRODUCTION OF DRI	845,000.0000	716,000.0000	716,000.0000	716,000.0000	1119000	1327000

TOTAL LABOR COST FO	106,206.6667	79,700.0000	79,700.0000	79,700.0000	172,680.0000	172,680.0000

TOTAL DEPRECIATION	7658,000.0000	5743500	5743500	5743500	11173500	12984500

TOTAL SPECIAL REPAI	2000,000.0000	1500000	1500000	1500000	2200000	2200000

TOTAL REPAIR COST F	3444,000.0000	2583000	2583000	2583000	4980000	4980000

TOTAL OTHER FIXED C	1210,385.2624	910,538.8580	910,538.8580	910,538.8580	1225773	1225773

FIXED COST TOTAL	17,0635	15,1072	15,1072	15,1072	17,6514	16,2494

GRAND TOTAL	92.8526	90.5371	90.4977	90.4974	93.1838	91.5340

LCP COST ACCOUNTING SHEET PHASE 2

	1987	1988	1989	1990	1991	1992	1993
<VARIABLE COST>							
<RAW MATERIALS>							
LIME STONE UNIT PRI	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000
LIME STONE UNIT CON	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800
LIME STONE COST PER	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
SUB TOTAL	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
<BYPRODUCT>							
LIME FINE UNIT PRIC	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500
LIME FINE UNIT OUTP	.2700	.2700	.2700	.2700	.2700	.2700	.2700
LIME FINE MINUS COS	.6075	.6075	.6075	.6075	.6075	.6075	.6075
SUB TOTAL	.6075	.6075	.6075	.6075	.6075	.6075	.6075
<UTILITY>							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	65.0000	65.0000	65.0000	65.0000	65.0000	62.0000	60.0000
ELEC. COST PER BURN	1.4205	1.3553	1.3465	1.3465	1.3465	1.2334	1.1647
GAS UNIT PRICE	.0879	.0878	.0878	.0878	.0878	.0875	.0875
GAS UNIT CONSUMPTIO	90.0000	90.0000	90.0000	90.0000	90.0000	87.0000	85.0000
GAS COST PER BURNT	7.9082	7.8981	7.8977	7.8977	7.8977	7.6143	7.4335
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	85.0000	85.0000	85.0000	85.0000	85.0000	61.0000	45.0000
AIR COST PER BURNT	2.3546	1.7131	1.6501	1.6486	1.6486	1.0193	.6880
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BURN	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.7893	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	.0100	.0100	.0100	.0100	.0100	.0100
WATER COST PER BURN	.0079	.0067	.0067	.0067	.0095	.0083
SUB TOTAL	11.6912	10.9733	10.9011	10.8995	9.8765	9.2945
VARIABLE COST TOTAL	34.8437	34.1258	34.0536	34.0520	33.0290	32.4470
*<FIXED COST>**						
PRODUCTION OF BURNT	37,000.0000	33,000.0000	34,000.0000	34,000.0000	44,000.0000	50,000.0000
TOTAL LABOR COST FO	54,320.0000	40,740.0000	40,740.0000	40,740.0000	43,750.0000	43,750.0000
TOTAL DEPRECIATION	891,700.0000	668,800.0000	668,800.0000	668,800.0000	668,800.0000	668,800.0000
TOTAL SPECIAL REPAI	80,000.0000	60,000.0000	60,000.0000	60,000.0000	74,000.0000	74,000.0000
TOTAL REPAIR COST F	400,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000
TOTAL OTHER FIXED C	1208,051.2300	908,788.3280	908,788.3280	908,788.3280	1220421	1220421
FIXED COST TOTAL	71.1911	59.9493	58.1861	58.1861	52.4312	46.1394
GRAND TOTAL	106.0348	94.0751	92.2397	92.2381	85.4602	78.5864

SMP COST ACCOUNTING SHEET PHASE 2

	1987	1988	1989	1990	1991	1992	1993
*<VARIABLE COST>**							
<RAW MATERIALS AND SUPPLIES>*							
DRI UNIT PRICE	75.7891	75.4299	75.3905	75.3902	75.3902	75.5323	75.2846
DRI UNIT CONSUMPTIO	.9470	.8970	.8720	.8720	.8720	1.0330	1.0770
DRI COST PER BILLET	71.7723	67.6606	65.7405	65.7403	65.7403	78.0249	81.0815
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT CONSUMPT	.2370	.2810	.3040	.3040	.3040	.1590	.1200
SCRAP COST PER BILL	13.7116	16.2573	17.5879	17.5879	17.5879	9.1989	6.9426
BURNT LIME UNIT PRI	34.8437	34.1258	34.0536	34.0520	34.0520	33.0290	32.4470
BURNT LIME UNIT CON	.0410	.0410	.0410	.0410	.0410	.0410	.0410
BURNT LIME COST PER	1.4286	1.3992	1.3962	1.3961	1.3961	1.3542	1.3303
FLOURSPAR UNIT PRIC	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000
FLOURSPAR UNIT CONS	.0020	.0020	.0020	.0020	.0020	.0020	.0020
FLOURSPAR COST PER	.4118	.4118	.4118	.4118	.4118	.4118	.4118
FE-MN UNIT PRICE	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600
FE-MN UNIT CONSUMPT	.0140	.0140	.0140	.0140	.0140	.0140	.0140
FE-MN COST PER BILL	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030
FE-SI UNIT PRICE	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050
FE-SI UNIT CONSUMPT	.0049	.0049	.0049	.0049	.0049	.0049	.0049
FE-SI COST PER BILL	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421
AL UNIT PRICE	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000
AL UNIT CONSUMPTION	.0001	.0001	.0001	.0001	.0001	.0001	.0001
AL COST PER BILLRT	.0767	.0767	.0767	.0767	.0767	.0767	.0767
COKE BREEZE UNIT PR	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250
COKE BREEZE UNIT CO	.0013	.0013	.0013	.0013	.0013	.0013	.0013

COKE BREEZE COST PE	.1263	.1263	.1263	.1263	.1263	.1263	.1263
ELECTRODE UNIT PRIC	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200
ELECTRODE UNIT CONS	.0041	.0041	.0041	.0041	.0041	.0041	.0041
ELECTRODE COST PER	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879
FETTLING MATERIALS	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000
FETTLING MATERIALS	.0260	.0260	.0260	.0260	.0260	.0260	.0260
FETTLING MATERIALS	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020
FURNACE BRICK UNIT	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000
FURNACE BRICK UNIT	.0026	.0026	.0026	.0026	.0026	.0026	.0026
FURNACE BRICK COST	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382
LADLE BRICK UNIT PR	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000
LADLE BRICK UNIT CO	.0030	.0030	.0030	.0030	.0030	.0030	.0030
LADLE BRICK COST PE	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410
TUNDISH BRICK UNIT	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000
TUNDISH BRICK UNIT	.0030	.0030	.0030	.0030	.0030	.0030	.0030
TUNDISH BRICK COST	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390
SUB TOTAL	122.0805	120.4850	119.8926	119.8923	119.8923	123.7460	124.5223
<BYPRODUCT>							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0164	.0164	.0164	.0164	.0164	.0164	.0164
SCRAP MINUS COST PE	.9488	.9488	.9488	.9488	.9488	.9488	.9488
SUB TOTAL	.9488	.9488	.9488	.9488	.9488	.9488	.9488
<UTILITY>							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	718.0000	708.0000	708.0000	708.0000	708.0000	731.0000	731.0000
ELEC. COST PER BILL	15.6912	14.7621	14.6667	14.6660	14.6660	14.5421	14.1900
GAS UNIT PRICE	.0879	.0878	.0878	.0878	.0878	.0875	.0875
GAS UNIT CONSUMPTIO	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500

GAS COST PER BILLE	.3559	.3554	.3554	.3554	.3554	.3545	.3542
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600
AIR COST PER BILLET	.2177	.1584	.1526	.1524	.1524	.1313	.1202
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800
O2 N2 COST PER BILL	.7566	.6407	.6259	.6259	.6259	.4613	.4020
WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400
WATER COST PER BILL	1.6890	1.4639	1.4397	1.4397	1.4397	2.0237	1.7744
SUB TOTAL	18.7104	17.3805	17.2403	17.2394	17.2394	17.5129	16.8408
VARIABLE COST TOTA	139.8421	136.9167	136.1840	136.1829	136.1829	140.3101	140.4143
*<FIXED COST>**							
PRODUCTION OF BILLE	892,000.0000	798,000.0000	821,000.0000	821,000.0000	821,000.0000	821,000.0000	821,000.0000
TOTAL LABOR COST FO	1088,506.6667	816,380.0000	816,380.0000	816,380.0000	816,380.0000	816,380.0000	816,380.0000
TOTAL DEPRECIATION	14128,500.0000	10596400	10596400	10596400	10596400	17159400	18471400
TOTAL REPAIR COST F	6111,000.0000	4583000	4583000	4583000	4583000	7127000	7127000
TOTAL PRECEDING PR	17052,723.1591	12795067	12795067	12795067	12795067	22058923	23869923
TOTAL OTHER FIXED C	1261,328.0550	948,746.0780	948,746.0780	948,746.0780	948,746.0780	1278697	1278697
FIXED COST TOTAL	44.4418	37.2677	36.2236	36.2236	36.2236	45.1934	42.2602
GRAND TOTAL	184.2839	174.1844	172.4076	172.4065	172.4065	185.5035	182.6744

BMP COST ACCOUNTING SHEET PHASE 2

	1987	1988	1989	1990	1991	1992	1993
*<VARIABLE COST>**							
<RAW MATERIALS>*							
BILLET UNIT PRICE	139.8421	136.9167	136.1840	136.1829	136.1829	140.3101	140.4143
BILLET UNIT CONSUMPT	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420
BILLET COST PER BAR	145.7155	142.6672	141.9037	141.9026	141.9026	146.2031	146.3117
SUB TOTAL	145.7155	142.6672	141.9037	141.9026	141.9026	146.2031	146.3117
<BYPRODUCT>*							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0260	.0260	.0260	.0260	.0260	.0260	.0260
SCRAP MINUS COST PE	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
SUB TOTAL	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
<UTILITY>*							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
ELEC. COST PER BAR	1.8795	1.7931	1.7815	1.7815	1.7815	1.7108	1.6694
GAS UNIT PRICE	.0879	.0878	.0878	.0878	.0878	.0875	.0875
GAS UNIT CONSUMPTIO	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000
GAS COST PER BAR	2.5921	2.5888	2.5887	2.5887	2.5887	2.5819	2.5799
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000
AIR COST PER BAR	.5346	.3890	.3747	.3743	.3743	.3225	.2951
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BAR	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.9457	.6291
WATER UNIT CONSUMPT	.6882	.6882	.6882	.6882	.6882	.6882	.6882
WATER COST PER BAR	.5432	.4708	.4630	.4630	.4630	.6508	.5706
SUB TOTAL	5.5494	5.2417	5.2079	5.2075	5.2075	5.2660	5.1150
VARIABLE COST TOTA	149.7606	146.4047	145.6074	145.6058	145.6058	149.9649	149.9224
<FIXED COST>							
PRODUCTION OF BAR	446,000.0000	418,000.0000	425,000.0000	425,000.0000	425,000.0000	427,000.0000	427,000.0000
TOTAL LABOR COST FO	394,220.0000	295,665.0000	295,665.0000	295,665.0000	295,665.0000	322,805.0000	322,805.0000
TOTAL DEPRECIATION	4298,500.0000	3223900	3223900	3223900	3223900	3223900	3223900
TOTAL REPAIR COST F	1783,000.0000	1337000	1337000	1337000	1337000	1337000	1337000
TOTAL PRECEDING PR	28333,906.7545	17484037	16988343	16965540	16965540	20921824	19833483
TOTAL OTHER FIXED C	1225,404.2530	921,803.1380	921,803.1380	921,803.1380	921,803.1380	1233503	1233503
FIXED COST TOTAL	80.7960	55.6517	53.5687	53.5151	53.5151	63.3233	60.7745
GRAND TOTAL	230.5507	202.0564	199.1762	199.1209	199.1209	213.2882	210.6969

RMP COST ACCOUNTING SHEET PHASE 2

	1987	1988	1989	1990	1991	1992	1993
*<VARIABLE COST>**							
<RAW MATERIALS>**							
BILLET UNIT PRICE	139.8421	136.9167	136.1840	136.1829	136.1829	140.3101	140.4143
BILLET UNIT CONSUMPT	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310
BILLET COST PER ROD	144.1772	141.1611	140.4057	140.4046	140.4046	144.6597	144.7671
SUB TOTAL	144.1772	141.1611	140.4057	140.4046	140.4046	144.6597	144.7671
<BYPRODUCT>**							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUPUT	.0160	.0160	.0160	.0160	.0160	.0150	.0150
SCRAP MINUS COST PE	.9257	.9257	.9257	.9257	.9257	.8678	.8678
SUB TOTAL	.9257	.9257	.9257	.9257	.9257	.8678	.8678
<UTILITY>**							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	144.0000	144.0000	144.0000	144.0000	144.0000	135.0000	131.0000
ELEC. COST PER ROD	3.1470	3.0025	2.9831	2.9829	2.9829	2.6856	2.5429
GAS UNIT PRICE	.0879	.0878	.0878	.0878	.0878	.0875	.0875
GAS UNIT CONSUMPTIO	32.5000	32.5000	32.5000	32.5000	32.5000	31.7000	31.3000
GAS COST PER ROD	2.8557	2.8521	2.8520	2.8520	2.8520	2.7744	2.7373
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	30.0000	30.0000	30.0000	30.0000	30.0000	27.0000	25.0000
AIR COST PER ROD	.8310	.6046	.5824	.5818	.5818	.4512	.3822
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER ROD	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	.8545	.8545	.8545	.8545	.8545	.8182	.8000
WATER COST PER ROD	.6745	.5846	.5749	.5749	.5749	.7737	.6633
SUB TOTAL	7.5082	7.0437	6.9923	6.9916	6.9916	6.6850	6.3257
VARIABLE COST TOTA	150.7598	147.2792	146.4723	146.4705	146.4705	150.4768	150.2250
*<FIXED COST>**							
PRODUCTION OF ROD	178,000.0000	293,000.0000	319,000.0000	320,000.0000	320,000.0000	571,000.0000	693,000.0000
TOTAL LABOR COST FO	363,713.3333	272,785.0000	272,785.0000	272,785.0000	272,785.0000	331,605.0000	331,605.0000
TOTAL DEPRECIATION	3182,200.0000	2937400	2937400	2937400	2937400	5325400	5324400
TOTAL REPAIR COST F	1493,000.0000	1120000	1120000	1120000	1120000	1808000	1808000
TOTAL PRECEDING PR	11308,151.1262	12255557	12751250	12774053	12774053	27977427	32188768
TOTAL OTHER FIXED C	1223,882.0580	920,661.4880	920,661.4880	920,661.4880	920,661.4880	1233900	1233900
FIXED COST TOTA	98.7132	59.7488	56.4329	56.3278	56.3278	64.2318	58.9995
GRAND TOTAL	249.4729	207.0280	202.9052	202.7983	202.7983	214.7086	209.2246

DRP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>**							
<RAW MATERIALS>*							
PELLET UNIT PRICE	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650
PELLET UNIT CONSUMPT	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150
PELLET COST PER DRI	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775
IRON ORE UNIT PRICE	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950
IRON ORE UNIT CONSU	.4350	.4350	.4350	.4350	.4350	.4350	.4350
IRON ORE COST PER D	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483
B. LIME UNIT PRICE	32.1470	32.4409	32.1559	32.1470	32.1470	32.1470	32.1470
B. LIME UNIT CONSUM	.0007	.0007	.0007	.0007	.0007	.0007	.0007
B. LIME COST PER DR	.0227	.0227	.0225	.0225	.0225	.0225	.0225
SUB TOTAL	48.7485	48.7485	48.7483	48.7483	48.7483	48.7483	48.7483
<BYPRODUCT>*							
OXIDE FINE UNIT PRI	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000
OXIDE FINE UNIT OUT	.0450	.0450	.0450	.0450	.0450	.0450	.0450
FINE MINUS COST PER	.4950	.4950	.4950	.4950	.4950	.4950	.4950
SUB TOTAL	.4950	.4950	.4950	.4950	.4950	.4950	.4950
<UTILITY>*							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
ELEC. COST PER DRI	2.1353	2.1353	2.0293	2.0130	2.0130	2.0130	2.0130
GAS UNIT PRICE	.0875	.0875	.0873	.0873	.0873	.0873	.0873
GAS UNIT CONSUMPTIO	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000
GAS COST PER DRI	23.6123	23.6123	23.5797	23.5797	23.5797	23.5797	23.5797

AIR UNIT PRICE	.0153	.0104	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
AIR COST PER DRI	.1070	.0726	.0726	.0726	.0726	.0726	.0726
O2 N2 UNIT PRICE	.0985	.0623	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
O2 N2 COST PER DRI	.0985	.0623	.0623	.0623	.0623	.0623	.0623
WATER UNIT PRICE	.8291	.6894	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000
WATER COST PER DRI	1.0779	.8962	.8962	.8962	.8962	.8962	.8962
SUB TOTAL	27.0310	26.6400	26.6236	26.6236	26.6236	26.6236	26.6236
VARIABLE COST T	75.2846	74.8933	74.8769	74.8769	74.8769	74.8769	74.8769
*<FIXED COST>**							
PRODUCTION OF DRI	1327,000.0000	1327000	1327000	1327000	1327000	1327000	1327000
TOTAL LABOR COST FO	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000
TOTAL DEPRECIATION	12984,500.0000	12983000	12981500	12981500	12981500	12981500	12981500
TOTAL SPECIAL REPAI	2200,000.0000	2200000	2200000	2200000	2200000	2200000	2200000
TOTAL REPAIR COST F	4980,000.0000	4980000	4980000	4980000	4980000	4980000	4980000
TOTAL OTHER FIXED C	1225,772.7020	1166693	1166673	1166673	1166673	1166673	1166673
FIXED COST TOTA	16.2494	16.2037	16.2026	16.2026	16.2026	16.2026	16.2026
GRAND TOTAL	91.5340	91.0970	91.0795	91.0795	91.0795	91.0795	91.0795

LCP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>**							
<CRAW MATERIALS>							
LINE STONE UNIT PRI	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000
LINE STONE UNIT CON	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800
LINE STONE COST PER	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
SUB TOTAL	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
<BYPRODUCT>							
LINE FINE UNIT PRIC	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500
LINE FINE UNIT OUTP	.2700	.2700	.2700	.2700	.2700	.2700	.2700
LINE FINE MINUS COS	.6075	.6075	.6075	.6075	.6075	.6075	.6075
SUB TOTAL	.6075	.6075	.6075	.6075	.6075	.6075	.6075
<UTILITY>							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
ELEC. COST PER BURNT	1.1647	1.1647	1.1069	1.0980	1.0980	1.0980	1.0980
GAS UNIT PRICE	.0875	.0875	.0873	.0873	.0873	.0873	.0873
GAS UNIT CONSUMPTIO	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000
GAS COST PER BURNT	7.4335	7.4335	7.4232	7.4232	7.4232	7.4232	7.4232
AIR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
AIR COST PER BURNT	.6880	.6880	.4664	.4664	.4664	.4664	.4664
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BURNT	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.8291	.8249	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	.0100	.0100	.0100	.0100	.0100	.0100	.0100
WATER COST PER BURN	.0083	.0082	.0069	.0069	.0069	.0069	.0069
SUB TOTAL	9.2945	9.2944	9.0034	8.9945	8.9945	8.9945	8.9945
VARIABLE COST TOTAL	32.4470	32.4469	32.1559	32.1470	32.1470	32.1470	32.1470
*<FIXED COST>**							
PRODUCTION OF BURNT	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000
TOTAL LABOR COST FO	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000
TOTAL DEPRECIATION	668,800.0000	668,800.0000	668,000.0000	667,300.0000	667,300.0000	667,300.0000	667,300.0000
TOTAL SPECIAL REPAI	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000
TOTAL REPAIR COST F	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000
TOTAL OTHER FIXED C	1220,420.7620	1220421	1161341	1161321	1161321	1161321	1161321
FIXED COST TOTAL	46.1394	46.1394	44.9418	44.9274	44.9274	44.9274	44.9274
GRAND TOTAL	78.5864	78.5863	77.0978	77.0745	77.0745	77.0745	77.0745

SNP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>**							
<RAW MATERIALS AND SUPPLIES>*							
DRI UNIT PRICE	75.2846	75.2791	74.8933	74.8769	74.8769	74.8769	74.8769
DRI UNIT CONSUMPTIO	1.0770	1.0770	1.0770	1.0770	1.0770	1.0770	1.0770
DRI COST PER BILLET	81.0815	81.0755	80.6600	80.6424	80.6424	80.6424	80.6424
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT CONSUMPT	.1200	.1200	.1200	.1200	.1200	.1200	.1200
SCRAP COST PER BILL	6.9426	6.9426	6.9426	6.9426	6.9426	6.9426	6.9426
BURNT LIME UNIT PRI	32.4470	32.4469	32.1559	32.1470	32.1470	32.1470	32.1470
BURNT LIME UNIT CON	.0410	.0410	.0410	.0410	.0410	.0410	.0410
BURNT LIME COST PER	1.3303	1.3303	1.3184	1.3180	1.3180	1.3180	1.3180
FLOURSPAR UNIT PRIC	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000
FLOURSPAR UNIT CONS	.0020	.0020	.0020	.0020	.0020	.0020	.0020
FLOURSPAR COST PER	.4118	.4118	.4118	.4118	.4118	.4118	.4118
FE-MN UNIT PRICE	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600
FE-MN UNIT CONSUMPT	.0140	.0140	.0140	.0140	.0140	.0140	.0140
FE-MN COST PER BILL	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030
FE-SI UNIT PRICE	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050
FE-SI UNIT CONSUMPT	.0049	.0049	.0049	.0049	.0049	.0049	.0049
FE-SI COST PER BILL	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421
AL UNIT PRICE	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000
AL UNIT CONSUMPTION	.0001	.0001	.0001	.0001	.0001	.0001	.0001
AL COST PER BILLRT	.0767	.0767	.0767	.0767	.0767	.0767	.0767
COKE BREEZE UNIT PR	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250
COKE BREEZE UNIT CO	.0013	.0013	.0013	.0013	.0013	.0013	.0013

COKE BREEZE COST PE	.1263	.1263	.1263	.1263	.1263	.1263	.1263	.1263	.1263
ELECTRODE UNIT PRIC	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200
ELECTRODE UNIT CONS	.0041	.0041	.0041	.0041	.0041	.0041	.0041	.0041	.0041
ELECTRODE COST PER	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879
FETTLING MATERIALS	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000
FETTLING MATERIALS	.0260	.0260	.0260	.0260	.0260	.0260	.0260	.0260	.0260
FETTLING MATERIALS	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020
FURNACE BRICK UNIT	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000
FURNACE BRICK UNIT	.0026	.0026	.0026	.0026	.0026	.0026	.0026	.0026	.0026
FURNACE BRICK COST	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382
LADLE BRICK UNIT PR	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000
LADLE BRICK UNIT CO	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030
LADLE BRICK COST PE	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410
TUNDISH BRICK UNIT	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000
TUNDISH BRICK UNIT	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030
TUNDISH BRICK COST	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390
SUB TOTAL	124.5223	124.5164	124.0890	124.0710	124.0710	124.0710	124.0710	124.0710	124.0710
<BYPRODUCT>									
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164
SCRAP MINUS COST PE	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
SUB TOTAL	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
<UTILITY>									
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000
ELEC. COST PER BILL	14.1900	14.1900	13.4857	13.3771	13.3771	13.3771	13.3771	13.3771	13.3771
GAS UNIT PRICE	.0875	.0875	.0873	.0873	.0873	.0873	.0873	.0873	.0873
GAS UNIT CONSUMPTIO	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500

GAS COST PER BILLE	.3542	.3537	.3537	.3537	.3537	.3537
AIR UNIT PRICE	.0153	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600
AIR COST PER BILLET	.1202	.0815	.0815	.0815	.0815	.0815
O2 N2 UNIT PRICE	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800
O2 N2 COST PER BILL	.4020	.2540	.2540	.2540	.2540	.2540
WATER UNIT PRICE	.8291	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400
WATER COST PER BILL	1.7744	1.4752	1.4752	1.4752	1.4752	1.4752
SUB TOTAL	16.8408	15.5415	15.5415	15.5415	15.5415	15.5415
VARIABLE COST TOTA	140.4143	138.7903	138.6637	138.6637	138.6637	138.6637
*<FIXED COST>**						
PRODUCTION OF BILLE	1231,000.0000	1231000	1231000	1231000	1231000	1231000
TOTAL LABOR COST FO	1275,230.0000	1275230	1275230	1275230	1275230	1275230
TOTAL DEPRECIATION	18471,400.0000	18438700	18438700	18438700	18438700	18438200
TOTAL REPAIR COST F	7127,000.0000	7127000	7127000	7127000	7127000	7127000
TOTAL PRECEEDING PR	23869,923.4640	23749463	23747223	23747223	23747223	23747223
TOTAL OTHER FIXED C	1278,697.4420	1219617	1219597	1219597	1219597	1219597
FIXED COST TOTAL	42.2602	42.0877	42.0859	42.0859	42.0859	42.0855
GRAND TOTAL	182.6744	180.8780	180.7496	180.7496	180.7496	180.7492

BMP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>**							
<RAW MATERIALS>*							
BILLET UNIT PRICE	140.4143	140.3993	138.7903	138.6637	138.6637	138.6637	138.6637
BILLET UNIT CONSUMPT	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420
BILLET COST PER BAR	146.3117	146.2961	144.6194	144.4876	144.4876	144.4876	144.4876
SUB TOTAL	146.3117	146.2961	144.6194	144.4876	144.4876	144.4876	144.4876
<BYPRODUCT>*							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0260	.0260	.0260	.0260	.0260	.0260	.0260
SCRAP MINUS COST PE	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
SUB TOTAL	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
<UTILITY>*							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
ELEC. COST PER BAR	1.6694	1.6694	1.5865	1.5738	1.5738	1.5738	1.5738
GAS UNIT PRICE	.0875	.0875	.0873	.0873	.0873	.0873	.0873
GAS UNIT CONSUMPTIO	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000
GAS COST PER BAR	2.5799	2.5799	2.5763	2.5763	2.5763	2.5763	2.5763
ATR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104
ATR UNIT CONSUMPTIO	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000
ATR COST PER BAR	.2951	.2951	.2000	.2000	.2000	.2000	.2000
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BAR	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.8291	.6894	.6894	.6894	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	.6882	.6882	.6882	.6882	.6882	.6882	.6882	.6882	.6882
WATER COST PER BAR	.5706	.5077	.4744	.4744	.4744	.4744	.4744	.4744	.4744
SUB TOTAL	5.1150	5.1120	4.8373	4.8245	4.8245	4.8245	4.8245	4.8245	4.8245
VARIABLE COST TOTA	149.9224	149.9039	147.9525	147.8079	147.8079	147.8079	147.8079	147.8079	147.8079
*<FIXED COST>**									
PRODUCTION OF BAR	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000
TOTAL LABOR COST FO	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000
TOTAL DEPRECIATION	3223,900.0000	3223900	3214100	3212100	3212100	3212100	3212100	3212100	3212100
TOTAL REPAIR COST F	1337,000.0000	1337000	1337000	1337000	1337000	1337000	1337000	1337000	1337000
TOTAL PRECEEDING PR	19833,483.1579	19833483	19752567	19751705	19751705	19751705	19751705	19751705	19751514
TOTAL OTHER FIXED C	1233,503.2820	1233503	1174423	1174403	1174403	1174403	1174403	1174403	1174403
FIXED COST TOTAL	60.7745	60.7745	60.4236	60.4169	60.4169	60.4169	60.4169	60.4169	60.4164
GRAND TOTAL	210.6969	210.6784	208.3762	208.2248	208.2248	208.2248	208.2248	208.2248	208.2244

	1994	1995	1996	1997	1998	1999	2000
RMP COST ACCOUNTING SHEET PHASE 2							
*<VARIABLE COST>**							
<RAW MATERIALS>							
BILLET UNIT PRICE	140.4143	140.3993	138.7903	138.6637	138.6637	138.6637	138.6637
BILLET UNIT CONSUMPT	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310
BILLET COST PER ROD	144.7671	144.7517	143.0928	142.9623	142.9623	142.9623	142.9623
SUB TOTAL	144.7671	144.7517	143.0928	142.9623	142.9623	142.9623	142.9623
<BYPRODUCT>							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0150	.0150	.0150	.0150	.0150	.0150	.0150
SCRAP MINUS COST PE	.8678	.8678	.8678	.8678	.8678	.8678	.8678
SUB TOTAL	.8678	.8678	.8678	.8678	.8678	.8678	.8678
<UTILITY>							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	131.0000	131.0000	131.0000	131.0000	131.0000	131.0000	131.0000
ELEC. COST PER ROD	2.5429	2.5429	2.4167	2.3973	2.3973	2.3973	2.3973
GAS UNIT PRICE	.0875	.0875	.0873	.0873	.0873	.0873	.0873
GAS UNIT CONSUMPTIO	31.3000	31.3000	31.3000	31.3000	31.3000	31.3000	31.3000
GAS COST PER ROD	2.7373	2.7373	2.7335	2.7335	2.7335	2.7335	2.7335
AIR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	25.0000	25.0000	25.0000	25.0000	25.0000	25.0000	25.0000
AIR COST PER ROD	.3822	.3822	.2591	.2591	.2591	.2591	.2591
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER ROD	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.8201	.8249	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	.8000	.8000	.8000	.8000	.8000	.8000	.8000
WATER COST PER ROD	.6633	.6599	.5515	.5515	.5515	.5515	.5515
SUB TOTAL	6.3257	6.3224	5.9608	5.9414	5.9414	5.9414	5.9414
VARIABLE COST TOTA	150.2250	150.2062	148.1858	148.0359	148.0359	148.0359	148.0359
*<FIXED COST>**							
PRODUCTION OF ROD	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000
TOTAL LABOR COST FO	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000
TOTAL DEPRECIATION	5324,400.0000	5324400	5324400	5324400	5324400	5324400	5324400
TOTAL REPAIR COST F	1808,000.0000	1808000	1808000	1808000	1808000	1808000	1808000
TOTAL PRECEEDING PR	32188768	32188768	32057444	32056046	32056046	32056046	32055736
TOTAL OTHER FIXED C	1233,899.7220	1233900	1174820	1174800	1174800	1174800	1174800
FIXED COST TOTA	58.9995	58.9995	58.7248	58.7227	58.7227	58.7227	58.7223
GRAND TOTAL	209.2246	209.2058	206.9105	206.7586	206.7586	206.7586	206.7581

DRP COST ACCOUNTING SHEET PHASE 2

	2001	2002	2003	2004	2005	2006	2007
*<VARIABLE COST>**							
<RAW MATERIALS>*							
PELLET UNIT PRICE	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650
PELLET UNIT CONSUMP	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150
PELLET COST PER DRI	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775
IRON ORE UNIT PRICE	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950
IRON ORE UNIT CONSU	.4350	.4350	.4350	.4350	.4350	.4350	.4350
IRON ORE COST PER D	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483
B. LIME UNIT PRICE	32.1470	32.0976	32.0976	32.0976	32.0976	32.0976	32.2773
B. LIME UNIT CONSUM	.0007	.0007	.0007	.0007	.0007	.0007	.0007
B. LIME COST PER DR	.0225	.0225	.0225	.0225	.0225	.0225	.0226
SUB TOTAL	48.7483	48.7483	48.7483	48.7483	48.7483	48.7483	48.7484
<BYPRODUCT>							
OXIDE FINE UNIT PRI	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000
OXIDE FINE UNIT OUT	.0450	.0450	.0450	.0450	.0450	.0450	.0450
FINE MINUS COST PER	.4950	.4950	.4950	.4950	.4950	.4950	.4950
SUB TOTAL	.4950	.4950	.4950	.4950	.4950	.4950	.4950
<UTILITY>							
ELEC. UNIT PRICE	.0183	.0181	.0181	.0181	.0181	.0181	.0188
ELEC. UNIT CONSUMPT	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
ELEC. COST PER DRI	2.0130	1.9924	1.9924	1.9924	1.9924	1.9924	2.0657
GAS UNIT PRICE	.0873	.0873	.0873	.0873	.0873	.0873	.0874
GAS UNIT CONSUMPTIO	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000
GAS COST PER DRI	23.5797	23.5797	23.5797	23.5797	23.5797	23.5797	23.5991

AIR UNIT PRICE	.0104	.0096	.0096	.0096	.0096	.0096	.0125
AIR UNIT CONSUMPTIO	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
AIR COST PER DRI	.0726	.0669	.0669	.0669	.0669	.0669	.0875

O2 N2 UNIT PRICE	.0623	.0623	.0623	.0623	.0623	.0623	.0840
O2 N2 UNIT CONSUMPT	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
O2 N2 COST PER DRI	.0623	.0623	.0623	.0623	.0623	.0623	.0840

WATER UNIT PRICE	.6894	.5257	.5257	.5257	.5257	.5257	.6093
WATER UNIT CONSUMPT	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000
WATER COST PER DRI	.8962	.6834	.6834	.6834	.6834	.6834	.7921

SUB TOTAL	26.6236	26.3846	26.3846	26.3846	26.3846	26.3846	26.6285

VARIABLE COST T	74.8769	74.6378	74.6378	74.6378	74.6378	74.6378	74.8819

*<FIXED COST>**							
PRODUCTION OF DRI	1327,000.0000	1327000	1327000	1327000	1327000	1327000	1327000
TOTAL LABOR COST FO	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000
TOTAL DEPRECIATION	11546,700.0000	10112000	10112000	10112000	10112000	10112000	7418000
TOTAL SPECIAL REPAI	2200,000.0000	2200000	2200000	2200000	2200000	2200000	2200000
TOTAL REPAIR COST F	4980,000.0000	4980000	4980000	4980000	4980000	4980000	7564000
TOTAL OTHER FIXED C	1166,672.7020	1056273	1056273	1056273	1056273	1056273	1090673
FIXED COST TOTA	15.1214	13.9570	13.9570	13.9570	13.9570	13.9570	13.9000
GRAND TOTAL	89.9983	88.5948	88.5948	88.5948	88.5948	88.5948	88.7819

LCP COST ACCOUNTING SHEET PHASE 2

	2001	2002	2003	2004	2005	2006	2007
*<VARIABLE COST>**							
<RAW MATERIALS>							
LIME STONE UNIT PRI	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000
LIME STONE UNIT CON	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800
LIME STONE COST PER	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
SUB TOTAL	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
<BYPRODUCT>							
LIME FINE UNIT PRIC	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500
LIME FINE UNIT OUTP	.2700	.2700	.2700	.2700	.2700	.2700	.2700
LIME FINE MINUS COS	.6075	.6075	.6075	.6075	.6075	.6075	.6075
SUB TOTAL	.6075	.6075	.6075	.6075	.6075	.6075	.6075
<UTILITY>							
ELEC. UNIT PRICE	.0183	.0181	.0181	.0181	.0181	.0181	.0188
ELEC. UNIT CONSUMPT	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
ELEC. COST PER BURN	1.0980	1.0868	1.0868	1.0868	1.0868	1.0868	1.1268
GAS UNIT PRICE	.0873	.0873	.0873	.0873	.0873	.0873	.0874
GAS UNIT CONSUMPTIO	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000
GAS COST PER BURNT	7.4232	7.4232	7.4232	7.4232	7.4232	7.4232	7.4294
AIR UNIT PRICE	.0104	.0096	.0096	.0096	.0096	.0096	.0125
AIR UNIT CONSUMPTIO	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
AIR COST PER BURNT	.4664	.4299	.4299	.4299	.4299	.4299	.5626
O2 N2 UNIT PRICE	.0623	.0623	.0623	.0623	.0623	.0623	.0840
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BURN	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.6894	.5257	.5257	.5257	.5257	.5257	.5257	.6093
WATER UNIT CONSUMPT	.0100	.0100	.0100	.0100	.0100	.0100	.0100	.0100
WATER COST PER BURN	.0069	.0053	.0053	.0053	.0053	.0053	.0053	.0061
SUB TOTAL	8.9945	8.9451	8.9451	8.9451	8.9451	8.9451	8.9451	9.1248
VARIABLE COST TOTAL	32.1470	32.0976	32.0976	32.0976	32.0976	32.0976	32.0976	32.2773
<FIXED COST>								
PRODUCTION OF BURNT	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000
TOTAL LABOR COST FO	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000
TOTAL DEPRECIATION	489,900.0000	334,000.0000	334,000.0000	334,000.0000	334,000.0000	334,000.0000	334,000.0000	334,000.0000
TOTAL SPECIAL REPAI	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000
TOTAL REPAIR COST F	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000
TOTAL OTHER FIXED C	1161,320.7620	1050921	1050921	1050921	1050921	1050921	1050921	1085321
FIXED COST TOTAL	41.3794	36.0534	36.0534	36.0534	36.0534	36.0534	36.0534	42.7614
GRAND TOTAL	73.5265	68.1510	68.1510	68.1510	68.1510	68.1510	68.1510	75.0387

SMP COST ACCOUNTING SHEET PHASE 2

2001 2002 2003 2004 2005 2006 2007

<VARIABLE COST>
 <RAW MATERIALS AND SUPPLIES>

DRI UNIT PRICE	74.8769	74.6378	74.6378	74.6378	74.6378	74.6378	74.8819
DRI UNIT CONSUMPTIO	1.0770	1.0770	1.0770	1.0770	1.0770	1.0770	1.0770
DRI COST PER BILLET	80.6424	80.3849	80.3849	80.3849	80.3849	80.3849	80.6478
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT CONSUMPT	.1200	.1200	.1200	.1200	.1200	.1200	.1200
SCRAP COST PER BILL	6.9426	6.9426	6.9426	6.9426	6.9426	6.9426	6.9426
BURNT LIME UNIT PRI	32.1470	32.0976	32.0976	32.0976	32.0976	32.0976	32.2773
BURNT LIME UNIT CON	.0410	.0410	.0410	.0410	.0410	.0410	.0410
BURNT LIME COST PER	1.3180	1.3160	1.3160	1.3160	1.3160	1.3160	1.3234
FLOURSPAR UNIT PRIC	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000
FLOURSPAR UNIT CONS	.0020	.0020	.0020	.0020	.0020	.0020	.0020
FLOURSPAR COST PER	.4118	.4118	.4118	.4118	.4118	.4118	.4118
FE-MN UNIT PRICE	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600
FE-MN UNIT CONSUMPT	.0140	.0140	.0140	.0140	.0140	.0140	.0140
FE-MN COST PER BILL	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030
FE-SI UNIT PRICE	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050
FE-SI UNIT CONSUMPT	.0049	.0049	.0049	.0049	.0049	.0049	.0049
FE-SI COST PER BILL	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421
AL UNIT PRICE	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000
AL UNIT CONSUMPTION	.0001	.0001	.0001	.0001	.0001	.0001	.0001
AL COST PER BILLRT	.0767	.0767	.0767	.0767	.0767	.0767	.0767
COKE BREEZE UNIT PR	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250
COKE BREEZE UNIT CO	.0013	.0013	.0013	.0013	.0013	.0013	.0013

COKE BREEZE COST PE	.1263	.1263	.1263	.1263	.1263	.1263	.1263	.1263	.1263
ELECTRODE UNIT PRIC	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200
ELECTRODE UNIT CONS	.0041	.0041	.0041	.0041	.0041	.0041	.0041	.0041	.0041
ELECTRODE COST PER	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879
FETTLING MATERIALS	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000
FETTLING MATERIALS	.0260	.0260	.0260	.0260	.0260	.0260	.0260	.0260	.0260
FETTLING MATERIALS	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020
FURNACE BRICK UNIT	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000
FURNACE BRICK UNIT	.0026	.0026	.0026	.0026	.0026	.0026	.0026	.0026	.0026
FURNACE BRICK COST	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382
LADLE BRICK UNIT PR	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000
LADLE BRICK UNIT CO	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030
LADLE BRICK COST PE	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410
TUNDISH BRICK UNIT	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000
TUNDISH BRICK UNIT	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030
TUNDISH BRICK COST	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390
SUB TOTAL	124.0710	123.8115	123.8115	123.8115	123.8115	123.8115	123.8115	123.8115	124.0817
<BYPRODUCT>*									
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164
SCRAP MINUS COST PE	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
SUB TOTAL	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
<UTILITY>*									
ELEC. UNIT PRICE	.0183	.0181	.0181	.0181	.0181	.0181	.0181	.0181	.0188
ELEC. UNIT CONSUMPT	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000
ELEC. COST PER BILL	13.3771	13.2404	13.2404	13.2404	13.2404	13.2404	13.2404	13.2404	13.7276
GAS UNIT PRICE	.0873	.0873	.0873	.0873	.0873	.0873	.0873	.0873	.0874
GAS UNIT CONSUMPTIO	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500

GAS COST PER BILLE	.3537	.3537	.3537	.3537	.3537	.3540
AIR UNIT PRICE	.0104	.0096	.0096	.0096	.0096	.0125
AIR UNIT CONSUMPTIO	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600
AIR COST PER BILLET	.0815	.0751	.0751	.0751	.0751	.0983
O2 N2 UNIT PRICE	.0623	.0623	.0623	.0623	.0623	.0840
O2 N2 UNIT CONSUMPT	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800
O2 N2 COST PER BILL	.2540	.2540	.2540	.2540	.2540	.3427
WATER UNIT PRICE	.6894	.5257	.5257	.5257	.5257	.6093
WATER UNIT CONSUMPT	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400
WATER COST PER BILL	1.4752	1.1249	1.1249	1.1249	1.1249	1.3040
SUB TOTAL	15.5415	15.0481	15.0481	15.0481	15.0481	15.8265
VARIABLE COST TOTA	138.6637	137.9108	137.9108	137.9108	137.9108	138.9594
*<FIXED COST>**						
PRODUCTION OF BILLE	1231,000.0000	1231000	1231000	1231000	1231000	1231000
TOTAL LABOR COST F0	1275,230.0000	1275230	1275230	1275230	1275230	1275230
TOTAL DEPRECIATION	1334,600.0000	13346600	13346600	13346600	13346600	10243600
TOTAL REPAIR COST F	7127,000.0000	7127000	7127000	7127000	7127000	11711000
TOTAL PRECEDING PR	22135,023.4640	20323623	20323623	20323623	20323623	20583423
TOTAL OTHER FIXED C	1219,597.4420	1109197	1109197	1109197	1109197	1143597
FIXED COST TOTAL	36,6397	35.0785	35.0785	35.0785	35.0785	36.5206
GRAND TOTAL	175.3034	172.9893	172.9893	172.9893	172.9893	175.4800

BMP COST ACCOUNTING SHEET PHASE 2

	2001	2002	2003	2004	2005	2006	2007
*<VARIABLE COST>**							
<RAW MATERIALS>*							
BILLET UNIT PRICE	138.6637	137.9108	137.9108	137.9108	137.9108	137.9108	138.9594
BILLET UNIT CONSUMPT	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420
BILLET COST PER BAR	144.4876	143.7031	143.7031	143.7031	143.7031	143.7031	144.7957
SUB TOTAL	144.4876	143.7031	143.7031	143.7031	143.7031	143.7031	144.7957
<BYPRODUCT>*							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0260	.0260	.0260	.0260	.0260	.0260	.0260
SCRAP MINUS COST PE	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
SUB TOTAL	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
<UTILITY>*							
ELEC. UNIT PRICE	.0183	.0181	.0181	.0181	.0181	.0181	.0188
ELEC. UNIT CONSUMPT	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
ELEC. COST PER BAR	1.5738	1.5577	1.5577	1.5577	1.5577	1.5577	1.6150
GAS UNIT PRICE	.0873	.0873	.0873	.0873	.0873	.0873	.0874
GAS UNIT CONSUMPTIO	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000
GAS COST PER BAR	2.5763	2.5763	2.5763	2.5763	2.5763	2.5763	2.5784
AIR UNIT PRICE	.0104	.0096	.0096	.0096	.0096	.0096	.0125
AIR UNIT CONSUMPTIO	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000
AIR COST PER BAR	.2000	.1844	.1844	.1844	.1844	.1844	.2413
O2 N2 UNIT PRICE	.0623	.0623	.0623	.0623	.0623	.0623	.0840
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BAR	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.6894	.5257	.5257	.5257	.5257	.5257	.6093
WATER UNIT CONSUMPT	.6882	.6882	.6882	.6882	.6882	.6882	.6882
WATER COST PER BAR	.4744	.3618	.3618	.3618	.3618	.3618	.4193
SUB TOTAL	4.8245	4.6801	4.6801	4.6801	4.6801	4.6801	4.8541
VARIABLE COST TOTA	147.8079	146.8790	146.8790	146.8790	146.8790	146.8790	148.1456
*<FIXED COST>**							
PRODUCTION OF BAR	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000
TOTAL LABOR COST FO	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000
TOTAL DEPRECIATION	1974,800.0000	1727200	1727200	1727200	1727200	1727200	1727200
TOTAL REPAIR COST F	1337,000.0000	1337000	1337000	1337000	1337000	1337000	2674000
TOTAL PRECEDING PR	17195,690.6579	16463004	16463004	16463004	16463004	16463004	17139799
TOTAL OTHER FIXED C	1174,403.2820	1064003	1064003	1064003	1064003	1064003	1098403
FIXED COST TOTAL	51.5333	48.9790	48.9790	48.9790	48.9790	48.9790	53.7757
GRAND TOTAL	199.3412	195.8579	195.8579	195.8579	195.8579	195.8579	201.9212

RMP COST ACCOUNTING SHEET PHASE 2

	2001	2002	2003	2004	2005	2006	2007
<VARIABLE COST>							
<RAW MATERIALS>							
BILLET UNIT PRICE	138.6637	137.9108	137.9108	137.9108	137.9108	137.9108	138.9594
BILLET UNIT CONSUMPT	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310
BILLET COST PER ROD	142.9623	142.1860	142.1860	142.1860	142.1860	142.1860	143.2672
SUB TOTAL	142.9623	142.1860	142.1860	142.1860	142.1860	142.1860	143.2672
<BYPRODUCT>							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0150	.0150	.0150	.0150	.0150	.0150	.0150
SCRAP MINUS COST PE	.8678	.8678	.8678	.8678	.8678	.8678	.8678
SUB TOTAL	.8678	.8678	.8678	.8678	.8678	.8678	.8678
<UTILITY>							
ELEC. UNIT PRICE	.0183	.0181	.0181	.0181	.0181	.0181	.0188
ELEC. UNIT CONSUMPT	131.0000	131.0000	131.0000	131.0000	131.0000	131.0000	131.0000
ELEC. COST PER ROD	2.3973	2.3728	2.3728	2.3728	2.3728	2.3728	2.4601
GAS UNIT PRICE	.0873	.0873	.0873	.0873	.0873	.0873	.0874
GAS UNIT CONSUMPTIO	31.3000	31.3000	31.3000	31.3000	31.3000	31.3000	31.3000
GAS COST PER ROD	2.7335	2.7335	2.7335	2.7335	2.7335	2.7335	2.7358
AIR UNIT PRICE	.0104	.0096	.0096	.0096	.0096	.0096	.0125
AIR UNIT CONSUMPTIO	25.0000	25.0000	25.0000	25.0000	25.0000	25.0000	25.0000
AIR COST PER ROD	.2591	.2388	.2388	.2388	.2388	.2388	.3126
O2 N2 UNIT PRICE	.0623	.0623	.0623	.0623	.0623	.0623	.0840
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER ROD	.0000	.0000	.0000	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.6894	.5257	.5257	.5257	.5257	.5257	.5257	.6093
WATER UNIT CONSUMPT	.8000	.8000	.8000	.8000	.8000	.8000	.8000	.8000
WATER COST PER ROD	.5515	.4205	.4205	.4205	.4205	.4205	.4205	.4875
SUB TOTAL	5.9414	5.7656	5.7656	5.7656	5.7656	5.7656	5.7656	5.9959
VARIABLE COST TOTA	148.0359	147.0838	147.0838	147.0838	147.0838	147.0838	147.0838	148.3952
<FIXED COST>*								
PRODUCTION OF ROD	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000
TOTAL LABOR COST FO	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000
TOTAL DEPRECIATION	5221,000.0000	4080800	4080800	4080800	4080800	4080800	4080800	2971800
TOTAL REPAIR COST F	1808,000.0000	1808000	1808000	1808000	1808000	1808000	1808000	2928000
TOTAL PRECEDING PR27907,760.2481		26718646	26718646	26718646	26718646	26718646	26718646	27817051
TOTAL OTHER FIXED C	1174,799.7220	1064400	1064400	1064400	1064400	1064400	1064400	1098800
FIXED COST TOTA	52.5875	49.0670	49.0670	49.0670	49.0670	49.0670	49.0670	50.7175
GRAND TOTAL	200.6234	196.1509	196.1509	196.1509	196.1509	196.1509	196.1509	199.1128

DRP COST ACCOUNTING SHEET PHASE 2
 2008 2009 2010 2011

<VARIABLE COST>
 <RAW MATERIALS>

PELLET UNIT PRICE	34.1650	34.1650	34.1650	34.1650
PELLET UNIT CONSUMP	1.0150	1.0150	1.0150	1.0150
PELLET COST PER DRI	34.6775	34.6775	34.6775	34.6775

IRON ORE UNIT PRICE	32.2950	32.2950	32.2950	32.2950
IRON ORE UNIT CONSU	.4350	.4350	.4350	.4350
IRON ORE COST PER D	14.0483	14.0483	14.0483	14.0483

B. LIME UNIT PRICE	32.2773	32.2773	32.2773	32.2773
B. LIME UNIT CONSUM	.0007	.0007	.0007	.0007
B. LIME COST PER DR	.0226	.0226	.0226	.0226

SUB TOTAL	48.7484	48.7484	48.7484	48.7484

<BYPRODUCT>

OXIDE FINE UNIT PRI	11.0000	11.0000	11.0000	11.0000
OXIDE FINE UNIT OUT	.0450	.0450	.0450	.0450
FINE MINUS COST PER	.4950	.4950	.4950	.4950

SUB TOTAL	.4950	.4950	.4950	.4950

<UTILITY>

ELEC. UNIT PRICE	.0188	.0188	.0188	.0188
ELEC. UNIT CONSUMPT	110.0000	110.0000	110.0000	110.0000
ELEC. COST PER DRI	2.0657	2.0657	2.0657	2.0657

GAS UNIT PRICE	.0874	.0874	.0874	.0874
GAS UNIT CONSUMPTIO	270.0000	270.0000	270.0000	270.0000
GAS COST PER DRI	23.5991	23.5991	23.5991	23.5991

AIR UNIT PRICE	.0125	.0125	.0125	.0125
AIR UNIT CONSUMPTIO	7.0000	7.0000	7.0000	7.0000
AIR COST PER DRI	.0875	.0875	.0875	.0875

O2 N2 UNIT PRICE	.0840	.0840	.0840	.0840
O2 N2 UNIT CONSUMPT	1.0000	1.0000	1.0000	1.0000
O2 N2 COST PER DRI	.0840	.0840	.0840	.0840

WATER UNIT PRICE	.6093	.6093	.6093	.6093
WATER UNIT CONSUMPT	1.3000	1.3000	1.3000	1.3000
WATER COST PER DRI	.7921	.7921	.7921	.7921

SUB TOTAL	26.6285	26.6285	26.6285	26.6285

VARIABLE COST T	74.8819	74.8819	74.8819	74.8819

*<FIXED COST>**				
PRODUCTION OF DRI	1327,000.0000	1327000	1327000	1327000

TOTAL LABOR COST FO	172,680.0000	172,680.0000	172,680.0000	172,680.0000

TOTAL DEPRECIATION	6521,000.0000	6521000	6521000	6521000

TOTAL SPECIAL REPAI	2200,000.0000	2200000	2200000	2200000

TOTAL REPAIR COST F	7564,000.0000	7564000	7564000	7564000

TOTAL OTHER FIXED C	1090,672.7020	1090673	1090673	1090673

FIXED COST TOTA	13.2241	13.2241	13.2241	13.2241

GRAND TOTAL	88.1060	88.1060	88.1060	88.1060

LCP COST ACCOUNTING SHEET PHASE 2
 2008 2009 2010 2011

*<VARIABLE COST>**
 <RAW MATERIALS>

LIME STONE UNIT PRI	12.0000	12.0000	12.0000	12.0000
LIME STONE UNIT CON	1.9800	1.9800	1.9800	1.9800
LIME STONE COST PER	23.7600	23.7600	23.7600	23.7600
SUB TOTAL	23.7600	23.7600	23.7600	23.7600

<BYPRODUCT>

LIME FINE UNIT PRIC	2.2500	2.2500	2.2500	2.2500
LIME FINE UNIT OUTP	.2700	.2700	.2700	.2700
LIME FINE MINUS COS	.6075	.6075	.6075	.6075
SUB TOTAL	.6075	.6075	.6075	.6075

<UTILITY>

ELEC. UNIT PRICE	.0188	.0188	.0188	.0188
ELEC. UNIT CONSUMPT	60.0000	60.0000	60.0000	60.0000
ELEC. COST PER BURN	1.1268	1.1268	1.1268	1.1268

GAS UNIT PRICE
 GAS UNIT CONSUMPTIO
 GAS COST PER BURNT

GAS UNIT PRICE	.0874	.0874	.0874	.0874
GAS UNIT CONSUMPTIO	85.0000	85.0000	85.0000	85.0000
GAS COST PER BURNT	7.4294	7.4294	7.4294	7.4294

AIR UNIT PRICE
 AIR UNIT CONSUMPTIO
 AIR COST PER BURNT

AIR UNIT PRICE	.0125	.0125	.0125	.0125
AIR UNIT CONSUMPTIO	45.0000	45.0000	45.0000	45.0000
AIR COST PER BURNT	.5626	.5626	.5626	.5626

O2 N2 UNIT PRICE
 O2 N2 UNIT CONSUMPT
 O2 N2 COST PER BURN

O2 N2 UNIT PRICE	.0840	.0840	.0840	.0840
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000
O2 N2 COST PER BURN	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.6093	.6093	.6093	.6093	.6093
WATER UNIT CONSUMPT	.0100	.0100	.0100	.0100	.0100
WATER COST PER BURN	.0061	.0061	.0061	.0061	.0061
SUB TOTAL	9.1248	9.1248	9.1248	9.1248	9.1248
VARIABLE COST TOTAL	32.2773	32.2773	32.2773	32.2773	32.2773
*<FIXED COST>**					
PRODUCTION OF BURNT	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000
TOTAL LABOR COST FO	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000
TOTAL DEPRECIATION	334,000.0000	334,000.0000	334,000.0000	334,000.0000	334,000.0000
TOTAL SPECIAL REPAI	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000
TOTAL REPAIR COST F	601,000.0000	601,000.0000	601,000.0000	601,000.0000	601,000.0000
TOTAL OTHER FIXED C	1085,320.7620	1085321	1085321	1085321	1085321
FIXED COST TOTAL	42.7614	42.7614	42.7614	42.7614	42.7614
GRAND TOTAL	75.0387	75.0387	75.0387	75.0387	75.0387

SMP COST ACCOUNTING SHEET PHASE 2
2009 2010 2011

2008

*<VARIABLE COST>***

<RAW MATERIALS AND SUPPLIES>**

DRI UNIT PRICE	74.8819	74.8819	74.8819	74.8819
DRI UNIT CONSUMPTIO	1.0770	1.0770	1.0770	1.0770
DRI COST PER BILLET	80.6478	80.6478	80.6478	80.6478
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT CONSUMPT	.1200	.1200	.1200	.1200
SCRAP COST PER BILL	6.9426	6.9426	6.9426	6.9426
BURNT LIME UNIT PRI	32.2773	32.2773	32.2773	32.2773
BURNT LIME UNIT CON	.0410	.0410	.0410	.0410
BURNT LIME COST PER	1.3234	1.3234	1.3234	1.3234
FLOURSPAR UNIT PRIC	205.9000	205.9000	205.9000	205.9000
FLOURSPAR UNIT CONS	.0020	.0020	.0020	.0020
FLOURSPAR COST PER	.4118	.4118	.4118	.4118
FE-MN UNIT PRICE	357.3600	357.3600	357.3600	357.3600
FE-MN UNIT CONSUMPT	.0140	.0140	.0140	.0140
FE-MN COST PER BILL	5.0030	5.0030	5.0030	5.0030
FE-SI UNIT PRICE	518.8050	518.8050	518.8050	518.8050
FE-SI UNIT CONSUMPT	.0049	.0049	.0049	.0049
FE-SI COST PER BILL	2.5421	2.5421	2.5421	2.5421
AL UNIT PRICE	766.5000	766.5000	766.5000	766.5000
AL UNIT CONSUMPTION	.0001	.0001	.0001	.0001
AL COST PER BILLRT	.0767	.0767	.0767	.0767
COKE BREEZE UNIT PR	97.1250	97.1250	97.1250	97.1250
COKE BREEZE UNIT CO	.0013	.0013	.0013	.0013

COKE BREEZE COST PE	.1263	.1263	.1263	.1263

ELECTRODE UNIT PRIC	2,045.8200	2,045.8200	2,045.8200	2,045.8200
ELECTRODE UNIT CONS	.0041	.0041	.0041	.0041
ELECTRODE COST PER	8.3879	8.3879	8.3879	8.3879

FETTLING MATERIALS	427.0000	427.0000	427.0000	427.0000
FETTLING MATERIALS	.0260	.0260	.0260	.0260
FETTLING MATERIALS	11.1020	11.1020	11.1020	11.1020

FURNACE BRICK UNIT	1,207.0000	1,207.0000	1,207.0000	1,207.0000
FURNACE BRICK UNIT	.0026	.0026	.0026	.0026
FURNACE BRICK COST	3.1382	3.1382	3.1382	3.1382

LADLE BRICK UNIT PR	747.0000	747.0000	747.0000	747.0000
LADLE BRICK UNIT CO	.0030	.0030	.0030	.0030
LADLE BRICK COST PE	2.2410	2.2410	2.2410	2.2410

TUNDISH BRICK UNIT	713.0000	713.0000	713.0000	713.0000
TUNDISH BRICK UNIT	.0030	.0030	.0030	.0030
TUNDISH BRICK COST	2.1390	2.1390	2.1390	2.1390

SUB TOTAL	124.0817	124.0817	124.0817	124.0817

<BYPRODUCT>				
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0164	.0164	.0164	.0164
SCRAP MINUS COST PE	.9488	.9488	.9488	.9488

SUB TOTAL	.9488	.9488	.9488	.9488

<UTILITY>				
ELEC. UNIT PRICE	.0188	.0188	.0188	.0188
ELEC. UNIT CONSUMPT	731.0000	731.0000	731.0000	731.0000
ELEC. COST PER BILL	13.7276	13.7276	13.7276	13.7276

GAS UNIT PRICE	.0874	.0874	.0874	.0874
GAS UNIT CONSUMPTIO	4.0500	4.0500	4.0500	4.0500

GAS COST PER BILLE	.3540	.3540	.3540	.3540
AIR UNIT PRICE	.0125	.0125	.0125	.0125
AIR UNIT CONSUMPTIO	7.8600	7.8600	7.8600	7.8600
AIR COST PER BILLET	.0983	.0983	.0983	.0983
O2 N2 UNIT PRICE	.0840	.0840	.0840	.0840
O2 N2 UNIT CONSUMPT	4.0800	4.0800	4.0800	4.0800
O2 N2 COST PER BILL	.3427	.3427	.3427	.3427
WATER UNIT PRICE	.6093	.6093	.6093	.6093
WATER UNIT CONSUMPT	2.1400	2.1400	2.1400	2.1400
WATER COST PER BILL	1.3040	1.3040	1.3040	1.3040
SUB TOTAL	15.8265	15.8265	15.8265	15.8265
VARIABLE COST TOTA	138.9594	138.9594	138.9594	138.9594
*<FIXED COST>**				
PRODUCTION OF BILLE	1231,000.0000	1231000	1231000	1231000
TOTAL LABOR COST F0	1275,230.0000	1275230	1275230	1275230
TOTAL DEPRECIATION	9621,600.0000	9621600	9621600	9621600
TOTAL REPAIR COST F11711,000.0000	11711000	11711000	11711000	11711000
TOTAL PRECEDING PR19686,423.4640	19686423	19686423	19686423	19686423
TOTAL OTHER FIXED C	1143,597.4420	1143597	1143597	1143597
FIXED COST TOTAL	35.2866	35.2866	35.2866	35.2866
GRAND TOTAL	174.2461	174.2461	174.2461	174.2461

BMP COST ACCOUNTING SHEET PHASE 2

2011

2010

2009

2008

	2008	2009	2010	2011
*<VARIABLE COST>**				
<RAW MATERIALS>				
BILLET UNIT PRICE	138.9594	138.9594	138.9594	138.9594
BILLET UNIT CONSUMPT	1.0420	1.0420	1.0420	1.0420
BILLET COST PER BAR	144.7957	144.7957	144.7957	144.7957
SUB TOTAL	144.7957	144.7957	144.7957	144.7957
<BYPRODUCT>				
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0260	.0260	.0260	.0260
SCRAP MINUS COST PE	1.5042	1.5042	1.5042	1.5042
SUB TOTAL	1.5042	1.5042	1.5042	1.5042
<UTILITY>				
ELEC. UNIT PRICE	.0188	.0188	.0188	.0188
ELEC. UNIT CONSUMPT	86.0000	86.0000	86.0000	86.0000
ELEC. COST PER BAR	1.6150	1.6150	1.6150	1.6150
GAS UNIT PRICE	.0874	.0874	.0874	.0874
GAS UNIT CONSUMPTIO	29.5000	29.5000	29.5000	29.5000
GAS COST PER BAR	2.5784	2.5784	2.5784	2.5784
AIR UNIT PRICE	.0125	.0125	.0125	.0125
AIR UNIT CONSUMPTIO	19.3000	19.3000	19.3000	19.3000
AIR COST PER BAR	.2413	.2413	.2413	.2413
O2 N2 UNIT PRICE	.0840	.0840	.0840	.0840
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000
O2 N2 COST PER BAR	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.6093	.6093	.6093	.6093
WATER UNIT CONSUMPT	.6882	.6882	.6882	.6882
WATER COST PER BAR	.4193	.4193	.4193	.4193
SUB TOTAL	4.8541	4.8541	4.8541	4.8541
VARIABLE COST TOTA	148.1456	148.1456	148.1456	148.1456
*<FIXED COST>**				
PRODUCTION OF BAR	427,000.0000	427,000.0000	427,000.0000	427,000.0000
TOTAL LABOR COST FO	322,805.0000	322,805.0000	322,805.0000	322,805.0000
TOTAL DEPRECIATION	1727,200.0000	1727,200	1727,200	1727,200
TOTAL REPAIR COST F	2674,000.0000	2674,000	2674,000	2674,000
TOTAL PRECEDING PR	16560,680.6579	16560,681	16560,681	16560,681
TOTAL OTHER FIXED C	1098,403.2820	1098,403	1098,403	1098,403
FIXED COST TOTAL	52.4194	52.4194	52.4194	52.4194
GRAND TOTAL	200.5650	200.5650	200.5650	200.5650

RMP COST ACCOUNTING SHEET PHASE 2
 2008 2009 2010 2011

	2008	2009	2010	2011
<VARIABLE COST>				
<RAW MATERIALS>				
BILLET UNIT PRICE	138.9594	138.9594	138.9594	138.9594
BILLET UNIT CONSUMP	1.0310	1.0310	1.0310	1.0310
BILLET COST PER ROD	143.2672	143.2672	143.2672	143.2672
SUB TOTAL	143.2672	143.2672	143.2672	143.2672
<BYPRODUCT>				
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUPUT	.0150	.0150	.0150	.0150
SCRAP MINUS COST PE	.8678	.8678	.8678	.8678
SUB TOTAL	.8678	.8678	.8678	.8678
<UTILITY>				
ELEC. UNIT PRICE	.0188	.0188	.0188	.0188
ELEC. UNIT CONSUMPT	131.0000	131.0000	131.0000	131.0000
ELEC. COST PER ROD	2.4601	2.4601	2.4601	2.4601
GAS UNIT PRICE	.0874	.0874	.0874	.0874
GAS UNIT CONSUMPTIO	31.3000	31.3000	31.3000	31.3000
GAS COST PER ROD	2.7358	2.7358	2.7358	2.7358
AIR UNIT PRICE	.0125	.0125	.0125	.0125
AIR UNIT CONSUMPTIO	25.0000	25.0000	25.0000	25.0000
AIR COST PER ROD	.3126	.3126	.3126	.3126
O2 N2 UNIT PRICE	.0840	.0840	.0840	.0840
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000
O2 N2 COST PER ROD	.0000	.0000	.0000	.0000

WATER UNIT PRICE	.6093	.6093	.6093	.6093
WATER UNIT CONSUMPT	.8000	.8000	.8000	.8000
WATER COST PER ROD	.4875	.4875	.4875	.4875
SUB TOTAL	5.9959	5.9959	5.9959	5.9959
VARIABLE COST TOTA	148.3952	148.3952	148.3952	148.3952
*<FIXED COST>**				
PRODUCTION OF ROD	693,000.0000	693,000.0000	693,000.0000	693,000.0000
TOTAL LABOR COST FO	331,605.0000	331,605.0000	331,605.0000	331,605.0000
TOTAL DEPRECIATION	2971,800.0000	2971800	2971800	2971800
TOTAL REPAIR COST F	2928,000.0000	2928000	2928000	2928000
TOTAL PRECEDING PR	26877,170.2481	26877170	26877170	26877170
TOTAL OTHER FIXED C	1098,799.7220	1098800	1098800	1098800
FIXED COST TOTA	49.3613	49.3613	49.3613	49.3613
GRAND TOTAL	197.7565	197.7565	197.7565	197.7565

INPUT: QUIT
 SAVE UPDATED M&R FILE EGYPT2 (YES OR NO)
 INPUT: YES

MODELS AND REPORTS SAVED ON FILE EGYPT2

表9-19 工程別製造原価 (Case II : With Expansion)

DRP COST ACCOUNTING SHEET PHASE 2							
	1987	1988	1989	1990	1991	1992	1993
*<VARIABLE COST>**							
<RAW MATERIALS>							
PELLET UNIT PRICE	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650
PELLET UNIT CONSUMP	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150
PELLET COST PER DRI	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775
IRON ORE UNIT PRICE	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950
IRON ORE UNIT CONSU	.4350	.4350	.4350	.4350	.4350	.4350	.4350
IRON ORE COST PER D	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483
B. LIME UNIT PRICE	32.2049	31.4870	31.4148	31.4132	31.4132	30.4782	29.9548
B. LIME UNIT CONSUMP	.0007	.0007	.0007	.0007	.0007	.0007	.0007
B. LIME COST PER DR	.0225	.0220	.0220	.0220	.0220	.0213	.0210
SUB TOTAL	48.7483	48.7478	48.7478	48.7478	48.7478	48.7471	48.7468
<BYPRODUCT>							
OXIDE FINE UNIT PRI	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000
OXIDE FINE UNIT OUT	.0450	.0450	.0450	.0450	.0450	.0450	.0450
FINE MINUS COST PER	.4950	.4950	.4950	.4950	.4950	.4950	.4950
SUB TOTAL	.4950	.4950	.4950	.4950	.4950	.4950	.4950
<UTILITY>							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
ELEC. COST PER DRI	2.4040	2.2935	2.2787	2.2786	2.2786	2.1883	2.1353
GAS UNIT PRICE	.0585	.0584	.0584	.0584	.0584	.0582	.0581
GAS UNIT CONSUMPTIO	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000
GAS COST PER DRI	15.8082	15.7779	15.7768	15.7768	15.7768	15.7143	15.6959
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
AIR COST PER DRI	.1939	.1411	.1359	.1358	.1358	.1170	.1070
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
O2 N2 COST PER DRI	.1854	.1570	.1534	.1534	.1534	.1131	.0985
WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000
WATER COST PER DRI	1.0261	.8893	.8746	.8746	.8746	1.2294	1.0779
SUB TOTAL	19.6175	19.2588	19.2194	19.2192	19.2192	19.3620	19.1146
VARIABLE COST T	67.8709	67.5117	67.4722	67.4720	67.4720	67.6142	67.3664
*<FIXED COST>**							

PRODUCTION OF DRI	845,000.0000	716,000.0000	716,000.0000	716,000.0000	716,000.0000	716,000.0000	1119000	1327000
TOTAL LABOR COST FD	106,266.6667	79,700.0000	79,700.0000	79,700.0000	79,700.0000	79,700.0000	172,680.0000	172,680.0000
TOTAL DEPRECIATION	7658,000.0000	5743500	5743500	5743500	5743500	5743500	11173500	12984500
TOTAL SPECIAL REPAIR	2000,000.0000	1500000	1500000	1500000	1500000	1500000	2200000	2200000
TOTAL REPAIR COST F	3444,000.0000	2583000	2583000	2583000	2583000	2583000	4980000	4980000
TOTAL OTHER FIXED C	1210,385.2624	910,538.8580	910,538.8580	910,538.8580	910,538.8580	910,538.8580	1225773	1225773
FIXED COST TOTAL	17,0635	15,1072	15,1072	15,1072	15,1072	15,1072	17,6514	16,2494
GRAND TOTAL	84,9344	82,6189	82,5794	82,5791	82,5791	82,5791	85,2656	83,6158

LCP COST ACCOUNTING SHEET PHASE 2

	1987	1988	1989	1990	1991	1992	1993
<VARIABLE COST>							
<RAW MATERIALS>							
LIME STONE UNIT PRI	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000
LIME STONE UNIT CON	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800
LIME STONE COST PER	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
SUB TOTAL	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
<BYPRODUCT>							
LIME FINE UNIT PRIC	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500
LIME FINE UNIT OUTP	.2700	.2700	.2700	.2700	.2700	.2700	.2700
LIME FINE MINUS COS	.6075	.6075	.6075	.6075	.6075	.6075	.6075
SUB TOTAL	.6075	.6075	.6075	.6075	.6075	.6075	.6075
<UTILITY>							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	65.0000	65.0000	65.0000	65.0000	65.0000	62.0000	60.0000
ELEC. COST PER BURN	1.4205	1.3553	1.3465	1.3465	1.3465	1.2334	1.1647
GAS UNIT PRICE	.0585	.0584	.0584	.0584	.0584	.0582	.0581
GAS UNIT CONSUMPTIO	90.0000	90.0000	90.0000	90.0000	90.0000	87.0000	85.0000
GAS COST PER BURNT	5.2694	5.2593	5.2589	5.2589	5.2589	5.0635	4.9413
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	85.0000	85.0000	85.0000	85.0000	85.0000	61.0000	45.0000
AIR COST PER BURNT	2.3546	1.7151	1.6501	1.6486	1.6486	1.0193	.6880
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BURN	.0000	.0000	.0000	.0000	.0000	.0000	.0000
WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	.0100	.0100	.0100	.0100	.0100	.0100	.0100
WATER COST PER BURN	.0079	.0068	.0067	.0067	.0067	.0095	.0083
SUB TOTAL	9.0524	8.3345	8.2623	8.2607	8.2607	7.3257	6.8023
VARIABLE COST TOTAL	32.2049	31.4870	31.4148	31.4132	31.4132	30.4782	29.9548
<FIXED COST>							
PRODUCTION OF BURNT	37,000.0000	33,000.0000	34,000.0000	34,000.0000	34,000.0000	44,000.0000	50,000.0000
TOTAL LABOR COST FO	54,320.0000	40,740.0000	40,740.0000	40,740.0000	40,740.0000	43,750.0000	43,750.0000
TOTAL DEPRECIATION	891,700.0000	668,800.0000	668,800.0000	668,800.0000	668,800.0000	668,800.0000	668,800.0000
TOTAL SPECIAL REPAI	80,000.0000	60,000.0000	60,000.0000	60,000.0000	60,000.0000	74,000.0000	74,000.0000

TOTAL REPAIR COST F	400,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000
TOTAL OTHER FIXED C	1208,051.2300	908,788.3280	908,788.3280	908,788.3280	908,788.3280	908,788.3280	908,788.3280	908,788.3280	908,788.3280
FIXED COST TOTAL	71.1911	59.9493	58.1861	58.1861	58.1861	58.1861	58.1861	52.4312	46.1394
GRAND TOTAL	103.5960	91.4363	89.6009	89.5993	89.5993	89.5993	82.9093	82.9093	76.0942

SMP COST ACCOUNTING SHEET PHASE 2

1987

1988

1989

1990

1991

1992

1993

*<VARIABLE COST>***

GRAM MATERIALS AND SUPPLIES>

	1987	1988	1989	1990	1991	1992	1993
DRI UNIT PRICE	67.8709	67.5117	67.4722	67.4720	67.4720	67.6142	67.3664
DRI UNIT CONSUMPTIO	.9470	.8970	.8720	.8720	.8720	1.0330	1.0770
DRI COST PER BILLET	64.2737	60.5580	58.8358	58.8356	58.8356	69.8454	72.5536
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT CONSUMPT	.2370	.2310	.3040	.3040	.3040	.1590	.1200
SCRAP COST PER BILL	13.7116	16.2573	17.5879	17.5879	17.5879	9.1989	6.9426
BURNT LIME UNIT PRI	32.2049	31.4870	31.4148	31.4132	31.4132	30.4782	29.9548
BURNT LIME UNIT CON	.0410	.0410	.0410	.0410	.0410	.0410	.0410
BURNT LIME COST PER	1.3204	1.2910	1.2880	1.2879	1.2879	1.2496	1.2281
FLOURSPAR UNIT PRIC	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000
FLOURSPAR UNIT CONS	.0020	.0020	.0020	.0020	.0020	.0020	.0020
FLOURSPAR COST PER	.4118	.4118	.4118	.4118	.4118	.4118	.4118
FE-MN UNIT PRICE	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600
FE-MN UNIT CONSUMPT	.0140	.0140	.0140	.0140	.0140	.0140	.0140
FE-MN COST PER BILL	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030
FE-SI UNIT PRICE	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050
FE-SI UNIT CONSUMPT	.0049	.0049	.0049	.0049	.0049	.0049	.0049
FE-SI COST PER BILL	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421
AL UNIT PRICE	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000
AL UNIT CONSUMPTION	.0001	.0001	.0001	.0001	.0001	.0001	.0001
AL COST PER BILLRT	.0767	.0767	.0767	.0767	.0767	.0767	.0767
COKE BREEZE UNIT PR	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250
COKE BREEZE UNIT CO	.0013	.0013	.0013	.0013	.0013	.0013	.0013
COKE BREEZE COST PE	.1263	.1263	.1263	.1263	.1263	.1263	.1263
ELECTRODE UNIT PRIC	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200
ELECTRODE UNIT CONS	.0041	.0041	.0041	.0041	.0041	.0041	.0041
ELECTRODE COST PER	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879
FETTLING MATERIALS	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000
FETTLING MATERIALS	.0260	.0260	.0260	.0260	.0260	.0260	.0260
FETTLING MATERIALS	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020
FURNACE BRICK UNIT	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000
FURNACE BRICK UNIT	.0026	.0026	.0026	.0026	.0026	.0026	.0026
FURNACE BRICK COST	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382
LADLE BRICK UNIT PR	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000
LADLE BRICK UNIT CO	.0030	.0030	.0030	.0030	.0030	.0030	.0030
LADLE BRICK COST PE	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410

TUNDISH BRICK UNIT	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000
TUNDISH BRICK UNIT	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030
TUNDISH BRICK COST	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390
SUB TOTAL	114.4737	113.2742	112.8797	112.8794	112.8794	112.8794	115.4619	115.8923	
<BYPRODUCT>									
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164
SCRAP MINUS COST PE	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
SUB TOTAL	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
<UTILITY>									
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	718.0000	708.0000	708.0000	708.0000	708.0000	708.0000	708.0000	731.0000	731.0000
ELEC. COST PER BILL	15.6912	14.7621	14.6667	14.6660	14.6660	14.6660	14.6660	14.5421	14.1900
GAS UNIT PRICE	.0585	.0584	.0584	.0584	.0584	.0584	.0584	.0582	.0581
GAS UNIT CONSUMPTIO	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500
GAS COST PER BILLE	.2371	.2367	.2367	.2367	.2367	.2367	.2367	.2357	.2354
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600
AIR COST PER BILLET	.2177	.1584	.1526	.1524	.1524	.1524	.1524	.1313	.1202
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800
O2 N2 COST PER BILL	.7566	.6407	.6259	.6259	.6259	.6259	.6259	.4613	.4020
WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400
WATER COST PER BILL	1.6890	1.4639	1.4397	1.4397	1.4397	1.4397	1.4397	2.0237	1.7744
SUB TOTAL	18.5917	17.2618	17.1215	17.1207	17.1207	17.1207	17.3942	16.7220	
VARIABLE COST TOTA	132.1166	129.5871	129.0524	129.0513	129.0513	129.0513	131.9073	131.6655	
*<FIXED COST>***									
PRODUCTION OF BILLE	892,000.0000	798,000.0000	821,000.0000	821,000.0000	821,000.0000	821,000.0000	821,000.0000	1082000	1231000
TOTAL LABOR COST FO	1088,506.6667	816,380.0000	816,380.0000	816,380.0000	816,380.0000	816,380.0000	816,380.0000	1275230	1275230
TOTAL DEPRECIATION	14128,500.0000	10596400	10596400	10596400	10596400	10596400	10596400	18471400	18471400
TOTAL REPAIR COST F	6111,000.0000	4583000	4583000	4583000	4583000	4583000	4583000	7127000	7127000
TOTAL PRECEEDING PRI	7052,723.1591	12795067	12795067	12795067	12795067	12795067	12795067	22058923	23869923
TOTAL OTHER FIXED C	1261,328.0550	948,746.0780	948,746.0780	948,746.0780	948,746.0780	948,746.0780	948,746.0780	1278697	1278697
FIXED COST TOTAL	44,4418	37,2677	36,2236	36,2236	36,2236	36,2236	45,1934	42,2602	
GRAND TOTAL	176.5584	166.8548	165.2760	165.2749	165.2749	165.2749	177.1007	173.9257	

BMP COST ACCOUNTING SHEET PHASE 2

	1987	1988	1989	1990	1991	1992	1993
<VARIABLE COST>							
CRAM MATERIALS							
BILLET UNIT PRICE	132.1166	129.5871	129.0524	129.0513	129.0513	131.9073	131.6655
BILLET UNIT CONSUMPT	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420
BILLET COST PER BAR	137.6655	135.0298	134.4726	134.4714	134.4714	137.4474	137.1955
SUB TOTAL	137.6655	135.0298	134.4726	134.4714	134.4714	137.4474	137.1955
<BYPRODUCT>							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0260	.0260	.0260	.0260	.0260	.0260	.0260
SCRAP MINUS COST PE	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
SUB TOTAL	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
<UTILITY>							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
ELEC. COST PER BAR	1.8795	1.7931	1.7815	1.7815	1.7815	1.7108	1.6694
GAS UNIT PRICE	.0585	.0584	.0584	.0584	.0584	.0582	.0581
GAS UNIT CONSUMPTIO	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000
GAS COST PER BAR	1.7272	1.7239	1.7238	1.7238	1.7238	1.7169	1.7149
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000
AIR COST PER BAR	.5346	.3890	.3747	.3743	.3743	.3225	.2951
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BAR	.0000	.0000	.0000	.0000	.0000	.0000	.0000
WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	.6882	.6882	.6882	.6882	.6882	.6882	.6882
WATER COST PER BAR	.5432	.4708	.4630	.4630	.4630	.6508	.5706
SUB TOTAL	4.6844	4.3768	4.3430	4.3425	4.3425	4.4011	4.2500
VARIABLE COST TOTAL	140.8457	137.9023	137.3113	137.3097	137.3097	140.5443	139.9413
<FIXED COST>							
PRODUCTION OF BAR	446,000.0000	418,000.0000	425,000.0000	425,000.0000	425,000.0000	427,000.0000	427,000.0000
TOTAL LABOR COST FO	394,220.0000	295,665.0000	295,665.0000	295,665.0000	295,665.0000	322,805.0000	322,805.0000
TOTAL DEPRECIATION	4298,500.0000	3223900	3223900	3223900	3223900	3223900	3223900
TOTAL REPAIR COST F	1783,000.0000	1337000	1337000	1337000	1337000	1337000	1337000

TOTAL PRECEDING PR28333,906.7545	17484037	16988343	16965540	16965540	20921824	19833483
TOTAL OTHER FIXED C 1225,404.2530	921,803.1380	921,803.1380	921,803.1380	921,803.1380	1233503	1233503
FIXED COST TOTAL	80.7960	53.5687	53.5151	53.5151	63.3233	60.7745
GRAND TOTAL	221.6417	190.8800	190.8248	190.8248	203.6675	200.7157

RMP COST ACCOUNTING SHEET PHASE 2

	1987	1988	1989	1990	1991	1992	1993
*<VARIABLE COST>***							
<RAW MATERIALS>							
BILLET UNIT PRICE	132.1166	129.5871	129.0524	129.0513	129.0513	131.9073	131.6655
BILLET UNIT CONSUMP	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310
BILLET COST PER ROD	136.2122	133.6043	133.0530	133.0518	133.0518	135.9964	135.7471
SUB TOTAL	136.2122	133.6043	133.0530	133.0518	133.0518	135.9964	135.7471
<BYPRODUCT>							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0160	.0160	.0160	.0160	.0160	.0150	.0150
SCRAP MINUS COST PE	.9257	.9257	.9257	.9257	.9257	.8678	.8678
SUB TOTAL	.9257	.9257	.9257	.9257	.9257	.8678	.8678
<UTILITY>							
ELEC. UNIT PRICE	.0219	.0209	.0207	.0207	.0207	.0199	.0194
ELEC. UNIT CONSUMPT	144.0000	144.0000	144.0000	144.0000	144.0000	135.0000	131.0000
ELEC. COST PER ROD	3.1470	3.0025	2.9831	2.9829	2.9829	2.6856	2.5429
GAS UNIT PRICE	.0585	.0584	.0584	.0584	.0584	.0582	.0581
GAS UNIT CONSUMPTIO	32.5000	32.5000	32.5000	32.5000	32.5000	31.7000	31.3000
GAS COST PER ROD	1.9028	1.8992	1.8991	1.8991	1.8991	1.8450	1.8196
AIR UNIT PRICE	.0277	.0202	.0194	.0194	.0194	.0167	.0153
AIR UNIT CONSUMPTIO	30.0000	30.0000	30.0000	30.0000	30.0000	27.0000	25.0000
AIR COST PER ROD	.8310	.6046	.5824	.5818	.5818	.4512	.3822
O2 N2 UNIT PRICE	.1854	.1570	.1534	.1534	.1534	.1131	.0985
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER ROD	.0000	.0000	.0000	.0000	.0000	.0000	.0000
WATER UNIT PRICE	.7893	.6841	.6728	.6728	.6728	.9457	.8291
WATER UNIT CONSUMPT	.8545	.8545	.8545	.8545	.8545	.8182	.8000
WATER COST PER ROD	.6745	.5846	.5749	.5749	.5749	.7737	.6633
SUB TOTAL	6.5553	6.0908	6.0394	6.0387	6.0387	5.7555	5.4020
VARIABLE COST TOTA	141.8419	138.7695	138.1667	138.1649	138.1649	140.8841	140.2875
*<FIXED COST>***							
PRODUCTION OF ROD	178,000.0000	293,000.0000	319,000.0000	320,000.0000	320,000.0000	571,000.0000	693,000.0000
TOTAL LABOR COST FO	363,713.3333	272,785.0000	272,785.0000	272,785.0000	272,785.0000	331,605.0000	331,605.0000
TOTAL DEPRECIATION	3182,200.0000	2937400	2937400	2937400	2937400	5325400	5324400
TOTAL REPAIR COST F	1493,000.0000	1120000	1120000	1120000	1120000	1808000	1808000

TOTAL PRECEEDING PRI1308,151.1262	1225557	12751250	12774053	12774053	27977427	32188768
TOTAL OTHER FIXED C 1225,882.0580	920,661.4880	920,661.4880	920,661.4880	920,661.4880	1233900	1233900
FIXED COST TOTAL	98.7132	56.4329	56.3278	56.3278	64.2318	58.9995
GRAND TOTAL	240.5550	194.5996	194.4927	194.4927	205.1158	199.2869

DRP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>**							
<RAW MATERIALS>							
PELLET UNIT PRICE	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650
PELLET UNIT CONSUMP	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150
PELLET COST PER DRI	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775
IRON ORE UNIT PRICE	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950
IRON ORE UNIT CONSU	.4350	.4350	.4350	.4350	.4350	.4350	.4350
IRON ORE COST PER O	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483
B. LIME UNIT PRICE	29.6548	29.6547	29.6637	29.6548	29.6548	29.6548	29.6548
B. LIME UNIT CONSUM	.0007	.0007	.0007	.0007	.0007	.0007	.0007
B. LIME COST PER DR	.0210	.0210	.0208	.0208	.0208	.0208	.0208
SUB TOTAL	48.7468	48.7468	48.7466	48.7466	48.7466	48.7466	48.7466
<BYPRODUCT>							
OXIDE FINE UNIT PRI	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000
OXIDE FINE UNIT OUT	.0450	.0450	.0450	.0450	.0450	.0450	.0450
FINE MINUS COST PER	.4950	.4950	.4950	.4950	.4950	.4950	.4950
SUB TOTAL	.4950	.4950	.4950	.4950	.4950	.4950	.4950
<UTILITY>							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
ELEC. COST PER DRI	2.1353	2.1353	2.0293	2.0130	2.0130	2.0130	2.0130
GAS UNIT PRICE	.0581	.0581	.0580	.0580	.0580	.0580	.0580
GAS UNIT CONSUMPTIO	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000
GAS COST PER DRI	15.6959	15.6959	15.6633	15.6633	15.6633	15.6633	15.6633
AIR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
AIR COST PER DRI	.1070	.1070	.0726	.0726	.0726	.0726	.0726
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
O2 N2 COST PER DRI	.0985	.0985	.0623	.0623	.0623	.0623	.0623
WATER UNIT PRICE	.8291	.8249	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000
WATER COST PER DRI	1.0779	1.0724	.8962	.8962	.8962	.8962	.8962
SUB TOTAL	19.1146	19.1091	18.7236	18.7072	18.7072	18.7072	18.7072
VARIABLE COST T	67.3664	67.3609	66.9751	66.9588	66.9588	66.9588	66.9588
*<FIXED COST>**							

PRODUCTION OF DRI	1327,000.0000	1327000	1327000	1327000	1327000	1327000
TOTAL LABOR COST FC	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000
TOTAL DEPRECIATION	12984,500.0000	12983000	12981500	12981500	12981500	12981500
TOTAL SPECIAL REPAIR	2200,000.0000	2200000	2200000	2200000	2200000	2200000
TOTAL REPAIR COST F	4980,000.0000	4980000	4980000	4980000	4980000	4980000
TOTAL OTHER FIXED C	1225,772.7020	1225773	1166673	1166673	1166673	1166673
FIXED COST TOTAL	16,2494	16,2494	16,2037	16,2026	16,2026	16,2026
GRAND TOTAL	83,6158	83,6103	83,1789	83,1614	83,1614	83,1614

LCP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>***							
<RAW MATERIALS>							
LIME STONE UNIT PRI	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000
LIME STONE UNIT CON	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800	1.9800
LIME STONE COST PER	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
SUB TOTAL	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600	23.7600
<BYPRODUCT>							
LIME FINE UNIT PRIC	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500
LIME FINE UNIT OUTP	.2700	.2700	.2700	.2700	.2700	.2700	.2700
LIME FINE MINUS COS	.6075	.6075	.6075	.6075	.6075	.6075	.6075
SUB TOTAL	.6075	.6075	.6075	.6075	.6075	.6075	.6075
<UTILITY>							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
ELEC. COST PER BURN	1.1647	1.1647	1.1069	1.0980	1.0980	1.0980	1.0980
SUB TOTAL	.5581	.5581	.5580	.5580	.5580	.5580	.5580
GAS UNIT PRICE	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000
GAS UNIT CONSUMPTIO	4.9413	4.9413	4.9310	4.9310	4.9310	4.9310	4.9310
GAS COST PER BURNT	418.8000	418.8000	418.8000	418.8000	418.8000	418.8000	418.8000
SUB TOTAL	418.8000	418.8000	418.8000	418.8000	418.8000	418.8000	418.8000
AIR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
AIR COST PER BURNT	.6880	.6880	.4664	.4664	.4664	.4664	.4664
SUB TOTAL	.6880	.6880	.4664	.4664	.4664	.4664	.4664
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BURNT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
SUB TOTAL	.0000	.0000	.0000	.0000	.0000	.0000	.0000
WATER UNIT PRICE	.8291	.8291	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	.0100	.0100	.0100	.0100	.0100	.0100	.0100
WATER COST PER BURNT	.0083	.0082	.0069	.0069	.0069	.0069	.0069
SUB TOTAL	6.8023	6.8022	6.5112	6.5023	6.5023	6.5023	6.5023
VARIABLE COST TOTAL	29.9548	29.9547	29.6537	29.6548	29.6548	29.6548	29.6548
<FIXED COST>							
PRODUCTION OF BURNT	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000	50,000.0000
TOTAL LABOR COST FO	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000	43,750.0000
TOTAL DEPRECIATION	668,800.0000	668,800.0000	668,000.0000	667,300.0000	667,300.0000	667,300.0000	667,300.0000
TOTAL SPECIAL REPAI	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000	74,000.0000

TOTAL REPAIR COST F	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000	300,000.0000
TOTAL OTHER FIXED C	1220,420.7620	1220421	1161341	1161321	1161321	1161321	1161321	1161321
FIXED COST TOTAL	46.1394	46.1394	44.9418	44.9274	44.9274	44.9274	44.9274	44.9274
GRAND TOTAL	76.0942	76.0941	74.6056	74.5823	74.5823	74.5823	74.5823	74.5823

SMP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
* VARIABLE COST **							
*** RAW MATERIALS AND SUPPLIES ***							
DRI UNIT PRICE	67.3664	67.3609	66.9751	66.9588	66.9588	66.9588	66.9588
DRI UNIT CONSUMPTIO	1.0770	1.0770	1.0770	1.0770	1.0770	1.0770	1.0770
DRI COST PER BILLET	72.5536	72.5477	72.1322	72.1146	72.1146	72.1146	72.1146
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT CONSUMPT	.1200	.1200	.1200	.1200	.1200	.1200	.1200
SCRAP COST PER BILL	6.9426	6.9426	6.9426	6.9426	6.9426	6.9426	6.9426
BURNT LIME UNIT PRI	29.9548	29.9547	29.6637	29.6548	29.6548	29.6548	29.6548
BURNT LIME UNIT CON	.0410	.0410	.0410	.0410	.0410	.0410	.0410
BURNT LIME COST PER	1.2281	1.2281	1.2162	1.2158	1.2158	1.2158	1.2158
FLOURSPAR UNIT PRIC	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000	205.9000
FLOURSPAR UNIT CONS	.0020	.0020	.0020	.0020	.0020	.0020	.0020
FLOURSPAR COST PER	.4118	.4118	.4118	.4118	.4118	.4118	.4118
FE-MN UNIT PRICE	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600	357.3600
FE-MN UNIT CONSUMPT	.0140	.0140	.0140	.0140	.0140	.0140	.0140
FE-MN COST PER BILL	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030	5.0030
FE-SI UNIT PRICE	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050	518.8050
FE-SI UNIT CONSUMPT	.0049	.0049	.0049	.0049	.0049	.0049	.0049
FE-SI COST PER BILL	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421	2.5421
AL UNIT PRICE	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000	766.5000
AL UNIT CONSUMPTION	.0001	.0001	.0001	.0001	.0001	.0001	.0001
AL COST PER BILLART	.0767	.0767	.0767	.0767	.0767	.0767	.0767
COKE BREEZE UNIT PR	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250	97.1250
COKE BREEZE UNIT CO	.0013	.0013	.0013	.0013	.0013	.0013	.0013
COKE BREEZE COST PE	.1263	.1263	.1263	.1263	.1263	.1263	.1263
ELECTRODE UNIT PRIC	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200	2,045.8200
ELECTRODE UNIT CONS	.0041	.0041	.0041	.0041	.0041	.0041	.0041
ELECTRODE COST PER	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879	8.3879
FETTLING MATERIALS	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000	427.0000
FETTLING MATERIALS	.0260	.0260	.0260	.0260	.0260	.0260	.0260
FETTLING MATERIALS	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020	11.1020
FURNACE BRICK UNIT	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000	1,207.0000
FURNACE BRICK UNIT	.0026	.0026	.0026	.0026	.0026	.0026	.0026
FURNACE BRICK COST	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382	3.1382
LADLE BRICK UNIT PR	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000	747.0000
LADLE BRICK UNIT CO	.0030	.0030	.0030	.0030	.0030	.0030	.0030
LADLE BRICK COST PE	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410	2.2410

TUNDISH BRICK UNIT	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000	713.0000
TUNDISH BRICK UNIT	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030	.0030
TUNDISH BRICK COST	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390	2.1390
SUB TOTAL	115.8923	115.8864	115.4590	115.4410	115.4410	115.4410	115.4410	115.4410	115.4410
<BYPRODUCT>									
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164	.0164
SCRAP MINUS COST PE	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
SUB TOTAL	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488	.9488
<UTILITY>									
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000	731.0000
ELEC. COST PER BILL	14.1900	14.1900	13.4857	13.3771	13.3771	13.3771	13.3771	13.3771	13.3771
GAS UNIT PRICE	.0581	.0581	.0580	.0580	.0580	.0580	.0580	.0580	.0580
GAS UNIT CONSUMPTIO	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500	4.0500
GAS COST PER BILLE	.2354	.2354	.2349	.2349	.2349	.2349	.2349	.2349	.2349
AIR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600	7.8600
AIR COST PER BILLET	.1202	.1202	.0815	.0815	.0815	.0815	.0815	.0815	.0815
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800	4.0800
O2 N2 COST PER BILL	.4020	.4020	.2540	.2540	.2540	.2540	.2540	.2540	.2540
WATER UNIT PRICE	.8291	.8249	.6894	.6894	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400	2.1400
WATER COST PER BILL	1.7744	1.7653	1.4752	1.4752	1.4752	1.4752	1.4752	1.4752	1.4752
SUB TOTAL	16.7220	16.7130	15.5313	15.4228	15.4228	15.4228	15.4228	15.4228	15.4228
VARIABLE COST TOTA	131.6655	131.6505	130.0415	129.9150	129.9150	129.9150	129.9150	129.9150	129.9150
<FIXED COST>									
PRODUCTION OF BILLE	1231.0000	1231.0000	1231.0000	1231.0000	1231.0000	1231.0000	1231.0000	1231.0000	1231.0000
TOTAL LABOR COST FO	1275.230	1275.230	1275.230	1275.230	1275.230	1275.230	1275.230	1275.230	1275.230
TOTAL DEPRECIATION	18471.400	18471.400	18438.700	18438.700	18438.700	18438.700	18438.700	18438.700	18438.700
TOTAL REPAIR COST F	7127.000	7127.000	7127.000	7127.000	7127.000	7127.000	7127.000	7127.000	7127.000
TOTAL PRECEEDING PR	23869.923	23749.463	23749.463	23749.463	23749.463	23749.463	23749.463	23749.463	23749.463
TOTAL OTHER FIXED C	1278.697	1219.617	1219.617	1219.617	1219.617	1219.617	1219.617	1219.617	1219.617
FIXED COST TOTAL	42.2602	42.2602	42.0877	42.0859	42.0859	42.0859	42.0859	42.0859	42.0859
GRAND TOTAL	173.9257	173.9107	172.1292	172.0009	172.0009	172.0009	172.0009	172.0009	172.0009

BMP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>***							
<RAW MATERIALS>							
BILLET UNIT PRICE	131.6655	131.6505	130.0415	129.9150	129.9150	129.9150	129.9150
BILLET UNIT CONSUMP	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420	1.0420
BILLET COST PER BAR	137.1955	137.1799	135.5032	135.3714	135.3714	135.3714	135.3714
SUB TOTAL	137.1955	137.1799	135.5032	135.3714	135.3714	135.3714	135.3714
<BYPRODUCT>							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0260	.0260	.0260	.0260	.0260	.0260	.0260
SCRAP MINUS COST PE	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
SUB TOTAL	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042	1.5042
<UTILITY>							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
ELEC. COST PER BAR	1.6694	1.6694	1.5865	1.5738	1.5738	1.5738	1.5738
GAS UNIT PRICE	.0581	.0581	.0580	.0580	.0580	.0580	.0580
GAS UNIT CONSUMPTIO	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000	29.5000
GAS COST PER BAR	1.7149	1.7149	1.7114	1.7114	1.7114	1.7114	1.7114
AIR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000	19.3000
AIR COST PER BAR	.2951	.2951	.2000	.2000	.2000	.2000	.2000
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER BAR	.0000	.0000	.0000	.0000	.0000	.0000	.0000
WATER UNIT PRICE	.8291	.8249	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	.6882	.6882	.6882	.6882	.6882	.6882	.6882
WATER COST PER BAR	.5706	.5677	.4744	.4744	.4744	.4744	.4744
SUB TOTAL	4.2500	4.2471	3.9724	3.9596	3.9596	3.9596	3.9596
VARIABLE COST TOTA	139.9413	139.9227	137.9714	137.8268	137.8268	137.8268	137.8268
*<FIXED COST>***							
PRODUCTION OF BAR	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000	427,000.0000
TOTAL LABOR COST FO	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000	322,805.0000
TOTAL DEPRECIATION	3223,900.0000	3223,900.0000	3214,100.0000	3212,100.0000	3212,100.0000	3212,100.0000	3212,100.0000
TOTAL REPAIR COST F	1337,000.0000	1337,000.0000	1337,000.0000	1337,000.0000	1337,000.0000	1337,000.0000	1337,000.0000

TOTAL PRECEDING PRI 983,483.1579	19833483	19752567	19751705	19751705	19751705	19751514
TOTAL OTHER FIXED C 1233,505.2820	1233503	1174423	1174403	1174403	1174403	1174403
FIXED COST TOTAL	60.7745	60.4236	60.4169	60.4169	60.4169	60.4164
GRAND TOTAL	200.7157	198.3950	198.2437	198.2437	198.2437	198.2432

RMP COST ACCOUNTING SHEET PHASE 2

	1994	1995	1996	1997	1998	1999	2000
*<VARIABLE COST>**							
<RAM MATERIALS>							
BILLET UNIT PRICE	131.6655	131.6505	130.0415	129.9150	129.9150	129.9150	129.9150
BILLET UNIT CONSUMPT	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310	1.0310
BILLET COST PER ROD	135.7471	135.7317	134.0728	133.9423	133.9423	133.9423	133.9423
SUB TOTAL	135.7471	135.7317	134.0728	133.9423	133.9423	133.9423	133.9423
<BYPRODUCT>							
SCRAP UNIT PRICE	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550	57.8550
SCRAP UNIT OUTPUT	.0150	.0150	.0150	.0150	.0150	.0150	.0150
SCRAP MINUS COST PE	.8678	.8678	.8678	.8678	.8678	.8678	.8678
SUB TOTAL	.8678	.8678	.8678	.8678	.8678	.8678	.8678
<UTILITY>							
ELEC. UNIT PRICE	.0194	.0194	.0184	.0183	.0183	.0183	.0183
ELEC. UNIT CONSUMPT	131.0000	131.0000	131.0000	131.0000	131.0000	131.0000	131.0000
ELEC. COST PER ROD	2.5429	2.5429	2.4167	2.3973	2.3973	2.3973	2.3973
GAS UNIT PRICE	.0581	.0581	.0580	.0580	.0580	.0580	.0580
GAS UNIT CONSUMPTIO	31.3000	31.3000	31.3000	31.3000	31.3000	31.3000	31.3000
GAS COST PER ROD	1.8196	1.8196	1.8158	1.8158	1.8158	1.8158	1.8158
AIR UNIT PRICE	.0153	.0153	.0104	.0104	.0104	.0104	.0104
AIR UNIT CONSUMPTIO	25.0000	25.0000	25.0000	25.0000	25.0000	25.0000	25.0000
AIR COST PER ROD	.3822	.3822	.2591	.2591	.2591	.2591	.2591
O2 N2 UNIT PRICE	.0985	.0985	.0623	.0623	.0623	.0623	.0623
O2 N2 UNIT CONSUMPT	.0000	.0000	.0000	.0000	.0000	.0000	.0000
O2 N2 COST PER ROD	.0000	.0000	.0000	.0000	.0000	.0000	.0000
WATER UNIT PRICE	.8291	.8249	.6894	.6894	.6894	.6894	.6894
WATER UNIT CONSUMPT	.8000	.8000	.8000	.8000	.8000	.8000	.8000
WATER COST PER ROD	.6633	.6599	.5515	.5515	.5515	.5515	.5515
SUB TOTAL	5.4080	5.4046	5.0431	5.0237	5.0237	5.0237	5.0237
VARIABLE COST TOTA	140.2873	140.2685	138.2481	138.0982	138.0982	138.0982	138.0982
*<FIXED COST>**							
PRODUCTION OF ROD	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000	693,000.0000
TOTAL LABOR COST FO	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000	331,605.0000
TOTAL DEPRECIATION	5324,400.0000	5324,400.0000	5324,400.0000	5324,400.0000	5324,400.0000	5324,400.0000	5324,400.0000
TOTAL REPAIR COST F	1808,000.0000	1808,000.0000	1808,000.0000	1808,000.0000	1808,000.0000	1808,000.0000	1808,000.0000

TOTAL PRECEDING PR32188,767.7481	32188768	32057444	32056046	32056046	32056046	32056046	32055736
TOTAL OTHER FIXED C 1233,899.7220	1233900	1174820	1174800	1174800	1174800	1174800	1174800
FIXED COST TOTAL	58.9995	58.7248	58.7227	58.7227	58.7227	58.7227	58.7223
GRAND TOTAL	199.2869	196.9728	196.8209	196.8209	196.8209	196.8209	196.8204

DRP COST ACCOUNTING SHEET PHASE 2

2001 2002 2003 2004 2005 2006 2007

<VARIABLE COST>

<RAW MATERIALS>

PELLET UNIT PRICE	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650	34.1650
PELLET UNIT CONSUMP	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150	1.0150
PELLET COST PER DRI	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775	34.6775
IRON ORE UNIT PRICE	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950	32.2950
IRON ORE UNIT CONSUM	.4350	.4350	.4350	.4350	.4350	.4350	.4350
IRON ORE COST PER D	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483	14.0483
B. LIME UNIT PRICE	29.6548	29.6054	29.6054	29.6054	29.6054	29.6054	29.7851
B. LIME UNIT CONSUM	.0007	.0007	.0007	.0007	.0007	.0007	.0007
B. LIME COST PER DR	.0208	.0207	.0207	.0207	.0207	.0207	.0208
SUB TOTAL	48.7466	48.7465	48.7465	48.7465	48.7465	48.7465	48.7466

<BYPRODUCT>

OXIDE FINE UNIT PRI
OXIDE FINE UNIT CUT
FINE MINUS COST PER

OXIDE FINE UNIT PRICE	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000	11.0000
OXIDE FINE UNIT CONSUMPT	.0450	.0450	.0450	.0450	.0450	.0450	.0450
OXIDE FINE MINUS COST PER	.4950	.4950	.4950	.4950	.4950	.4950	.4950
SUB TOTAL	.4950	.4950	.4950	.4950	.4950	.4950	.4950

<UTILITY>

ELEC. UNIT PRICE
ELEC. UNIT CONSUMPT
ELEC. COST PER DRI

ELEC. UNIT PRICE	.0183	.0181	.0181	.0181	.0181	.0181	.0188
ELEC. UNIT CONSUMPT	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
ELEC. COST PER DRI	2.0130	1.9924	1.9924	1.9924	1.9924	1.9924	2.0657

GAS UNIT PRICE

GAS UNIT CONSUMPTIO
GAS COST PER DRI

GAS UNIT PRICE	.0580	.0580	.0580	.0580	.0580	.0580	.0581
GAS UNIT CONSUMPTIO	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000	270.0000
GAS COST PER DRI	15.6633	15.6633	15.6633	15.6633	15.6633	15.6633	15.6827

AIR UNIT PRICE

AIR UNIT CONSUMPTIO
AIR COST PER DRI

AIR UNIT PRICE	.0104	.0096	.0096	.0096	.0096	.0096	.0125
AIR UNIT CONSUMPTIO	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
AIR COST PER DRI	.0726	.0669	.0669	.0669	.0669	.0669	.0875

O2 N2 UNIT PRICE

O2 N2 UNIT CONSUMPT
O2 N2 COST PER DRI

O2 N2 UNIT PRICE	.0623	.0623	.0623	.0623	.0623	.0623	.0840
O2 N2 UNIT CONSUMPT	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
O2 N2 COST PER DRI	.0623	.0623	.0623	.0623	.0623	.0623	.0840

WATER UNIT PRICE

WATER UNIT CONSUMPT
WATER COST PER DRI

WATER UNIT PRICE	.6894	.5257	.5257	.5257	.5257	.5257	.6093
WATER UNIT CONSUMPT	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000
WATER COST PER DRI	.8962	.6834	.6834	.6834	.6834	.6834	.7921

SUB TOTAL

VARIABLE COST T

SUB TOTAL	18.7072	18.4682	18.4682	18.4682	18.4682	18.4682	18.7121
VARIABLE COST T	66.9588	66.7197	66.7197	66.7197	66.7197	66.7197	66.9638

<FIXED COST>

PRODUCTION OF BRY	1327,000.0000	1327000	1327000	1327000	1327000	1327000
TOTAL LABOR COST FO	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000	172,680.0000
TOTAL DEPRECIATION	11546,700.0000	10112000	10112000	10112000	10112000	7418000
TOTAL SPECIAL REPAIR	2200,000.0000	2200000	2200000	2200000	2200000	2200000
TOTAL REPAIR COST F	4980,000.0000	4980000	4980000	4980000	4980000	7564000
TOTAL OTHER FIXED C	1166,672.7020	1056273	1056273	1056273	1056273	1090673
FIXED COST TOTAL	15,1214	13,9570	13,9570	13,9570	13,9570	13,9000
GRAND TOTAL	82,0801	80,6767	80,6767	80,6767	80,6767	80,8638