

CHAPTER II: MINISTRY OF FINANCE

Department of Economic Affairs

2. Modernisation of India Government Mint, Calcutta

Highlights

- The project of modernisation of India Government Mint, Calcutta is nowhere near completion even 10 years after it was sanctioned and more than six years after the original scheduled date of completion.
- Despite an expenditure of over Rs 59 crore, the objective of increasing the production of coin blanks and coins remained unfulfilled. The mint continued to produce almost the same quantity of coins as before the modernisation. Thus, no value for money has been realised from the expenditure of over Rs 59 crore.
- Consequently objective of reducing dependence on import of blanks and coins remained unrealised. Heavy dependence on import continues.
- GM, IGM Calcutta executed the project in an unsatisfactory manner. He issued tenders for equipment etc. very late, did not take advance action for preparation of sites for installing and commissioning the equipment. Most of the equipment were installed late by up to 29 months. Many were yet to be installed up to 54 months after their receipt.

2.1. Introduction

Government of India, Ministry of Finance approved in March 1989 a modernisation project for the Mints at Mumbai, Calcutta and Hyderabad. This was a follow-up on the recommendation of the PAC in its 90th Report (1986-87) to the Eighth Lok Sabha. The objectives of the project were to replace obsolete equipment in the mints, to improve productivity and achieve self-sufficiency in coin production, avoid import of blanks/coins and to streamline the working hours of the existing mint.

The project envisaged production of coins of denomination of Rs 5, Rs 2 and Re 1 made of cupro-nickel and stainless steel coins of 50 paise, 25 paise and 10 paise denomination. The expected increase in blank output was from 150 to

1900 million pieces and output of coins from 400 to 1000 million pieces in the India Government Mint, Calcutta.

The project was to be completed by January 1993. The consultant, MECON¹ submitted the final engineering report in November 1990. In March 1989, the estimated cost of the project was Rs 40.09 crore, which increased to Rs 111.63 crore in 1994. There has been a time over run of over six years and over run of the estimated cost by Rs 71.54 crore.

2.2. Organisational set up

The General Manager, Hyderabad Mint functions as the co-ordinator of the project. General Manager IGM² Calcutta is in overall charge of the mint and, thus, of the modernisation project. The modernisation project was to be monitored by a project cell in Calcutta Mint under the Works Manager.

2.3. Scope of audit

A review on the implementation of the project in IGM, Calcutta was conducted during March - May 1999 to examine whether the project execution has been carried out as per the schedule, whether proper value for money has been realised and whether the stated objectives had been achieved. Rs 59.21 crore have been expended upto March 1999 but only two shops out of the total modernisation project involving nine main shops including auxiliaries had been commissioned.

2.4. Finance

The revised estimated cost of the Calcutta chapter of the project was fixed at Rs 111.63 crore in 1994 against the original estimate of Rs 40.09 crore. However, the pace of implementation of the project was very slow throughout. Against the total allotment of Rs 70.47 crore during 1990-91 to 1998-99, the expenditure was only Rs 40.19 crore excluding an amount of Rs 19.02 crore which was transferred to Hyderabad Mint directly for procuring imported equipment.

The unspent amount in six of the nine years was higher than 25 *per cent* of the budget provision. It ranged between 97.70 *per cent* in 1993-1994 to 6.88 *per cent* in 1995-96.

¹ Metallurgical and Engineering Consultants (India) Limited

² India Government Mint

The reasons for unspent provision under the annual budget were (a) non-receipt of bills from civil contractors, (b) delayed supply of equipment due to late placement of orders and (c) slow progress of works.

2.5. Project profile

The modernisation project of India Government Mint, Calcutta involved nine shops including auxiliaries as under :-

Name	Function	Scheduled date of completion
(i) Melting and Casting shop	Metals (Cupro-nickel) are melted and cast into strips and ingots	November 1992
(ii) Rolling and Cupro-nickel Blanking shop iii) "A" Rolling Mill	Ingots and strips are rolled into sheets and Blanks prepared	January 1993 October 1992
(iv) Cupro-nickel Blank Annealing shop	Polishing of cupro-nickel blanks	November 1992
(v) Stainless Steel Blanking shop	Stainless Steel Blanks prepared	September 1992
(vi) Cupro-nickel and Stainless Steel Blank Finishing shop	Finishing of cupro-nickel and stainless steel blanks	October 1992
(vii) Cupro-nickel and Stainless Steel Coining and Coin examining shop	Coins stamped and examined	August 1992
(viii) Die shop	Prepares presses for stamping Cupro-nickel and Stainless Steel blanks	December 1992
(ix) Auxiliaries	Consist of facilities like water, electricity, stores etc.	August 1992

The operation of the shops are interconnected and cannot be run to achieve the design target in isolation. The detailed status of each shop is shown in **Annex 'A'**.

2.6. Project management and status as of March 1999

The modernisation project involved procurement and installation of new equipment with civil and structural engineering works for equipment foundation and erection as well as streamlining of existing manpower so that self sufficiency in coin production together with optimisation of capacity are achieved.

The General Managers of the three mints signed an agreement with MECON in January 1990 entrusting the job of detailed engineering and consultancy

services of mint modernisation to them. Out of the total consideration of Rs 5 crore for consultancy by MECON, Rs 1.25 crore related to IGM, Calcutta. As per the contract of January 1990, MECON's scope for engineering and consultancy services for the project extended over a period of 36 months i.e. up to January 1993. As MECON was unable to complete the project, the contract with MECON was extended in November 1997 upto January 1998 for a consideration of additional Rs 92 lakh for IGM, Calcutta.

Analysis of monthly progress reports up to November, 1999 with reference to the 'Network for Implementation' and 'Bar Chart' in respect of the nine shops disclosed following delays against crucial shopwise activities indicated in the Bar Chart / Network for Implementation :

S. No.	Name of shop	Delay in issue of technical specification for civil/ structural works	Delay in tender scrutiny and recommendation	Delay in placement of order for equipment & civil works	Delay in delivery	Delay in issue of civil/ structural drawings	Delay in civil construction	Delay in equipment erection	Delay in commissioning
				In months					
1.	Melting and casting shop		39	32-52	36-57	27-60	91	86	85 (I)♦
2.	Rolling and Cupro-nickel blanking shop		34-61	45-104	44-90	26-73	84	84	82 (I)
3.	Stainless Steel blanking and processing shop		---	29-40	37-45	33-76	58-92	49-57	86 (I)
4.	A' Rolling shop	2 to 48 months	46	58	60	71	90	86	85 (I)
5.	Cupro-nickel blank annealing shop		---	---	---	---	---	---	84* (I)
6.	Auxiliary buildings and stores								
i) ii) iii)	Water system Power distribution and shop electrics Illumination		---	---	---	---	---	---	87 (I)

♦ I: Incomplete

7..	Cupro-nickel and Stainless Steel coining and coin examining shop		44	22-23	25-41	20-50	56-57	38	41•(C)
8.	Die shop		13-102	103-04	88-89	---	88	86	83
9.	Cupro-nickel and Stainless Steel blank finishing shop		---	40	45-64	---	88	56-57	54 (C)

* Four Birlec furnaces were objected to by the Pollution Control Board of Government of West Bengal but have not been replaced by IGM Calcutta. Hence the Cupro-nickel Blank Annealing shop remained incomplete.

Delay against crucial shopwise activities was attributable to MECON and IGM, Calcutta

The delay is attributable to MECON's inability to adhere to the time schedule and failure of General Manager, IGM, Calcutta in timely processing of tenders, issuing purchase orders/work orders and to selection of inexperienced contractors. Thus, in spite of extension of contract with MECON the project is incomplete even after a time overrun of six years.

2.7 Achievement of objectives of modernisation

2.7.1 Procurement and commissioning of equipment

To increase the production capacity, some of the essential equipment included a Roll Grinding machine, a double drum furnace and three blanking lines. The Roll Grinding machine was to be used in Rolling and Cupro-nickel blanking shop to grind the rolls generated by the rolling mills. The double drum furnace and blanking lines were to be utilised in the Stainless Steel Blanking shop and in the Cupro-nickel Blanking shops for producing coin blanks. While the roll grinding machine was envisaged as replacement for two existing machines, the double drum furnace and blanking line were new equipment, considered pre-requisite for the functioning of Stainless Steel Blanking shop under the project.

Though the project was to be completed by October 1992, the Roll Grinding machine was received as late as in April 1999 due to delay in tendering and delayed delivery. The machine had not yet been commissioned as of November 1999.

• C : Complete

Equipment considered a pre requisite for the project was yet to be procured

The IGM, Calcutta procured the Double Drum Furnace in November 1994 but shifted it to the Cupro-nickel and Stainless Steel Blank Finishing shop. The Double Drum Furnace required for Stainless Steel Blanking shop had not been procured as of November 1999. The Stainless Steel Blanking shop therefore cannot function.

Out of three Blanking Lines, two had been procured and installed in Stainless Steel Blanking shop. The third Blanking Line for Cupro-nickel Blanking shop had not been procured as of November 1999 since Ministry's approval had not been received.

The General Manager of the Mint stated, in April 1999 that the procurement of third Blanking Line and additional Double Drum Furnace was being taken up with the Ministry.

The Cupro-nickel and the Stainless Steel Blanking shops could not be made operational as the Roll Grinding machine had not been installed and additional Double Drum Furnace and the third Blanking Line had not been procured. As a result, against a target of 1000 million pieces of coins, IGM produced only 525.11 million pieces of coins in 1998-99.

2.7.2 Equipment procured but not installed

Out of expenditure of Rs 53.58 crore on procurement of equipment, installation of 10 major equipment valuing a total of Rs 48.79 crore were test-checked. GM, IGM Calcutta had procured there 10 high value imported and indigenous equipment between July 1994 and July 1998, as indicated in **Annex 'B'**.

Five machine costing Rs. 28.80 crore were installed with delay of 3 to 45 months. Five costing Rs 19.99 crore had not been installed/commissioned up to four years.

Five types of equipment, namely Composite Blanking Lines, Double Drum Furnace, Pickling and Polishing Lines, Coining Presses and Coin Counting machines valuing Rs 28.80 crore were commissioned between September 1995 and August 1998. These equipment were commissioned three months to 45 months after their receipt. The remaining five types of equipment procured at Rs 19.99 crore, namely Induction Furnace and Continuous Casting Plant for Melting and Casting shop, Hi Cold Rolling Mill and Strip Milling Line for Rolling and Cupro-nickel Blanking Shop and Bell Annealing Furnace for Rolling Shop, had not been installed as of November 1999. These machines had not been installed for upto four years after their receipt. Warranty had expired for three of the machines without having been commissioned. The Hi Cold Rolling Mill was needed for rolling out Cupro-nickel sheets and was identified as the most crucial in overall implementation of the scheme. This was received during January 1996 to July 1998 but had not been erected and commissioned till November 1999 as civil and structural works were not complete.

Besides, two Diesel Generating sets being part of auxiliary facilities, ordered at a cost of Rs 39.21 lakh in August 1998 had been received in April 1999 and Rs 31.37 lakh had been paid to the firm in March 1999. But as the civil works remained incomplete the DG sets were yet to be commissioned.

Thus, due to improper planning and lack of adherence to time schedule, many equipment have not been installed/ commissioned.

2.7.3 *Production target for coins not achieved*

The production of coins has not increased. The actual production remained close to premodernisation capacity.

The aim of modernisation was to increase blanking and coining capacity of the mint from 150 to 1900 million pieces blanks and from 400 to 1000 million pieces coins respectively by October 1992. The target and achievement of coin production is shown in the table below :

(In million pieces)

Year	Target	Achievement
1994-95	410	421.30
1995-96	450	317.63
1996-97	424.7	468.82
1997-98	440	434.18
1998-99	500	525.11

The annual target set was between 410 million pieces and 500 million pieces while the actual production ranged between 317.63 million pieces and 525.11 million pieces during 1994-99. Thus, there has been no significant improvement in the production and the maximum production was only about 52.5 per cent of the target of 1000 million expected to be achieved after modernisation.

2.7.4 *Self sufficiency in production of blanks not attained*

IGM, Calcutta contributed to the failure to achieve self-sufficiency in the production. Foreign exchange equivalent of Rs 77.19 crore had to be spent on import of 864.61 million pieces of blank during 1994-95 to 1999-2000.

2.7.5 *Streamlining of the working hours*

As per the contract, MECON was to make recommendations on staffing pattern and manpower re-deployment after modernisation. It was also to prepare a manpower utilisation chart in consultation with IGM, Calcutta.

Out of the nine shops, MECON had made manpower assessment for six shops. Out of these the General Manager, Calcutta Mint has assessed the manpower for three shops only comprising four categories of equipment. The manpower planning for remaining shops was not carried out.

Manpower utilisation chart and streamlining of the working hours of the existing mint also remained to be completed. The General Manager stated in

April 1999 that streamlining of working hours would be taken up after the completion of modernisation work.

2.8 Reasons for failure to implement the project.

2.8.1 Delayed performance of contractual service

The delayed performance of contractual service by MECON as evident from para 2.6 above had the following impact:-

- Delayed submission of tender enquiry/recommendation resulted in delay in placement of order.
- Imported/ indigenous equipment were received late between July 1994 and July 1998 i.e 17 months after expiry of the original contract period

As the major portion of civil works consisted of equipment foundation, late placement of order resulted in late receipt of feedback data on equipment foundation necessary for foundation design work. MECON was unable to perform main services like foundation design, project scheduling, site services inclusive of planning, control, co-ordination, monitoring of civil construction, dismantling and alteration of existing equipment etc. within the contract period.

2.8.2 Delay in civil works and in handing over of site

Disregarding MECON's opinion that UPRNN³ was inexperienced in executing mechanical and electrical works GM, IGM, Calcutta awarded the civil structural mechanical and electrical work for equipment erection to UPRNN in March 1993 at a cost of Rs 3.19 crore.

UPRNN was slow in execution and was able to complete only one third of the value of the work till May 1995. Rs 1.18 crore was paid to UPRNN after deducting Rs 7.55 lakh towards liquidated damages.

Delay in completion of work by UPRNN was due to delay in releasing the sites and drawings by GM, IGM as well as lack of experienced personnel with them. But the General Manager, IGM Calcutta did not invoke the risk and cost clause as per the agreement.

The work valued at Rs 1.77 crore was withdrawn from them in October 1995. The remaining work continues to be with UPRNN and was still incomplete.

Delay in releasing sites by IGM Calcutta resulted in completion of only one third of the work by UPRNN

³ Uttar Pradesh Rashtriya Nirman Nigam Limited

The works entrusted to NBCC were also delayed. Liquidated damages of Rs 11.81 lakh not recovered from NBCC

The work valued at Rs 1.77 crore withdrawn from UPRNN was entrusted to NBCC⁴ at a cost of Rs 2.48 crore resulting in cost overrun of Rs 71.42 lakh. The work at 30 sites was to be completed by NBCC within 14 months from the date of handing over the sites. NBCC also was lagging behind the time schedule. As of February 1999, work at only two sites had been completed, work at two other sites had not been started and in the remaining 26 sites, the work was partially completed. Rs 2.74 crore inclusive of additional work entrusted from time to time, had been paid to NBCC up to January 1999. As per penalty clause 4.6 of General Conditions of Contract, liquidated damages of Rs 11.81 lakh for not completing the work within the fourteen months' schedule had not been recovered from NBCC in violation of the Ministry's instructions.

The slow progress of works by NBCC was due to inadequate mobilisation of resources and supervisory personnel, in experienced sub-contractors and frequent revision of completion schedule.

2.8.3. Auxiliary facilities

Auxiliary facilities like water system, power distribution and shop electrical system and illumination were necessary for timely implementation of the project. These were delayed as NBCC could not complete the civil works and consequently clear sites were not made available. The work relating to auxiliary facilities was incomplete, though an expenditure of Rs 2.98 crore had been incurred on them.

Erection work of machinery like Induction Furnace, Mould Cooling, Hi Cold Rolling Mill and Annealing Furnace was held up as the water supply system had not been completed. Five equipment valuing Rs 18.64 crore erected in Stainless Steel Blanking and Processing shop and Cupronickel & Stainless Steel coining and coin examining shop had to be installed with temporary electric connection, as power distribution and shop electrical system had not been completed. The illumination facility was also yet to be completed.

The General Manager attributed the set back to delays in handing over the site to UPRNN due to shifting of existing plants and equipment, procedural hold up in auction of dismantled and unserviceable equipment, scrap etc. The General Manager added that skilled persons were not available with UPRNN for specialised nature of jobs and that there were delays in supply of drawings by MECON.

It would be seen from the above that these factors were controllable if proper attention was paid.

⁴ National Building Construction Corporation Limited

2.8.4 Defects in the agreement

The interest of the IGM, Calcutta was not safeguarded while finalising the agreement with the consultant, namely MECON, as it tilted heavily in their favour. As a result, they had received payment of Rs 2.04 crore till March 1999, while the project had not been completed. The agreement did not set any milestones for completing the project within the contract period. Though payment schedule was part of the agreement, the work schedule was not. The result was that while the agreement stipulated the dates on which instalments had to be paid, there was no mention regarding the commensurate work to be completed. Consequently, MECON got its payment even though corresponding works had not been completed. The contract stipulated that IGM, Calcutta was not liable to pay extra fees for time over-run solely attributable to the consultants. The modernisation project required close co-ordination by them with civil and mechanical contractors and equipment vendors. As consultant for the project, they were also responsible for corrective measures to prevent delay in overall project schedule.

No penalty clause was incorporated in the contract specifying damages to be levied for delayed completion of the project due to non-fulfilment of contractual responsibilities by MECON

2.8.5 Monitoring

As per the agreement entered into by IGM, Calcutta, MECON was entrusted the work of monitoring the entire modernisation project consisting of procurement of equipment, civil and mechanical construction, including dismantling and alterations of existing equipment/facilities and supervision of erection of mechanical and electrical equipment piping, cabling and other utility services. MECON was to further formulate a system for corrective action to prevent slippage of overall project schedule. Thus the full responsibility for timely implementation of the project rested with them. No evidence was available to indicate that they effectively monitored the project and formulated a system to prevent delay.

MECON was sending monthly progress reports to the General Manager of IGM, Calcutta. However neither any action was taken on these progress reports nor the progress of the project was monitored by the Works Manager(Construction), IGM who was incharge of the project cell of the modernisation scheme. Payments were released as and when demands were raised by the consultant. No attempt was made to link the progress of work with payments. Thus, despite receiving continuous feedback from the executing agency on delay in progress of the work, the General Manager, IGM Calcutta and Works Manager took no corrective action to prevent the delay nor did they prepare any contingent plan to complete the project in time and continued paying bills of MECON without ensuring completion of the works.

The matter was referred to the Ministry in September 1999; their reply was awaited as of January 2000.

Annex - A
(Refers to paragraph 2.5)

Sl. No	Shop's Name	Functions as per Engg. Report	Civil Works (Civil Construction & Equipment Foundation)	Equipment	Schedule date of Completion/Commissioning	Actual date of Completion/Commissioning	Expected benefit (Ref Engg. Report)
1.	Melting & Casting Shop	Melting of copper & nickel would be done in medium frequency induction type melting furnaces for the production of Re.1 and Rs.2 CN blanks.	Between 26-8-91 & 26-4-92	(i) Induction & Melting furnace (ii) Continuous Casting Plant (CCP)	7-9-92 to 1-11-92	Not Commissioned upto 3/99	The entire quantity of liquid Cupro-nickel would be cast into strips through matching continuous strip casters and would be coiled in the coilers provided in the caster line.
2.	Rolling and CN Blanking shop	In the modernisation programme two routes of rolling would be practised. The first route would be followed for rolling ingots into sheets for the production of Rs 5 blanks. The second route rolling would be adopted for rolling continuous cast strips to desired thickness for the production of Re 1 and Rs 2 blanks.	2-12-91 and 29-11-92	(i) High rolling mill (ii) Bell Annealing Furnace (iii) Roll grinding machine (iv) Blank Cutting line	3-11-92 to 10-1-93	(i) NC (ii) NC (iii) NC upto 4/99 (iv) 14-11-96 and 2-12-96	The cast and conditioned ingots would be first rough rolled in 450 dia mill & finish rolled in 350 dia mill. The second route of rolling would be adopted for rolling continuous cast strips to desired thickness for the production of Re 1 and Rs 2 blanks.
3.	S.S. Blanking and Processing shop	The existing "A" melting shop and the open space of its eastern side would be converted to SS Blanking/blank processing shop after modernisation. This is entirely new shop for production of SS Blanks for 10P, 25P and 50P denominations.	30-9-91 and 29-3-92	1) Blanking lines 2) Bright Annealing furnace 3) Pickling and Polishing lines	24-8-92 to 20-9-92	1) -do- 2) between 26-6-98 & 25-8-98 3) between 13-5-97 & 29-5-97	This shop would store incoming stainless steel coins as raw materials and produce finished stainless steel blanks.
4.	"A" Rolling Mill	In the modernisation programme two routes of rolling would be practised. The first route would be followed for rolling ingots into sheets for the production of Rs 5 blanks. The second route of rolling would be adopted blanks.	11-11-91 and 10-5-92	1) Strip Milling machine	28-9-92 to 11-10-92	Not commissioned	The cast and conditioned ingots would be first rough rolled in 450 dia mill & finish rolled in 350 dia mill. The second route of rolling would be adopted for rolling continuous cast strips to desired thickness for

Report No. 2 of 2000 (Civil)

Sl. No	Shop's Name	Functions as per Engg. Report	Civil Works (Civil Construction & Equipment Foundation)	Equipment	Schedule date of Completion/Commissioning	Actual date of Completion/Commissioning	Expected benefit (Ref Engg. Report)
		for rolling continuous cast strips to desired thickness for the production of Re 1 and Rs 2					the production of Re 1 and Rs 2 blanks.
5.	CN Blank Annealing shop	The existing "B" annealing shop after modernisation would be known as CN Blank Annealing shop where rimmed CN blanks received from CN blanking shop would be annealed in Birlec furnaces.	7-10-91 and 24-5-92	1) Birlec Furnaces 2) Gas oven	16-11-92 and 29-11-92		The annealed blanks would be visually inspected on overlooking machines and then sent to CN & SS blank finishing shop for further processing. CN blanks for Rs 5 denomination would be washed and dried in this shop.
6.	Auxiliary Building and stores	R-water system S-Elec facilities Illumination	24-2-92 and 14-6-92		27-7-92 and 16-8-92		
7.	CN & SS Coining and coin examining shop	The "B" Coining Shop would be known as CN & SS Coining Shop after modernisation. The total quantity of finished CN blank and part of SS blanks would be stamped in this shop	20-1-92 and 3-5-92	1) Coining presses 2) Counting Machines	27-7-92 to 23-8-92	1. September '95 2. 14-2-96	For finishing targeted quantity of blanks into coin, the coining capacity of this shop would be augmented by installing high speed coining presses.
8.	Die shop	The existing Die shop would be modernised by augmenting the existing equipment and facilities to improve the quality of dies and collars	6-1-92 and 5-7-92 (NI)	1) Die Press 2) Annealing Furnace	9-11-92 and 20-12-92		Dies and collars for both existing and new coining presses as well as punch blocks for existing blanking presses of the proposed blanking lines would be manufactured in this shop.
9.	CN & SS Blank Finishing shop	The existing "A" annealing shop would be known as CN & SS Blank Finishing shop after modernisation. About 40% of rimmed SS Blanks received from SS Blanking shop is proposed to be annealed.	17-2-92 and 5-7-92	1) Pickling & Polishing line 2) Over looking Machine.	14-9-92 to 25-10-92	1) 29-5-97	The total quantity of annealed CN blanks received form CN blank annealing shop would be processed in this shop.

Annex - B
(Refers to paragraph 2.7.2)

Sl. No.	Name of Equipment	Quantity (Number)	Imported or Indigenous	Shop for which the equipment is to be installed as per N.1	Order placed on	Value (in crores of rupees)	Date of receipt of equipment at I.G. Mint Cal. (Store challan file)	Whether erected, if so, date	Date of commissioning	Remarks if any
1.	Composite Blanking Lines	2	Imported	SS Blanking shop	L.Schuler GMBH, Germany PO No.4 dt. 3.12.93	10.25	24.6.95	Between 14.11.96 & 4.12.96	Between 14.11.96 & 4.12.96	Warranty expired before commissioning
2.	Induction Furnace	1	Indigenous	Melting & Casting Shop	GEC Alsthor Equipment, Calcutta. PO 418 Dtd.2.10.95	1.03	Between 16.3.96 & 3.3.97	Not erected	Not Commissioned	Warranty expired
3.	Continuous Casting Plant (CCP)	2	Imported	Melting & Casting Shop	Alfred Switzerland No.5 Dtd.15.12.93	5.31	8.5.95	Not erected	Not Commissioned	Warranty expired
4.	Double Drum type Bright Annealing Furnace	1	Imported	SS Blanking Shop (Diverted to Blank Finishing Shop)	Bak, Germany PO.No. 2 dt 17.3.93	1.86	25.11.94	Between 16.4.97 & 19.5.97	Between 26.6.98 & 25.8.98	Warranty expired before installation and commissioning
5.	Pickling & Polishing lines (3 no)	3	Imported	SS Blanking & Blank Finishing shop	Bak Germany PO 6 dtd. 11.8.94	7.56	17.2.96 1st 26.4.96 2nd 11.11.96 3rd	Between 13.3.97 & 29.5.97	Between 13.5.97 & 29.5.97	Warranty expired
6.	Hi-Rolling Mill	1	Indigenous	Rolling & CN Blanking Shop	Mecon, Ranchi	7.27	Between 17.1.96 & 15.7.98	Not erected	Not Commissioned	Warranty not expired
7.	Strip Milling Line	2	Imported	Rolling & CN Blanking Shop	Mino. SPA Italy, PO No. 8 dtd.27.2.96	5.58	16.8.97	Not erected	Not Commissioned	Warranty expired

Report No. 2 of 2000 (Civil)

Sl. No.	Name of Equipment	Quantity (Number)	Imported or Indigenous	Shop for which the equipment is to be installed as per N.1	Order placed on	Value (in crores of rupees)	Date of receipt of equipment at I.G. Mint Cal. (Store challan file)	Whether erected, if so, date	Date of commissioning	Remarks if any
8.	Coining Press	6	Imported	Coin & Cash Examining Shop (Diverted to New Coining Shop)	Schuler GMBH, Germany PO No.1 dt. 26.2.93	8.59	28.2.95	September 95	September 95	Warranty expired
9.	Coin Counting Machine	8	Imported	Coin & Cash Examining Shop (Diverted to New Coining Shop) (2no)	Universal Manufacturing Co. , USA dt.17.3.93	0.54	7.7.94 (4 Nos) 2.11.95 (4 Nos)	Feb 96	14.2.96	Warranty expired
10.	Bell Annealing Furnace	1	Indigenous	Rolling & CN Blanking Shop	Precision PO 72/M dt. 5.7.95	0.80	Between 20.7.96 & 1.8.96	Not Erected	Not Commissioned	Warranty not expired