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ANNUAL REPORT
OF THE DIRECTOR OF THE SOUTH AFRICAN MINT
FOR THE YEAR 1ST APRIL, 1971, TO 31ST MARCH, 1972.

REPUBLIC OF SOUTH AFRICA

SOUTH AFRICAN MINT

The Secretary for Finance,
Union Buildings,
PRETORIA.

ANNUAL REPORT OF THE DIRECTOR OF THE SOUTH AFRICAN MINT FOR 1971/72

I wish to submit the following report on the activities of the South African Mint during the financial year 1st April, 1971, to 31st March, 1972.

INTRODUCTION.

The production of coins for the year was at a lower level being 112 million as against 130 million for the previous year. The value of the coins issued however increased by R830.114 to a total of R4.693.919.

This is the result of the demand for higher denomination coins increasing in relation to the low value bronze coins previously heavily in demand.

The nett profit for the year is R3.903.522 which is an increase of 24% over the previous year.

The programme of modernisation is progressing as planned and it was again a difficult year from the point of view of maintaining production while rebuilding. It is however pleasing to report that all demands for coinage were fully met.

A further section of the new building was made available for occupation and it was possible to permanently occupy the melting, blank treatment, laboratory and stores sections.

With the installation and commissioning of a horizontal continuous casting plant for supplying the bronze requirements of the Mint an urgently required facility became available. Certain technical problems were encountered and will have to be solved.

A new high-frequency induction furnace for melting gold and silver has been commissioned with marked improvement in efficiency in the production of these metals in the various alloys required.

The administration building has been vacated and all personnel accommodated in temporary offices throughout the old and new buildings. This allows for demolition of the old and the building of a new administration block.

The activities of the various departments are as set out in the following chapters.

CHAPTER 1 - FINANCIAL

COMBINED MANUFACTURING, TRADING AND PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 MARCH, 1972.

1970/71			1971/72
R	EXPENDITURE:	R	R
30.524	Work in progress, 1st April, 1971		8.685
1.302.776	Coin stocks on hand 1st April, 1971 at cost		1.561.718
4.693.578	Operating costs for year:-		5.104.546
	-Bullion	4.547.718	
	-Conversion costs	556.828	
56.417	Sales expenses		77.847
4.982	Credit allowed in the manufacture of coin for Foreign Governments		3.355
-	Abnormal operating costs written off		76.264
6.088.277			6.832.415
	LESS:		
49.390	Value of new coin issued in replacement of old coin withdrawn from circulation	11.942	
1.561.718	Coin stocks 31st March, 1972 at cost	1.880.022	
8.685	Work in progress 31st March, 1972	13.085	1.905.049
4.468.484	Value of sales		4.927.366
	RECEIPTS:		
7.406.141	Sales		8.821.888
204.948	Value of bullion taken on charge ex recoinage accounts		9.000
7.611.089			8.830.888
4.468.484	Less cost of sales		4.927.366
3.142.605	Nett profit for year		3.903.522

BALANCE SHEET AS AT 31st MARCH, 1972.

31st March, 1971.	LIABILITIES		31st March, 1972.
R		R	
	MINT CAPITAL		
626.619	Balance 1st April, 1971	1.205.492	
626.736	Additions during year	2.378.792	
1.253.355		3.584.284	
47.863	Sales and depreciation written off	68.790	
1.205.492	Balance 31 March, 1972		3.515.494
223.751	OPERATING CAPITAL		412.589
254.147	SUNDRY CREDITORS		297.015
1.293.129	RAND REFINERY LTD. - for gold deposited at statutory price		1.384.762
3.075.000	THE TREASURY - advances for purchase of bullion		3.075.000
129.830	ADVANCE PAYMENTS by customers		115.239
6.181.349			8.800.099
R	ASSETS	R	
809.694	BUILDINGS at cost	1.259.962	
450.268	Additions during year	2.290.833	
1.259.962		3.550.795	
571.672	Less Accumulated depreciation	578.555	
688.290	Value 31 March, 1972.		2.972.240
2.651.509	PLANT AND EQUIPMENT at cost	2.827.977	
176.468	Additions during year	87.959	
2.827.977		2.915.936	
2.328.775	Less accumulated depreciation and sales	2.390.682	
499.202	Value 31 March, 1972.		525.254
18.000	LAND		18.000
1.205.492			3.515.494
78.439	STORES at cost		74.349
29.414	SUNDRY DEBTORS		158.067
	BULLION, (including bullion in coin stocks)-		4.317.269
1.240.935	-Gold	1.311.892	
3.046.412	-Other	3.005.377	
258.993	COIN STOCKS at cost (excluding bullion)		322.512
8.685	WORK IN PROGRESS at cost		3.838
7.464	OPERATING SUSPENSE ACCOUNTS		10.481
-	MINT MUSEUMS STOCKS at cost		1.409
305.515	CASH with Paymaster General		396.680
R6.181.349			R8.800.099

1. A comparative statement of sales as reflected in the combined operating, trade, and profit and loss statement for the year compared with the two previous years, is set out below:-

	1971/72	1970/71	1969/70
Circulation coin	R4.526.250	R3.510.241	R3.757.582
Proof and collectors' coin	553.889	544.920	619.179
Gold and silver	3.425.922	3.149.842	2.810.853
Die and medal products and laboratory services	114.649	66.815	47.100
Manufacture of gold coin for the Chamber of Mines	48.634	45.476	20.600
Manufacture of coin for Foreign Governments	152.544	88.847	205.518
Sale of silver alloy derived from old silver coin withdrawn from circulation	-	-	551.613
Re-Sale of old ½ cents withdrawn from circulation	-	-	6.030
	R8.821.888	R7.406.141	R8.018.475

2. Over the past three years operating costs, with the exclusion of bullion costs, increased steadily mainly as a result of the revision of salaries and the increase in costs of stores and services. The following comparisons are made:-

	1969/70	1970/71	1971/72
Conversion costs	485.059	542.508	556.828
Selling costs	51.289	56.417	77.847
	536.348	598.925	634.675

3. The nett profit of R3.903.522 for the year 1971/72 is approximately 24,21% higher than that for 1970/71.

4. Sales increased by approximately 19,12% in 1971/72 while nett profits were maintained despite rising costs, mainly as a result of the greater demand during the year for nickel coin and for those proof and collectors' coins and sets yielding greater profits.

5. Moderate increases in nett profits are apparent generally in the following comparative statements, but should not be regarded as trends:-

ALL OPERATING RESULTS INCLUDING ABNORMAL COSTS.

	1969/70	1970/71	1971/72
	R	R	R
Sales	8.018.475	7.406.141	8.821.888
Nett Profit	3.246.929	3.142.605	3.903.522
% Profit on Sales	40,49	42,43	44,25
CIRCULATION COIN			
Sales	3.757.582	3.510.241	4.526.250
Nett Profit	2.882.532	2.695.564	3.641.976
% Profit on Sales	76,71	76,79	80,48
PROOF AND COLLECTORS' COIN			
Sales	619.179	544.921	553.889
Nett Profit	254.355	199.282	257.496
% Profit on Sales	41,08	36,57	46,49

6. Additions to the new buildings during 1971/72 amounted to R2.290.834 in comparison with R450.268 in 1970/71. The figures in respect of plant and machinery were R87.959 and R176.468 respectively. Expenditure on these items were mainly in connection with the modernisation programme now being carried out at the S.A. Mint.

7. During 1971/72 circulation coin with a face value of R160.000 was manufactured for foreign governments. The figure for 1970/71 was R75.620.

8. The production of gold coin for the Chamber of Mines was continued during 1971/72 and a comparison with 1970/71 reads as follows:-

COINS.	Krugerrand	R1 Gold
1970/71	447464	-
1971/72	436189	102.106

9. Stock levels of stores are returning to normal after an initial sharp increase in 1970/71 and to a lesser extent in 1971/72 as a result of stocks of spare parts which had to be bought in conjunction with new plant and machinery acquired. The following figures reflect stock levels as at 31st March of the relative year:-

1969/70	R54.862
1970/71	R78.439
1971/72	R74.249

The application of the 80/20 technique of stock control is being considered and it is likely that stock levels will drop appreciably in the furure should this technique be adopted.

CHAPTER II - ADMINISTRATION.

A. MINT OFFICE:

The Mint Office is responsible for the purchase of all coinage metals, the issue thereof to the production sections and the issue of all coins, medals and products manufactured by the S.A. Mint.

1. GOLD:

Basic price of monetary gold remained at R25,30 per fine oz. plus 1% (the basic price plus ½% is paid to the Rand Refinery Ltd.) until 20th December, 1971; from 21st December, 1971 R28,80 plus 1%.

The average selling price of Industrial gold was R30,26 per fine ounce, compared with R26,39 in the previous year. The selling price of gold sold for Industrial purposes is determined in accordance with the average ruling prices on the free market over a period of a month, as adjusted and approved by the South African Reserve Bank, plus a commission of 1%.

A total fine weight of 104.504,42 ozs. of gold was sold during the year whereas 103.614,22 ozs. were sold during the previous year.

Gold coins:

A total of 15,300 gold proof coins (7,650 of R2 and 7,650 of R1 coins) were struck for sale in 7,000 proofsets of 10 coins (R2-½c) and 650 proofsets of 2 coins (R2-R1).

In addition to the above 10,100 non-proof R2 coins, 10,100 non-proof R1 coins and 6,000 Krugerrand coins were minted for sale, as well as 447,464 Krugerrand coins for the Chamber of Mines of South Africa, also 10,000 R1 coins for Jewellers Association.

Gold transactions:

There was a decrease in the total weight of the gold transacted as compared with the previous year as follows:-

	1971/72 ozs.	1970/71 ozs.
Received from the Rand Refinery Ltd.....	115.343,51	128.276,21
Granulated and dental gold sold.....	104.504,42	103.614,35
Medals, wire and sheet gold sold.....	1.271,06	362,16
Weight of R2, R1, Krugerrand.....	13.478,62	16.001,64
Transferred to Die & Medal Section.....	1.095,12	369,44
Received from Die & Medal Section.....	951,28	-
Transferred to Coinage Section.....	12.359,07	-
Received from Coinage Section.....	-	-
Transferred to Chamber of Mines.....	1.440,63	3.629,15
	250.443,71	252.252,95

2. SILVER:

Silver transactions by weight converted to fine ozs. troy:

	1971/72	1970/71
Bought from Rand Refinery Ltd. and Sundry persons	172.793,87	273.900,63
Coin withdrawn from circulation 500 Std., 800 Std.	44.086,50	156.348,09
Granules and strip sold	194.377,50	335.964,80
Medals & Other items sold	6.680,75	5.706,95
Issues to Coinage Section	210,65	-
Received from Coinage Section (not coin)	-	181.480,71
Coin received from Coinage Section	12.383,24	9.297,08
Issues for various alloys	5.612,88	4.919,00
	436.145,39	967.617,26

Purchase of Silver:

172.793,87 ozs of silver were purchased from the Rand Refinery Ltd., mainly for the sale in granulations.

Basic selling price of silver:

It was necessary for the Mint, with Treasury approval, to vary its basic selling price of silver in conformity with the rise and fall in the overseas market price. Silver is sold at the daily cash prices ruling on the London metal market. The average selling price was R1,09 per fine ounce compared with R1,25 in the previous year. The total fine weight sold during the year was 194.377,50 ozs. whereas 335.964,80 ozs. were sold during the previous year.

Withdrawal of 500 Std. and 800 Std.
Silver coin for remelting:-

During the year silver coins to the value of R48.500 were withdrawn from circulation.

3. NICKEL

Nickel transactions by weight in lbs. avoirdupois:

	1971/72	1970/71
Blanks purchased for coinage	-	111.109,46
Weight of coins received	6.185.924,74	205.340,59
Transferred to Die & Medal Section ...	325,43	22,27
	6.186.250,17	316.472,32

4. BASE METALS:

The following are the receipts of and the transactions in base metals. This involved mainly issues to the Coinage Section for the production of gold, silver and bronze coin as well as a small amount of copper for the alloying of the different grades of gold sold to industry.

Base Metals Transactions by weight in lbs.

Issued to Coinage Section for Silver coin	-
Weight of bronze issued to Coinage Section	35.985,90
Weight of bronze coin received from Coinage Section .	359.157,65
Weight of cupro-nickel issued to Coinage Section ...	-
Weight of Cupro-nickel received from Coinage Section	-
Weight of Metals for various alloys	698,77
Weight of bronze issued to Die & Medal Section	603,79
Weight of bronze received from Die & Medal Section ..	1.522,34
Weight of bronze articles sold	766,72
Weight of Rhod. bronze coin received from Coinage Section	145.396,69
Weight of bronze issued to P.M.P.	182.066,00
Weight of bronze received from P.M.P.	1.342.475,00
	2.068.672,86

Withdrawal of bronze coin:

During the year coin to the value of R6.350 was withdrawn from circulation.

5. COIN RECEIVED AND ISSUED:

The following is a comparative schedule in respect of gold, silver, nickel and bronze coins received from the Coinage Section and issued by the Bullion Office:-

Denomination	Receipts from Coinage Section 1971/72	Receipts from Coinage Section 1970/71	Issued to Banks etc. during 1971/72	Issued to Banks etc. during 1970/71
GOLD:				
2 Rand	35.500,00	34.000,00	33.268,00	31.236,00
1 Rand	28.022,00	17.000,00	26.877,00	16.396,00
SILVER:				
1 Rand	32.000,00	24.050,00	28.164,00	31.592,00
NICKEL:				
50c	1.282.295,00	2.827.903,00	1.404,925,00	1.183.839,00
20c	2.986.787,00	8.810,00	1.078,603,00	395,936,20
10c	799.623,30	250.978,20	633.694,60	647.966,10
5c	923.773,00	579.315,00	794.349,30	495.485,05
BRONZE:				
2c	480.860,00	644.454.08	320.439,72	625.893,82
1c	146.248,15	523.536,79	313.269,86	357.196,91
½c	58.673,53½	86.229,91	60.329,17½	78.264,00
	6.773.781,98½	4.996.276,98	4.693.919,65½	3.863.805,08

6. PROOFSETS:

The Mint made 7,000 ton coin proofsets (R2-½c), 650 gold proofsets (R2-R1) and 5.000 eight coin proofsets (R1-½c).

7. COINS MANUFACTURED FOR OTHER COUNTRIES:

Rhodesian Coin

	1971/72	1970/71
½c	R 10.000	-
1c	R150.000	R107.550

8. PACKING AND DESPATCH SECTION:

The number of parcels despatched by post and by rail compared with the previous year was:-

	1971/72	1970/71
Parcels despatched by Post	10.123	18.883
Parcels, other than coin, despatched by rail	7 (155 Kg)	16 (361 lb)
Boxes of coin despatched by rail	2.996 (162.091 Kg)	3.054 (571012 lb)

B. PERSONNEL.

1. SCHEDULE OF POSTS AND PERSONNEL EMPLOYED.

The following comparative schedule shows the number of posts and the personnel employed at the end of the year as compared with the previous year:-

	CATAGORIES	1972		1971	
		Posts	Personnel	Posts	Personnel
(a)	Administrative	6	6	6	6
(b)	Professional	2	1	2	1
(c)	Technical	9	6	7	6
(d)	Clerical	12	6	12	6
(e)	General Divions A & B, excluding items (g) to (i)	26	11	25	9
(f)	Temporary employees against posts under items (a) to (e)	-	16	-	16
(g)	Special Craftsmen	6	6	6	6
(h)	Artisans and Toolmakers	8	7	9	6
(i)	Male Operators	11	11	11	12
(j)	Apprentices	2	1	2	1
(k)	Woman Operators & Supervisors	38	31	38	36
(l)	Messengers	4	-	4	-
(m)	Bantu Guards and Bossboys	13	14	13	14
(n)	Bantu Messengers and Female cleaners	4	8	4	8
(o)	Bantu Labourers	71	56	71	62
	TOTAL:	212	180	210	189

As result of resignations there was a decrease of 9 in personnel whereas the number of posts increased by 2. No additional temporary employees were in service during the year.

2. PERSONNEL TURNOVER.

Appointments - 40
Resignations - 49

3. POST STRUCTURAL CHANGES.

The number of authorised posts increased by 2 to 212 with additional temporary posts at an approved scale on increased production of more than the accepted basic annual production. The following structural changes were effected during the year:-

(a) One post of TN.6 Special Operator was converted to TN.5 Special Operator in the Die and Medal Section from 1.7.71.

(b) One post of TN.3 Security Officer was converted to Senior Security Officer in the Protection Section from 1.7.71.

(c) Five posts of TN.4 Security Officer were converted to Security Officer in the Protection Section from 1.7.71.

(d) One post of Assistant Works Manager was converted to Production Superintendent in the Coining Division from 1.9.71.

(e) One post of Maintenance Superintendent was created in the Maintenance Section from 1.9.71.

(f) One post of Chief Die Sinker and Medallist was upgraded in the Die and Medal Section from 1.9.71.

(g) One post of Senior Die Sinker and Medallist was created in the Die and Medal Section from 1.9.71.

(h) One post of Administrative Assistant was converted to Senior Administrative Assistant in the Numismatic Section from 1.9.71.

(i) One post of Special Craftsman was converted to Senior Operator in the Melting Section from 1.9.71.

(j) One post of Boiler Attendant was abolished in the Maintenance Section from 1.9.71.

(k) One post of Clerical Assistant was created in the Numismatic Section from 1.9.71.

(l) A Proof Coin Section was created and three posts of TN.7 Machine Operator in the Coining Section were converted to TN.6 Special Operator in the Proof Coin Section from 1.9.71.

(m) One post of Artisan was converted to Special Craftsman in the Maintenance Section from 1.12.71.

4. PERSONNEL CHANGES.

(a) Mr. W. Roux was promoted to Maintenance Superintendent from 1.9.71.

(b) Mr. M.N. de Beer was promoted to Senior Administrative Assistant from 1.10.71.

C. MINT MUSEUM AND LIBRARY.

1. The following gifts were received:-

	FROM	ITEM
a.	Bank of Korea, Seoul	Set of 3 coins i.e. 10 Won, 5 Won and 1 Won
b.	Mint Bureau, Ministry of Finance, Osaka, Japan	Set of 6 coins i.e. 100 Yen Expo, 100 Yen, 50 Yen, 10 Yen, 5 Yen and 1 Yen.

2. VISITORS.

During the rebuilding of the Mint in accordance with the programme of modernisation, no visitors are permitted.

(d) One post of Assistant Works Manager was converted to Production Superintendent in the Coining Division from 1.9.71.

(e) One post of Maintenance Superintendent was created in the Maintenance Section from 1.9.71.

(f) One post of Chief Die Sinker and Medallist was upgraded in the Die and Medal Section from 1.9.71.

(g) One post of Senior Die Sinker and Medallist was created in the Die and Medal Section from 1.9.71.

(h) One post of Administrative Assistant was converted to Senior Administrative Assistant in the Numismatic Section from 1.9.71.

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2. VISITORS.

During the rebuilding of the Mint in accordance with the programme of modernisation, no visitors are permitted.

CHAPTER III - PRODUCTION

1. MELTING SECTION:-

The following schedules show the activities of the sections for the year:-

Gold:

Fine gold granules		19.833,40 ozs
22 Ct. Gold granules		44.583,57 ozs
18Ct. Gold granules		5.124,52 ozs
9 Ct. Gold granules		15.003,26 ozs
18 Ct. Gold for Die & Medal		3.362,05 ozs
9 Ct. Gold for Die & Medal		4.564,55 ozs
Mixed Gold bars for Mint Office		738,86 ozs
	Total	93.210,21 ozs

Silver:

925 Std. Silver for Die & Medal		21.444,86 ozs
Fine Silver for Die & Medal		1.713,99 ozs
Fine Silver granules		126.567,27 ozs
800 Std. Silver melted		67.872,85 ozs
	Total	217.598,97 ozs

Bronze: 278,96 lb.

2. ROLLING SECTION:-

The production in this section was as follows:-

(a) Bars rolled and blanked:-

800 Std. Silver	302.534,92 ozs.
Coinage bronze	619.040,41 lbs.

(b) Blanks annealed and cleaned:-

800 Std. Silver		30.000 Pieces
Std. Gold (Krugerrand R2 and R1)		572.395 Pieces
2c, 1c and ½c Bronze		49.918.522 Pieces
Rhod 1c and ½c Bronze		17.000.000 Pieces
	Total	67.520.917 Pieces

(c) Blanks cleaned:-

Nickel (50c, 20c, 10c and 5c)	43.927.418 Pieces

3. COINAGE SECTION:-

The number of coins minted during the year amount to 112.023.066 pieces as reflected in the following schedule:-

COIN PRODUCTION.

Denominations	Bars cast ozs	Bars rolled ozs	Blanks coined ozs	Good coins produced 1971/72 No of pieces	Good coins produced 1970/71 No of pieces
GOLD					
Krugerrand				6.000	10.000
R2			14.703,90	17.750	17.000
R1				28.022	17.000
TOTAL			14.703,90	51.772	44.000
800 STD. SILVER					
R1	67.872,85	302.534,92	15.479,05	32.000	24.050
TOTAL	67.872,85	302.534,92	15.479,05	32.000	24.050
NICKEL					
50c			783.936,72	2.565.850	5.655.806
20 c			2.878.753,54	14.933.935	44.050
10c			1.036.551,58	7.996.233	2.509.782
5c			1.486.682,90	18.475.460	11.586.300
TOTAL			6.185.924,74	43.971.478	19.795.938
BRONZE.			LBS.		
2c			310.998,18	24.043.000	32.222.704
1c	27.896,00	27.896,00	211.106,18	14.624.815	52.353.679
½c			96.759,81	11.734.706	17.245.983
TOTAL	27.896,00	27.896,00	618.864,17	50.402.521	101.822.366
BRONZE.			LBS.		
Rhod. 1c			132.137,21	15.000.000	8.046.000
Rhod. ½c			13.259,48	2.000.000	
TOTAL			145.396,69	17.000.000	8.046.000
CHAMBER OF MINES			OZS.		
Krugerrand			504.876,01	463.189	447.464
R1			13.110,59	102.106	
TOTAL			517.986,60	565.295	447.464
GRAND TOTAL				112.023.066	130.179.818

(b) Proofsets:-

The following proofsets were minted, packed in leatherette cases and delivered to the Mint Office:-

SOUTH AFRICAN

(a) Gold Proofsets (R2 & R1)	650 Sets
(b) Long Proofsets (R2 & R1 gold R1-½c)	7.000 Sets
(c) Short Proofsets (R1-½c)	5.000 Sets
	12.650 Sets

4. DIE AND MEDAL SECTION.

1. The number of units produced in this section during the year amounted to:

Coinage Dies	2.352
Dies for medals etc.	71
Medals and badges etc.	34.152
Gold jeweller's articles	117
Silver jeweller's articles	388
Sundries Die and Medal	33.477
Articles Engraved	610
Defence medals stamped	2.246
	73.413

The following new medals were produced.

(1) South African Institute of Mining and Metallurgy.

18 Ct. Gold and Silver Medals 38,1mm diameter.

Obverse:

The South African Institute of Mining and Metallurgy. Coat of arms cut from a model by J. Buisset.

Reverse:

Laurel Wreath.

(2) Suid-Afrikaanse Akademie vir Wetenskap en Kuns.

Stg. medals 63,5mm diameter.

Obverse:

The Portrait of Christo Beyers as modelled by T. Sasseen with inscription "GEDENKTAK CHRISTO BEYERS".

Reverse:

Laurel wreath with inscription "Suid-Afrikaanse Akademie vir Wetenskap en Kuns".

(3) South African Bureau of Standards.

18 Ct. Gold, Stg & Bronze medals 38,1mm diameter.

Obverse:

The obverse has the new S.A.B.S. building as modelled by A. Sutherland with the words "S.A. Bureau of Standards S.A. Buro van Standarde".

Reverse:

S.A.B.S. Emblem as modelled by T. Sasseen and date 1971.

(4) University of the Witwatersrand's 50th Anniversary Medal.

18 Ct. Gold, Stg & Bronze Medals. 38,1mm diameter.

Obverse:

The entrance to the Great Hall as modelled by T. Sasseen.

Reverse:

Revised Wits. University Coat of Arms as modelled by T. Sasseen with dates "1922-1972".

(5) Suid-Afrikaanse Akademie vir Wetenskap en Kuns.

18 Ct. Gold Medal 63,5mm diameter.

Obverse:

Suid-Afrikaanse Akademie vir Wetenskap en Kuns Coat of Arms.

Reverse:

Cut by J. Buisset showing the 3 elements viz. air, fire and water and surrounded by inscription. "Akademiemedalje vir Natuurwetenskaplike prestasie" Geskenk deur die Kamer van Mynwese van Suid-Afrika.

(6) Perskor Medal

9 Ct. Gold Medals 50,75mm diameter

Obverse:

A lager of ox wagons as modelled by J. Buisset with inscription "Herskepte Slagveld Bloedrivier 1971"

Reverse:

An oval superimposed on a Zulu shield with assagai and knobkerrie as modelled by A. Sutherland.

(7) Opening of the Hendrik Verwoerd Dam.

Gold, Stg & Bronze Medals 63,5mm diameter.

Obverse:

A view of the Dam showing the spillways power station etc. as modelled by A. Sutherland with inscription. "Department of Water Affairs Hendrik Verwoerd Dam Hendrik Verwoerddam Departement van Waterwese".

Reverse:

South African coat of arms as modelled by T. Sasseen with inscription "I.O.R.C.C. Consultants. G.H.P. B.U.S. Contractors U.C.D.B.D.

(8) Opening of the Hendrik Verwoerd Building Cape Town.

18 Ct. Gold Medal 38,1mm diameter

Obverse:

Portrait of the late Dr. H.F. Verwoerd cut from a model by T. Sasseen.

Reverse:

The new Hendrik Verwoerd Building as modelled by T. Sasseen with inscription "Gebou Hendrik Verwoerd Building Opening 11 February, 1972".

CHAPTER IV - ENGINEERING.

The function of the section is the installation of all machinery and plant in all sections of the Mint as well as the manufacture of tooling for production requirements.

Owing to modernisation and rebuilding of the Mint the engineering section was again called upon to undertake the moving and re-establishment of several sections with attendant overhauling and repainting of machinery prior to re-installation. Together with tooling requirements for a high rate of coin production during the year under review this section was again hard pressed to fulfil its commitments.

In the execution of the sections function the following special tasks were performed

1. Major assistance was rendered to Alfred Wertli of Switzerland in the erection and commissioning of a continuous casting installation for coinage bronze production in the new melting house.

Several heavy steel containers were manufactured in the Mint's workshops for use as emergency molten metal collectors together with associated wooden patterns for refractory lining of the collectors.

Further tasks in this connection included the handling of heavy shipping cases, the provision of water supply and drainage facilities, cutting and laying of chequered floor plates and the design, manufacture and installation of a switchboard for power supply to auxiliary electrical apparatus on two induction furnaces.

2. A new coin blank annealing and cleaning installation was erected and commissioned by Barnes Birlec.

A tilting type feed hopper with platform and handrails was designed, manufactured and installed by the Mint for feeding of coin blanks into the revolving retort of an electrically heated annealing furnace wherein annealing is performed under controlled atmosphere. Rotary stainless steel drums provide for burnishing and washing with drying by hot air at the end of the cycle.

Water supply and drainage pipes were also supplied and installed for this plant.

3. Mint Office personnel were moved from the old melting section and temporarily re-housed in the new metal storage section.

4. A new 400 stroke per minute H. M. E. coin blanking press was erected and commissioned.

5. Two Carl Wezel strip rolling mills were dismantled in No. 1 Rolling Room and temporarily re-erected and commissioned in the old No. 2 Rolling Room pending demolition and re-building of the rolling section.

6. The Laboratory was moved and re-housed on a temporary basis in the old tool room pending completion of the new laboratory.

7. The Museum was evacuated for demolision and all valuable equipment stored in the vault of the old melting house which will be incorporated in the new Museum.

8. A second coin counting unit was adapted for use in conjunction with dual transisterized electronic counting mechanisms and additional counting

heads were manufactured to cover the full range of coin denominations.

9. Two H.M.E. coinage presses were overhauled and equipped with safety guards.

10. A new surface grinding machine was installed and commissioned in the mechanical workshop.

11. A 400 ton Weingarten percussion screw press was erected and commissioned in the Die and Medal section.

12. Four tables with integral seating arrangements was manufactured by the Welder and Carpenter to seat 24 persons in the new Bantu lunch room.

CHAPTER V - ASSAYING.

This section is responsible for the assaying of all coinage metals and metals for the manufacture of medals. The control of all chemical processes is maintained and a considerable amount of assaying is done for the South African Police in connection with illicit gold and platinum dealings and the investigation of counterfeit coins.

The assaying of minerals is undertaken for bonafide prospectors. The following work was done by this section during the year:-

1. Precious metal assays:-

GOLD:	Mint Office	256 samples	
	S.A. Bureau of Standards	2 samples	
			258
SILVER:	Mint Office	101 samples	
	S.A. Bureau of Standards	0 samples	
			101
	TOTAL		359 samples

One gold sample and no silver samples submitted for Assay by the Bureau of Standards were below standard for compliance with the Bureau's Hall Marking Scheme.

2. General Chemical Analysis:

a. Illicit gold trade:

Assays on 397 exhibits in 178 court cases were carried out for the S.A. Police, Gold Staff.
127 pieces of gold were cast for trapping purposes.

In two cases the assayer was subpoenaed to give evidence in court.

b. Counterfeit coins:

125 pieces were handed in as alleged counterfeits of which 55 were proved to be counterfeit after investigation.

c. Miscellaneous:

Chemical analysis of bronze samples and nickel samples

Bronze	5 copper determinations 5 tin determinations
Nickel	1 nickel determination

Groenewald

I.J. GROENEWALD.

DIRECTOR OF THE S.A. MINT.

/CK