



ANNUAL REPORT
OF THE DIRECTOR OF THE SOUTH AFRICAN MINT
FOR THE YEAR 1ST APRIL, 1973 TO 31ST MARCH, 1974.

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 1973/74

I wish to submit the following report on the activities of the South African Mint during the financial year 1st April, 1973 to 31st March, 1974.

INTRODUCTION

An active year was experienced with production facilities fully occupied.

Coinage production amounted to 97 million coins which is an increase of 10 million over the previous year.

There was a relative increase in the demand for the higher denomination nickel coins as against the bronze coins this resulting in a marked increase in the value of circulation coins issued to the banks. The value of coins issued during the year was R6 408 760 as against R2 141 300 during the previous year.

The demand for collectors' coins continued, particularly in respect of gold coins as a result of the increase in the free market price of gold. Total sales amounted to R1 353 571 yielding a nett profit of R548 266.

Total sales for the year amounted to R17 141 750 giving a nett profit of R5 877 388 which is an increase of 194% over the previous year.

The production of uncirculated gold coins for the Chamber of Mines of S.A. from coinage blanks supplied by the Rand Refinery Ltd. for sale locally and overseas continued on a high level.

The rebuilding and modernisation programme continued and it is expected that the completed new building will be ready for occupation during the new year.

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

CHAPTER 1 - FINANCIAL

COMBINED MANUFACTURING, OPERATING AND PROFIT AND LOSS ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1974

<u>1972/73</u>			<u>1973/74</u>
R	<u>EXPENDITURE</u>	R	R
13 084	Work in progress 1st April, 1973		21 134
1 880 022	Coin stocks on hand 1st April, 1973 at cost		1 659 281
	Operating costs for the year:-		
6 760 396	Bullion	10 012 739	
543 530	Conversion	<u>601 287</u>	
72 758	Sales costs		132 440
-	Cost price of bronze scrap sold		18 200
2 791	Credit allowed in the manufacture of coin for foreign governments		11 131
	Abnormal costs written off		-
<u>52 193</u>			<u>12 456 212</u>
9 324 774			
	<u>LESS</u>		
	Value of new coin issued in replacement of old coin withdrawn from circulation at cost	54 576	
60 519	Coin stocks 31 st March 1973 at cost	1 035 982	
1 659 281	Work in progress 31st March 1973	<u>41 121</u>	
21 134			<u>1 131 679</u>
<u>7 583 840</u>			<u>11 324 533</u>
	<u>RECEIPTS</u>		
9 509 286	Sales		17 141 750
	Value of bullion taken on charge ex recoinage accounts		60 171
69 813			<u>17 201 921</u>
9 579 099			<u>11 324 533</u>
7 583 840	Less cost of sales		
<u>1 995 259</u>	Nett profit for the year		<u>5 877 388</u>

BALANCE SHEET AS AT 31st MARCH 197431st March, 197331st March, 1974

R	LIABILITIES	R	R
	<u>MINT CAPITAL</u>		
3 584 284	Balance 1st April 1973	2 927 818	
515 763	Additions during the year	615 009	
4 100 047		3 542 827	
1 006 546	Less adjustment in respect of 1971/72	-	
3 093 501		3 542 827	
165 683	Less sales, depreciation and write-offs	73 696	
2 927 818	Balance 31st March 1974		3 469 131
542 427	<u>OPERATING CAPITAL</u>		366 951
590 717	<u>SUNDRY CREDITORS</u>		724 752
	<u>RAND REFINERY LTD</u> - for gold deposited at statutory price		2 000 421
1 588 390	<u>THE TREASURY</u> - advances for purchases of bullion		2 215 000
3 215 000	<u>ADVANCE PAYMENTS</u> by customers		1 096 194
622 479			9 872 449
9 486 831			
	<u>ASSETS</u>		
3 550 795	<u>BUILDINGS</u> at cost	3 043 544	
499 295	Additions during the year	458 061	
4 050 090		3 501 605	
1 006 546	Less adjustment in respect of 1971/72	-	
3 043 544		3 501 605	
608 277	Less accumulated depreciation	622 664	
2 435 267	Value 31st March 1974		2 878 941
2 915 936	<u>PLANT AND EQUIPMENT</u> at cost	2 932 404	
16 468	Additions during the year	156 948	
2 932 404		3 089 352	
	Less sales, accumulated depreciation and write-offs	2 517 162	
2 457 853	Value 31st March 1974		572 190
474 551			
18 000	<u>LAND</u>		18 000
88 305	<u>STORES</u> at cost		45 122
62 820	<u>SUNDRY DEBTORS</u>		80 720
	<u>BULLION</u> (including bullion in coin stocks)		4 674 511
1 289 194	Gold	1 811 760	
3 273 554	Other	2 862 751	
414 816	<u>COIN STOCKS</u> at cost (excluding bullion)		212 413
21 134	<u>WORK IN PROGRESS</u> at cost		41 121
16 307	<u>OPERATING SUSPENSE ACCOUNTS</u>		66 312
1 865	<u>MINT MUSEUM STOCK</u> at cost		1 983
1 391 018	<u>CASH</u> with Paymaster General		1 281 136
9 486 831			9 872 449

1. Total sales increased appreciably during the year as reflected in the following comparative statement:-

	<u>1973/1974</u>	<u>1972/1973</u>	<u>1971/1972</u>
	R	R	R
Circulation Coin	6 408 760	2 141 300	4 526 250
Proof and collector's coin	1 353 571	1 311 295	553 889
Gold and silver	9 058 729	5 895 358	3 425 922
Die and medal products and laboratory services	108 928	79 982	114 649
Manufacture of gold coin for the Chamber of Mines	143 181	68 537	48 634
Manufacture of coin for Foreign governments	46 250	12 814	152 544
	<u>17 119 419</u>	<u>9 509 286</u>	<u>8 821 888</u>

An amount of R22 330 received during 1973/74 in respect of bronze scrap sold has been omitted from the above statement in view of the fact that receipts of this nature occur very rarely.

2. During 1973/74 operating costs increased by 26, 2% compared with those of 1972/73:-

	<u>1973/1974</u>	<u>1972/1973</u>	<u>1971/1972</u>
	R	R	R
Conversion costs	601 287	508 772	556 828
Selling costs	132 440	72 758	77 847
	<u>733 727</u>	<u>581 530</u>	<u>634 675</u>

The appreciably lower figure of R581 530 for 1972/73 in comparison with R634 675 for 1971/72 is mainly the result of the exclusion from operating costs of interest on capital items; Treasury approval having previously been obtained.

The increase of 26,2% for 1973/74 referred to above is due mainly to increases in salaries and wages as well as in municipal services.

The following comparisons are made:-

	<u>1973/1974</u>	<u>1972/1973</u>	<u>1971/1972</u>
	R	R	R
Electricity	23 204	16 685	13 120
Salaries & Wages	432 155	369 007	355 144
	<u>455 359</u>	<u>385 692</u>	<u>368 264</u>

3. The nett profit of R5 877 388 for 1973/74 against R1 995 259 for 1972/73 can be ascribed mainly to the greater demand for circulation coin especially for nickel coin which normally yield a nett profit of 80% and more. The profit on proof and collector's coin was also noticeably higher (refer to paragraph 5) as a result of the increase in selling prices of gold coins due to the higher price of gold on the free market.
4. During 1971/72 and 1972/73 R76 264 and R52 193 respectively was written off in the profit and loss accounts in respect of abnormal costs incurred in connection with the commissioning of the continuous melting and casting installation for bronze. These costs have been excluded in the comparative statements set out in paragraph 5 in order to make valid comparisons.

5. COMBINED OPERATING RESULTS

	<u>1973/1974</u>	<u>1972/1973</u>	<u>1971/1972</u>
	R	R	R
Sales	17 141 750	9 509 286	8 821 888
Nett profit	5 877 388	2 047 452	3 979 786
% Profit on Sales	<u>34,29</u>	<u>20,98</u>	<u>44,25</u>

CIRCULATION COIN

	<u>1973/1974</u>	<u>1972/1973</u>	<u>1971/1972</u>
	R	R	R
Sales	6 408 760	2 141 300	4 526 250
Nett profit	5 125 878	1 587 254	3 641 976
% Profit on Sales	79,98	74,13	80,48

PROOF AND COLLECTOR'S COIN

	<u>1973/1974</u>	<u>1972/1973</u>	<u>1971/1972</u>
	R	R	R
Sales	1 353 571	1 311 295	553 889
Nett profit	548 266	345 757	257 496
% Profit on Sales	40,51	26,37	46,49

SUNDRY OTHER ACCOUNTS

	<u>1973/1974"</u>	<u>1972/1973</u>	<u>1971/1970</u>
	R	R	R
Sales	9 379 419	6 056 691	3 741 749
Nett profit	203 244	114 441	80 314
% Profit on Sales	2,17	1,89	2,15

Sales volume in respect of the sundry other accounts has a strong influence on overall operating results since the profits on these accounts are usually small.

6. Additions in respect of buildings and plant amounted to R458 061 and R156 948 respectively during 1973/1974. The greater part of the expenditure incurred was related to the modernization of the S.A. Mint.

7. The following figures refer to the manufacture of circulation coin for foreign governments:-

	<u>Face value</u>
	R
1973/1974	46 250
1972/1973	10 000
1971/1972	160 000

8. During the year the manufacture of uncirculated gold coin for the Chamber of Mines was continued and production figures (number of pieces) are as follows:-

	<u>KRUGERRAND</u>	<u>R2-GOLD</u>	<u>R1-GOLD</u>
1973/1974	1 363 499	200 064	Nil
1972/1973	529 313	302 782	97 894
1971/1972	436 189	Nil	102 106

9. On 31st March, 1974 the value of stores in stock amounted to R45 122. The considerable decrease of R43 183, namely from R88 305 on 1 st April 1973 to R45 122 on 31st March, 1974 is accounted for as follows:-

Spare parts for the continuous melting
and casting installation received during
1972/1973 and issued during 1973/1974

R30 092

Items written off ,

2 329

Material issued for coin bags

4 738

Sundry items issued

6 024

R43 183

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:

The basic price of monetary gold remained at R30-05 per fine oz. plus 1%. The basic price plus $\frac{1}{2}\%$ is paid to the Rand Refinery Ltd.

The average selling price of Industrial gold was R72-37 per fine ounce, compared with R46-86 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 mass of 3 369,13 kg of gold was sold during the year whereas 3 843,82 kg was sold during the previous year.

Gold coins:

A total of 25 876 gold proof coins (12 938 of R2 and 12938 of R1) was struck for sale in 6 850 proofsets of 10 coins (R2- $\frac{1}{2}$ c) and 6 088 proofsets of 2 coins (R2-R1).

In addition to the above 14 156 non-proof R2 coins, 14 446 non-proof R1 coins and 10 000 Krugerrand coins were minted for sale as well as 1 363 499 Krugerrand and 200 000 R2 coins for the Chamber of Mines of South Africa. A further 10 000 R1 coins were minted for members of the S.A. Jewellers Association.

Gold transactions:

There was an increase in the total fine mass of the gold transacted as compared with the previous year as follows:

	<u>1973/1974</u>	<u>1972/1973</u>
	kg	kg
Received from the Rand Refinery Ltd.	4 628,99	4 707,28
Granulated and dental gold sold	3 369,13	3 843,82
Medals, wire and sheet gold sold	23,05	17,48
Mass of R2, R1, Krugerrand	646,47	449,07
Transferred to Die & Medal Section	53,96	13,50
Received from Die & Medal Section	69,70	-
Transferred to Coinage Section	1 214,47	960,54
Received from Coinage Section	-	6,47
Transferred to Chamber of Mines	-	-
	<u>10 005,77</u>	<u>9 998,16</u>

2. SILVER:

Silver transactions by mass

	<u>1973/1974</u> kg	<u>1972/1973</u> kg
Bought from Rand Refinery Ltd. and Sundry persons	17 920,11	10 051,81
Coin withdrawn from circulation 500 Std., 800 Std.	1 908,28	2 210,95
Granules and strip sold	17 952,58	9 401,72
Medals & Other items sold	204,47	163,09
Issues to Coinage Section	-	-
Received from Coinage Section (not coin) ..	130,72	602,24
Coin received from Coinage Section	219,28	192,88
Issues for various alloys	122,45	-
	<u>38 457,89</u>	<u>22 622,69</u>

Purchase of Silver:

17 920,11 kg of silver was purchased from the Rand Refinery Ltd., mainly for 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 price ruling on the London Metal Market. The average selling price was R2-27 per fine ounce compared with R1-54 in the previous year. The total fine mass sold during the year was 17 952,58 kg whereas 9 401,72 kg was 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 R67 400-00 were withdrawn from circulation.

3. NICKEL:

Nickel transactions by mass in kg

	<u>1973/1974</u>	<u>1972/1973</u>
Blanks purchased for coinage		131 181,50
Mass of coins received	35 364,27	72 250,12
Transferred to Die & Medal Section	10,00	12,58
	<u>35 374,27</u>	<u>203 444,20</u>

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 mass.

	kg
Bronze issued to Coinage Section	463 597,02
Bronze coin received from Coinage Section	244 511,65
Metals for various alloys	352,79
Bronze issued to Die & Medal Section	409,14
Bronze received from Die & Medal Section	11,34
Bronze articles sold	71,80
Rhodesian bronze coin received from Coinage Section..	20 087,85
Bronze issued to P.M.P.	-
Bronze received from P.M.P.	-
Scrap Bronze sold	23 429,19
	<u>752 470,78</u>

Withdrawal of bronze coin:

During the year coin to the value of R2 640 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 Mint Office:-

Denomination	Receipts from Coinage Section		Issued to Banks etc. during	
	1973/74	1972/73	1973/74	1972/73
<u>GOLD:</u>	R.c.	R.c.	R.c.	R.c.
2 Rand	54 188,00	36 580,00	61 570,00	52 112,00
1 Rand	37 384,00	29 795,00	41 955,00	37 775,00
<u>SILVER:</u> 1 Rand	10 850,00	50 000,00	52 573,00	44 430,00
<u>NICKEL:</u>				
50c	517 149,00	25 000,00	1 883 320,00	694 187,00
20c	2 170,00	10 000,00	1 653 537,00	391 182,80
10c	145 035,10	849 372,90	960 263,40	305 591,40
5c	393 155,90	746 100,00	970 631,70	306 800,65
<u>BRONZE:</u>				
2c	350 652,30	169 532,16	475 152,68	227 019,06
1c	524 447,53	356 920,00	483 928,34	275 359,53
$\frac{1}{2}$ c	39 192 17 $\frac{1}{2}$	81 115,35 $\frac{1}{2}$	80 830,74	57 332,57
	2 074 224,00 $\frac{1}{2}$	2 354 415,41 $\frac{1}{2}$	6 663 761,86	2 391 790,01

6. PROOFSETS:

The Mint made 6 850 ten coin proofsets (R2- $\frac{1}{2}$ c), 6 088 gold proofsets (R2-R1) and 4 000 eight coin proofsets (R1- $\frac{1}{2}$ c).

7. COINS MANUFACTURED FOR OTHER COUNTRIES:

RHODESIAN COIN

	<u>1973/1974</u>	<u>1972/1973</u>
$\frac{1}{2}$ c	-	R 10 000
1c	R 50 000	-
5c	R102 000	-

8. PACKING AND DESPATCH SECTION:

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

	<u>1973/1974</u>	<u>1972/1973</u>
Parcels despatched by Post	10 788	11 986
Parcels, other than coin, despatched by rail	5 (111kg)	4 (45kg)
Boxes of coin despatched by rail	3 719	2 787
	<u>(203 056 kg)</u>	<u>(150 204 kg)</u>

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	1974		1973	
	Posts	Personnel	Posts	Personnel
(a) Administrative	6	6	6	6
(b) Professional	3	1	2	1
(c) Technical	9	9	9	9
(d) Clerical	11	4	11	7
(e) General Divisions A & B excluding items (g) to (j)	25	12	26	10
(f) Temporary employees against posts under items (a) to (e)	-	15	-	12
(g) Senior Special Craftsmen	2	-		
(h) Special Craftsmen	5	5	5	5
(i) Artisans	7	6	8	8
(j) Male Operators	11	10	11	10
(k) Apprentices	2	1	2	1
(l) Female Operators and Supervisors	38	38	38	31
(m) Messengers	4	-	4	-
(n) Bantu Guards and Bossboys	13	14	13	14
(o) Bantu Messengers and Female cleaners	4	8	4	8
(p) Bantu Labourers	71	70	71	57
TOTAL:	211	199	210	179

There was an increase of 20 in the number of persons employed while the number of posts increased by 1. No additional temporary employees were in service this year.

2. PERSONNEL TURNOVER

Appointments - 84
Resignations - 79

3. POST STRUCTURAL CHANGES

- The number of authorised posts increased by 1 to 211.
- The Toolmaker's post and one Artisan's post were abolished and two Senior Special Craftmen's posts designated as Electrician and Toolmaker were created in the General B. Section.
- An extra post for Security Officer was created in the General B. Section.

- d) A post in the General B. Section was abolished and an extra post for a Librarian was created in the Professional Section.

4. PERSONNEL CHANGES

- a) Mr. G.P. Kersten was appointed to the post of Senior Professional Officer in the Laboratory on 1st November, 1973.
- b) The Administrative Officer for the Office Management Section Mr. M.J. de W. de Kock resigned with effect from the 1st May, 1973 and was replaced by Mr. N.P.J. Coetzee from the Department of National Education on the 13th June, 1973.
- c) Messrs. W.J. Muller and P.J. Jacobsz retired on pension respectively on 31st August 1973 and 31st October 1973 on account of ill health.
- d) Three members of the staff died while still on duty - Mr. J.H.C. Grobler on 4th December 1973 after 11 years service. Mr. C.N. Hope on 4th February 1974 after only 10 months service and Bantu Labourer Alpheus Nthloro (No 16) after 27 years service.
- e) Mr. A.F. Scholtz Assistant Accountant was promoted to Accountant with effect from 1st March, 1974. and transferred to the Department of Agricultural Technical Services.
- f) Bantu Labourer Willie Mageza (No. 1) retired on pension on 1st March, 1974 after 48 years of service.

C. MINT MUSEUM AND LIBRARY

VISITORS

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

CHAPTER III - PRODUCTION

1. MELTING SECTION

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

GOLD

Fine gold granules	607,544	Kg
22 Ct gold granules	1 264,252	Kg
18 Ct gold granules	319,399	Kg
9 Ct gold granules	452,299	Kg
18 Ct gold for Die & Medal	31,171	Kg
9 Ct gold for Die & Medal	191,707	Kg
Mixed gold for Mint Office	60,718	Kg
TOTAL	2 927,090	Kg

SILVER

925 Std silver for Die & Medal	1 106,957	Kg
Fine silver granules	37,700	Kg
TOTAL	1 144,657	Kg

BRONZE

Coinage Bronze	660 598,092	Kg
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2. ROLLING SECTION

The production in this section was as follows:-

(a) Coinage Bronze	467 100,043	Kg
(b) <u>Blanks annealed and cleaned:-</u>		
800 Std silver	30,850	Pieces
Std Gold Krugerrand	1 138,500	Pieces
Std Gold R2	226,949	Pieces
Std Gold R1	37,215	Pieces
2c, 1c & ½c Bronze	76 839,919	Pieces
Rhod 1c Bronze	5 000,000	Pieces
TOTAL	83 273,433	Pieces
(c) <u>Blanks cleaned</u>		
Nickel (50c, 20c, 10c & 5c)	34 967,566	Kg

3. COINAGE SECTION

(a) The number of coins minted during the year amount to 96 863 247 pieces as reflected in the following schedules:-

COIN PRODUCTION

Denominations	Bars cast kg	Bars Rolled kg	Blanks Coined kg	Good coins produced	
				1973/1974 No of pieces	1972/1973 No of pieces
<u>GOLD</u>					
Krugerrand	1 122,297		339,261	10 000	6 625
R2			216,428	27 094	18 290
R1			149,312	37 384	29 795
TOTAL	1 122,297		705,001	74 478	54 710
<u>800 STD SILVER</u>					
R1			162,750	10 850	50 000
TOTAL			162,750	10 850	50 000
<u>NICKEL</u>					
50c			9 825,831	1 034 298	50 000
20c			65,100	10 850	50 000
10c			5 801,404	1 450 351	8 493 729
5c			19 657,795	7 863 118	14 522 000
TOTAL			35 350,130	10 358 617	23 515 729
<u>BRONZE</u>					
2c			70 130,460	17 532 615	8 476 608
1c	660 598,092	467 100,148	157 334,259	52 444 753	35 692 000
$\frac{1}{2}$ c			15 676,870	7 838 435	16 223 071
TOTAL	660 598,092	467 100,148	243 141,589	77 815 803	60 391 679
<u>BRONZE</u>					
Rhod 1c			20 087,980	5 000 000	2 000 000
Rhod $\frac{1}{2}$ c					2 000 000
TOTAL			20 087,980	5 000 000	2 000 000
<u>CUPRO NICKEL</u>					
Rhod 5c			5 850,190	2 040 000	
TOTAL			5 850,190	2 040 000	
<u>CHAMBER OF MINES</u>					
Krugerrand			46 264,980	1 363 499	526 404
R2			1 596,428	200 000	579 782
R1					97 894
TOTAL			47 861,408	1 563 499	1 204 080
GRAND TOTAL			353 159,048	96 863 247	87 216 198

(b) Proofsets:-

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

SOUTH AFRICAN

(a) Gold Proofsets (R2 & R1)	6 088 sets
(b) Long Proofsets (R2 & R1 gold R1 - $\frac{1}{2}$ c)	6 850 sets
(c) Short Proofsets (R1 - $\frac{1}{2}$ c)	4 000 sets
TOTAL	16 938 sets

4. DIE AND MEDAL SECTION

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

Coinage Dies	2 735
Dies for Medals etc.	110
Medals & Badges etc.	14 613
Gold Jeweller's articles	77
Silver Jeweller's articles	374
Sundries Die & Medal	30 365
Articles engraved	596
Defence medals stamped	1 691

The following new medals were produced

1. Langenhoven Commemoration Medal

38 mm Dia. Medal in 9 ct Gold, Stg. Silver and bronze.

Obverse.

Profile of C.J. Langenhoven South Africa's famous poet and author of the words of S.A. National Anthem with his signature and dates 1923-1973.

Modelled by T. Sasseen.

Reverse.

Crest of the Federasie van Afrikaanse Kultuurverenigings.

2. Electric Supply Commission

38 mm Dia. Medal in 18 ct Gold, Stg. silver and bronze to commemorate the 50th Anniversary of the Commission.

Obverse.

Profile of the founder of Escom, Dr. H.J. Van der Bijl with the inscription Hendrik Johannes van der Bijl. Model by J. Buisset.

Reverse.

Escom's crest with dates 1923-1973.

3. Simon Van Der Stel Foundation

Boekenhoutfontein Medal.

73.5mm Dia Silver and Bronze medals.

Obverse.

The obverse depicts the restored house of President Paul Kruger at Boekenhoutfontein and a Boekenhout tree as modelled by A. Sutherland, with inscription Boekenhoutfontein 1973.

Reverse.

Crest of the Foundation.

4. Rhodes University

44.45mm dia 9ct Gold Medal.

Obverse

Profile of Cecil John Rhodes cut from a model by Parker with inscription - Cecil John Rhodes Commemoration Medal.

Reverse.

Wording: Delivered at Rhodes University by on

5. Standard Bank of South Africa

50, 8mm 18ct Gold Medal struck on the retirement of Bank Chairman A.Q. Davies.

Obverse.

The Standard Bank Building in Johannesburg as modelled by T. Sasseen.

Reverse.

The Standard Bank crest with dates 1967-1973 and inscription A.Q. Davies Chairman Standard Bank.

6. The Parliamentary Association.

73, 5mm Bronze medallion mounted on a stinkwood base. The medallion shows the South African coat of arms and the maces of Parliament and the Senate. Die hand cut by J. Buisset.

7. Transvaal Numismatic Society.

38mm Dia. 9ct Gold, Fine silver and bronze medals to commemorate the 5th National Numismatic Convention.

Obverse.

The profile of President Thomas Burgers modelled by T. Sasseen to commemorate the centenary of the minting of the first South African gold coin. The profile is the same as the one which appeared on the coin in 1874. Inscription on medal - Thomas Francois Burgers and dates 1874-1974.

Reverse.

Transvaal Numismatic Society crest.

CHAPTER IV - ENGINEERING

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

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

1. The horizontal continuous casting plant was commissioned and produced 350 tons of coinage bronze in strip form 10mm x 120mm x 2 metres.
A test run on C.G.W. casting dies from Union Carbide Co. produced 45 tons from two strips compared to an average of 10 tons with A.T.J. grade dies used during this and previous casting programmes. The new grade will be employed exclusively in future and in view of the considerably prolonged life of the casting dies the dies have to be enshrouded in a controlled non-corrosive atmosphere for which purpose CO₂ is employed.
2. Two special steel containers (tote boxes) were manufactured and tested for bulk handling of blanks and coin in conjunction with vibratory feeding equipment.
3. The Breakdown strip rolling mill was equipped with roller bearings to replace the old grease lubricated bronze bearings which modification resulted in a considerable increase in rolling capacity.
4. Three H.M.E. coinage presses and two edge marking machines were completely overhauled during the year under review.
5. Two large pressure vessels used in conjunction with the new air-conditioning system were subjected to hydraulic test and internal inspection during the annual December closure.
6. A new edge filing machine was designed and manufactured for "filing" the edges of gold blanks to maintain the statutory weight tolerances.
7. Twenty-four steel pallets were manufactured for strip coil handling in the Rolling section.

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. (a) Precious Metal Assays:-

Gold	Mint Office	373 samples	389
	S.A. Bureau of Standards	<u>16</u> samples	
Silver	Mint Office	188 samples	<u>188</u>
	S.A. Bureau of Standards	<u>0</u> samples	
Total			577 samples

(b) Other Metal Assays:-

<u>Bronze:</u>	2051 Copper determinations
	512 Zinc determinations
	512 Tin determinations

(c) Illicit Gold Trade:

92 Exhibits in 88 court cases were assayed for the Diamond and Gold Branch of the S.A. Police. 226 Pieces of gold were cast for trapping purposes.

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

2. General Chemical Analysis:-

Gas Analysis

37 Samples of gas taken at the Coin blank annealing plant were analysed for carbon dioxide, carbon monoxide and oxygen content.


I.J. GROENEWALD

DIRECTOR OF THE S.A. MINT.

/BdP