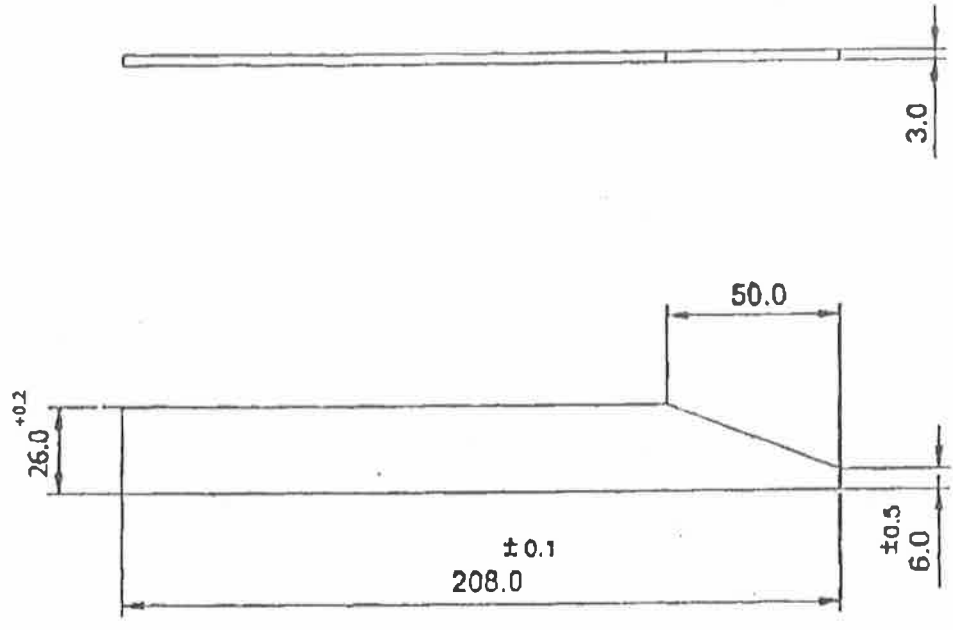


1	2	3	4
RevNo	Revision note	Zone	Date
1.	TEMPERED CONDITION 'U' WAS 'X'	-	19-09-19
			Authority Sign
			ARD 2576



NOTE :-

ENSURE TIGHT FITMENT BETWEEN OUTER AND INNER CYLINDERS PRIOR TO WELDING

HARDENED AND TEMPERED 'X' CONDITION P

इन आरेखों पर इनके साथ ही सजाएँ सामग्री का हस्तक्षेपित भाग चरण पर दत्त नौसेना की नौसेना आयुध निरीक्षण महानिदेशालय को पास है। भारतीय नौसेना आयुध निरीक्षण महानिदेशालय की लिखित अनुमति के बिना इनकी नकल या प्रिंटी भी रूप में इनको प्रकाश या इनकी सजाविल रूपका किसी अनधिकृत व्यक्ति को नहीं करनी चाहिए।
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इस रेखा की कतरेगा है जब किसी व्यवसाय में सेवा करे TRAM ON THIS LINE WHEN SUPPLY TO TRADE

पुर्जा संख्या Item No	मात्रा Qty	विवरण Description	आरेखण का Drawing No	अन्य Remarks
पुर्जा की तालिका SCHEDULE OF COMPONENTS				
पदार्थ और निशानि Matl & Spec	स्टैंडर्ड आदर्श Protective Finish	माप लि लि में Dimension In MM	सामान्य निशानि Gen Spec	सामान्य सजाविल Gen Tol IS: 2102-mx
आरेखण का Atty Drg No	आयुध सजाविल Store Ref	डीसीएन का DCAN No	गेज तालिका का Gauge Sch No	
ग्रा/ब. का Dwg/SOM	नं. का. CD	डीसीओ(सी) CTO (D)	प्रमाणित Approved	नौसेना आयुध निरीक्षण महानिदेशालय स्वीकृत मुख्यालय रक्षा मंत्रालय (नौसेना) नई दिल्ली Dte Gen of Naval Armament Inspection IHQ/ MoD (NAVY), New Delhi
आरेखण Dgn/Comp	जांचा Checked	पासि Passd	अनुमोदि Approval	
डी. व. का Dwg/SOM	डी. व. का CD	डी. व. का CTO (D)	डी. व. का DGN	
शीर्षक Title				आरेखण का Drg No
STRIP MOD 1				NASK 1134/1/8/3(P)

QUALITY ASSURANCE PLAN FOR A/S ROCKET RGB 60 (EMPTY) MOD 1

Item Description	STRIP MOD 1
Ref. Document	NASK 1134/1/8/3(P)
Material	Steel to spec BS 970(Pt 3)-91 Gde-817 M40 (EN 24)
Heat Treatment	Hardened & Tempered 'X' condition

Component name/operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection Activity Categorisation	Inspection by
Strip - Raw material	General finish, appearance	Semi critical	Visual	100%	BS 970(Pt 3)-91 Gde-817 M40 Hardened & Tempered 'X' Condition	BS 970(Pt 3)-91 Gde-817 M40 Hardened & Tempered 'X' Condition	Visual Inspn. Report	Critical	NAI
	Chemical properties	Critical	Chemical lab analysis	Three samples per lot or as per the discretion of inspection authority			Test report from NABL Lab / Govt lab		
	Mechanical properties	Critical	Mechanical lab analysis	Three samples per lot or as per the discretion of inspection authority			Test report from NABL Lab / Govt lab		
In process - Laser cutting	All dimensional parameters as per inspection report format enclosed	Critical	Dimensional measurement	As per sampling plan IS 2500 Level II	Tolerance as specified in DRG.NASK 1134/1/8/3(P)	Tolerance as specified in DRG.NASK 1134/1/8/3(P)	Inspection report of Strip	Critical	NAI
	Ensure tight fitment between outer and inner cylinder prior to welding	Critical		100%	As per drg.	As per drg.	Inspection report of Strip		
Final finish	Zinc & Yellow Chromate coating - 25 microns after assy.	Critical	Visual / Test Sample	100%	As specified in the relevant drg.	As specified in the relevant drg.	Test report from NABL Lab / Govt lab or Inspection report of Strip	Non-Critical	QC/HEPF

Inspection Report

Description of the item	STRIP MOD 1
Drawing No.	NASK 1134/1/8/3 (P)
Date of Inspection	

Sno.	Description of parameter	Nominal dimension as per drawing in mm	Gauge used	Tolerance (As drg.)	Nature of Parameter	Observed dimension in mm	Deviation in mm	Remarks
1	Overall length	208		±0.1	Major			
2	Overall width	26		+0.2				
3	Length (taper cut at other end)	50						
4	Flat width (other end)	6		±0.5				
5	Flat thickness	3						

Special Notes:

Ser.	Note	Observations
1	Material: Steel to spec BS 970(Pt 3)-91 Gde- 817 M40 (EN 24).	
2	General Tolerance spec IS 2102 (Medium class) unless specified.	
3	Ensure tight fitment between outer and inner cylinders prior to welding.	
4	Finish as per assembly drawing.	

Table 16 — Chemical composition: alloy direct hardening steels

Steel	C	Si	Mn	P	S	Cr	Mo	Ni
	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)
530M40	0.36 to 0.44	0.10 to 0.40	0.60 to 0.90	0.035 max.	0.040 max.	0.90 to 1.20	—	—
605M36	0.32 to 0.40	0.10 to 0.40	1.30 to 1.70	0.035 max.	0.040 max.	—	0.22 to 0.32	—
606M36	0.32 to 0.40	0.10 to 0.40	1.30 to 1.70	0.035 max.	0.15 to 0.25	—	0.22 to 0.32	—
708M40	0.36 to 0.44	0.10 to 0.40	0.70 to 1.00	0.035 max.	0.040 max.	0.90 to 1.20	0.15 to 0.25	—
709M40	0.36 to 0.44	0.10 to 0.40	0.70 to 1.00	0.035 max.	0.040 max.	0.90 to 1.20	0.25 to 0.35	—
722M24	0.20 to 0.28	0.10 to 0.40	0.45 to 0.70	0.035 max.	0.040 max.	3.00 to 3.50	0.45 to 0.65	—
817M40	0.36 to 0.44	0.10 to 0.40	0.45 to 0.70	0.035 max.	0.040 max.	1.00 to 1.40	0.20 to 0.35	—
826M31	0.27 to 0.35	0.10 to 0.40	0.45 to 0.70	0.035 max.	0.040 max.	0.50 to 0.80	0.45 to 0.65	1.30 to 1.70
826M40	0.36 to 0.44	0.10 to 0.40	0.45 to 0.70	0.035 max.	0.040 max.	0.50 to 0.80	0.45 to 0.65	2.30 to 2.80
945M38	0.34 to 0.42	0.10 to 0.40	1.20 to 1.60	0.035 max.	0.040 max.	0.40 to 0.60	0.15 to 0.25	2.30 to 2.80 0.60 to 0.90

NOTE See also 3.3 c), 3.3 i) and options A.2 and A.5.

Table 17 — Chemical composition: ferritic and martensitic stainless and heat resisting steels

Chemical composition (maximum unless range stated)								
Steel	C	Si	Mn	P	S	Cr	Mo	Se
	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)	%(m/m)
<i>Ferritic steels</i>								
403S17	0.08	1.0	0.040	0.030	0.030	12.0 to 14.0	—	0.50
430S17	0.08	1.0	0.040	0.030	0.030	16.0 to 18.0	—	0.50
<i>Martensitic steels</i>								
410S21	0.09 to 0.15	1.0	0.040	0.030	0.030	11.5 to 13.5	—	1.00
416S21	0.09 to 0.15	1.0	0.060	0.15 to 0.35	0.15 to 0.35	11.5 to 13.5	0.60	1.00
416S29	0.14 to 0.20	1.0	0.060	0.15 to 0.35	0.15 to 0.35	11.5 to 13.5	0.60	1.00
416S37	0.20 to 0.28	1.0	0.060	0.15 to 0.35	0.15 to 0.35	12.0 to 14.0	0.60	1.00
416S41	0.09 to 0.15	1.0	0.060	0.060	0.060	11.5 to 13.5	0.60	1.00
420S29	0.14 to 0.20	1.0	0.040	0.030	0.030	11.5 to 13.5	—	1.00
420S37	0.20 to 0.28	1.0	0.040	0.030	0.030	12.0 to 14.0	—	1.00
431S29	0.12 to 0.20	1.0	0.040	0.030	0.030	15.0 to 18.0	—	2.0 to 3.0

Table 21 — Mechanical properties for alloy steels (18)

Steel	Condition (2)	Size (1) (diameter across flats, or thickness) mm	R_m N/mm ²	R_e min. N/mm ²	A min. on 5.65 $\sqrt{S_0}$ %	Impact ^a		$R_{p0.2}$ (3) min. N/mm ²	HB (13)	
						Izod min. J	KCV min. J			
722M24	Hardened and tempered + turned or ground	$T > 150 \leq 250$	850 to 1 000	650	13	40	35	635	248 to 302	
		$T \geq 6 \leq 150$	850 to 1 000	680	13	54	50	665	248 to 302	
		$U \geq 6 \leq 150$	925 to 1 075	755	12	47	42	740	269 to 331	
817M40	Hardened and tempered + turned or ground	$T \geq 6 \leq 150$	850 to 1 000	700	9	54	—	680	248 to 302	
		$U \geq 6 \leq 150$	925 to 1 075	770	9	47	—	755	269 to 331	
		Turned, ground or cold drawn and finally softened							269 max.	
817M40	Hardened and tempered + turned or ground	$T > 150 \leq 250$	850 to 1 000	650	13	40	35	635	248 to 302	
		$T > 63 \leq 150$	850 to 1 000	680	13	54	50	665	248 to 302	
		$U > 29 \leq 100$	925 to 1 075	755	12	47	42	740	269 to 331	
		$V > 13 \leq 63$	1 000 to 1 150	850	12	47	42	835	293 to 352	
		$W \geq 6 \leq 29$	1 075 to 1 225	940	11	40	35	925	311 to 375	
		$X \geq 6 \leq 29$	1 150 to 1 300	1 020	10	34	28	1 005	341 to 401	
		$Z \geq 6 \leq 29$	1 550 min.	1 235	5	10	9	1 125	444 min.	
		Hardened and tempered + cold drawn or hardened and tempered + cold drawn + ground	$T > 63 \leq 150$ $U > 29 \leq 100$ $V > 13 \leq 63$ $W \geq 6 \leq 29$ $X \geq 6 \leq 29$ $Z \geq 6 \leq 29$	700 770 865 955 1 035 1 250	9 9 9 8 7 3	54 47 47 40 34 11	— — — — — —	680 755 850 940 1 020 1 235	248 to 302 269 to 331 293 to 352 311 to 375 341 to 401 444 min.	
		Turned, ground or cold drawn and finally softened								277 max.

^a See also option A.3.