

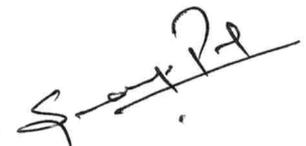
9041-SPC

## SPECIFICATION

VL-SRSAM Missile Integration Jig is designed of the Integration of Missile as well as Integration of Rocket Motor assembly. Following are the specification details for the Jig

1. Integration Jig should have a single bottom frame (Stand assembly) of 4.8 m length.
2. Two single length channels should be welded of the stand assembly for the smooth movement of Missile section formats as per approved drawings.
3. Jig should have two fixed type formats for the mounting of rocket motor assembly. There should be a provision for the clamping of motor assembly with the help of motor launch shoes with the fixed formats.
4. There are two section formats which should have 5D movement with locking provision i.e. lateral movement, longitudinal movement, Vertical and rotation about vertical and longitudinal axis.
5. There are two section another formats which should have 4D movement with locking provision i.e. lateral movement, longitudinal movement, Vertical and rotation about longitudinal axis.
6. Lateral and vertical movement should be  $\pm 50$ mm.
7. Total six formats are required for the missile section assemblies.
8. Center axis of all formats should be at  $1030 \pm 1$ mm from the ground.
9. Stand assembly should have the provision for the mounting on ground.
10. Stand assembly should have two tool boxes at the front and rear.
11. Formats should have two halves for the proper placement of missile sections.
12. All formats should have ID of 178 mm with 5 mm Felt/ Rubber layer at ID side.
13. Width of the formats should be min 80 mm.
14. Proper clamping arrangement for the formats between two halves.
15. All components should be powder coated painted.
16. Branded bearings should be used. (SKF or equivalent).
17. All components should have at least one year warranty.





Sandeep Kumar Pal  
Sc 'D'  
Project ASTRA

### Scope of work

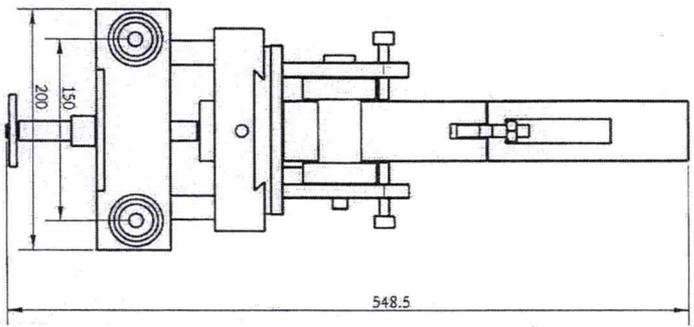
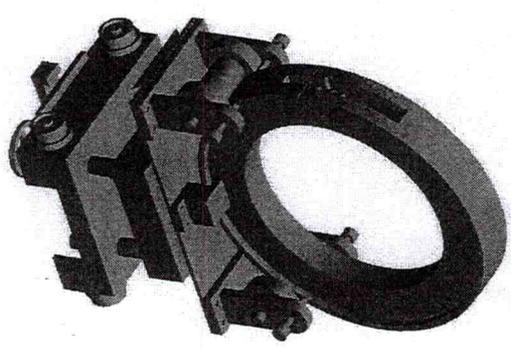
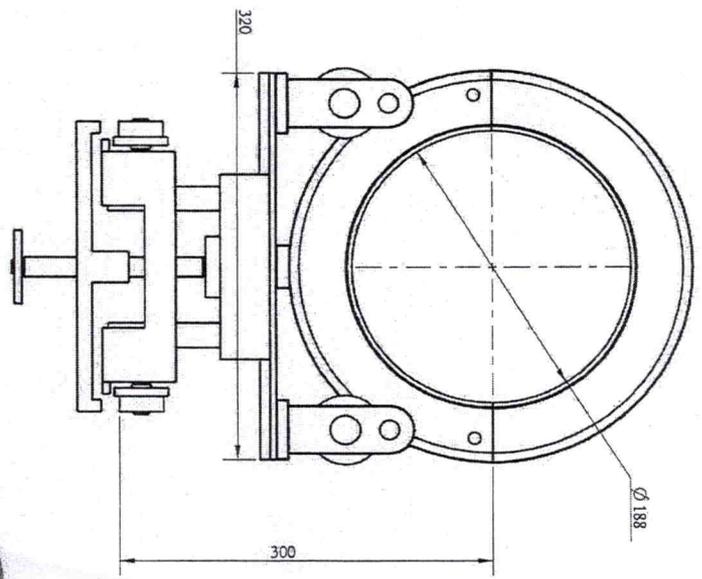
1. Vendor has to manufacture and supply integration Jigs as per approved drawings and specifications enclosed in tender.
2. Vendor has to design the section formats, prepare engineering drawings of each component and get approval from Project VL-SRSAM before the start of fabrication of items.
3. Missile formats should be machined within the tolerance limits.
4. All sharp corners should be removed.
5. All components should be powder coated painted where ever applicable.
6. Vendor has to assembly all components and deliver Jigs to project VL-SRSAM, DRDL.  
No extra charges will be provided for the transportation.
7. Installation will be under vendor's scope.
8. All the mentioned items must be defect free due to transportation, storage etc.
9. Inspection of items will be done by Project Rep at firm's place.
10. Vendor has to do stenciling on component where ever required.





Sandeep Kumar Pal  
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Drg. No.  
Part No.

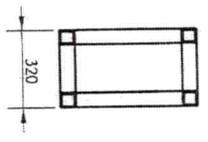
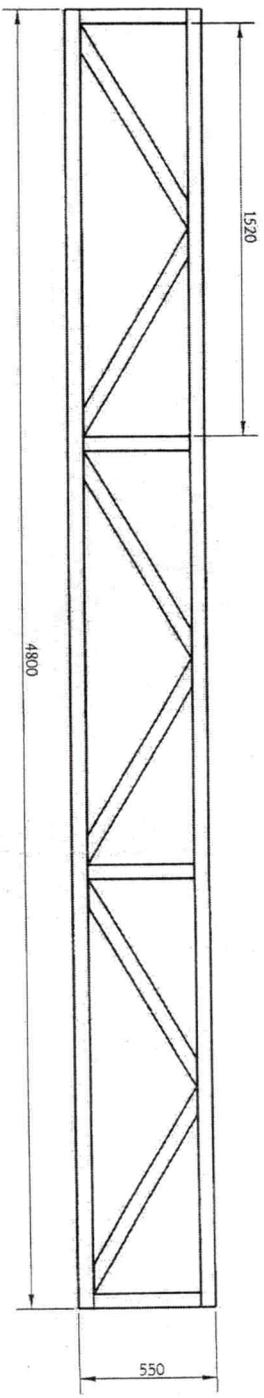
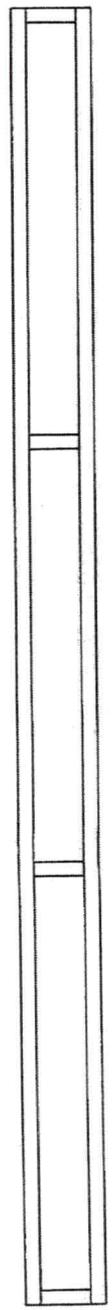


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Rev. No.		R. No.	DATE	AUTHORITY	ZONE	BRIEF RECORD	INITIALS

Drawn to Spec. IS:10714-1983 (R 1999), IS : 10714 (Part 20) : 2001 & IS : 10714 (Part 21) : 2001 & DRDL Note Sheet 1 & 2				Deviation for Untoleranced Dimensions to conform to Spec. IS : 2102 - Medium (Part 1 & 2) : 1993			
All Dimensions are in mm				Scale 1:1			
Mass	Material	Finish		Product Design	Date	Jan-20-20	
kg				APPD (DGN)	<i>(Signature)</i>	(Sandeep Kumar Pal)	
				APPD (DRN)		0	
				Tech. Officer		0	
				APPD (QA)		0	
				Assy. Drg. No.			
<b>MOVABLE CLAMP ASSEMBLY</b> Defence Research & Development Laboratory HYDERABAD				Drg. No.			
				Part No.			

Drg. No. \_\_\_\_\_  
Part No. \_\_\_\_\_

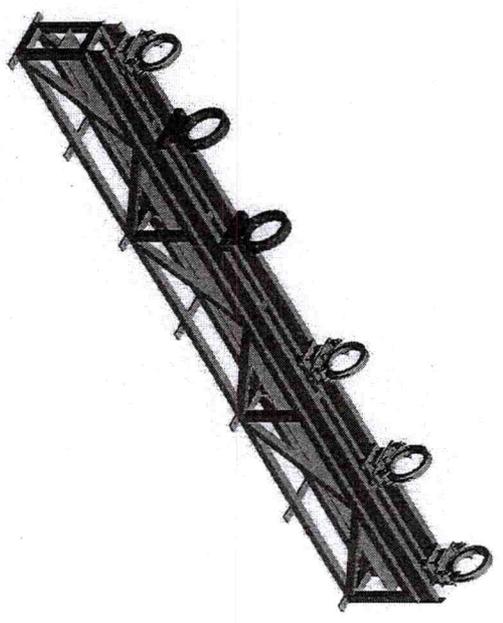
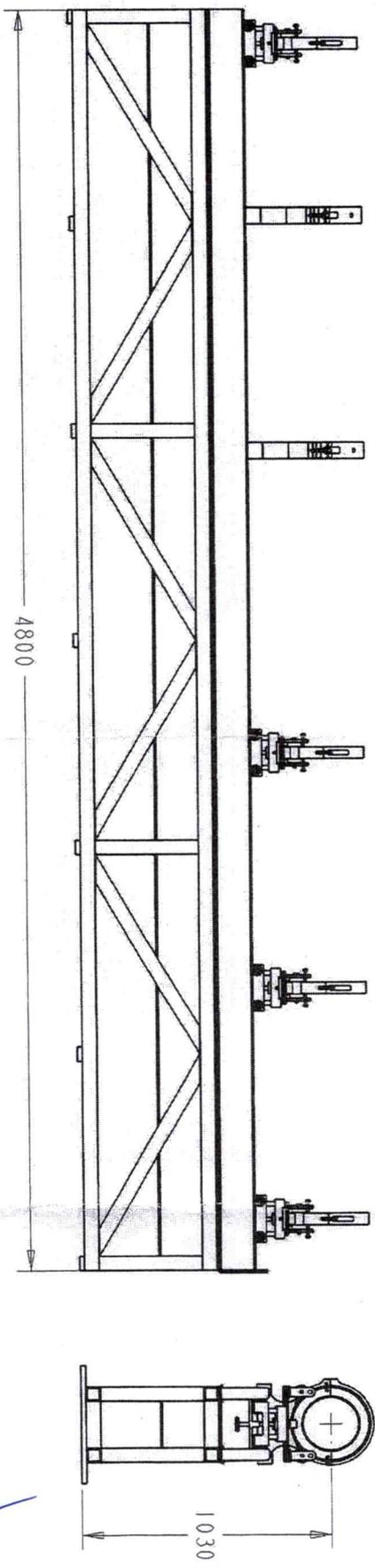
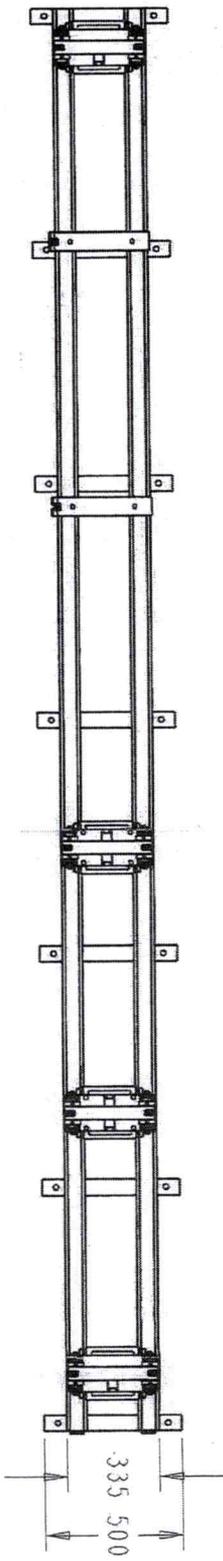


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All Dimensions are in mm Scale 1:1			Product Design Date Jan-20-20 (Sandeep Kumar Pal)		
Mass	Material	Finish	APPD (DCN)	APPD (DRN)	APPD (QA)
kg					
<b>STAND ASSEMBLY</b>			Tech. Officer Assy. Drg. No. _____ Drg. No. _____ Part No. _____		
Defence Research & Development Laboratory HYDERABAD					

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Drg. No.  
Part No.



All Dimensions are in mm		Scale	1:000
Mass	Material	Finish	
kg			
<b>ASTRA MISSILE INTEGRATION JIG</b>			
Defence Research & Development Laboratory HYDERABAD			
Product Design	APPD (DGN)	Date	Jan-20-20
Tech. Officer	APPD (DRN)	(Sandeep Kumar Pal)	
Assy. Drg. No.	APPD (QA)		
Drg. No.			
Part No.			

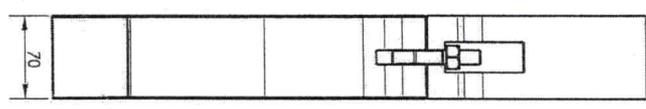
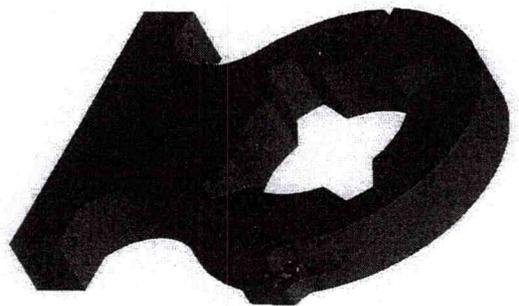
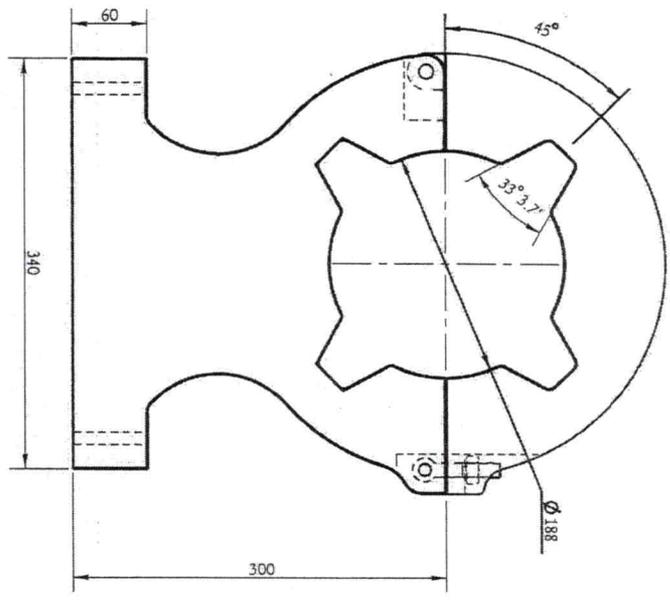
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& DRDL Note Sheet 1 & 2

Deviation for Untoleranced Dimensions  
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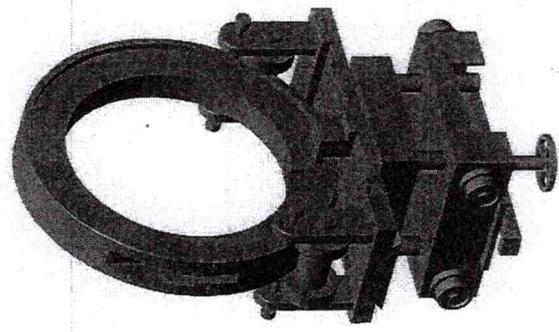
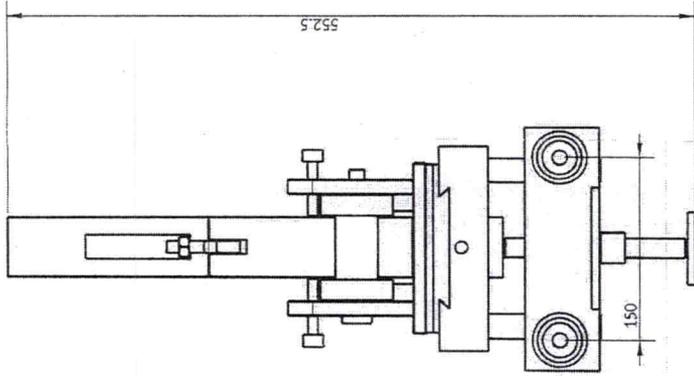
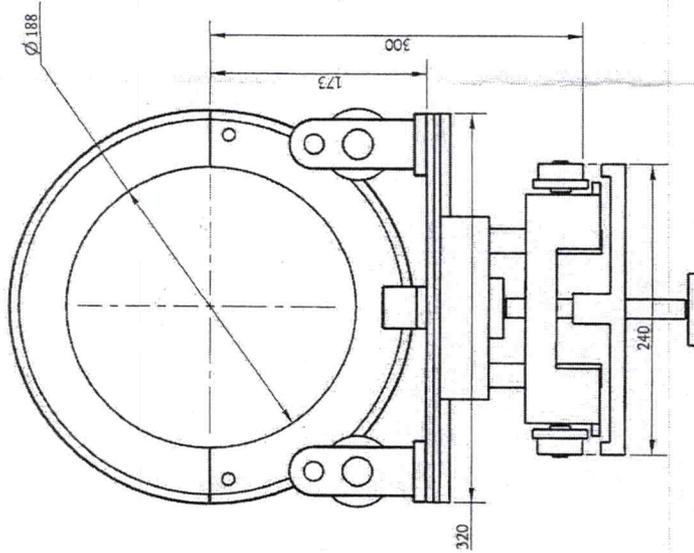


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kg				APPD (DGN)	<i>Sandeep Kumar Pal</i>		
<b>FIXED CLAMP ASSEMBLY</b> Defence Research & Development Laboratory HYDERABAD				APPD (DRN)			
				Tech. Officer			
				APPD (QA)			
Assy. Drg. No.				Drg. No.			
				Part No.			

1	2
Part No.	Dwg. No.



Drawn to Spec. IS:10714-1983 (R. 1999), IS : 10714 (Part 20) : 2001 & IS : 10714 (Part 21) : 2001 & DRDL Note Sheet 1 & 2		Deviation for Untoleranced Dimensions to conform to Spec. IS : 2102 - Medium (Part 1 & 2) : 1993	
All Dimensions are in mm		Scale 1:1	Product Design Date Jan-20-20 (Sandeep Kumar.Pa)
Mass	Material	Finish	APPD (DGN)
kg			APPD (DRN)
<b>ROTATIONAL CLAMP ASSY.</b>		Tech. Officer	
Defence Research & Development Laboratory		APPD (QA)	
HYDERABAD		Assy. Drg. No.	
		Drg. No.	
		Part No.	

Rev. No.	R. No.	DATE	AUTHORITY	ZONE	BRIEF RECORD	INITIALS
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