

SCOPE OF WORK

MANUFACTURE AND SUPPLY OF FABRICATED BOGIE SUB ASSEMBLIES WITH ROZ PRIMER PAINTING FOR DMC AND TC CARS – MEMU-3PH PROJECT:

I. Brief Scope of Work & Quantity:

SI NO	Part Number	Part Description	QTY /DMC CAR	QTY/ TC CAR	Qty Required for 25.5 Rakes (153TC+ 51DMC)	Scope of Work
TC CAR BOGIE FURNISHING SUB-ASSEMBLIES						Manufacturing of Components, Fabrication and Supply of Sub Assemblies with ROZ Primer Painting (Excluding Bush Pressing)
1	CC06104	BOTTOM COVER COMPLETE FOR CENTER PIVOT	0	2	306	
DMC CAR BOGIE FURNISHING SUB-ASSEMBLIES						
2	M32069C1SC	LEVER OUTER L.H.	4	0	204	
3	M32069C2SC	LEVER OUTER R.H.	4	0	204	
4	M32068C1SC	LEVER INNER L.H.	4	0	204	
5	M32068C2SC	LEVER INNER R.H.	4	0	204	
6	EMUM32067C1SC	ARTICULATION PIECE ASSY FOR 2OT AXLE BOG (As Per FABRICATED DRG M32019C1)	8	0	408	
7	ACDCMUD203216	BRACKET FOR APC RECEIVER	2	0	102	
8	84983303	CHANNEL COMPLETE FOR APC FIXING BKT	1	0	51	

Note:

- Firm to supply Sub-Assemblies for one TC & DMC Car to ascertain the fitment/ installation aspects before bulk supply.
- Manufacture & Supply of above Assemblies should conform to Latest drawings and to the material specification/Standards/Test, indicated in the respective drawings is to be adhered/ ensured.

II. Detailed Scope of Work :

Scope of Work for Manufacture of Detailed Components:

- All Components to be only manufactured by CNC Flame Cutting/Plasma Cutting/Laser Cutting/Shearing for Plates & Sheets, Saw Cutting for Rolled Channels/ Tubes/Pipes/Bars/Rods. Vendor shall submit a nesting plan to BEML for Approval before taking up for manufacturing.
- Dress, Grind and Deburr cut edges of all detailed components and all edge preparation to be carried out by Beveling.
- Straightening of Components to be carried out wherever required before taking up for forming/Machining/Assembly.
- All components to be shot blasted before taking up for forming/ Machining/Assembly. All Parts/Members shall be first degreased and derusted and Paint with ROZ Primer.
- Machining of Components to be carried out as per drawing requirement. All machined surfaces to be protected from rusting by applying rust preventive oils and physical damages if any.

Scope of Work for Fabrication:

- All the Parts/Members shall be welded using appropriate fixtures during assembly stages.
- Machining has to be carried out wherever required as per drawings.
- The assemblies shall be checked for its Dimensions & Inspected.

4. All other dimensions / standards / specifications to be maintained / followed for all Subassemblies / Assemblies as per respective Drawings with latest alterations. Before starting the production, vendor should ensure to manufacture as per the latest drawing as and when it is updated.
5. Bush Pressing in the above Sub Assemblies is in BEML Scope.

Shot Blasting:

1. Cleaning of the Surface of Components and Sub Assemblies with Pressurized Air/Emery paper to remove dust & Debris.
2. Apply Rust Preventive Oil on the Machined Surfaces/Tapped Holes and Mask.
3. Holes, Machined Surfaces to be masked to avoid entry of Paint or Shots.
4. Shot/Abrasive blasting of Sub Assemblies to grade SA 2.5 of ISO 8501-1-1988.

ROZ Primer Painting:

1. Check the Condition of Masked Areas and the Painting Equipment.
2. Apply One Coats of Red Oxide Primer (ROZ - IS:2074-92) Primer Painting within 4 Hrs of Shot Blasting to arrest Rusting and Corrosion

Inspection & Clearance:

1. Any minor scope changes/Modifications if any, to be taken up by vendor.
2. Offer the Sub Assemblies to BEML inspection/SIT and should carry out any modifications suggested by inspection/quality team.
3. The Vendor should maintain & provide Reports & Dimensional Check sheets to BEML/SIT.

VII. Delivery Schedule:

1. All above sub assemblies for 1 Car to be supplied as a set (car wise for DMC & TC) to BEML Bangalore Complex, after Inspection Clearance.
2. After Successful Installation of above Sub Assemblies at BEML, Bulk Production to be taken up after obtaining Clearance from BEML Inspection Team & supplies to be made car wise.
 - DMC Sub Assemblies- 4 Cars/Month
 - TC Sub Assemblies - 12 Cars/Month.

SCOPE OF SUPPLY OF MATERIALS:

1. BEML Scope:

1. Raw materials in the form of Plates/Sheets.
2. Channel, Rounds and Tubes in full Lengths.
3. Bought Out Items as per Annexure-A
4. Applicable Drawings.
5. Inspection Check Sheet

2. Vendor Scope:

1. All welding consumables, Paint Materials, Oils, Lubricants, Grease etc
2. Shots for Shot Blasting to grade SA 2.5 of ISO 8501-1-1988
3. Material Specification for Welding consumables, Heat Resistant, Rust Preventive Oils & paints and its expiry details shall be furnished to BEML for approval before manufacturing of the first proto Sub Assemblies.

LIST OF BOUGHT OUT ITEMS UNDER BEML SCOPE

Annexure-A

SI.NO	PART NO	DESCRIPTION	QTY/DMC	QTY/TC
1	M32006	BOLT 40 DIA X 60	16	0

