RFQ for
EOL Checking gauge-Integration

12th Apr 2025

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Overview

Secrecy/Confidentiality :
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PROJECT NAME	**M & M – U171**
SITE LOCATION	**Adient, Pune**
ANNUAL VOLUME	**120,000 car set**
PROGRAM LIFE	**7 YEARS**
QUOTE TYPE	**Final Production Equipment**

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1.SUPPLIER SCOPE OF WORK

Supplier will design & manufacture complete Workstations as per details in RFQ. After manufacturing, supplier will do trials & prove at their end and later after installation at Adient works location. Supplier should meet Adient's Quality, Safety & Cycle time requirements.
Supplier should comply to all requirements mentioned in RFQ. For any deviation, separate sign-off will be done.

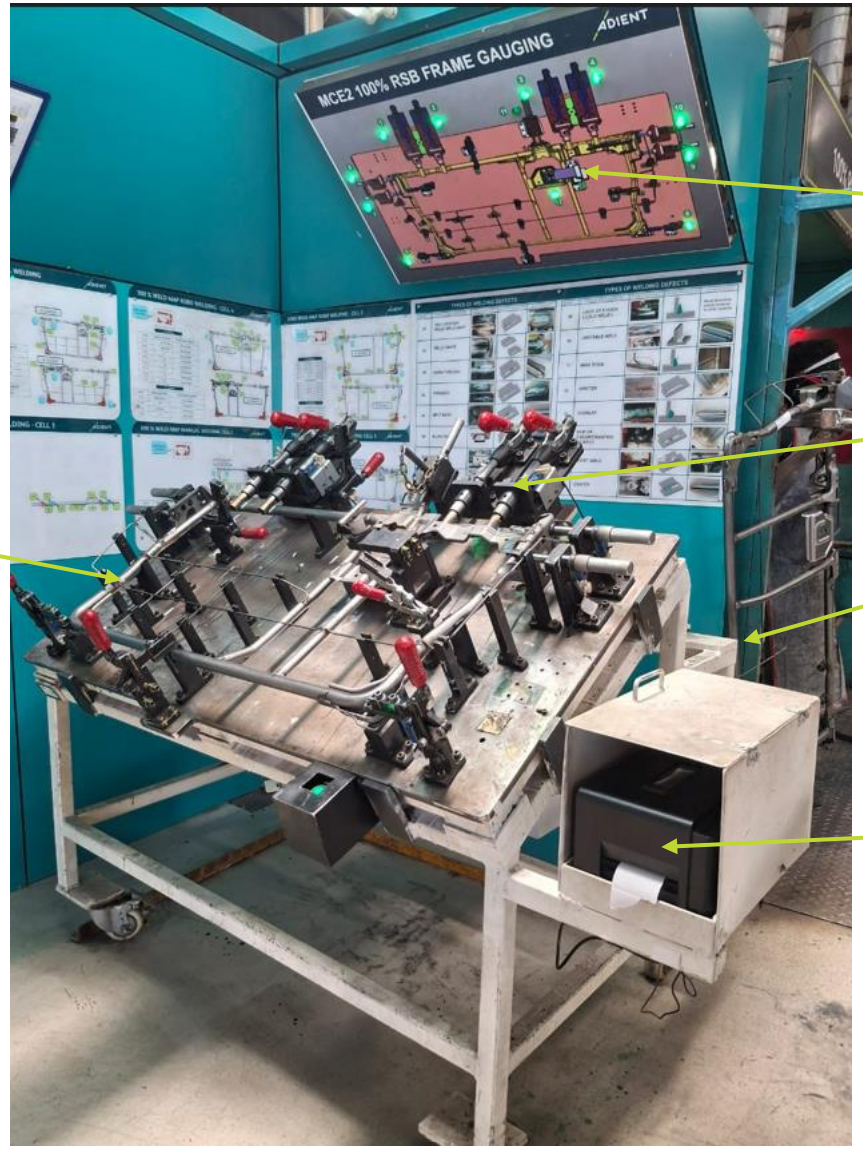
2.WORKSTATION DEFINATION & REFERENCE IMAGES

This is a EOL checking workstation. In this workstation, checking gauge of Metal Frame (FEB LH/RH or FSC LH/RH) is linked with Bar code printer to generate sticker for OK checked part.

In this workstation, completed welded frame (FEB LH/RH or FSC LH/RH) is loaded on checking gauge. Metal frame is rested on mounting pins. The position of resting area is detected by sensors. After this all checking pins and moving locator are moved inside to respective area of welded assembly. If all pins and locator reach to end position then part is considered as qualified to gauge and accordingly Bar code sticker is generated. This bar code sticked is pasted on OK checked part and scanned by handheld scanner. After this all pins are retraced and brought to original position. The Mimic then show blinking light to unload the part. After this part is unloaded from gauge and loaded in FG trolley
workstation controls through PLC & MIMIC Board. It has location pin end position sensors (magnetic sensors)

The workstation should have server connectivity

Reference images for RSB 100% Frame checking gauge with integration



RSB 100% Frame

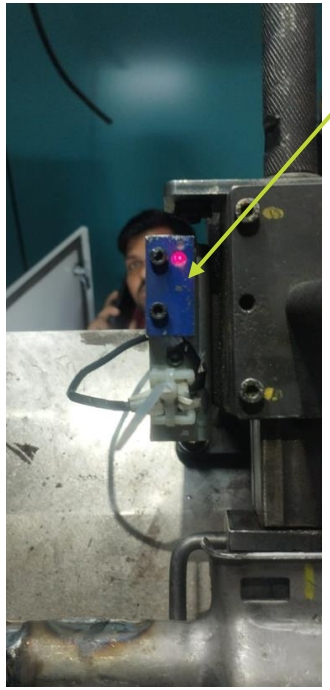
MIMIC Board

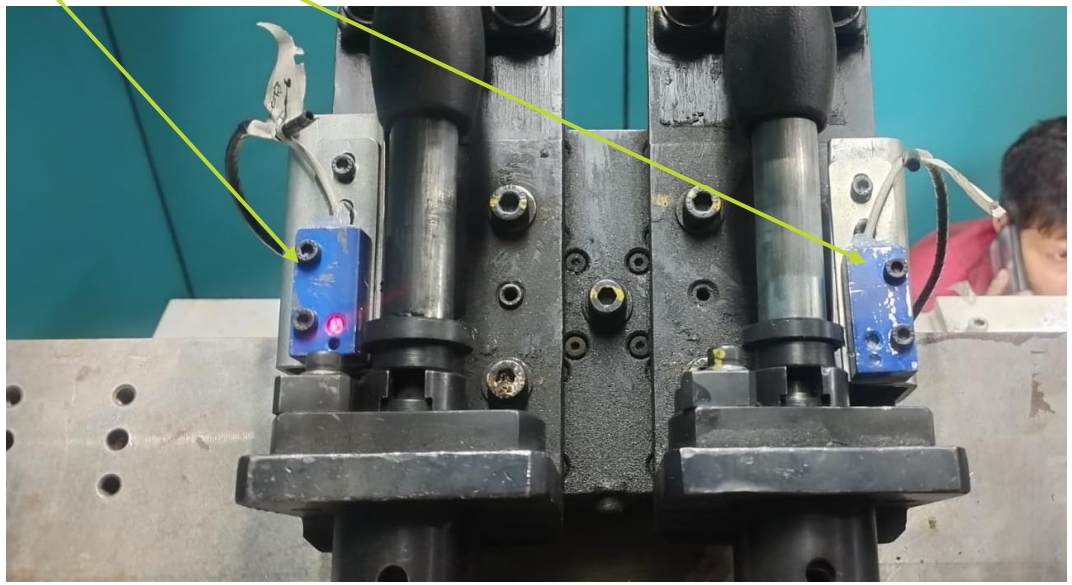
Checking gauge

Control Panel

Printer & Scanner

Magnetic sensor for end position sensing





3.WORKSTATION CONTENTS

Functional Area	SN	Content	Check
Adient Scope of Supply	1	Checking gauge	Checking gauge will be provided by Adient to supplier
Workstation Details	2	Control Panel	Main control panel will have required SMPS, PLC, Relays, Wire connectors etc.
			This panel will be mounted at suitable position for easy access & maintenance
			PLC-Siemens based on number of I/O
			Push button with light - Control ON, Push button with light - Control OFF, Display light – JOB OK
			RESET button
			Magnetic sensor for end position sensing. Number of sensor based on number pin. Appr. 20 Nos.
			Display Light - START CYCLE (with blinking light)
			MIMIC Board – Showing light for each checking position. Also showing sequence of checking by blinking next light
	3	Bar code printer & scanner	Zebra bar code printer (1 D/2D) & suitable scanner to be selected for traceability
Safety	4	LOTO	Proper mounting of Bar code printer & scanner to avoid any damages during regular working
			Main electrical switch of machine should have LOTO attachment

4.OPERATIONAL DETAILS

SN	Operation Description
1	Load Frame Assly. on checking gauge
2	Rest the part properly at resting block and location pin
3	Check MIMIC board for next blinking light for next checking position
4	Insert all location pin/block as per MIMIC board light sequence in the Frame assly.
5	After checking of location pins, MIMIC board will show blinking light for OK Frame Assly
6	Bar code printer will print sticker for OK Frame assly
7	Peel off sticker and stick at designed location on Frame assly
8	Pick up scanner and scan sticker
9	Move all location pin to home position. MIMIC will show Remove Frame Assly light
10	Remove Frame Assly from gauge and load on FG trolley

5. ADIENT INPUT FOR SYSTEM DESIGN

Adient will share detailed RFQ along with following data to the supplier

1.CAD Data (3D) for each assembly

2. Engineering Drawing of assembly & its child parts with all details

6. SYSTEM DESIGN REQUIREMENTS

1)Supplier will understand quality & functional requirement

2)Supplier & Adient will do necessary design reviews.

3)Supplier will take care of all safety interlocks during design

4)Integration sysyem should be maintenance friendly & easy to maintain

8) PLC logic should be edited from remote location through Data card using software like Teamviewer

After DAP sign off, Integration sysyem will be kicked off for manufacturing

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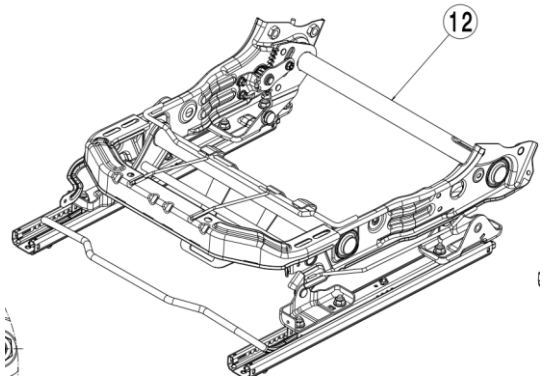
7. PRODUCT INFORMATION

FSC



8. RECOMMENDED MAKES

1. Electrical switchgears/Contactor : Schnider
2. Magnetic sensor – Local make
3. Push Buttons & Indicators – Schnider
4. Cables – Lapp
5. PLC – Siemens
6. SMPS/Power Supply – Meanwell/Omron
7. Control Panel & Machine Panel : Local make

All makes will be finalized at the time of DAP

9. ACCEPTANCE CRITERIA

1. Equipment run-off and trials will be held at supplier end.
2. All necessary Components will be provided by Adient before trials at supplier end.
3. Required consumables/compressed air/Electric supply will be arranged by supplier.
4. Trial production batch of minimum 100 nos. will be produced at supplier end to meet all Quality & Cycle time requirements
5. Supplier will provide facility for quality checking
6. Completed Equipment Qualification Form **&** safety analysis using the Adient Job Safety Analysis form.
7. No weld flash or burrs. No sharp corners or edges permitted in any area. Pinch points must be avoided

10.DOCUMENTATION, SPARES & TRAINING

1. Supplier will provide necessary Operating & Maintenance supplier's Manuals as Hardcopy & CD (pdf file) with following details
   1) System operating instructions
   2) Electrical diagram, wiring diagram
   3) Bill of Material (Electrical & Mechanical)
   4) List of recommended spare parts & wear parts (Electrical & Mechanical)
   5) Engineering drawing of wear part in pdf file
2. Supplier will provide necessary training to Adient personnel for Usage, Handling & Trouble shooting of complete system at supplier end during trials and at Adient plant during installation.

11.PACKING, TRANSPORTATION & INSTALLATION

1. Supplier is responsible for proper packaging of machine. For packaging machine should be mounted in heavy duty base wooden platform. Machine should be fixed to base wooden platform by bolts. Complete machine will be Shrink-wrapped to avoid any damage due to water. Machine should be covered with wooden sheets from all side & top side.
2. After packaging supplier will use proper lifting devices to safety load packed machine into Transport vehicle
3. Transport of machine from supplier end to Hinjewadi plant is supplier responsibility.
4. Machine unloading at Adient Hinjewadi plant will be done by Adient team, with recommended unloading instructions from supplier. Supplier should provide specific unloading instruction if any through e-mail communication to Adient Program manager, Launch Manger & AME before dispatch of system
5. Machine installation, integration and setup in Adient plant will be the responsibility of the suppler.
6. Adient will provide Required consumables/compressed air/water/Oil during installation.

12.TIMELINE

After receipt of PO/LOI from Adient, within one week period, supplier should provide timeline for implementation mentioning major milestones like

- Clarity of additional inputs required from Adient
- 1st Design review between Adient & supplier
- Final design review
- Receipt of manufactured & bought out parts
- Completion of assembly for 1st trials
- Completion of trials after corrections
- Final Trial run & equipment validation
- Equipment packing & dispatch etc.

13.WARRENTY, SUPPORT TILL SOP & AFTER SALES SUPPORT

1.Complete system should be warranted for 12 months from date of installation
2. After installation of system/machine in Adient, till SOP (Start of regular production) supplier should provide support for any technical issues with 24 hours.
3.After SOP till 1 year period, supplier should provide support for any technical issues with 24 hours

14.RFQ SIGN OFF

The selected supplier need to sign off with Company Seal on each page of RFQ as token of acceptance. The final machine/system will be checked against the signed RFQ details. Deviation sign off will be referred for any deviations.

Thank You