

मिश्र धातु निगम लिमिटेड

(भारत सरकार का उद्यम)

(मिनी रत्न कंपनी)

सुपर अलॉय्स प्लांट

निगमित पहचान सं. U14292TG1973GOI001660

डाकघर : कंचनबाग, हैदराबाद - 500 058. भारत

दूरभाष : 040-24184000 (श्रृंखला नं.)

फैक्स : 040-24340214, 24340280, 24340371

वेबसाइट : www.midhani.com



AN ISO 9001:2008 COMPANY

MISHRA DHATU NIGAM LIMITED

(A. Govt. of India Enterprise)

(MINI RATNA COMPANY)

SUPERALLOYS PLANT

CIN: U14292TG1973GOI001660

P.O. Kanchanbagh, Hyderabad - 500 058. India

Phone : 040-24184000 (Extn.)

Fax : 040-24340214, 24340280, 24340371

Website : www.midhani.com

CORRIGENDUM

Date: 03/12/2018

Tender Title : Procurement of stainless steel TP304L Forged Heat Treated & Proof Machined Bars.

Tender Ref No. : MDNL/PUR/4681115/RM/eADVT/270/18-19, dt. 12.11.2018

CORRIGENDUM TITLE: CHANGE IN SCOPE OF WORK, SPECIFICATION AND QAP.

This has reference to subject tender. The Corrigendum to the subject tender is hereby issued. All participating bidders are requested to note the changes in respect of the above subject tender.

S. No.	Existing Document Reference	Clarification / to be read as
1	Size- NIL	Size- \varnothing 260 +/- 5mm X L1000 +/-10 mm
2	Point No. L & M of Sl. No. 4 (Scope of Work)	Excluded (Deleted)
3	Initial QAP Document	Revised QAP Document enclosed.

It is advised that the above may please be taken into consideration while submitting your offer. You are advised to submit your offer accordingly

Yours Sincerely,
For Mishra Dhatu Nigam Limited


K. Raj Kumar

Dy. General Manager (Purchase)

VENDOR'S NAME & ADDRESS:

Manufacturing and Quality Plan for Bars

QP. NO.: QP/MDN/LT1

Specification: ASME SA 182 WITH REQUIREMENTS OF ASME SA 312 TP 304L AND TECHNICAL SPECIFICATION OF PO.
PO No: AWAITED

REV NO: 0 DATE: 30/11/2018

Size: OD 260 X L 1000 mm
Quantity: 1700 Nos

PAGE 1 OF 1

SL NO	COMPONENTS & OPERATIONS	CHARACTERISTICS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS																							
								* D	V	M																								
1	Steel Melting: EAF + LRF + VOD or any other route	Chemistry	Chemical analysis	1/Melt	Internal process sheet	<table border="1"> <thead> <tr> <th>Elements</th> <th>Range (% Wt.)</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>≤0.028</td> </tr> <tr> <td>Si</td> <td>≤0.5</td> </tr> <tr> <td>Mn</td> <td>≤1.8</td> </tr> <tr> <td>Ni</td> <td>09-13.0</td> </tr> <tr> <td>Cr</td> <td>18.0-20.0</td> </tr> <tr> <td>N</td> <td>0.06-0.09</td> </tr> <tr> <td>Cu</td> <td>≤0.3</td> </tr> <tr> <td>Co</td> <td>≤0.025</td> </tr> <tr> <td>S</td> <td>≤0.010</td> </tr> <tr> <td>P</td> <td>≤0.035</td> </tr> <tr> <td>Fe</td> <td>Balance</td> </tr> </tbody> </table>	Elements	Range (% Wt.)	C	≤0.028	Si	≤0.5	Mn	≤1.8	Ni	09-13.0	Cr	18.0-20.0	N	0.06-0.09	Cu	≤0.3	Co	≤0.025	S	≤0.010	P	≤0.035	Fe	Balance	1Top +1Bot of every Ingot sample shall be sent to MIDHANI for clearance for further processing	-	P	Delta ferrite < 0.5FN
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2	Forge to Round Billet	Forging Ratio	Dimensions	100%	Internal process sheet	Internal procedure	Forge log sheet	-	P	R	Reduction ratio >4:1 shall be given in TC																							
3	Annealing (at 1050 °C + sufficient time for soaking + Water quenching)	Soaking time & temperature	Record Verification	100%	As per procedure To be submitted to MIDHANI	As per procedure To be submitted to MIDHANI	HT log sheet	-	P	-	Actual HT cycle shall be given in TC																							
4	Testing of samples	Macrostructure (Etching test)	Check for laminations, cracks & other objectionable defects	(1 Top + 1 Bot) /Heat	As per ASTM E 381	As per ASME SA 312 and Technical specification	Test certificate	√	P	W																								

LEGEND: P: PERFORM, W: WITNESS, R: VERIFICATION/REVIEW. INDICATE M: MIDHANI/PCIL REPRESENTATIVE & V: FOR VENDOR, AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & R COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED FOR RECORDS.

APPROVED BY	APPROVED BY
VENDOR'S SIGNATURE & STAMP	PCIL QA SIGNATURE & STAMP
CUSTOMER'S SIGNATURE & STAMP	

VENDOR'S NAME & ADDRESS: **Manufacturing and Quality Plan for Bars**

Size: OD 260 X L 1000 mm
Quantity: 1700 Nos

Specification: ASME SA 182 WITH REQUIREMENTS OF ASME SA 312 TP 304L AND TECHNICAL SPECIFICATION OF PO.
PO No: AWAITED

QP. NO.: QP/MD/NT/1
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SL NO	COMPONENTS & OPERATIONS	CHARACTERISTICS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS
								D	V	M	
5	Product analysis (Chemistry)	Spectroscopic analysis	(1)Top + 1 Bot /Heat	As per ASME SA 312 and Technical specification	As per ASTM E 8 with sample extraction requirements as per technical specification	As per ASME SA 312 and Technical specification	Test certificate	✓	P	W	
6								Tensile testing	Tensile strength measurement on Universal testing machine.	1L+1T/h ea/HTB	As per ASTM E 10 and technical specification
7	Hardness test	Hardness of material	2No/He at/HTB	As per ASTM E 10 and technical specification	As per ASTM E 10 and technical specification	As per technical specification	Test certificate				
8								Grain size	Microscopic examination	1No/He at/HTB	As per ASTM E 112
9	IGC test	As per ASTM A262 Practice A	1No/He at/HTB	As per ASTM A262 Practice A with additional requirements as per technical specification	As per ASTM A262 Practice E with additional requirements (72 hrs boiling) as per technical specification	As per ASME SA 312 and Technical specification	Test certificate	✓	P	W	
10								IGC test	As per ASTM A262 Practice E	2 No/Heat /HTB	As per ASME SA 312 and Technical specification
11	Delta ferrite	Ferrite meter (Ferritoscope)	1No/He at/HTB	as per technical specification	as per technical specification	as per technical specification	Test certificate	✓	P	W	

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PREPARED BY: _____ APPROVED BY: _____

VENDOR'S SIGNATURE & STAMP: _____ NPCIL QA SIGNATURE & STAMP: _____ CUSTOMER'S SIGNATURE & STAMP: _____

VENDOR'S NAME & ADDRESS:		Manufacturing and Quality Plan for Cars				QP. NO.: QP/MDMLT/1					
Size: OD 260 X L 1000 mm Quantity: 1700 Nos		Specification: ASME SA 182 WITH REQUIREMENTS OF ASME SA 312 TP 304L AND TECHNICAL SPECIFICATION OF PO. PO No: AWAITED				REV NO: 0	DATE: 30/11/2018				
						PAGE 3 OF 1					
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									V	M	
12	Machining of bars to sizes	To the required dimensions	Dimensions	100%	As per PO and ASME SA 312 for wall thickness	As per PO and ASME SA 312 for wall thickness	Dimensional report	-	P	-	
13	Ultrasonic Examination	Internal Soundness	By Ultrasonic Test	100%	UT Procedure: to be submitted to MIDHANI	UT Procedure to be submitted to MIDHANI and technical specification	UT report	✓	P	W	Ensure freedom from cavities and slag inclusions.
14	Marking of Bars	Identification of Bars	Marking on one side flat portion of wall thickness	100%	as per technical specification	as per technical specification	-	-	P	R	
15	Hydrostatic pressure test	Hydrostatic pressure test	As per PO	1 No/heat	As per ASTM A 999/ A 999M and technical specification	as per technical specification	Test certificate	✓	P	10 % W	
16	Flattening test	Flattening of tubes	Flattening	1 No/Heat	As per ASME SA 312	As per ASME SA 312	Test certificate	✓	P	W	
17	Packing and Storage	Packing for protection from damage	Spot check		As per procedure to be submitted to MIDHANI	As per technical specification	Packing register	-	P	R	Normal packing

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		VENDOR'S SIGNATURE & STAMP	NPCIL QA SIGNATURE & STAMP	CUSTOMER'S SIGNATURE & STAMP