



QUALITY ASSURANCE DEPARTMENT

QA PLAN FOR: FORGINGS
QA PLAN NO: QSP/HG/104

PI NO: _____
REVISION: 01

DATE: 13/10/1993

SHEET 1 of 2

DATE: 14/01/2016

SL. NO.	COMPONENT/ASSY/ OPERATION	CHARACTERISTICS	CLASS	TYPE	QUANTUM OF CHECK	REF. DOC.	RECORD FORMAT	INSPECTION AGENCY	REMARKS
1.0	Forging stock (ingot or bloom)	a) Material certification b) Material identification	Major Major	Review Review	100% 100%	Spec/ Drawing Spec/ Drawing	TC TC	Supplier/BHEL/ Customer Supplier/BHEL/ Customer	
1.2	Forging	a) Visual and process checks b) Heat treatment	Major Critical	Review Heat treatment	100% 100%	Approved forging process Spec	Supplier QC record TC	Supplier/BHEL/ Customer Supplier/BHEL/ Customer	
		c) Marking of test samples as per drawing d) Chemical analysis	Major Major	Review Chem	100% Sample	Drawing Spec	Supplier QC record TC	Supplier/BHEL/ Customer Supplier/BHEL/ Customer	
		e) Mechanical analysis	Major	Mech	Sample	Spec	TC	Supplier/BHEL/ Customer	
		f) Ensure proof marking for availability of machining allowance	Major	Dimensional	100%	Drawing	Supplier QC record	Supplier/BHEL/ Customer	
		g) Marking of PF nos., etc. before rough machining	Major	Review	100%	Drawing	Supplier QC record	Supplier/BHEL/ Customer	
		h) Visual & dimensional checks of rough machined forgings	Major	Visual/ Dimensional	100%	Drawing	Supplier QC record	Supplier/BHEL/ Customer	

PREPARED BY: -SD-

CHECKED BY: -SD-

APPROVED BY: -SD-

DATE: 13/10/1993

REVISION 01: 1) "Important note" has been added. 2) The "Type" field was blank for 1.2 c) & 1.2 g). 3) The "Record format" field was blank for Sl. No. 1.2 c). 4) The format has been updated.

PREPARED BY: *[Signature]* 14/01/2016

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कृष्णा च. बंडारु

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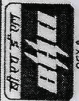
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		i) UT on forging and boroscopic examination	Major	NDT	100%	Drawing	TC	Supplier/BHEL/ Customer	
		j) Final marking of PF nos., heat nos., identification, etc.	Major	Review	100%	Drawing	TC	Supplier/BHEL/ Customer	
		k) Painting, preservation, and packing	Major	Review	100%	Drawing	TC	Supplier/BHEL/ Customer	

ABBREVIATIONS: NDT - Non Destructive Testing, Mech - Mechanical, Chem - Chemical, Elec - Electrical, Spec - Specification, TC - Test Certificate, QC - Quality Control

IMPORTANT NOTE: Some of the above-mentioned tests may be witnessed by the customer. This shall be intimated at a later date.

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