



QUALITY ASSURANCE DEPARTMENT

QA PLAN FOR: FORGINGS

QA PLAN NO: QSP/HG/104

DATE: 13/10/1993

PI NO: _____

REVISION: 01

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	Major	Review	100%	Spec/ Drawing	TC	Supplier/BHEL/ Customer	
		b) Material identification	Major	Review	100%	Spec/ Drawing	TC	Supplier/BHEL/ Customer	
1.2	Forging	a) Visual and process checks	Major	Review	100%	Approved forging process	Supplier QC record	Supplier/BHEL/ Customer	
		b) Heat treatment	Critical	Heat treatment	100%	Spec	TC	Supplier/BHEL/ Customer	
		c) Marking of test samples as per drawing	Major	Review	100%	Drawing	Supplier QC record	Supplier/BHEL/ Customer	
		d) Chemical analysis	Major	Chem	Sample	Spec	TC	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

CHECKED BY: *[Signature]* 14/01/16

APPROVED BY: *[Signature]* 15/01/2016

DATE: 14/01/2016

कृष्णा चै. बंडारु

KRISHNA C BANDARU

वरि अभियंता (अभिकल्प) / Sr. Engineer (D)
एच.जी.ई. प्रभाग / HGE Division
बी.एच.ई.एल., भोपाल / BHEL, BHOPAL

रितेश गजभिये / RITESH GAJBHIYE

वरि प्रबंधक (अभिकल्प) / Sr. Manager (D)

एच.जी.ई. प्रभाग / HGE Division
बी.एच.ई.एल., भोपाल / BHEL, BHOPAL





QUALITY ASSURANCE DEPARTMENT

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

DATE: 13/10/1993

PI NO: _____
REVISION: 01

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
		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.

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

CHECKED BY: *[Signature]* 14/01/16

APPROVED BY: *[Signature]*

DATE: 14/01/2016

कृष्णा चै बंडारु

KRISHNA C BANDARU
वरि अभियंता (अभिकल्प) / Sr. Engineer (D)
एच.जी.ई. प्रभाग / HGE Division
बी.एच.ई.एल., भोपाल / BHEL, BHOPAL

रितेश गजमिये / RITESH GAJBHIYE
वरि प्रबंधक (अभिकल्प) / Sr. Manager (D)
एच.जी.ई. प्रभाग / HGE Division
बी.एच.ई.एल., भोपाल / BHEL, BHOPAL

