

ANNEXURE-A		APPROVED SOURCES		
Mat Group	Vendor No	VENDOR NAME	Agent/ Manufacturer	Specification
		STRUCTURALS, BEAMS, CHANNELS		
STCAB	20258	CORUS UK LIMITED	Manufacturer	IS2062
	20261	DAEWOO CORPORATION	Manufacturer	IS2062
	20269	DILLING-GTS VENTES	Trader	IS2062
	20289	FERROMET	Manufacturer	IS2062
	11919	HARIYANA METALS LTD	Manufacturer	IS2062
	20326	HYUNDAI CORPORATION	Manufacturer	IS2062
	11927	INDIAN IRON & STEEL CO.LTD.	Manufacturer	IS2062
	12439	JINDAL STEEL & POWER LIMITED	Manufacturer	IS2062
	11939	JINDAL STEEL & POWER LIMITED	Manufacturer	IS2062
	14771	KANISHK STEEL INDUSTRIES Ltd.,	Manufacturer	IS2062
	20357	KRUPP HOESCH STAHL EXPORT GMBH	Manufacturer	IS2062
	20387	METAL ONE CORPORATION	Trader	IS2062
	20388	METALEXPORTIMPORT S.A.	Trader	IS2062
	20395	MOBAR ENGINEERING GMBH	Manufacturer	IS2062
	90030	Power Sector (Southern Region)	Trader	IS2062
	91051	R.S.JHAVERI & CO.	Agent	IS2062
	11540	RASHTRIYA ISPAT NIGAM LIMITED	Sales Office	IS2062
	17147	RASHTRIYA ISPAT NIGAM LIMITED,	Sales Office	IS2062
	20449	SALZGITTER MANNESMANN	Manufacturer	IS2062
	11609	SHAH BROTHERS & CO	Trader	IS2062
	10259	STEEL AUTHORITY OF INDIA LTD	Sales Office	IS2062
	91064	STEEL COMMODITIES CORPORATION	Agent	IS2062
	14103	SUJANA METAL PRODUCTS LIMITED	Manufacturer	IS2062
	20059	SUMITOMO CORPORATION	Trader	IS2062
	10267	SUMITOMO CORPORATION INDIA PVT	Agent	IS2062
	15928	THE INDIAN IRON & STEEL CO. LTD.,	Manufacturer	IS2062
	11929	THE INDIAN IRON & STEEL CO.LTD	Manufacturer	IS2062
	11928	THE INDIAN IRON & STEEL CO.LTD	Sales Office	IS2062
	12030	THE TATA IRON & STEEL CO.LTD.	Sales Office	IS2062
	20060	THYSSEN KRUPP STAHLUNION GMBH	Trader	IS2062
	20501	TRADE ARBED EXPORT S.A.	Manufacturer	IS2062
	14770	UNITED METAL INDUSTRIES,	Manufacturer	IS2062
	10289	V.D.SWAMI AND COMPANY LIMITED	Agent	IS2062
	17555	MAHAMAYA STEEL INDUSTRIES LTD	Manufacturer	IS2062
		PLATES		
Mat Group	Vendor No	VENDOR NAME	Agent/ Manufacturer	Specification
STCS1	10259	STEEL AUTHORITY OF INDIA LTD	Sales Office	SA515, SA516, SA203, SA204, SA240
	11912	STEEL AUTHORITY OF INDIA LTD	Manufacturer	SA515, SA516, SA203, SA204, SA240
	11958	LLOYDS STEEL INDUSTRIES LTD	Manufacturer	SA515, SA516, SA203, SA204, SA240
	11959	LLOYD STEEL INDUSTRIES LTD.,	Manufacturer	SA515, SA516, SA203, SA204, SA240
	13336	STEEL AUTHORITY OF INDIA LIMITED	Sales Office	SA515, SA516, SA203, SA204, SA240
	14370	ULTRATEST SYSTEMS LTD.,	Manufacturer	SA515, SA516, SA203, SA204, SA240
	14790	STEEL AUTHORITY OF INDIA LIMITED,	Sales Office	SA515, SA516, SA203, SA204, SA240
	15064	ESSAR STEEL LIMITED,	Manufacturer	SA515, SA516, SA203, SA204, SA240
	15871	STEEL AUTHORITY OF INDIA	Sales Office	SA515, SA516, SA203, SA204, SA240
	12439	JINDAL STEEL & POWER LIMITED	Manufacturer	IS2062A, B ASTMA36
	20060	THYSSEN KRUPP STAHLUNION GMBH	Trader	SA515, SA516, SA203, SA204, SA240
	20258	CORUS UK LIMITED	Manufacturer	SA515, SA516, SA203, SA204, SA240
				SA515, SA516, SA203, SA204, SA240,
	20269	DILLING-GTS VENTES	Manufacturer	ASTMA36
	20275	DUFERCO S.A.	Manufacturer	SA515, SA516, SA203, SA204, SA240
	20290	STEEL FORCE SOUTH ASIA N.V	Trader	SA515, SA516, SA203, SA204, SA240
				SA515, SA516, SA203, SA204, SA240,
	20332	INDUSTEEL FRANCE	Manufacturer	ASTMA36
				SA515, SA516, SA203, SA204, SA240,
	20339	LNM MARKETING FZE	Manufacturer	ASTMA36
	20387	METAL ONE CORPORATION	Manufacturer	SA515, SA516, SA203, SA204, SA240
				SA515, SA516, SA203, SA204, SA240,
	20395	MOBAR ENGINEERING GMBH	Manufacturer	ASTMA36
				SA515, SA516, SA203, SA204, SA240,
	20438	REINER BRACH GMBH & CO.KG	Manufacturer	ASTMA36
	20449	SALZGITTER MANNESMANN	Manufacturer	SA515, SA516, SA203, SA204, SA240
	20501	TRADE ARBED EXPORT S.A.	Manufacturer	SA515, SA516, SA203, SA204, SA240

Approved Sources For Stainless Steel

Mat Group	Vendor No	VENDOR NAME	Agent/ Manufactuerer	Specification
STSSP	13284.00	M/s Steel Authority of India Ltd - Chennai.	Manufacturer	SA240 TP 304, 309,310, 310S, 316,321, SA240TP 409,430,410, 410S
	11301.00	M/s. JSL Ltd, Chennai	Manufacturer	SA240 TP 304, 309,310, 310S, 316,321, SA240TP 409,430,410, 410S
	12069.00	M/s Shah Alloys Ltd., - Ahmedabad	Manufacturer	SA240 TP 304, 309,310, 310S, 316,321, SA240TP 409,430,410, 410S

Mat Group	Vendor No	VENDOR NAME	Agent/ Manufacturer	Specification
	20502	TRADE LINK COMPANY	Manufacturer	SA515, SA516, SA203, SA204, SA240
	20810	SAMSUNG CORPORATION	Manufacturer	SA515, SA516, SA203, SA204, SA240
	20911	ULTRATEST SYSTEMS LTD	Manufacturer	SA515, SA516, SA203, SA204, SA240
	20975	JSC ILLYICH IRON AND STEEL WORKS.	Manufacturer	SA515, SA516, SA203, SA204, SA240
	20976	OJSC DONETSK IRON AND STEEL WORKS	Manufacturer	SA515, SA516, SA203, SA204, SA240
	21660	MEGASTEEL SDN BHD,	Manufacturer	SA515, SA516, SA203, SA204, SA240
	91008	CORUS LIASION SERVICES (INDIA) LTD	Sales Office	SA515, SA516, SA203, SA204, SA240
	91009	D.K.CORPORATION	Agent	SA515, SA516, SA203, SA204, SA240
	91018	STEEL FORCE SOUTH ASIA	Agent	SA515, SA516, SA203, SA204, SA240
	91020	HANSA INDUSTRIES PVT LTD	Agent	SA515, SA516, SA203, SA204, SA240
	91035	MITSUBISHI CORPORATION INDIA PVT.LT	Sales Office	SA515, SA516, SA203, SA204, SA240
	91036	MOBAR INDIA LTD	Agent	SA515, SA516, SA203, SA204, SA240
	91047	INDUSTEEL PLATES INDIA DELHI PVT. L	Agent	SA515, SA516, SA203, SA204, SA240
	91051	R.S.JHAVERI & CO.	Agent	SA515, SA516, SA203, SA204, SA240
	91058	SAMSUNG CORPORATION	Sales Office	SA515, SA516, SA203, SA204, SA240
	91064	STEEL COMMODITIES CORPORATION	Agent	SA515, SA516, SA203, SA204, SA240
	91068	TRADE ARBED INDIA (LUXEMBOURG)	Sales Office	SA515, SA516, SA203, SA204, SA240
	91230	DHAMM STEEL SERVICES PVT LTD	Agent	SA515, SA516, SA203, SA204, SA240
	91355	INTER TRADE,	Agent	SA515, SA516, SA203, SA204, SA240
	91435	REINER BRACH GmbH & Co KG	Manufacturer	SA515, SA516, SA203, SA204, SA240
		PLATES & SHEETS - CARBON		
Mat Group	Vendor No	VENDOR NAME	Agent/ Manufacturer	Specification
STCSP	10126	KALPANA STEEL CENTRE	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	10259	STEEL AUTHORITY OF INDIA LTD	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	10262	STEELMET INDUSTRIES	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	11047	CHAMPAK STEEL & ENGINEERING CO	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	11682	STEEL AUTHORITY OF INDIA LTD	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	11912	STEEL AUTHORITY OF INDIA LTD	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	11958	LLOYDS STEEL INDUSTRIES LTD	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	11959	LLOYD STEEL INDUSTRIES LTD.,	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	12952	STEEL AUTHORITY OF INDIA LTD	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	13335	STEEL AUTHORITY OF INDIA LIMITED	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	13336	STEEL AUTHORITY OF INDIA LIMITED	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	14307	STEEL AUTHORITY OF INDIA LTD	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	14308	STEEL AUTHORITY OF INDIA LTD	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	14790	STEEL AUTHORITY OF INDIA LIMITED,	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	14857	STEEL AUTHORITY OF INDIA LIMITED	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	15064	ESSAR STEEL LIMITED,	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	15305	STEEL AUTHORITY OF INDIA LIMITED	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	15871	STEEL AUTHORITY OF INDIA	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	15928	THE INDIAN IRON & STEEL CO. LTD.,	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	16754	STEEL AUTHORITY OF INDIA LIMITED,	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	17400	STEEL AUTHORITY OF INDIA LIMITED,	Sales Office	IS277, 513, 1079, 2002, 2062, 3502
	20060	THYSSEN KRUPP STAHLUNION GMBH	Trader	IS277, 513, 1079, 2002, 2062, 3502
	20211	ALLEGHENY TECHNOLOGIES TAIWAN INC	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	20220	BAOSTEEL TRADING EUROPE GMBH	Trader	IS277, 513, 1079, 2002, 2062, 3502
	20258	CORUS UK LIMITED	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	20269	DILLING-GTS VENTES	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	20290	STEEL FORCE SOUTH ASIA N.V	Trader	IS277, 513, 1079, 2002, 2062, 3502
	20387	METAL ONE CORPORATION	Trader	IS277, 513, 1079, 2002, 2062, 3502
	20449	SALZGITTER MANNESMANN	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502, ASTMA36
	20501	TRADE ARBED EXPORT S.A.	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	20810	SAMSUNG CORPORATION	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	21133	PT GUNUNG RAJA PAKSI	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	21660	MEGASTEEL SDN BHD,	Manufacturer	IS277, 513, 1079, 2002, 2062, 3502
	91047	INDUSTEEL PLATES INDIA DELHI PVT. L	Agent	IS277, 513, 1079, 2002, 2062, 3502
	91051	R.S.JHAVERI & CO.	Agent	IS277, 513, 1079, 2002, 2062, 3502
	91064	STEEL COMMODITIES CORPORATION	Agent	IS277, 513, 1079, 2002, 2062, 3502
	91235	JBB INTERNATIONAL,	Agent	IS277, 513, 1079, 2002, 2062, 3502
	91355	INTER TRADE,	Agent	IS277, 513, 1079, 2002, 2062, 3502

APPROVED SOURCES FOR ERW TUBES

Mat Group	Matl Description	Vendor No	Vendor Name	Agent	Mill Details	TDC
TPERT	TUBES: ERW BLACK	10276	TATA STEEL LIMITED., Chennai	Sales Office	Tata Steel , Jamshedpur	AS PER BHEL TDC
		11300	JINDAL PIPES LTDGurgaon.	Manufacturer	JINDAL PIPES LTD .,Gurgaon. Ghaziabad	AS PER BHEL TDC
		11304	JOTINDRA STEEL & TUBES LTD.Faridabad	Manufacturer	JOTINDRA STEEL & TUBES LTD.Faridabad	AS PER BHEL TDC
		11815	ZENITH LIMITED , Mumbai	Manufacturer		AS PER BHEL TDC
		11842	BHUSHAN POWER & STEEL LIMITED, Chennai	Manufacturer	CHANDIGARH	AS PER BHEL TDC
		11990	P.S.STEEL TUBES LTD, UNIT II, Bhilai	Manufacturer	BHILAI	AS PER BHEL TDC
		12028	TUBE PRODUCTS OF INDIA , Chennai	Manufacturer	TUBE PRODUCTS OF INDIA , Chennai	AS PER BHEL TDC
		13895	KLT AUTOMOTIVE	Manufacturer	Maharastra	AS PER BHEL TDC
		16011	BIHAR TUBES LTD	Manufacturer	Chennai	AS PER BHEL TDC
		16816	SWASTIK PIPES LIMITED,	Manufacturer	BAHADURGARH &KOSIKALAN PLANTS., Haryana	AS PER BHEL TDC
		16820	CAPARO ENGINEERING INDIA PVT. LTD.,	Manufacturer	DEWAS TUBE PLANT. & Chennai	AS PER BHEL TDC

Approved Sources for Cast Steel Items				
Mat Group	Vendor No	Vendor Name	Agent	Description
CFSCC	17845	KARAMADAI STEEL & ALLOY (P) LTD.,	Manufacturer	CASTINGS:STEEL
CFSCC	17625	GNAT FOUNDRY PVT. LTD.,	Manufacturer	CASTINGS:STEEL
CFSCC	17545	HYPER STEEL CASTING PVT. LTD.,	Manufacturer	CASTINGS:STEEL
CFSCC	16647	SHREE KUMARAN ALLOYS	Manufacturer	CASTINGS:STEEL
CFSCC	16235	TRUEFIT ENGINEERING CO. LTD.,	Manufacturer	CASTINGS:STEEL
CFSCC	16145	SHREE HARIE STEEL & ALLOYS	Manufacturer	CASTINGS:STEEL
CFSCC	16115	PTC INDUSTRIES LTD	Manufacturer	CASTINGS:STEEL
CFSCC	13451	NMVST ALLOY CAST	Manufacturer	CASTINGS:STEEL
CFSCC	11827	ACC-NIHON CASTINGS LTD	Manufacturer	CASTINGS:STEEL
CFSCC	11793	VIVEK ENGINEERING CORPORATION	Manufacturer	CASTINGS:STEEL
CFSCC	11741	TOUGH CASTING PVT LTD	Manufacturer	CASTINGS:STEEL
CFSCC	10286	ULTIMATE ALLOYS PVT LTD	Manufacturer	CASTINGS:STEEL
CFSCC	10185	KOSO FLUID CONTROLS (P) LTD	Manufacturer	CASTINGS:STEEL
CFSCC	10130	KRISHNA ENGG.CO.(P) LTD	Manufacturer	CASTINGS:STEEL
CFSCC	10100	HARIHAR ALLOY CASTINGS PVT. LTD	Manufacturer	CASTINGS:STEEL
CFSCC	10075	ELECTRALLOY SPL STEEL CASTINGS	Manufacturer	CASTINGS:STEEL
CFSCC	10025	HYDERABAD CASTINGS LIMITED	Manufacturer	CASTINGS:STEEL
CFSCC	10022	ASHUTOSH CASTINGS LIMITED	Manufacturer	CASTINGS:STEEL
CFSCC	10010	ALLIED CASTING SERVICES	Manufacturer	CASTINGS:STEEL
Mat Group	Vendor No	Vendor Name	Agent	Description
CFSGC	17336	KIRLOSKAR FERROUS INDUSTRIES LTD.,	Manufacturer	CAST:SG IRON
CFSGC	16115	PTC INDUSTRIES LTD	Manufacturer	CAST:SG IRON
CFSGC	11994	PRAVEEN FOUNDRY (P) LTD	Manufacturer	CAST:SG IRON
CFSGC	11793	VIVEK ENGINEERING CORPORATION	Manufacturer	CAST:SG IRON
CFSGC	10860	SOUTHERN ALLOY FOUNDRIES P Ltd	Manufacturer	CAST:SG IRON
CFSGC	10460	M.R.ENGINEERING WORKS	Manufacturer	CAST:SG IRON
CFSGC	10357	SANDFITS FOUNDRIES PVT LTD	Manufacturer	CAST:SG IRON
CFSGC	10273	SUPERTECH CASTINGS PVT LTD	Manufacturer	CAST:SG IRON
CFSGC	10232	SANPREET CASTINGS PVT LTD	Manufacturer	CAST:SG IRON
CFSGC	10204	PSG & SONS CHARITIES	Manufacturer	CAST:SG IRON
CFSGC	10135	M.V.FOUNDRY	Manufacturer	CAST:SG IRON
CFSGC	10130	KRISHNA ENGG.CO.(P) LTD	Manufacturer	CAST:SG IRON
CFSGC	10027	BANGALORE MALLEABLE CASTINGS P LTD	Manufacturer	CAST:SG IRON
Mat Group	Vendor No	Vendor Name	Agent	Description
CFCIC	17625	GNAT FOUNDRY PVT. LTD.,	Manufacturer	CAST:CASTIRON
CFCIC	17336	KIRLOSKAR FERROUS INDUSTRIES LTD.,	Manufacturer	CAST:CASTIRON
CFCIC	13950	TRUEFIT ENGINEERING CO. LTD	Manufacturer	CAST:CASTIRON
CFCIC	13643	SANTHI CASTING WORKS,	Manufacturer	CAST:CASTIRON
CFCIC	11994	PRAVEEN FOUNDRY (P) LTD	Manufacturer	CAST:CASTIRON
CFCIC	11793	VIVEK ENGINEERING CORPORATION	Manufacturer	CAST:CASTIRON
CFCIC	10460	M.R.ENGINEERING WORKS	Manufacturer	CAST:CASTIRON
CFCIC	10357	SANDFITS FOUNDRIES PVT LTD	Manufacturer	CAST:CASTIRON
CFCIC	10327	SOUND CAST	Manufacturer	CAST:CASTIRON
CFCIC	10135	M.V.FOUNDRY	Manufacturer	CAST:CASTIRON
CFCIC	10130	KRISHNA ENGG.CO.(P) LTD	Manufacturer	CAST:CASTIRON
CFCIC	10010	ALLIED CASTING SERVICES	Manufacturer	CAST:CASTIRON
Mat Group	Vendor No	Vendor Name	Agent	Description
CFIVC	17336	KIRLOSKAR FERROUS INDUSTRIES LTD.,	Manufacturer	CAST:INVESTMENT
CFIVC	17261	THIRUMALA PRECICASTS PVT. LTD.,	Manufacturer	CAST:INVESTMENT
CFIVC	16115	PTC INDUSTRIES LTD	Manufacturer	CAST:INVESTMENT
CFIVC	15062	ALLTECH TECHNO CAST PVT. LTD.,	Manufacturer	CAST:INVESTMENT
CFIVC	11997	PRECICAST CORPORATION	Manufacturer	CAST:INVESTMENT
CFIVC	11221	HI-TECH INVESTMENT CASTINGS LTD	Manufacturer	CAST:INVESTMENT
CFIVC	10193	PLYCAST (DELHI) PVT LTD	Manufacturer	CAST:INVESTMENT
CFIVC	10178	OMNICAST PRECISION PRODUCTS P.LTD	Sales Office	CAST:INVESTMENT
CFIVC	10153	MGM INDUSTRIES	Manufacturer	CAST:INVESTMENT
CFIVC	10136	GENERAL FOUNDRIES (P) LTD	Manufacturer	CAST:INVESTMENT
CFIVC	10120	INTRICAST PVT LTD	Manufacturer	CAST:INVESTMENT
CFIVC	10060	CREATIVE CASTINGS LTD.	Manufacturer	CAST:INVESTMENT

ANNEXURE B
QUALILTY WORK INSTRUCTIONS

SUPPLY OF STRUCTURES, AUTO WELDBOXES & BEAMS, COLUMNS & DUCTS FOR 250 & 500 MW BOILERS				
SL. NO.	TYPE OF DOCUMENT	REF. NO.	REVISION	DESCRIPTION
1.	Quality Plan	SQP: NP:01	03	BOILER DUCTS & HOPPERS.
2.	Quality Control Procedure	QCP: 002	02	Non-Pressure part work.
3.	Standard Inspection Procedure	SIP: NP:07	01	Welding qualification for Structural application.
4	Standard Inspection Procedure	SIP: NP:05	01	Procedures for Kerosene Leak test
5	Standard Inspection Procedure	SIP: NP:06	01	Procedures for visual inspection of non-pressure parts
6.	Standard Painting Scheme	SIP: PP: 22	05*	Procedure for Surface Preparation and Painting
7.	Special Painting scheme	QPLC3PS06 49-651	00	NTPC Aravali –Jhajjar Painting scheme
8.	Raw material TDC	TDC:0: 313	01	Raw material requirements for manufacture of Columns and other structural components by sub Contractors with vendor's materials.
9.	Quality Plan	SQP: NP:06	03	Columns and Ceiling Girders
10.	Standard Inspection Procedure	SIP: NP:02	02	Trial assembly of Columns Ceiling Girders monorail and runway beams
11.	Quality Plan	SQP: NP:07	03	General Structural
12.	Standard inspection Procedure	SIP: NP:09	01	Trial assembly of Diagonal bracing
13.	Contract Inspection Procedure	CIP: 033	07	Process Control of Welding of Columns and Ceiling girders (for NTPC)
14	Contract Quality Plan	CQP: 1476	04	Ceiling Girders, Columns – Horizontal and built up beams (for NTPC)

* SIP: PP:22 is our General painting procedure. However, special painting with blast cleaning is required for some of the customers, similar to projects for NTPC as given in Sl. No. 7.

Note : For Full details please refer to our CD

ANNEXURE "C"		APPROVED IST OF VENDORS FOR PAINTS		
Mat Group	Material Group Description	Vendor No	VENDOR NAME	Agent/ Manufacturer
PGPH1	HR.Al.Paint Gr-I	10323	STAR PAINT & OIL INDUSTRIES	Manufacturer
		10242	SHALIMAR PAINTS LTD.	Manufacturer
PGPH1	HR.Al.Paint Gr-I	10031	BERGER PAINTS INDIA LTD.,	Manufacturer
PGPH2	H.R.ALUMINIUM PAINTS	10442	ASIAN PAINTS LTD	Manufacturer
		10323	STAR PAINT & OIL INDUSTRIES	Manufacturer
		10242	SHALIMAR PAINTS LTD.	Manufacturer
		10095	KANSAI NEROLAC PAINTS LIMITED,	Manufacturer
PGPH2		10031	BERGER PAINTS INDIA LTD.,	Manufacturer
PGPH3		10442	ASIAN PAINTS LTD	Manufacturer
		10324	BOMBAY PAINTS LTD	Manufacturer
		10323	STAR PAINT & OIL INDUSTRIES	Manufacturer
		10242	SHALIMAR PAINTS LTD.	Manufacturer
		10095	KANSAI NEROLAC PAINTS LIMITED,	Manufacturer
PGPH3	H.R.ALUMINIUM PAINTS	10031	BERGER PAINTS INDIA LTD.,	Manufacturer
PGPTC	:PAINTS & THINNER	10635	PASU MEENA PAINTS INDUSTRIES	Manufacturer
		10442	ASIAN PAINTS LTD	Sales Office
		10325	SRI MEENAAKSHI PAINT INDUSTRIES	Manufacturer
		10324	BOMBAY PAINTS LTD	Sales Office
		10308	WESTERN INDIA PAINT& COLOUR CO. (P)	Manufacturer
		10268	SUNDARAM PAINTS PVT LTD	Manufacturer
		10242	SHALIMAR PAINTS LTD.	Manufacturer
		10174	NOVAA PAINTS	Manufacturer
		10095	KANSAI NEROLAC PAINTS LIMITED,	Manufacturer
PGPTC	:PAINTS & THINNER	10031	BERGER PAINTS INDIA LTD.,	Sales Office
PGPTE	EPOXY BASED PAINTS &	10865	SIGMAKALON INDIA PVT.LTD.,	Manufacturer
		10442	ASIAN PAINTS LTD	Sales Office
		10324	BOMBAY PAINTS LTD	Sales Office
		10242	SHALIMAR PAINTS LTD.	Manufacturer
		10031	BERGER PAINTS INDIA LTD.,	Sales Office
PGPTE	EPOXY BASED PAINTS &	10007	AKZO NOBEL COATINGS INDIA PVT. LTD	Manufacturer
PGPTF	EPOXY FINISH PAINTS	10865	SIGMAKALON INDIA PVT.LTD.,	Manufacturer
		10442	ASIAN PAINTS LTD	Sales Office
		10324	BOMBAY PAINTS LTD	Sales Office
		10242	SHALIMAR PAINTS LTD.	Manufacturer
		10056	CHEMGUARD COATINGS LIMITED,	Manufacturer
		10031	BERGER PAINTS INDIA LTD.,	Sales Office
PGPTF	EPOXY FINISH PAINTS	10007	AKZO NOBEL COATINGS INDIA PVT. LTD	Manufacturer
PGPTP	SPECIAL PRIMER PAINT	10865	SIGMAKALON INDIA PVT.LTD.,	Manufacturer
		10442	ASIAN PAINTS LTD	Sales Office
		10324	BOMBAY PAINTS LTD	Sales Office
		10242	SHALIMAR PAINTS LTD.	Manufacturer
		10031	BERGER PAINTS INDIA LTD.,	Sales Office
PGPTP	SPECIAL PRIMER PAINT	10007	AKZO NOBEL COATINGS INDIA PVT. LTD	Manufacturer
PGRPF	PSS:RUST PREV.FLUID	10835	INDIAN OIL CORPORATION LIMITED	Manufacturer
		10308	WESTERN INDIA PAINT& COLOUR CO. (P)	Manufacturer
		10268	SUNDARAM PAINTS PVT LTD	Manufacturer
PGRPF	RUST PREV.FLUID	10192	PLASTIPEEL CHEMICALS & PLASTIC	Manufacturer
NOTE As far as possible, for all industrial paints, primers, intermediate and finish paints shall be procured (and used) from the same supplier to accommodate compatability with each other.				

BHARAT HEAVY ELECTRICALS LIMITED						
TIRUCHIRAPALLI-620014						
SUPPLIER DEVELOPMENT CELL						
LIST OF APPROVED WELDING CONSUMABLES SUPPLIERS						
AS ON : 05.02.2009.						
SL NO.	MATL GROUP	SPECIFICATION	SUPPLIER CODE	VENDOR NAME / PLACE	BRAND NAME	APPLICATION FOR
1	ATFFL	SAW FLUX WCPI-412	10081	ESAB INDIA LTD	OK.FLUX 10.81LS	
2	DRMFL	SAW FLUX WCPI-403	20047	NIKKO BOEKI COMPANY,JAPAN	MF-38	
	DRMFL	SAW FLUX WCPI-403	11712	TAPADIA ENGINEERS & TRADERS P.LTD.	TAPADIA GR-80M	
	DRMFL	SAW FLUX WCPI-403	10305	WELD WELL SPECIALITY PVT LTD	MF-38	
3	FINFL	SAW FLUX WCPI-405	11299	JHAVERI WELD FLUX LTD	CYLVWELD-44	
4	HESFL	ER309LMO	20476	AB.SANDVIK STEEL		
5	IMPFL	SAW FLUX WCPI-410	10081	ESAB INDIA LTD	OK FLUX.10.62	
	IMTFL	SAW FLUX WCPI-411	10081	ESAB INDIA LTD	OK.FLUX 10.71L	
6	MIGW1	ER80S-G (1/2MO) GMAW WIRE	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	BOHLER DMO -1G	
	MIGW1	ER80S-G (1/2MO) GMAW WIRE	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION I Mo	
	MIGW1	ER80S-G (1/2MO) GMAW WIRE	91033	MERIDIAN EXPORTS	BOHLER DMO -1G	
	MIGW1	ER80S-G (1/2MO) GMAW WIRE	20047	NIKKO BOEKI COMPANY,JAPAN	MGS-M	
	MIGW1	ER80S-G (1/2MO) GMAW WIRE	10305	WELD WELL SPECIALITY PVT LTD	MGS-M	
7	MIGW2	ER80S-G (1CR 1/2MO) GMAW WIRE	21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A.,ITALY	INEFIL B2	
	MIGW2	ER80S-G (1CR 1/2MO) GMAW WIRE	91033	MERIDIAN EXPORTS	INEFIL B2	
	MIGW2	ER80S-G (1CR 1/2MO) GMAW WIRE	21411	METRODE PRODUCTS, U.K.	METRODE ER80S-B2	
	MIGW2	ER80S-G (1CR 1/2MO) GMAW WIRE	20047	NIKKO BOEKI COMPANY,JAPAN	MGS-1CM	
	MIGW2	ER80S-G (1CR 1/2MO) GMAW WIRE	10305	WELD WELL SPECIALITY PVT LTD	MGS-1CM	
8	MIGW3	ER90S-G(2.25CR 1MO) GMAW WIRE	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION I CrMo 910	
	MIGW3	ER90S-G(2.25CR 1MO) GMAW WIRE	21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A.,ITALY	INEFIL B3	
	MIGW3	ER90S-G(2.25CR 1MO) GMAW WIRE	91033	MERIDIAN EXPORTS	INEFIL B3	
	MIGW3	ER90S-G(2.25CR 1MO) GMAW WIRE	21411	METRODE PRODUCTS, U.K.	METRODE ER80S-B3	
	MIGW3	ER90S-G(2.25CR 1MO) GMAW WIRE	20047	NIKKO BOEKI COMPANY,JAPAN	MGS-2CM	
	MIGW3	ER90S-G(2.25CR 1MO) GMAW WIRE	10305	WELD WELL SPECIALITY PVT LTD	MGS-2CM	
9	MIGW4	ER347 GMAW WIRE	91033	MERIDIAN EXPORTS	UTP A 68	

SL NO.	MATL GROUP	SPECIFICATION	SUPPLIER CODE	VENDOR NAME / PLACE	BRAND NAME	APPLICATION FOR
	MIGW4	ER347 GMAW WIRE	20047	NIKKO BOEKI COMPANY,JAPAN	MGS-347Si	
	MIGW4	ER347 GMAW WIRE	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP A 68	
	MIGW4	ER347 GMAW WIRE	10305	WELD WELL SPECIALITY PVT LTD	MGS-347Si	
10	MIGW5	ERNICR3 GMAW WIRE	20047	NIKKO BOEKI COMPANY,JAPAN	MGS-70NCb	
	MIGW5	ERNICR3 GMAW WIRE	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP A 068 HH	
	MIGW5	ERNICR3 GMAW WIRE	10305	WELD WELL SPECIALITY PVT LTD	MGS-70NCb	
11	MIGW6	MIG ER90S-B9 GMAW WIRE	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	BOHLER C9 MV-1G	
	MIGW6	MIG ER90S-B9 GMAW WIRE	20563	BOHLER THYSEN SCHWEISSTECHNIK	THERMANIT MTS-3	
	MIGW6	MIG ER90S-B9 GMAW WIRE	21411	METRODE PRODUCTS, U.K.	9CrMoV-N MIG	
	MIGW6	MIG ER90S-B9 GMAW WIRE	21410	OERLIKON WELDING LTD., SWITZERLAND		
12	MIGW7	ER70S-6 CO2 WIRE	10785	ADOR WELDING LIMITED	AUTOMIG - 1	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	14791	ANAND ARC ELECTRODES PVT. LTD.,CHENNAI.	ANAND MIG 1	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	10081	ESAB INDIA LTD.,CHENNAI	ESAB MW1	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	16166	EVERSHINE WIRES	SHINE ARC -1	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	16661	KLINWELD WIRES PVT. LTD.,MUMBAI.	KLINWELD.	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	15100	MANTEK WIRESS	MANTEK MIG	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	13906	MARUTI WELD LTD.	ER 70S-6	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	14340	NALLI ARC INDUSTRIE	NALLI ARC	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	16662	NATIONAL ENGINEERING ENTERPRISES, JAMSHEDPUR	CARBOMIG S6	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	15810	NOUVEAX INDUSTRIES (P) LTD,KANGAYAM	NOUVARC	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	13693	RASI ELECT.,CHENNAI	RASI CO2	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	14428	SHAKUNT ENTERPRISES PVT LTD,LUDHIANA.	SANWALKA.	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	16575	STANDARD WIRE PRODUCTS.	STAR	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	15085	VOLTARC ELECTRODE PVT. LTD.,TIRUPATHI	AUTOFIL - 6	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	14455	WIRE & WIRE PRODUCTS, CHENNAI	ESSARC	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	11288	JAGSHANN INDUSTRIES.NAGPUR	JAGM1	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	17842	PRECISION DRAWEL PVT. LTD., NAGPUR	PRECISION	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	17841	PRASHANTH CYLINDERS PVT. LTD., BANGALORE.	PRAWELD	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	16548	WELD EXCEL INDIA LTD., LUDHIANA	EXCEL MAG1	STRUCTURAL
	MIGW7	ER70S-6 CO2 WIRE	17644	VARUN ELECTRODES PVT. LTD.,CHENNAI	PRIMA	STRUCTURAL

SL NO.	MATL GROUP	SPECIFICATION	SUPPLIER CODE	VENDOR NAME / PLACE	BRAND NAME	APPLICATION FOR
13	P91FL	SAW FLUX ASME SFA 5.23	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	BOHLER BB 910	
	P91FL	SAW FLUX ASME SFA 5.23	20563	BOHLER THYSSEN SCHWEISSTECHNIK	MARATHON 543	
	P91FL	SAW FLUX ASME SFA 5.23	10081	ESAB INDIA LTD.,CHENNAI	OK 10.93	
	P91FL	SAW FLUX ASME SFA 5.23	21411	METRODE PRODUCTS, U.K.	LA 491	
	P91FL	SAW FLUX ASME SFA 5.23	20047	NIKKO BOEKI COMPANY,JAPAN		
	P91FL	SAW FLUX ASME SFA 5.23	21410	OERLIKON WELDING LTD., SWITZERLAND		
14	PIPFL	SAW FLUX WCPI 404	10081	ESAB INDIA LTD	ESAB BRD-1	
	PIPFL	SAW FLUX WCPI 404	11299	JHAVERI WELDFLUX LTD	FJB-1.2	
15	PPMFL	PPM FLUX WCPI - 409	12184	LAKSHMI CHEMICAL INDUSTRIES	LAK-40	
	PPMFL	PPM FLUX WCPI - 409	11701	SUPER WELD PRODUCTS	SWP-50	
16	SSOFL	SS OVERLAY FLUX WCPI 407	10785	ADOR WELDING LIMITED	AUTOMELT S-76	
	SSOFL	SS OVERLAY FLUX WCPI 407	10015	ANITA FLUXES ALLOY SPECIALITY	ST-410	
17	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	10785	ADOR WELDING LIMITED	AUTOMELT Gr. II	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	12184	LAKSHMI CHEMICALS INDS., TRICHY	LAXMI FLUX	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	13691	MANTEK WELDED FLUX CO	MANTEK - 22	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	14593	RMH CHEMICAL,TRICHY-15	RMH Autoweld Gr.I	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	14309	S.CHEM&ALLIED PRODUCTS PRIVATE. LTD	SURE FLUX GP	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	11701	SUPER ELEC INDS, TRICHY	SUPER S41	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	11701	SUPERWELD PRODUCTS, PULIVALAM	SWP40T	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	15099	THERMIT ALLOYS LTD., SHIMOGA	CONWELD - RM	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	15810	NOUVARC INDUSTRIES (P) LTD. KANGAYAM	NOUVOFLUX	STRUCTURAL
	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	13211	D&H WELDING ELECTRODES (INDIA) LTD.	SUPERMELT II	STRUCTURAL

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	STRFL	SAW FLUX FOR STRUCTURAL APPLICATION	11712	TAPADIA ENGINEERS & TRADERS P.LTD.	TPD-50	STRUCTURAL
18	TIGW1	ER70S -A1 GTAW ROD	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	BOHLER DMO-1G	
	TIGW1	ER70S -A1 GTAW ROD	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION I Mo	
	TIGW1	ER70S -A1 GTAW ROD	15083	MARUTHI ELECTRODES (P) LTD	MARUTHI TA1	
	TIGW1	ER70S -A1 GTAW ROD	20047	NIKKO BOEKI COMPANY,JAPAN	TGS-M	
	TIGW1	ER70S -A1 GTAW ROD	20067	UTP SCHWEISS MATERIAL GMBH & C	A642	
	TIGW1	ER70S -A1 GTAW ROD	10305	WELD WELL SPECIALITY PVT LTD	TGS-M	
	TIGW1	ER70S -A1 GTAW ROD	10774	D&H SECHERON ELECTRODES PVT LTD.	F Cr Mo	
19	TIGW2	ER80SG 1.25CR 1/2MO GTAW ROD	21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A.,ITALY	INETIG B2	
	TIGW2	ER80SG 1.25CR 1/2MO GTAW ROD	91033	MERIDIAN EXPORTS	INETIG B2	
	TIGW2	ER80SG 1.25CR 1/2MO GTAW ROD	21411	METRODE PRODUCTS, U.K.	METRODE ER80S-B2	
	TIGW2	ER80SG 1.25CR 1/2MO GTAW ROD	20047	NIKKO BOEKI KAISHA LTD	TGS-1CM	
	TIGW2	ER80SG 1.25CR 1/2MO GTAW ROD	10305	WELD WELL SPECIALITY PVT LTD	TGS-1CM	
	TIGW2	ER80SG 1.25CR 1/2MO GTAW ROD	10774	D&H SECHERON ELECTRODES PVT LTD.	F Cr Mo - 1	
	TIGW2	ER80SG 1.25CR 1/2MO GTAW ROD	15083	MARUTHI ELECTRODES (P) LTD, BANGALORE	MARUTHI TB2	
20	TIGW3	ER90SG-2 1/4CR 1MO GTAW ROD	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION-I CRMO 910	
	TIGW3	ER90SG-2 1/4CR 1MO GTAW ROD	21461	INDUSTRIA NAZIONALE ELETTRODI S.p.A.,ITALY	INETIG B3	
	TIGW3	ER90SG-2 1/4CR 1MO GTAW ROD	21411	METRODE PRODUCTS, U.K.	METRODE ER90S-B3	
	TIGW3	ER90SG-2 1/4CR 1MO GTAW ROD	20047	NIKKO BOEKI KAISHA LTD	TGS-2CM	
	TIGW3	ER90SG-2 1/4CR 1MO GTAW ROD	10305	WELD WELL SPECIALITY PVT LTD	TGS-2CM	
	TIGW3	ER90SG-2 1/4CR 1MO GTAW ROD	15083	MARUTHI ELECTRODES (P) LTD, BANGALORE	MARUTHI TB3	
21	TIGW4	ER347 GTAW ROD	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMANIT-H347	
	TIGW4	ER347 GTAW ROD	20390	METRODE PRODUCTS LIMITED	347S96 TIG	
	TIGW4	ER347 GTAW ROD	20047	NIKKO BOEKI COMPANY,JAPAN	TGS-347	
	TIGW4	ER347 GTAW ROD	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP A 68	
	TIGW4	ER347 GTAW ROD	10305	WELD WELL SPECIALITY PVT LTD	TGS-347	

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22	TIGW5	ERNICR3 GTAW ROD	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMANIT NICRO 82	
	TIGW5	ERNICR3 GTAW ROD	15083	MARUTHI ELECTRODES (P) LTD	ERNICR3	
	TIGW5	ERNICR3 GTAW ROD	20047	NIKKO BOEKI COMPANY, JAPAN	TGS-70NCb	
	TIGW5	ERNICR3 GTAW ROD	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP A 068 HH	
	TIGW5	ERNICR3 GTAW ROD	10305	WELD WELL SPECIALITY PVT LTD	TGS-70NCb	
23	TIGW6	TUNGSTEN ELECTRODE-2% THORIATED	20429	PLANSEE AKTIENGESELLSCHAFT		
24	TIGW7	TIG ER90S-B9	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	BOHLER C9 MV-1G	
	TIGW7	TIG ER90S-B9	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMANIT MTS-3	
	TIGW7	TIG ER90S-B9	21411	METRODE PRODUCTS, U.K.	9CrMoV-N TIG	
	TIGW7	TIG ER90S-B9	20047	NIKKO BOEKI COMPANY, JAPAN	TGS-90 B9	
	TIGW7	TIG ER90S-B9	21410	OERLIKON WELDING LTD., SWITZERLAND		
25	WCA08	E7018-A1	10774	D&H SECHERON ELECTRODES PVT LTD.	MOLYTHERME	
	WCA08	E7018-A1	11227	HONAVAR ELECTRODES LTD	ULTIMATE 18A1	
	WCA08	E7018-A1	11420	MODI ARC ELECTRODES CO.	MODI 7018A1	
	WCA08	E7018-A1	13906	MARUTI WELD LIMITED. NEW DELHI	ULTRA 7018 -A1	
26	WCA09	E8013-B2	10774	D&H SECHERON ELECTRODES PVT LTD.	MEDIO-CrMo	
27	WCA10	E8018-B2	10785	ADOR WELDING LIMITED	CROMOTEN	
	WCA10	E8018-B2	10774	D&H SECHERON ELECTRODES PVT LTD.	CROMOTHERME-1	
	WCA10	E8018-B2	11227	HONAVAR ELECTRODES LTD	ULTIMATE - 80 B2	
	WCA10	E8018-B2	11378	MAILAM INDIA LTD	MAILARC - 1CR	
	WCA10	E8018-B2	11420	MODI ARC ELECTRODES CO.	MODI 8018B2	
	WCA10	E8018-B2	13906	MARUTI WELD LIMITED. NEW DELHI	ULTRA - CR-1	
28	WCA11	E9013-B3	10774	D&H SECHERON ELECTRODES PVT LTD.	MEDIO-2CrMo	
29	WCA12	E9018-B3	10785	ADOR WELDING LIMITED	CROMOTEN-C	
	WCA12	E9018-B3	10774	D&H SECHERON ELECTRODES PVT LTD.	CROMOTHERME-2	
	WCA12	E9018-B3	11227	HONAVAR ELECTRODES LTD	ULTIMATE - 90 B3	
	WCA12	E9018-B3	11420	MODI ARC ELECTRODES CO.	MODI 9018B3	

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	WCA12	E9018-B3	13906	MARUTI WELD LIMITED. NEW DELHI	ULTRA - CR-2	
30	WCA14	E11018M	10774	D&H SECHERON ELECTRODES PVT LTD.	ULTRATENSAL-MH	
	WCA14	E11018M	10081	ESAB INDIA LTD	ESAB 118	
31	WCA15	E9018-B9	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	FOX C 9 MVS	
	WCA15	E9018-B9	10148	MERDIAN EXPORTS	FOX C 9 MVS	
32	WCA17	E8018-B6	10774	D&H SECHERON ELECTRODES PVT LTD.	CROMOTHERME-5	
33	WCA18	E8016C2	10774	D&H SECHERON ELECTRODES PVT LTD.	NITHEREME-3.5	
34	WCA19	E7016C2	10774	D&H SECHERON ELECTRODES PVT LTD.		
35	WCA20	E8018-B2(IMPACT @-18 DEG C)	10774	D&H SECHERON ELECTRODES PVT LTD.	CROMOTHERME -1(MOD)	
36	WCA21	E8018-D3	10774	D&H SECHERON ELECTRODES PVT LTD.	MOLYTHERME (EXTRA)	
37	WCA22	E8018-B9	10774	D&H SECHERON ELECTRODES PVT LTD.	CROMOTHERME-9	
38	WCA23	SMAW ELECTRODE E9015	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	FOX C9MV	
	WCA23	SMAW ELECTRODE E9015	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMANIT MTS-3	
	WCA23	SMAW ELECTRODE E9015	20630	KOBE STEELS LIMITED		
	WCA23	SMAW ELECTRODE E9015	21411	METRODE PRODUCTS, U.K.	CHROMET 9MV-N	
	WCA23	SMAW ELECTRODE E9015	20047	NIKKO BOEKI COMPANY, JAPAN		
	WCA23	SMAW ELECTRODE E9015	21410	OERLIKON WELDING LTD., SWITZERLAND	CHROMOCORD 9M	
39	WCC01	E6013	10785	ADOR WELDING LIMITED	METALBOND	STRUCTURAL
	WCC01	E6013	14429	ALPHA FLUX AND ELECTRODES, THURAIYUR.	WELDER-G	STRUCTURAL
	WCC01	E6013	13763	CLASSIC ELECTRODES (I) PVT LTD. KOLKATTA	CLASSIC 6013 PLUS	STRUCTURAL
	WCC01	E6013	10774	D&H SECHERON ELECTRODES PVT LTD.	NORMA	
	WCC01	E6013	13211	D&H WELDING ELECTRODES (INDIA) LTD.	STANDARD	STRUCTURAL
	WCC01	E6013	15084	DWEKAM ELECTRODES PVT. LTD., INDORE	DK 13	STRUCTURAL
	WCC01	E6013	10081	ESAB INDIA LTD	ESAB FERROSPEED PLUS	
	WCC01	E6013	11881	FUSION ENGG. PRODUCT LTD.	ELECTRA-6	STRUCTURAL
	WCC01	E6013	13690	GEE LTD., THANE	GEECON PINK	STRUCTURAL

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	WCC01	E6013	11227	HONAVAR ELECTRODES, CHENNAI	REGULAR-S	STRUCTURAL
	WCC01	E6013	11378	MAILAM INDIA LTD	MAILARC – 13R	
	WCC01	E6013	11380	MALU ELECTRODES PVT.LIMITED	MANGALAM E 6013	STRUCTURAL
	WCC01	E6013	14040	MANTEK ELECTRODES PRIVATE LTD.	MANTEK GP-13	STRUCTURAL
	WCC01	E6013	15083	MARUTHI ELECTRODES (P) LTD	MARUTHI 6013 X	STRUCTURAL
	WCC01	E6013	13906	MARUTI WELD LIMITED. NEW DELHI	MARUTI 44	STRUCTURAL
	WCC01	E6013	11420	MODI ARC ELECTRODES CO.	STEELON STD	
	WCC01	E6013	15088	NIVETHA ELECTRODES. TIRUCHY-7	MADAL ARC	STRUCTURAL
	WCC01	E6013	13693	RASI ELECT.,CHENNAI	RASI E6013	STRUCTURAL
	WCC01	E6013	13911	ROYAL ARC ELECTRODES PVT. LTD	ROYAL S	STRUCTURAL
	WCC01	E6013	15086	SRI RENGGA ELECTRODES (P) LTD	SUNSHINE E-6013	STRUCTURAL
	WCC01	E6013	15080	SUNCRAFT ELECTRODES PVT.LTD. TRICHY	SUNCRAFT E 6013	STRUCTURAL
	WCC01	E6013	15081	TRICHY SRI JEEVA ELECTRODES	SUNLINE-27	STRUCTURAL
	WCC01	E6013	15087	V.N.C. ELECTRODES . KARUR	BEST ARC MS11	STRUCTURAL
	WCC01	E6013	15085	VOLTARC ELECTRODE,TIRUPATHI	SPEED ARC	STRUCTURAL
	WCC01	E6013	15082	ROYAL WELD WIRE PVT. LTD,KANCHIPURAM	JACKSUN 5	STRUCTURAL
	WCC01	E6013	14575	WELD ALLOY PRODUCTS,UP	WA - 6013 - S	STRUCTURAL
	WCC01	E6013	16548	WELD EXCEL INDIA LTD	EXCEL - 13S.	STRUCTURAL
	WCC01	E6013	15090	RAJ KESARI ELECTRODES PRIVATE LTD	RAJCORD - 13S	STRUCTURAL
	WCC01	E6013	15102	SOLARC WELD RODS	VATSARC 19 PLUS	STRUCTURAL
	WCC01	E6013	17664	ELMARK ELECTRODES PVT. LTD.,CHENNAI	ELMARK 11	STRUCTURAL
	WCC01	E6013	17643	SUNDEEP ELECTRODES PVT. LTD.,HAPUR	SUNDEEP S	STRUCTURAL
	WCC01	E6013	17661	ALPHA WELDING & ALLIED PRODUCTS PVT. LTD., BANGALORE	LG	STRUCTURAL
	WCC01	E6013	17644	VARUN ELECTRODES PVT. LTD.,CHENNAI	PRIMA 6013-S	STRUCTURAL
	WCC01	E6013	17801	JAIN ELECTRODES,KOTA	SUN WELD	STRUCTURAL
	WCC01	E6013	17802	SRI VARSHA ELECTRODES,KAKKALUR.	BLAZE ARC	STRUCTURAL
	WCC01	E6013	17812	VICTOR ELECTRODES LIMITED,NEW DELHI	VICTOR 6013 PLUS	STRUCTURAL
	WCC01	E6013	17814	K.M.CROWN WELDING CONSUMABLES PVT. LTD., DEWAS	CROWN 13S	STRUCTURAL
	WCC01	E6013	17815	CALCUTTA ELECTRODES PVT. LTD., RAIPUR.	SIVA - S	STRUCTURAL
	WCC01	E6013	17820	SETH ELECTRODES PVT. LTD., KHURAI (M.P)	KAYNOZ 7S	STRUCTURAL

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	WCC01	E6013	18433	NUCOR WELD (INDIA) PVT., LTD, BANGALORE	EKNOWELD	STRUCTURAL
40	WCC02	E6013 (ATTEST)	10774	D&H SECHERON ELECTRODES PVT LTD.	MEDIO	
	WCC02	E6013 (ATTEST)	10785	ADOR WELDING LIMITED	SUPABASE	STRUCTURAL
	WCC02	E6013 (ATTEST)	10081	ESAB INDIA LTD	ESAB VORDIAN	
	WCC02	E6013 (ATTEST)	11227	HONAVAR ELECTRODES LTD	REGULAR-SS	STRUCTURAL
	WCC02	E6013 (ATTEST)	11420	MODI ARC ELECTRODES CO.	STEELON ULTRA	STRUCTURAL
41	WCC03	E7048	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-DH70	STRUCTURAL
42	WCC04	E7016	10774	D&H SECHERON ELECTRODES PVT LTD.	INDOTHERME	
	WCC04	E7016	10081	ESAB INDIA LTD	ESAB-56	STRUCTURAL
43	WCC05	E7018	10785	ADOR WELDING LIMITED	SUPABASE 7018	
	WCC05	E7018	14791	ANAND ARC ELECTRODES PVT LTD., THANE	ANAND THERME	
	WCC05	E7018	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-7018	
	WCC05	E7018	10774	D&H SECHERON ELECTRODES PVT LTD.	SUPRATHERME	STRUCTURAL
	WCC05	E7018	13211	D&H WELDING ELECTRODES(I) LTD,INDORE	Super-LH	STRUCTURAL
	WCC05	E7018	15084	DWEKAM,CHENNAI	DK-18	STRUCTURAL
	WCC05	E7018	10081	ESAB INDIA LTD	ESAB-36H	STRUCTURAL
	WCC05	E7018	13690	GEE LIMITED	GRICON GREEN	STRUCTURAL
	WCC05	E7018	11227	HONAVAR ELECTRODES LTD	ULTIMATE-18	STRUCTURAL
	WCC05	E7018	15091	MAGNA ENGG PROD. P LTD,VIJAYAWADA	MAGNA-8	STRUCTURAL
	WCC05	E7018	11378	MAILAM INDIA, PONDICHERRY	MAIL ARC-18	
	WCC05	E7018	14040	MANTEK ELECTRODS PVT. LTD., TRICHY	MANTEK LH - 18.	STRUCTURAL
	WCC05	E7018	15083	MARUTHI ELECTRODES (P) LTD	MARUTHI - 7018	STRUCTURAL
	WCC05	E7018	13906	MARUTI WELD LIMITED,DELHI	ULTRA -7018	STRUCTURAL
	WCC05	E7018	11420	MODI ARC ELECTRODES CO.	MODI-7018	
	WCC05	E7018	15090	RAJ KESARI ELECTRODES PRIVATE LTD	SUPERLET - 18	STRUCTURAL
	WCC05	E7018	13693	RASI ELECT.,CHENNAI	RASI E7018 LH	STRUCTURAL
	WCC05	E7018	13911	ROYAL ARC ELECTRODES PVT LTD., THANE	ROYAL THERME	STRUCTURAL
	WCC05	E7018	15082	ROYAL WELD WIRE PVT. LTD,KANCHIPURAM	JACKSUN 18H	STRUCTURAL
	WCC05	E7018	15102	SOLARC WELD RODS	SUPRADYNE	STRUCTURAL
	WCC05	E7018	15833	THIRUMALA ELECTRODES Co., TRICHY.	SEVEN ARC - 18	STRUCTURAL
	WCC05	E7018	15085	VOLTARC ELECTRODE,TIRUPATHI	SUPERARC	STRUCTURAL
	WCC05	E7018	14575	WELD ALLOY PRODUCTS,UP	WA 7018	STRUCTURAL

SL NO.	MATL GROUP	SPECIFICATION	SUPPLIER CODE	VENDOR NAME / PLACE	BRAND NAME	APPLICATION FOR
	WCC05	E7018	16548	WELD EXCEL INDIA LTD	EXCEL - 18.	STRUCTURAL
	WCC05	E7018	15089	WELDCRAFT PRIVATE LIMITED	MAXIDURE-7018	STRUCTURAL
	WCC05	E7018	14429	ALPHA FLUX AND ELECTRODES, THURAIYUR.	SUPER WELD 7018	STRUCTURAL
	WCC05	E7018	11881	FUSION ENGG. PRODUCT LTD.	BASICOTE - 6	STRUCTURAL
	WCC05	E7018	15087	V.N.C. ELECTRODES . KARUR	BESTARC LH	STRUCTURAL
	WCC05	E7018	17644	VARUN ELECTRODES PVT. LTD., CHENNAI	PRIMA 7018	NON CRITICAL STRUCTURAL WITHOUT HEATTREATMENT
	WCC05	E7018	15086	SRI RENGAL ELECTRODES (P) LTD	SUNSHINE - 18	STRUCTURAL
	WCC05	E7018	18432	VIJAY ELECTRODES AND WIRES PVT., LTD, CHENNAI	VJ - 7018	STRUCTURAL
44	WCC06	E7018-1	10785	ADOR WELDING LIMITED	TENALLOY	STRUCTURAL
	WCC06	E7018-1	10774	D&H SECHERON ELECTRODES PVT LTD.	SUPRATHERME (SPL)	
	WCC06	E7018-1	11227	HONAVAR ELECTRODES LTD	ULTIMATE-18 SPL	STRUCTURAL
45	WCC07	E7024	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL 7024	STRUCTURAL
46	WCC08	E7018-1(SOUR&HIC)	10785	ADOR WELDING LIMITED	TENALLOY	STRUCTURAL
	WCC08	E7018-1(SOUR&HIC)	10774	D&H SECHERON ELECTRODES PVT LTD.		STRUCTURAL
	WCC08	E7018-1(SOUR&HIC)	11227	HONAVAR ELECTRODES LTD	ULTIMATE-18SPL NC	STRUCTURAL
47	WCF01	E71T-1	10785	ADOR WELDING LIMITED	AUTOMIG-FC120	STRUCTURAL
	WCF01	E71T-1	14791	ANAND ARC ELECTRODES PVT. LTD.,	ANANDCORD-71	STRUCTURAL
	WCF01	E71T-1	91205	BAJAJ INDUSTRIAL CORPORATION	TWE-711	STRUCTURAL
	WCF01	E71T-1	10081	ESAB INDIA LTD	7100S	STRUCTURAL
	WCF01	E71T-1	21065	HYUNDAI WELDING CO. LTD.,	SUPERCORED 71H	STRUCTURAL
	WCF01	E71T-1	20033	KISWEL LTD		STRUCTURAL
	WCF01	E71T-1	11378	MAILAM INDIA LTD	MGA-12	STRUCTURAL
	WCF01	E71T-1	20047	NIKKO BOEKI KAISHA LTD	DW-100	STRUCTURAL
	WCF01	E71T-1	11459	NIVEK AGENCIES	DW-100	STRUCTURAL
	WCF01	E71T-1	14656	PADMA BALAJI ASSOCIATES,	LW71	STRUCTURAL
	WCF01	E71T-1	20970	THE SHANGHAI LINCOLN	LW71	
	WCF01	E71T-1	14557	TIEN TAI ELECTRODES CO., LTD	TWE-711	STRUCTURAL
	WCF01	E71T-1	10305	WELD WELL SPECIALITY PVT LTD	DW-100	STRUCTURAL
48	WCF02	E309T0-1	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMIT TG 309 L	STRUCTURAL
	WCF02	E309T0-1	20047	NIKKO BOEKI COMPANY, JAPAN	DW-309	

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	WCF02	E309T0-1	10305	WELD WELL SPECIALITY PVT LTD	DW-309	
49	WCF03	E309LMOT0-1	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMIT TG 309 Mo L	
	WCF03	E309LMOT0-1	20033	KISWEL LTD.,	K-309MOL T	
	WCF03	E309LMOT0-1	20047	NIKKO BOEKI KAISHA LTD	DW-309MOL	
	WCF03	E309LMOT0-1	10306	WELDWELL SPECIALITY PVT LTD	DW-309MOL	
50	WCF04	E81T1 - B2	20033	KISWEL LTD.,	K-81TB2	
	WCF04	E81T1 - B2	11378	MAILAM INDIA LTD	MGA-16	
	WCF04	E81T1 - B2	20047	NIKKO BOEKI COMPANY,JAPAN	DW-81B2	
	WCF04	E81T1 - B2	10305	WELD WELL SPECIALITY PVT LTD	K-81TB2	
51	WCF05	E91T1-B3	20033	KISWEL LTD.,	K-91TB3	
	WCF05	E91T1-B3	20630	KOBE STEELS LIMITED	DW-91B3	
	WCF05	E91T1-B3	20047	NIKKO BOEKI COMPANY,JAPAN	DW-91B3	
52	WCF06	E316LT1-1	20033	KISWEL LTD.,	K-316LT	
	WCF06	E316LT1-1	20047	NIKKO BOEKI COMPANY,JAPAN	DW-316	
	WCF06	E316LT1-1	10305	WELD WELL SPECIALITY PVT LTD	DW-316	
53	WCF07	E308LT0-1	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	EAS-2FD	
	WCF07	E308LT0-1	10148	MERDIAN EXPORTS	EAS-2FD	
54	WCF08	E80 T1-A1	20011	BOHLER SCHWEISSTECHNIK AUSTRIA		
	WCF08	E80 T1-A1	20047	NIKKO BOEKI KAISHA LTD		
55	WCF09	E 71T - 1 BULK PACK	91205	BAJAJ INDUSTRIAL CORPORATION	TWE-711	
	WCF09	E 71T - 1 BULK PACK	10081	ESAB INDIA LTD	OK TUBROD 15.14A	
	WCF09	E 71T - 1 BULK PACK	21065	HYUNDAI WELDING CO. LTD.,	SUPER CORED 71H	
	WCF09	E 71T - 1 BULK PACK	20033	KISWEL LTD.,		
	WCF09	E 71T - 1 BULK PACK	11378	MAILAM INDIA LTD	MGA 12	
	WCF09	E 71T - 1 BULK PACK	20047	NIKKO BOEKI KAISHA LTD	DW-100	
	WCF09	E 71T - 1 BULK PACK	14656	PADMA BALAJI ASSOCIATES,	LW71	

SL NO.	MATL GROUP	SPECIFICATION	SUPPLIER CODE	VENDOR NAME / PLACE	BRAND NAME	APPLICATION FOR
	WCF09	E 71T - 1 BULK PACK	20970	THE SHANGHAI LINCOLN	LW71	
	WCF09	E 71T - 1 BULK PACK	14557	TIEN TAI ELECTRODES CO., LTD	TWE-711	
	WCF09	E 71T - 1 BULK PACK	10306	WELDWELL SPECIALITY PVT LTD	DW-100	
56	WCH01	WCPI HF ELECTRODE	10774	D&H SECHERON ELECTRODES PVT LTD.	BOR-B	
	WCH01	WCPI HF ELECTRODE	10081	ESAB INDIA LTD	ESAB DOROID-350	
57	WCH02	WCPI HF ELECTRODE	10081	ESAB INDIA LTD	ESAB COBALARC -1M	
58	WCH03	ECOCRA	20130	ALCONIX CORPORATION	BISHILITE-6	
	WCH03	ECOCRA	20018	DELORO STELLITE LIMITED	STELLITE-6	
	WCH03	ECOCRA	20050	NISSHO IWAI CORPORATION	BISHILITE-6	
	WCH03	ECOCRA	10172	NISSHO IWAI CORPORATION		
	WCH03	ECOCRA	10780	P&S INTERNATIONAL	BISHILITE-6	
	WCH03	ECOCRA	10303	VIRGO CONSULTANTS PVT LTD	STELLITE-6	
59	WCH04	ER.C A9	11865	DIFFUSION ENGINEERS LTD		
	WCH04	ER.C A9	13241	ITW WELDING PRODUCTS GROUP		
	WCH04	ER.C A9	20067	UTP SCHWEISS MATERIAL GMBH & C		
60	WCL02	ENICI	10774	D&H SECHERON ELECTRODES PVT LTD.	NFM	
	WCL02	ENICI	11420	MODI ARC ELECTRODES CO.	CASTRON KALT	
61	WCL03	ENIFECI	10081	ESAB INDIA LTD	ESAB 802KG	
62	WCL04	ENI - 1	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-1280	
	WCL04	ENI - 1	10081	ESAB INDIA LTD		
	WCL04	ENI - 1	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP-80Ni	
63	WCL05	ENICU-7	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-1250	
	WCL05	ENICU-7	10081	ESAB INDIA LTD	ESAB MONEL	
	WCL05	ENICU-7	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP 80M	
64	WCL06	ENICRFE2	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-1200T	
	WCL06	ENICRFE2	10081	ESAB INDIA LTD	ESAB CN1G	
	WCL06	ENICRFE2	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP 7015 Mo	

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65	WCL07	ENICRFE3	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMANITNicro 182	
	WCL07	ENICRFE3	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-1212	
	WCL07	ENICRFE3	20472	SPECIAL METALS WELDING PRODUCTS COM	INCONEL 182	
	WCL07	ENICRFE3	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP 068HH	
66	WCS20	E308-16	10785	ADOR WELDING LIMITED	SUPERINOX-1A	
	WCS20	E308-16	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-308	
	WCS20	E308-16	10774	D&H SECHERON ELECTRODES PVT LTD.	RUTOX-A	
	WCS20	E308-16	10081	ESAB INDIA LTD	OK 61.50	
	WCS20	E308-16	11378	MAILAM INDIA LTD	MAILEX-A	
	WCS20	E308-16	11420	MODI ARC ELECTRODES CO.	SS-308	
67	WCS21	E308L-16	10785	ADOR WELDING LIMITED	SUPERINOX-1C	
	WCS21	E308L-16	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-308L	
	WCS21	E308L-16	10774	D&H SECHERON ELECTRODES PVT LTD.	RUTOX-B	
	WCS21	E308L-16	10081	ESAB INDIA LTD	OK 61.30	
68	WCS22	E309-16	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL -309	
	WCS22	E309-16	10774	D&H SECHERON ELECTRODES PVT LTD.	CRONITHERME-25/12	
	WCS22	E309-16	10081	ESAB INDIA LTD	OK.67.67	
	WCS22	E309-16	11420	MODI ARC ELECTRODES CO.	SS-309	
69	WCS23	E309L-16	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL 309L	
	WCS23	E309L-16	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-309L	
	WCS23	E309L-16	10081	ESAB INDIA LTD	OK.67.60	
70	WCS24	E308L-15	10774	D&H SECHERON ELECTRODES PVT LTD.	BATOX-B	
	WCS24	E308L-15	10081	ESAB INDIA LTD	ESAB 304B	
71	WCS25	E309L-15	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-309L-15	
	WCS25	E309L-15	10081	ESAB INDIA LTD	ESAB 309LC	
72	WCS26	E316L-15	10774	D&H SECHERON ELECTRODES PVT LTD.	BATOX-F	
	WCS26	E316L-15	10081	ESAB INDIA LTD	ESAB 316B	
73	WCS27	E310-16	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-310-16	
	WCS27	E310-16	10081	ESAB INDIA LTD	OK.67.13	
74	WCS28	E316-16	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-316	
	WCS28	E316-16	10774	D&H SECHERON ELECTRODES PVT LTD.	RUTOX-Mo	

SL NO.	MATL GROUP	SPECIFICATION	SUPPLIER CODE	VENDOR NAME / PLACE	BRAND NAME	APPLICATION FOR
	WCS28	E316-16	10081	ESAB INDIA LTD	OK.63.50	
75	WCS29	E316L-16	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-316L	
	WCS29	E316L-16	10774	D&H SECHERON ELECTRODES PVT LTD.	RUTOX-D	
	WCS29	E316L-16	10081	ESAB INDIA LTD	OK.63.30	
76	WCS30	E347-16	10785	ADOR WELDING LIMITED	SUPERINOX-1B	
	WCS30	E347-16	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-347	
	WCS30	E347-16	10774	D&H SECHERON ELECTRODES PVT LTD.	RUTOX-A(ST)	
	WCS30	E347-16	10081	ESAB INDIA LTD	OK.61.80	
	WCS30	E347-16	11378	MAILAM INDIA LTD	MAILEX-Anb	
	WCS30	E347-16	11420	MODI ARC ELECTRODES CO.	SS-347	
77	WCS31	E410-15	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-410	
	WCS31	E410-15	11378	MAILAM INDIA LTD	MAILEX 410	
	WCS31	E410-15	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H 13Cr	
78	WCS32	E430-15	10036	BHARAT HEAVY ELECTRICALS LTD	BHEL-430	
	WCS32	E430-15	11378	MAILAM INDIA LTD	MAILEX 430	
	WCS32	E430-15	20050	NISSHO IWAI CORPORATION	CR-43	
	WCS32	E430-15	10172	NISSHO IWAI CORPORATION	CR-43	
	WCS32	E430-15	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H 17Cr	
79	WCS33	E309MO-16	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-309Mo	
	WCS33	E309MO-16	10081	ESAB INDIA LTD	O.K.67.70	
80	WCS34	E312-16	10081	ESAB INDIA LTD	ESAB RSW	
81	WCS35	E309CB-16	10774	D&H SECHERON ELECTRODES PVT LTD.	D&H-309Cb	
	WCS35	E309CB-16	10081	ESAB INDIA LTD	ESAB 309Cb	
82	WCS36	X20 ELECTRODE	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	FOX 20MVW	
	WCS36	X20 ELECTRODE	10148	MERDIAN EXPORTS	FOX 20MVW	
83	WCS37	ARMOUR STEEL ELECTRODE	10774	D&H SECHERON ELECTRODES PVT LTD.	SIAMO	
84	WCT01	HAYNESS ALLOY 25	20130	ALCONIX CORPORATION	BISHILITE No25	
	WCT01	HAYNESS ALLOY 25	10172	NISSHO IWAI CORPORATION	BISHILITE No25	
	WCT01	HAYNESS ALLOY 25	10780	P&S INTERNATIONAL	BISHILITE No25	
	WCT01	HAYNESS ALLOY 25	10313	ZIRCAST LTD	INDELLITE-GR25	

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81	WCT02	HAYNESS ALLOY 21	20130	ALCONIX CORPORATION	BISHILITE No21	
	WCT02	HAYNESS ALLOY 21	10041	BHAVANI AGENCY & CO	WT-21	
	WCT02	HAYNESS ALLOY 21	10172	NISSHO IWAI CORPORATION	BISHILITE No21	
	WCT02	HAYNESS ALLOY 21	10780	P&S INTERNATIONAL	BISHILITE No21	
	WCT02	HAYNESS ALLOY 21	20073	WEARTECH INTL INC	WT-21	
85	WCT03	RCOCRA	20130	ALCONIX CORPORATION	BISHILITE NO 21	
	WCT03	RCOCRA	10041	BHAVANI AGENCY & CO	WT-6	
	WCT03	RCOCRA	20018	DELORO STELLITE LIMITED	STELLITE-6 ROD	
	WCT03	RCOCRA	10172	NISSHO IWAI CORPORATION	BISHILITE NO 6 I	
	WCT03	RCOCRA	10780	P&S INTERNATIONAL	BISHILITE NO 6 I	
	WCT03	RCOCRA	10303	VIRGO CONSULTANTS PVT LTD	STELLITE-6 ROD	
	WCT03	RCOCRA	20073	WEARTECH INTL INC	WT-6	
	WCT03	RCOCRA	10313	ZIRCAST LTD	INDELLITE-GR6	
86	WCT04	COBALT BASED POWDER - WCPI 302	20130	ALCONIX CORPORATION	BISHILITE-NO 6 PPOWDER	
	WCT04	COBALT BASED POWDER - WCPI 302	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	CELSIT-VP	
	WCT04	COBALT BASED POWDER - WCPI 302	20018	DELORO STELLITE LIMITED	STELLITE-6W POWDER	
	WCT04	COBALT BASED POWDER - WCPI 302	20321	HOGANAS BELGIUM SA	HMSP2537	
	WCT04	COBALT BASED POWDER - WCPI 302	10745	HOGANAS INDIA LIMITED	HMSP2537	
	WCT04	COBALT BASED POWDER - WCPI 302	10172	NISSHO IWAI CORPORATION	BISHILITE-NO 6 POWDER	
	WCT04	COBALT BASED POWDER - WCPI 302	10780	P&S INTERNATIONAL	BISHILITE-NO 6 POWDER	
	WCT04	COBALT BASED POWDER - WCPI 302	20067	UTP SCHWEISS MATERIAL GMBH & C	UTP PTA 2.706.10	
	WCT04	COBALT BASED POWDER - WCPI 302	10303	VIRGO CONSULTANTS PVT LTD	STELLITE-6W POWDER	
	WCT04	COBALT BASED POWDER - WCPI 302	20073	WEARTECH INTL INC	WT-6	
87	WCW01	EL 8WELDING WIRE FOR SAW	10785	ADOR WELDING LIMITED	Automelt Gr.A	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW	10081	ESAB INDIA LTD.,CHENNAI	OK AUTROD 12.08L	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW		INDIAN METAL INDS,CALCUTTA	IMI WIRE	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW	11288	JAGSHAAN INDUSTRIES . NAGPUR	JAG 1 A	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW	15100	MANTEK WIRESS	MANTEK GR.A	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW	14340	NALLI ARC INDUSTRIE, KANGEYAM	NALLI SA -1	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW	15101	PRECISION WIRES	METASPOOL S1 DIA4.00 MM	STRUCTURAL

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	WCW01	EL 8WELDING WIRE FOR SAW	14455	WIRE & WIRE PRODUCTS, CHENNAI	ESARC	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW	13693	SUNWIRES	SUNWIRES	STRUCTURAL
	WCW01	EL 8WELDING WIRE FOR SAW	15810	NOUVEAX INDUSTRIES (P) LTD,KANGAYAM	NOUVAX	STRUCTURAL
88	WCW02	EB3	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	BOHLER CM 2-UP	
	WCW02	EB3	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION S 1 Cr Mo 2	
	WCW02	EB3	20047	NIKKO BOEKI COMPANY,JAPAN	US-521	
	WCW02	EL 8WELDING WIRE FOR SAW	13693	SUN WIRES	SUN WIRE	
	WCW02	EB3	10305	WELD WELL SPECIALITY PVT LTD	US-521	
89	WCW03	EH14	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION S4	
	WCW03	EH14	10081	ESAB INDIA LTD	OK AUTROD12.40L	
	WCW03	EH14	20047	NIKKO BOEKI KAISHA LTD	US-36	
	WCW03	EH14	10305	WELD WELL SPECIALITY PVT LTD	US-36	
90	WCW04	ER430	10081	ESAB INDIA LTD	OK.AUTROD 430	
	WCW04	ER430	20033	KISWEL LTD.,	M-430	
	WCW04	ER430	10158	MITSUMI & CO LTD	M-430	
	WCW04	ER430	20047	NIKKO BOEKI KAISHA LTD	US-430	
	WCW04	ER430	10305	WELD WELL SPECIALITY PVT LTD	US-430	
91	WCW05	ER410	20033	KISWEL LTD.,	M-410	
	WCW05	ER410	10158	MITSUMI & CO LTD	M-410	
	WCW05	ER410	20047	NIKKO BOEKI COMPANY,JAPAN	US-410	
	WCW05	ER410	10305	WELD WELL SPECIALITY PVT LTD	US-410	
92	WCW06	EB2	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	EMS 2 Cr Mo	
	WCW06	EB2	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION S 2 Cr Mo	
	WCW06	EB2	20047	NIKKO BOEKI COMPANY,JAPAN	US-511	
	WCW06	EB2	10305	WELD WELL SPECIALITY PVT LTD	US-511	
93	WCW07	EA3	20047	NIKKO BOEKI COMPANY,JAPAN	US-40	
	WCW07	EA3	10305	WELD WELL SPECIALITY PVT LTD	US-40	
94	WCW08	EA4	20011	BOHLER SCHWEISSTECHNIK AUSTRIA		
	WCW08	EA4	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION S 3 Mo	
	WCW08	EA4	20359	KUSAKABE KIKAI CO.LTD.	KW- 50C	

SL NO.	MATL GROUP	SPECIFICATION	SUPPLIER CODE	VENDOR NAME / PLACE	BRAND NAME	APPLICATION FOR
	WCW08	EA4	20047	NIKKO BOEKI COMPANY, JAPAN	US-49	
	WCW08	EA4	10305	WELD WELL SPECIALITY PVT LTD	US-49	
95	WCW09	EM12K	20563	BOHLER THYSSEN SCHWEISSTECHNIK	UNION S2SI	
	WCW09	EM12K	10081	ESAB INDIA LTD	OK.AUTROD 12.22L	
	WCW09	EM12K	20359	KUSAKABE KIKAI CO.LTD.	KW- 43B	
	WCW09	EM12K	20047	NIKKO BOEKI KAISHA LTD	US-29	
	WCW09	EM12K	20560	THE LINCOLN ELECTRIC	L61	
	WCW09	EM12K	10305	WELD WELL SPECIALITY PVT LTD	US-29	
96	WCW11	EL8 PPM WIRE	11288	JAGSHAAN INDUSTRIES	JAG-1	
	WCW11	EL8 PPM WIRE	20359	KUSAKABE KIKAI CO.LTD.	KW -43	
	WCW11	EL8 PPM WIRE	20047	NIKKO BOEKI COMPANY, JAPAN	US-43	
	WCW11	EL8 PPM WIRE	10305	WELD WELL SPECIALITY PVT LTD	US-43	
97	WCW12	SFA 5.23 E B9	20011	BOHLER SCHWEISSTECHNIK AUSTRIA	BOHLER C9MV-UP	
	WCW12	SFA 5.23 E B9	20563	BOHLER THYSSEN SCHWEISSTECHNIK	THERMANIT MTS-3	
	WCW12	SFA 5.23 E B9	10081	ESAB INDIA LTD., CHENNAI	OK 13.35	
	WCW12	SFA 5.23 E B9	21411	METRODE PRODUCTS, U.K.	9CrMoV-N	
	WCW12	SFA 5.23 E B9	20047	NIKKO BOEKI COMPANY, JAPAN		
	WCW12	SFA 5.23 E B9	21410	OERLIKON WELDING LTD., SWITZERLAND		
98	WCF11	ER70S-6 BULK PACK.	10081	ESAB INDIA LTD		
	WCF11	ER70S-6 BULK PACK.	15084	DWEKAM ELECTRODES PVT. LTD., INDORE		
	WCF11	ER70S-6 BULK PACK.	13906	MARUTI WELD LIMITED, DELHI		
	WCF11	ER70S-6 BULK PACK.	15810	NOUVEAX INDUSTRIES (P) LTD, KANGAYAM		
	WCF11	ER70S-6 BULK PACK.	10785	ADOR WELDING LIMITED		
				(R.MOHANAKRISHNAN)		
				MANAGER / SUPPLIER DEVELOPMENT CELL		

SPECIAL INSTRUCTIONS TO TENDERERS

**IF DESIRED, TENDERER MAY DEPUTE THEIR REPRESENTATIVE FOR
'TENDER OPENING' WITH PROPER AUTHORISATION**

1. All the prices shall be given both in words and figures. In case of any difference between the two, the offer will be rejected.
2. **Offers shall be duly signed by a legally authorised principal officer(s) of the Firm and by affixing the Rubber Stamp.**
3. The tenderers shall keep the offer valid for a minimum period of 6 (six) months from the closing date of the tender.
4. The tenderer shall acquaint himself with the conditions / limitations and official regulations under which or conforming to which the jobs are to be performed and shall examine carefully all the information as may be furnished to them in writing from time to time.
5. The tenderer shall acquaint himself with applicable Acts.
6. No deviation or change from the tender conditions will be entertained and BHEL has the right to reject such tenders.
7. BHEL reserves the right to restrict to the lowest bidder for negotiation. BHEL also reserves the right to distribute the work to one or more Vendors for award of contract as required.
8. Tenderers are requested to indicate their reasonable offers and it may please be noted that offers with unreasonable/abnormal rates are liable for total rejection at the discretion of BHEL without assigning any reason thereof.
9. Insertions, postscripts, additions and alterations in the tender shall not be recognised unless received prior to the closing date of the tender and in time and confirmed by the tenderer's signature.
10. Tenderer shall bear all cost incidental to preparation, submission and negotiations against the tender.
11. Offers containing corrections or alterations in the documents are liable to be rejected. Any correction made by the tenderer(s)/his//her/their Representative, must be authenticated by the tenderer who has signed the original offer. The tenderer shall authenticate all pages of the offer by putting his initials or the Firm's official rubber stamp.
13. **A separate certificate is to be attached with the offer to the effect that the Enquiry terms and conditions have been fully read and understood and the prices quoted are in accordance with the same.**
14. Whether the tender is accepted or not, tenderer shall not be entitled to claim any costs, charges, expenses incidental or incurred by him through or in connection with the submission of the Tender even if BHEL withdraws the Tender before or after the receipt of the offers.
15. **As a policy BHEL is not registering any power of attorney issued by contractors/suppliers in favour of their bank for the collection of invoice amounts on behalf of contractors/suppliers and merely because BHEL had acted upon any such request by the party or their bankers does not constitute any legal right or binding on BHEL for any acts of omissions and commissions or failure to act upon it or for any payment made directly to the party. If any banker includes BHEL also as a party to any such dispute between the banker and the party, all legal and incidental expenses thereof will be recovered from the concerned parties only.**
16. Tenderers contacted in this tender do not automatically qualify for consideration just because they are found to be the lowest in the Tender. BHEL reserves the right to reject any offers without assigning any reasons.
17. **Conditional tenders are liable to be rejected.**



**AN ISO 9001
COMPANY**

BHARAT HEAVY ELECTRICALS LIMITED
(A GOVT. OF INDIA UNDERTAKING)
HIGH PRESSURE BOILER PLANT, TIRUCHIRAPPALLI - 620 014
DEPT: OUTSOURCING

(OFF) 91 (0431) 2574298
E-MAIL: bbalu@bheltry.co.in

FAX: 91 (0431) 252 0517

ANNEXURE - F

GENERAL CONDITIONS OF CONTRACT

I DEFINITIONS

Throughout these conditions and in the specifications "THE CONTRACTEE" means the Bharat Heavy Electricals Limited, acting through the Sr.Dy. General Manager/OUT SOURCING, Tiruchirapalli-14, unless the context otherwise provides "THE CONTRACTOR" means the person, firm or company with whom the order for Structural work is placed and shall be deemed to include the Contractor's successors (approved by the Contractee) representatives, heirs, executors and administrators as the case may be unless excluded by the terms of the Contract. "DRAWINGS" means the drawings exhibited or provided for the guidance of the Contractor.

II EXECUTION

The whole contract is to be executed in the most approved substantial and workman like manner to the entire satisfaction of the Contractee, or the Inspecting Officer who shall have power to reject any of the Structurals of which he may disapprove; and his decision thereon and any question as to the true intent and meaning of the specifications of drawing or of the work necessary for the proper completion of the contract, shall be final and conclusive. The contractee may require alteration if any to be made during the progress of work and should these alterations be such that either party to the contract considers an alteration in charges justified such alteration shall not be carried out until amended cost have been submitted by contractor and accepted by the Contractee. Should the Contractor proceed to work without obtaining the consent of the Contractee in writing to an amended cost of work the Contractor shall be deemed to have agreed to execute the work at such charges as may be considered reasonable by the Contractee.

III FORCE MAJEURE

If any time during the continuance of this Contract the performance in whole or part by either part of any obligation under this contract shall be prevented or delayed by reasons of war, hostilities, acts of public enemy, civil, commotions, sabotage, fires, floods, explosions, epidemic quarantine restrictions or acts of God (herein referred to as events), then provided the notice of the happenings of any such events is given by either party to other party within 21 (Twenty one) days from the date of occurrence thereof, either party shall by reason of such event not be entitled to terminate this contract, nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance and delivery under the contract shall be resumed as soon as

Practicable after such event has come to an end or ceased to exist and the decision of the Contractee as to whether the deliveries have been so resumed or not shall be final and conclusive. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such event, claims for extension of time shall be granted for periods considered reasonable by the Contractee subject to prompt notification by the Contractor to the Contractee of the particulars of the events and supply to the Contractee if required of any supporting evidence. Any waiver of time in respect of partial instalment shall not be deemed to be a waiver of time in respect of remaining work schedules.

IV TERMINATION OF CONTRACT

If as a result of difficulty in procurement of materials or due to force majeure reasons or any other reasons whatsoever the contractor is unable to keep the delivery schedule of the Contractee, the Contractee to the extent considered necessary may grant extension of time. Should there be delay in work, beyond the extended date of delivery, it shall be open to the Contractee to terminate the contract in part or full and make other arrangements for executing work at the cost and risk of the Contractor.

V INTERPRETATION

The Contractee shall decide any dispute or difference of opinion in respect of the interpretation, effect or application of this particular condition of the Contract or the amount recoverable hereunder from the contractor and the decision shall be final and conclusive.

VI BOOK EXAMINATION CLAUSE:

The Contractor shall whenever required produce or cause to be produced for examination by any Officer of the Contractee authorized in that behalf, any cost or other account book or account voucher, receipt letter, memorandum, paper or writing or any copy extract from any such document and also furnish information and returns verified in such a manner as may be required in any way relating to the execution of this contract or relevant for verifying or ascertaining the cost of execution of this contract (the decision of such officer of the Contractee on this question or relevancy of any documents, information or return being final and binding on the Parties). The obligation imposed by this clause is without prejudice to the obligation of the contract / purchase order or under any status rules or orders binding the contractor. The contractor shall if the authorized officer or the Contractee so required (whether before or after the prices have been finally fixed), afford facilities to the officer of the Contractee concerned to visit the contractors works for the purpose of examining the process of manufacture and estimate or ascertaining the cost for production of the articles, if any portion of the work be carried out by a sub contractor of any subsidiary of an allied firm or company, the authorized officer of the Contractee shall have power to secure the books of such sub contractor, or any subsidiary or allied firm or company shall be open to his inspection.

VII SET-OFF CLAUSES

Payment shall be subject to the deduction of any amount for which the Contractor is liable under this Contract, or any contract in respect of which Bharat Heavy Electricals Limited is the Contractee.

VIII LAWS GOVERNING THE CONTRACT

The Laws of Government of India in force shall govern the Contract. Irrespective of the place of the execution of the Contract place, of payment under the contract, the contract shall be deemed to have been made at the place at which the acceptance of the tender has been issued.

IX JURISDICTION OF THE COURT

The Courts of the place from where the acceptance of the tender is issued shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract.

X THE GLOBAL COMPACT

Global Compact is a signature initiative of United Nations Secretary General Kofi Annan and Four United Nation Agencies:

- ❖ Office of the High Commissioner for Human Rights
- ❖ International Labour Organisation
- ❖ United Nations Environment Programme
- ❖ United Nations Development Programme

This is a broad based initiative and engages:

- ❖ Individual Companies
- ❖ Business Associations
- ❖ International Labour
- ❖ Human Rights, Environment and
- ❖ Development Organisations
- ❖ Academic & Public Policy
- ❖ Institutions and United Nations

The Contractee (BHEL) is a member of this Global Compact. As a participating company, we have the obligation to

- ❖ Support and respect Human Rights within our spheres of influence.
- ❖ Make sure we are not complicit in Human Rights abuses.
- ❖ Make sure we are not employing Forced or compulsory labour.
- ❖ Refrain from employing Child Labour
- ❖ Eliminate discrimination in our hiring and firing policies.
- ❖ Support a precautionary approach to Environmental challenges.
- ❖ Undertake initiatives to promote greater environmental responsibility.
- ❖ Encourage development and diffusion of environmentally friendly Technologies

Contractor shall also ensure to fall in line with the above principles.

LIST OF DRAWINGS**PART – A – BOILER STRUCTURES**

S. No.	Drawing No.	Remarks	Project
1	1-36-322-02893	Typical Drawing	0390, 0391 & 0636
2	0-36-322-06982	Typical Drawing	0390, 0391 & 0636
3	0-36-322-06983	Typical Drawing	0390, 0391 & 0636
4	0-36-322-06984 / 01	Typical Drawing	0390, 0391 & 0636
5.	0-35-230-05695 / 01	Typical Drawing	0390 & 0391
6.	2-35-511-00775 / 02	Typical Drawing	0390 & 0391

PART – B - DUCTS

S. No.	Drawing No.	Remarks	Project
1	1-48-112-39322	Typical Drawing	0390, 0391 & 0636
2	1-48-112-39318	Typical Drawing	0390, 0391 & 0636
3	3-48-112-63770	Typical Drawing	0390, 0391 & 0636
4	3-48-112-63823	Typical Drawing	0390, 0391 & 0636
5.	2-48-112-45768	Typical Drawing	0390, 0391 & 0636
6.	1-48-222-35972	Typical Drawing	0390, 0391 & 0636
7.	1-48-222-35959	Typical Drawing	0390, 0391 & 0636
8.	0-48-207-32556	Typical Drawing	0390, 0391 & 0636

PART – C – AUTO WELD & COLUMNS

S. No.	Drawing No.	Remarks	Project
1	0-35-130-05816	Typical Drawing	0390 & 0391
2	0-35-130-05814	Typical Drawing	0390 & 0391
3	0-35-110-06047	Typical Drawing	0390 & 0391
4	0-35-110-03964	Typical Drawing	0390 & 0391
5	0-35-110-03959	Typical Drawing	0390 & 0391
6	0-35-110-03960	Typical Drawing	0390 & 0391
7	0-35-140-02933	Typical Drawing	0390 & 0391
7	0-35-140-05891	Typical Drawing	0390 & 0391
8	0-35-140-03956	Typical Drawing	0390 & 0391
9	0-35-111-04873	Typical Drawing	0636
10	0-35-111-04874	Typical Drawing	0636
11	0-35-111-04875	Typical Drawing	0636
12	0-35-111-04876	Typical Drawing	0636
13	0-35-521-05901	Typical Drawing	0633
14	0-35-521-05903	Typical Drawing	0633

PART-D- BUCK STAY ASSEMBLY

S. No.	Drawing No.	Remarks	Project

PART – E – DUCT MANUAL

ANNEXURE "H"								
2009-10 PLAN (MT) FOR SUPPLY WITH VENDOR MATERIALS								
SL. NO.	CUST. NO.	PROJECT	STRUCTURES	AUTO WELD	COLUMNS	DUCTS	TOTAL	STATE LOCATION
(A)	250 MW							
	0495	RINL, Vizag	125	150	300	0	575	ANDHRA PRADESH
	1400	HMEL-1	110	130	150	190	580	PUNJAB
	1401	HMEL-2	110	130	150	190	580	PUNJAB
	1402	HMEL-3	110	130	150	190	580	PUNJAB
	1403	HMEL-4	110	130	150	190	580	PUNJAB
	0439	HZL-DARIBA-1	24	0	0	60	84	RAJASTHAN
	0440	HZL-DARIBA-2	44	0	0	60	104	RAJASTHAN
	1206	SATPURA-10	402	900	700	1100	3102	MADHYA PRADESH
	1207	SATPURA-11	401	900	700	0	2001	MADHYA PRADESH
	1210	CHABBRA-3	747	1200	700	1100	3747	RAJASTHAN
	1211	CHABBRA-4	747	1200	700	229	2876	RAJASTHAN
	1212	BINA-1	750	1200	700	1059	3709	MADHYA PRADESH
	1213	BINA-2	750	1200	700	285	2935	MADHYA PRADESH
	1208	SYRIA TISHREEN – 1	0	450	700	0	1150	EXPORT
	1209	SYRIA TISHREEN – 2	0	450	700	0	1150	EXPORT
			4430	8170	6500	4653	23753	
ANTICIPATED								
		BELA 270 MW	102	400	700	0	1202	MAHARASHTRA
		BHILAI – 1, 170 MW	0	0	420	0	420	CHATTISGARH
		BHILAI – 2, 170 MW	0	0	368	0	368	CHATTISGARH
		BHUSHAWAL – 2, 250 MW	402	0	0	800	1202	MAHARASHTRA
		BOKORO – 1, 250 MW	190	1100	700	0	1990	JHARKHAND
		BOKORO – 2, 250MW	0	1102	700	0	1802	JHARKHAND
		NAGALAND 380 TPD	0	178	100	0	278	NAGALAND
		PARAS – 3 250 MW	102	400	700	0	1202	MAHARASHTRA
		PARLI- 3 250 MW	102	400	700	0	1202	MAHARASHTRA
		SENEGAL – 2 125 MW	221	300	500	0	1021	EXPORT
			1119	3880	4888	800	10686	
(B)	500 MW							
	636	BELLARY – 2	53	0	0	100	153	KARNATAKA
	642	KHAPERKHEDA	50	0	0	80	130	MAHARASHTRA
	643	BHUSHAWAL – 4	172	0	0	300	472	MAHARASHTRA
	644	BHUSHAWAL - 5	172	0	0	300	472	MAHARASHTRA
	647	KODERMA – 1	236	150	0	600	986	JHARKHAND
	648	KODERMA – 2	236	150	0	600	986	JHARKHAND
	652	DURGAPUR – 1	100	299	150	700	1249	WEST BENGAL
	653	DURGAPUR – 2	100	299	150	700	1249	WEST BENGAL
	654	VALLUR – 1	400	250	0	745	1395	TAMILNADU
	655	VALLUR – 2	400	250	0	745	1395	TAMILNADU
	656	MAITHON – 1	650	650	350	1468	3118	JHARKHAND
	657	MAITHON – 2	650	850	300	1318	3118	JHARKHAND
	658	UKAI – 6	700	850	0	1066	2616	GUJARAT
	659	ANPARA D1	1200	2000	1800	1843	6843	UTTAR PRADESH
	660	ANPARA D2	1200	2000	1800	1843	6843	UTTAR PRADESH
	663	KORBA	1933	600	2000	1400	5933	CHATTISGARH
	664	MARWA	800	650	350	1053	2853	CHATTISGARH
	665	MARWA	800	650	350	1053	2853	CHATTISGARH
	666	BOKKARO	900	800	1300	1072	4072	JHARKHAND
	667	CHANRAPUR – 8	500	700	2000	1513	4713	MAHARASHTRA
	668	CHANRAPUR – 9	500	700	2000	1513	4713	MAHARASHTRA
	1600	NORTH CHENNAI 1	1008	1500	2200	3320	8028	TAMILNADU
	1601	NORTH CHENNAI - 2	1008	1700	2000	3320	8028	TAMILNADU
	1800	KRISHNAPATNAM	1050	1408	2200	2800	7458	ANDHRA PRADESH
	1801	KRISHNAPATNAM	1050	1408	2200	2800	7458	ANDHRA PRADESH
		KAKATIYA 2 X 600 MW	1000	1400	2200	0	4600	ANDHRA PRADESH
		WARDHA – 2, 600 MW	531	800	2200	0	3531	MAHARASHTRA
			17399	20064	25550	32252	95259	
ANTICIPATED								
		DERANG – 1, 600 MW	1100	1400	2200	1987	6687	ORISSA

ANNEXURE "H"								
2009-10 PLAN (MT) FOR SUPPLY WITH VENDOR MATERIALS								
SL. NO.	CUST. NO.	PROJECT	STRUCTURES	AUTO WELD	COLUMNS	DUCTS	TOTAL	STATE LOCATION
		ENNORE - 500 MW	636	1000	2000	0	3636	TAMILNADU
		MALWA – 1 600 MW	1100	1400	2200	1987	6687	UTTAR PRADESH
		MALWA – 2 600 MW	657	1400	2200	0	4257	MADHYAPRADESH
		RIHAND 500 MW	0	0	1950	0	1950	MADHYAPRADESH
		VINDHYACHAL – 1x500 MW	1100	1300	2200	622	5222	MADHYAPRADESH
		VINDHYACHAL – 2x500 MW	200	626	2200	0	3026	MADHYAPRADESH
		WARDHA 1 , 600 MW	1100	1400	2200	1987	6687	MAHARASHTRA
	1604	JINDAL RAIGARH -1-600 MW	1100	1400	2200	1987	6687	CHATISHGARH
	1605	JINDAL RAIGARH -2-600 MW	1100	1400	2200	1987	6687	CHATISHGARH
	1606	JINDAL RAIGARH -3-600 MW	1100	1400	2200	1987	6687	CHATISHGARH
	1607	JINDAL RAIGARH -4-600 MW	1100	1400	2200	1987	6687	CHATISHGARH
	661	MAUDA – 1	650	800	2000	0	3450	MAHARASHTRA
	662	MAUDA – 2	650	800	2000	0	3450	MAHARASHTRA
			11593	15726	29950	14531	71802	
		GRAND TOTAL	34541	47840	66888	52236	201499	

ANNEXURE “I”

ENQUIRY NO:
OS/ACF/010

M/s

SUPPLY OF BOILER COMPONENTS (2,00,000 MT):

SL. NO.	SCHEDULE	TENDERED QTY (MTs)		RATE PER MT (RS.)		SPARABLE MONTHLY CAPACITY FOR BHEL (MT)
		250 MW	500 MW	250 MW	500 MW	
01	SUPPLY OF GENERAL FABRICATION OF STRUCTURES AS PER BHEL DRAWINGS AND SPECIFICATION AS DETAILED IN THE ANNEXURE“L” , “M”.&”N”					
02)	SUPPLY OF AUTO WELDED BEAMS AND BOXES WITH MATERIAL AS PER BHEL DRAWINGS AND SPECIFICATION AS DETAILED IN THE ANNEXURE“L” , “M”&”N”.					
03)	SUPPLY OF COLUMNS AFTER ASSEMBLY AS PER BHEL DRAWINGS & SPECIFICATION AS DETAILED IN THE ANNEXURE“L” , “M”&”N”					
04)	SUPPLY OF DUCTS AS PER BHEL DRAWINGS & SPECIFICATION AS DETAILED IN THE ANNEXURE“L” , “M”&”N”					
05)	FREIGHT CHARGES RATE / MT / KM					
06)	RATE FOR SURFACE BLASTING – FINISH Sa 2½ (BEFORE PAINTING) RATE / MT					

- 1) The above rates are quoted after having fully read and understood the enquiry terms and conditions.
- 2) We note that any deviation at a later date will invite disqualification.
- 3) The PVC formula as per Annexure“P” is acceptable to us.
- 4) The quoted rates are the base Price and will be valid for a period of one year from the date of finalization of tender and are subject to escalation as per PVC formula.
- 5) It is certified to deliver 300 MT per Month minimum with major quantities from Sl. No. 2 to 4.

VENDOR’S AUTHORISED SIGNATORY
WITH SEAL

ANNEUXRE - J

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT AND THE EXPIRY DATE OF BG MUST BE AFTER 60 DAYS FROM THE DATE OF COMPLETION OF WARRANTY PERIOD)

PERFORMANCE BANK GUARANTEE

In accordance of M/s. Bharat Heavy Electricals Limited (A Government of India undertaking, a company incorporated under the Companies Act 1956 having its Registered Office at "BHEL House", SIRI Fort, New Delhi 110 049) through its High Pressure Boiler Plant Division located at Tiruverumbur, Tiruchirapalli- 620 014 (hereinafter called 'the Company') having entered into a contract withhereinafter called 'the said contractor' which term includes 'suppliers' for the purpose of this Bond and under the terms and conditions of the contract No..... Dt Between BHEL, Trichy and as per the contract, the contractor / supplier is to furnish a performance Bank guarantee for Rs. for the due performance of the equipment to be supplied under the above referred contract and for the fulfillment of all the terms and conditions of the contract, We(indicate the name of the bank) (herein after referred to as the bank) at the request of (Contractor(s)) do here by undertake to pay the company an amount not exceeding Rs.....against any loss or damage caused to or suffered or would be caused to or suffered by the company by reason of any breach by the said contractor (s) of any of the terms and conditions contained in the said agreement.

2. We(indicate the name of the bank with full address), do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by the reason of the contractor(s) 'failure to perform' the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs._____.

3. We undertake to pay unconditionally to the Company any money so demanded notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal. The payment under this guarantee would not wait till the disputes have been decided by any Court or Tribunal or in the arbitration proceedings or by any other authority. The payment so made by us under this Bond shall be a valid discharge of liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We.....(indicate the name of Bank), further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till_____Office / Department/ Division of the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. (I) Unless a demand or claim under this guarantee is made on us in writing on or before the _____ we shall be discharged from all the liability under this guarantee thereafter. But where such claim or demand has been preferred by the Company with the Bank before the expiry of the said date, the claim shall be enforceable notwithstanding the fact that the said enforcement is effected after the said date.

(ii) For the purpose of this clause, any letter making demand on the Bank by M/s. BHEL dispatched by Registered Post with Ack. Due or by Telegram or by any Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim / demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the bank personally.

6. We(indicate the name of Bank), further agree with the company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the company or any indulgence by the company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating would, but for this provision, have effect of not so relieving us.

This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. It shall not be necessary for the company to proceed against the contractor before proceeding against the guarantor-bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealised.

8. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirapalli.

9. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authority granted to him/them by the guarantor

10. We(indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing.

In witness whereof we....., (indicate the name of Bank) have hereunto setout Bank Seal the _____ day _____ month 200

ANNEXURE-K	
MAJOR RAW MATERIALS FOR 500 MW BOILERS	
(D) DUCTS	
MATERIAL DESCRIPTION	
ANGLE 50x50x6 MM	
ANGLE 75 x 75 x 6 MM - IS2062GRA	
ANGLE 150 x 150 x 12 MM - IS2062GRA	
BEAM 125 x 70 - IS2062GRA	
BEAM 150 x 75 - IS2062GRA	
BEAM 200 x 100 - IS2062GRA	
BEAM 250 x 125 - IS2062GRA	
H-BEAM 305X165 - IS2062GRB	
CAF JOINTING GR W/1-1.5 MM	
CHANNEL 75 x 40 MM - IS2062GRA	
CHANNEL 100 x 50 MM - IS2062GRA	
CHANNEL 125 x 65 MM - IS2062GRA	
CHANNEL 150 x 75 MM - IS2062GRA	
CHANNEL 200 x 75MM - IS2062GRA	
CHANNEL 250 x 82 MM - IS2062GRA	
CHANNEL 250 x 82 MM - IS2062GRB	
CHANNEL 300 x 90 MM - IS2062GRA	
CHANNEL 300 x 90 MM - IS2062GRB	
CHANNEL 400 x 100 MM - IS2062GRA	
DIA 10mm-IS2062FE410GRA	
ERW TUBE NB 32 MEDIUMX6100-IS1161YST240	
PIPE OD 88.90 x 5.49 - SA106GRB	
PIPE OD 114.30 x 6.02 - SA106GRB	
PIPE OD 168.30 x 7.11 X 6000 - SA106GRB	
PLATE 10.0 MM - IS2062GRB	
PLATE 10-IS2062 Fe410A	
PLATE 12.0 MM - IS2062GRB	
PLATE 16.0 MM - IS2062GRB	
PLATE 20.0 MM - IS2062GRB	
PLATE 25.0 MM - IS2062GRB	
PLATE 36.0 MM - IS2062GRB	
PLATE 5.0 MM - IS2062GRB	
PLATE 5.00 MM IS2062FE410GRA	
PLATE 6 MM - ASTMA36	
PLATE 6.0 MM - IS2062GRB	
PLATE 6mm-IS 2062 Fe 410A	
PLATE 7 MM - ASTMA36	
PLATE 7.0 MM - IS2062GRB	
PLATE 7.00 MM - IS2062GRA	
PLATE 8.0 MM - IS2062GRB	
PLATE 8.00 MM - IS2062GRA	
ROUND DIA 6.0 MM - IS2062GRA	
ROUND DIA 32.0 MM - SA105	
ROUND DIA 40.0 MM - SA105	
ROUND DIA 50.0 MM - SA105	
ROUND DIA 63.0 MM - SA105	
SHEET 2.5MM - IS1079D	
SHEET 2mm-IS1079 Fe 330	
SHEET 4.00 MM - IS1079	
TUBE 60.8X4.5	
TUBE OD 21.30 x 2.77 MM - SA106GRB.	
TUBE OD 33.40 x 3.38 MM - SA106GRB	
TUBE OD 60.3 X 5.6 X 12150 - SA210GRC	
TUBE OD 76.1 X 4.5 X - ASTMA53 GRB	
TUBE OD 76.1 X 4.5 X 10000 - ASTMA53 GRB	
TUBE OD 76.1 X 4.5 X 10000 - SA210GRA1	
TUBE OD 76.1 X 4.5 X 12000 - ASTMA53 GRB	
TUBE OD 76.1 X 4.5 X 13100 - SA210GRA1	
TUBE OD 76.1 X 4.5 X 14000 - SA210GRA1	
TUBE OD 76.1 X 4.5 X 4000 - ASTMA53 GRB	
TUBE OD 76.1 X 4.5 X 5000 - A53GRB	
TUBE OD76.1 X 5.4 X 13100 - SA210GRA1	

ANNEXURE-K
MAJOR RAW MATERIALS FOR 500 MW BOILERS
(C) COLUMNS
MATERIAL DESCRIPTION
ANGLE 100 x 100 x 10 MM - IS2062GRA
ANGLE 130 x 130 x 12 MM - IS2062GRA
BEAM 200 x 100 - IS2062GRA
BEAM 500 X 200 - IS2062GRB
BEAM 600 X 220 - IS2062GRB
CHQ PLATE 5 - IS3502
GP SHEET 1.60 MM - IS277GR120
H-BEAM 305X165 - IS2062GRB
H-BEAM 406 X 178 - IS2062GRB
PLATE 10 - ASTMA36
PLATE 10.0 MM - IS2062GRB
PLATE 100 X 2500 X 8000 - ASTMA36
PLATE 10-IS2062 Fe410A
PLATE 12 MM - ASTMA36
PLATE 12.0 MM - IS2062GRB
PLATE 16 - ASTMA36
PLATE 16.0 MM - IS2062GRB
PLATE 20 - ASTMA36
PLATE 20.0 MM - IS2062GRB
PLATE 25 - ASTMA36
PLATE 25.0 MM - IS2062GRB
PLATE 32 MM - ASTMA36
PLATE 32.0 MM - IS2062GRB
PLATE 36.0 MM - IS2062GRB
PLATE 40.0 MM - IS2062GRB
PLATE 5.0 MM - IS2062GRB
PLATE 5.00 MM IS2062FE410GRA
PLATE 50 - IS2062GRB
PLATE 56 X 2000 X 10000 - ASTMA36
PLATE 56.0 MM - IS2062GRB
PLATE 63 X 1800 X 10000 - ASTMA36
PLATE 75 X 2100 X 4300 - ASTMA36
SHEET 1.6 MM - IS513D
SHEET 2.5MM - IS1079D

ANNEXURE-K
MAJOR RAW MATERIALS FOR 250 MW BOILERS
(C) COLUMNS
MATERIAL DESCRIPTION
ANGLE 65 x 65 x 6 MM - IS2062GRA
ANGLE 75 x 75 x 6 MM - IS2062GRA
ANGLE 80 x 80 x 8 MM - IS2062GRA
ANGLE 100 x 100 x 10 MM - IS2062GRA
ANGLE 130 x 130 x 12 MM - IS2062GRA
BEAM 200 x 100 - IS2062GRA
BEAM 250 x 125 - IS2062GRA
BEAM 300 x 140 - IS2062GRA
BEAM 350 x 140 - IS2062GRA
BEAM 500 X 200 - IS2062GRB
BEAM 600 X 220 - IS2062GRB
H-BEAM 254X146 - IS2062GRB
H-BEAM 305X165 - IS2062GRB
H-BEAM 406 X 178 - IS2062GRB
H-BEAM 450 X 190 - IS2062GRB
CHANNEL 125 x 65 MM - IS2062GRA
CHANNEL 150 x 75 MM - IS2062GRA
CHANNEL 200 x 75MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRB
CHANNEL 300 x 90 MM - IS2062GRA
CHANNEL 300 x 90 MM - IS2062GRB
CHANNEL 400 x 100 MM - IS2062GRA
CHANNEL 400 x 100 MM - IS2062GRB
PLATE 10.0 MM - IS2062GRB
PLATE 10-IS2062 Fe410A
PLATE 12.0 MM - IS2062GRB
PLATE 16.0 MM - IS2062GRA
PLATE 16.0 MM - IS2062GRB
PLATE 20 - ASTMA36
PLATE 20.0 MM - IS2062GRA
PLATE 20.0 MM - IS2062GRB
PLATE 25 - ASTMA36
PLATE 25.0 MM - IS2062GRB
PLATE 32.0 MM - IS2062GRB
PLATE 40.0 MM - IS2062GRB
PLATE 5.0 MM - IS2062GRB
PLATE 5.00 MM IS2062FE410GRA
PLATE 50 - IS2062GRB
PLATE 56.0 MM - IS2062GRB
PLATE 6.0 MM - IS2062GRB
PLATE 63.0 MM - IS2062GRB
PLATE 6mm-IS 2062 Fe 410A
PLATE 8.0 MM - IS2062GRB
SHEET 1.6 MM - IS513D
SHEET 2mm-IS1079 Fe 330

ANNEXURE-K
MAJOR RAW MATERIALS FOR 250 MW BOILERS
(D) DUCTS
MATERIAL DESCRIPTION
ANGLE 50x50x6 MM
ANGLE 75 x 75 x 6 MM - IS2062GRA
ANGLE 80 x 80 x 8 MM - IS2062GRA
ANGLE 100 x 100 x 10 MM - IS2062GRA
BEAM 125 x 70 - IS2062GRA
BEAM 150 x 75 - IS2062GRA
BEAM 250 x 125 - IS2062GRA
BEAM 300 x 140 - IS2062GRA
CHANNEL 75 x 40 MM - IS2062GRA
CHANNEL 100 x 50 MM - IS2062GRA
CHANNEL 125 x 65 MM - IS2062GRA
CHANNEL 150 x 75 MM - IS2062GRA
CHANNEL 200 x 75MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRA
CHANNEL 300 x 90 MM - IS2062GRA
CHANNEL 400 x 100 MM - IS2062GRA
ERW PIPE OD 273.10 x 6.40 - API5LGRB
ERW TUBE NB 25 MEDIUM-IS1239
ERW TUBE NB 32 MEDIUMX5300-IS1161YST240
ERW TUBE NB 32 MEDIUMX6100-IS1161YST240
ERW TUBE NB 65 LIGHT- IS1239
PIPE OD 88.90 x 5.49 - SA106GRB
PLATE 10.0 MM - IS2062GRB
PLATE 10-IS2062 Fe410A
PLATE 12 MM - ASTMA36
PLATE 16 - ASTMA36
PLATE 5.0 MM - IS2062GRB
PLATE 5.00 MM IS2062FE410GRA
PLATE 6.0 MM - IS2062GRB
PLATE 6mm-IS 2062 Fe 410A
PLATE 8.0 MM - IS2062GRB
PLATE 8.00 MM - IS2062GRA
ROUND DIA 32.0 MM - SA105
SHEET 2.5MM - IS1079D
SHEET 2mm-IS1079 Fe 330
SHEET 4.00 MM - IS1079
TUBE 60.8X4.5
TUBE OD 21.30 x 2.77 MM - SA106GRB.
TUBE OD 33.40 x 3.38 MM - SA106GRB
TUBE OD 60.3 X 5 X 12150 - SA210GRA1
TUBE OD 76.1 X 4.5 X 4000 - ASTMA53 GRB
TUBE OD 76.1 X 4.5 X 5000 - A53GRB

COLUMN BASE PLATE DETAILS					
A) TYPICAL 250 MW					
Sr.No	PGMA	COL. NO	BASE PLATE SIZE	BASE PLATE WT IN KGS	SPECIFICATION
1	35110	S6L	1600X1600X75	1507	ASTM A36
2	35110	S7L	1200X1200X75	565	ASTM A36
3	35110	S8L	1700X1700X75	1702	ASTM A36
4	35110	S9L	1700X1700X75	1702	ASTM A36
5	35110	S10L	1500X1500X75	1325	ASTM A36
6	35130	S11	1200X1200X63	712	IS 2062 Fe410B
7	35130	S12	800X800X40	201	IS 2062 Fe410B
8	35130	S13	1200X1200X40	452	IS 2062 Fe410B
9	36110	S14	1100X1100X40	380	IS 2062 Fe410B
10	36110	S15	1100X1100X40	380	IS 2062 Fe410B
11	36110	S17L	800X800X40	201	IS 2062 Fe410B
12	36110	S18L	800X800X40	201	IS 2062 Fe410B
13	36110	S18R	800X800X40	201	IS 2062 Fe410B
14	35130	S16	1200X1200X56	633	IS 2062 Fe410B
15	35140	S1L	800X800X40	201	IS 2062 Fe410B
16	35140	S2L	800X800X40	201	IS 2062 Fe410B
17	35140	S3L	800X800X40	201	IS 2062 Fe410B
18	35140	S4L	800X800X40	201	IS 2062 Fe410B
19	35140	S5L	800X800X40	201	IS 2062 Fe410B
20	35150	S1R	800X800X40	201	IS 2062 Fe410B
21	35150	S2R	800X800X40	201	IS 2062 Fe410B
22	35150	S3R	800X800X40	201	IS 2062 Fe410B
23	35150	S4R	800X800X40	201	IS 2062 Fe410B
24	35150	S5R	800X800X40	201	IS 2062 Fe410B
25	35120	S6R	1600X1600X75	1507	ASTM A36
26	35120	S7R	1200X1200X50	565	IS 2062 Fe410B
27	35120	S8R	1700X1700X75	1702	ASTM A36
28	35120	S9R	1700X1700X75	1702	ASTM A36
29	35120	S10R	1500X1500X75	1325	ASTM A36
30	38110	LC1	800X800X32	201	IS 2062 Fe410B
31	38110	LC2	800X800X32	201	IS 2062 Fe410B

B) TYPICAL 500 MW					
Sr.No	PGMA	COL. NO	BASE PLATE SIZE	BASE PLATE WT IN KGS	SPECIFICATION
1	35140	S6L	1400X1400X56	862	IS 2062 Fe410B
2	35111	S7L	1400X1400X63	969	IS 2062 Fe410B
3	35111	S8L	2000X2000X100	3140	ASTM A36
4	35111	S9L	1800X1800X100	2543	ASTM A36
5	35111	S10L	2000X2000X100/	3140/ 3462	ASTM A36
6	35112	S11L	2000X2000X100/	3140/ 3462	ASTM A36
7	35112	S12L	1600X1600X75	1507	ASTM A36
8	35130	S13L	1600X1600X63	1266	IS 2062 Fe410B
9	36130	S14L	1000X1000X40	314	IS 2062 Fe410B
10	36130	S15L	1000X1000X40	314	IS 2062 Fe410B
11	35130	S16L	1000X1000X40	314	IS 2062 Fe410B
12	36130	S17	1000X1000X40	314	IS 2062 Fe410B
13	35130	S18	1800X1800X100	2543	ASTM A36
14	36110	S19	1400X1400X56	862	ASTM A36
15	36110	S20L	1400X1400X40	615	ASTM A36
16	36110	S21L	1000X1000X40	314	ASTM A36
17	36110	S22L	1000X1000X40	314	ASTM A36
18	36110	S23L	1000X1000X40	314	ASTM A36
19	35130	S13R	1600X1600X63	1266	ASTM A36
20	36130	S14R	1000X1000X40	314	ASTM A36
21	36130	S15R	1000X1000X40	314	ASTM A36
22	35130	S16R	1000X1000X40	314	ASTM A36
23	36110	S20R	1400X1400X40	615	ASTM A36
24	35130	S21R	1000X1000X40	314	ASTM A36
25	35140	S1L	1200X1200X50	565	ASTM A36
26	35140	S2L	1000X1000X40	314	ASTM A36
27	35140	S3L	1000X1000X40	314	ASTM A36
28	35140	S4L	1600X1600X56	1125	ASTM A36
29	35140	S5L	1000X1000X40	314	ASTM A36
30	35150	S1R	1200X1200X50	565	ASTM A36
31	35150	S2R	1000X1000X40	314	ASTM A36
32	35150	S3R	1000X1000X40	314	ASTM A36
33	35150	S4R	1600X1600X56	1125	ASTM A36
34	35150	S5R	1000X1000X40	314	ASTM A36
35	35150	S6R	1400X1400X56	862	ASTM A36
36	35121	S7R	1400X1400X63	969	ASTM A36
37	35121	S8R	2000X2000X100	3140	ASTM A36
38	35121	S9R	1800X1800X100	2543	ASTM A36
39	35121	S10R	2000X2000X100/	3140/ 3462	ASTM A36
40	35122	S11R	2000X2000X100	3140	ASTM A36
41	35122	S12R	1600X1600X75	1507	ASTM A36
42	35130	S13R	1600X1600X75	1266	ASTM A36
43	36130	S14R	1000X1000X40	314	IS 2062 Fe410B
44	36130	S15R	1000X1000X40	314	IS 2062 Fe410B
45	36110	S22R	1000X1000X40	314	IS 2062 Fe410B
46	36110	S23R	1000X1000X40	314	IS 2062 Fe410B
47	38110	LC1	1000X1000X40	314	IS 2062 Fe410B
48	38110	LC2	1000X1000X40	314	IS 2062 Fe410B
All raw material plates > 40 mm. are to be procured in normalized condition with UT as per ASTM A435. No joint is permitted					

The above data is not Exhaustive .It may vary from Project to project at the time of design.

ANNEXURE-K
MAJOR RAW MATERIALS FOR 250 MW BOILERS
(B) AUTO WELD
MATERIAL DESCRIPTION
ANGLE 50x50x6 MM
ANGLE 65 x 65 x 6 MM - IS2062GRA
ANGLE 75 x 75 x 6 MM - IS2062GRA
ANGLE 80 x 80 x 8 MM - IS2062GRA
ANGLE 100 x 100 x 10 MM - IS2062GRA
ANGLE 130 x 130 x 12 MM - IS2062GRA
BEAM 125 x 70 - IS2062GRA
BEAM 150 x 75 - IS2062GRA
BEAM 200 x 100 - IS2062GRA
BEAM 350 x 140 - IS2062GRA
BEAM 500 X 200 - IS2062GRB
BEAM 600 X 220 - IS2062GRB
H-BEAM 254X146 - IS2062GRB
H-BEAM 305X165 - IS2062GRB
H-BEAM 406 X 178 - IS2062GRB
H-BEAM 450 X 190 - IS2062GRB
WPHB 700 X 300 -IS2062 Gr.B, @204.5 Kg/m
WPLB 700 X 300 -IS2062 Gr.B, @149.9 Kg/m
CHANNEL 75 x 40 MM - IS2062GRA
CHANNEL 100 x 50 MM - IS2062GRA
CHANNEL 125 x 65 MM - IS2062GRA
CHANNEL 150 x 75 MM - IS2062GRA
CHANNEL 200 x 75MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRB
CHANNEL 300 x 90 MM - IS2062GRA
CHANNEL 300 x 90 MM - IS2062GRB
CHANNEL 400 x 100 MM - IS2062GRA
CHQ PLATE 6 - IS3502
CHQ PLATE 8 - IS3502
HEX HD BOLT M12X40-4.6 IS1363(P-1) CAD
PIPE OD 88.90 x 7.62 - SA106GRB
PIPE OD 127.00 x 10.00 - SA106GRB
PLATE 10 - ASTMA36
PLATE 10.0 MM - IS2062GRB
PLATE 10-IS2062 Fe410A
PLATE 12.0 MM - IS2062GRB
PLATE 16.0 MM - IS2062GRB
PLATE 16.0 MM - SA515GR70
PLATE 20.0 MM - IS2062GRA
PLATE 20.0 MM - IS2062GRB
PLATE 25 - ASTMA36
PLATE 25.0 MM - IS2062GRB
PLATE 32 MM - ASTMA36
PLATE 32.0 MM - IS2062GRB
PLATE 36.0 MM - IS2062GRB
PLATE 40.0 MM - IS2062GRB
PLATE 5.0 MM - IS2062GRB
PLATE 5.00 MM IS2062FE410GRA
PLATE 56 X 2000 X 10000 - ASTMA36
PLATE 6.0 MM - IS2062GRB
PLATE 6mm-IS 2062 Fe 410A
PLATE 8 MM - ASTMA36
PLATE 8.0 MM - IS2062GRB
PUNCHED WASHER A 18(ID) IS:2016
PUNCHED WASHER A14 (ID) IS 2016-CAD
ROUND DIA 22.0 MM - SA105
STEPTREAD 50X250X850MMDRG 23682000399/03
TUBE OD 63.50 X 5.20 X 11000 - SA210GRC
Grand

ANNEXURE-K
MAJOR RAW MATERIALS FOR 250 MW
(A) GENERAL FABRICATION
MATERIAL DESCRIPTION
ANGLE 50x50x6 MM
ANGLE 65 x 65 x 6 MM - IS2062GRA
ANGLE 75 x 75 x 6 MM - IS2062GRA
ANGLE 80 x 80 x 8 MM - IS2062GRA
ANGLE 100 x 100 x 10 MM - IS2062GRA
ANGLE 130 x 130 x 12 MM - IS2062GRA
BEAM 125 x 70 - IS2062GRA
BEAM 150 x 75 - IS2062GRA
BEAM 200 x 100 - IS2062GRA
BEAM 250 x 125 - IS2062GRA
BEAM 300 x 140 - IS2062GRA
BEAM 350 x 140 - IS2062GRA
BEAM 400 x 140 - IS2062GRA
BEAM 450 x 150 - IS2062GRA
BEAM 500 x 180 - IS2062GRA
BEAM 500 X 200 - IS2062GRB
BEAM 600 X 220 - IS2062GRB
H-BEAM 254X146 - IS2062GRB
H-BEAM 305X165 - IS2062GRB
H-BEAM 406 X 178 - IS2062GRB
H-BEAM 450 X 190 - IS2062GRB
CHANNEL 75 x 40 MM - IS2062GRA
CHANNEL 100 x 50 MM - IS2062GRA
CHANNEL 125 x 65 MM - IS2062GRA
CHANNEL 150 x 75 MM - IS2062GRA
CHANNEL 200 x 75MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRB
CHANNEL 300 x 90 MM - IS2062GRA
CHANNEL 300 x 90 MM - IS2062GRB
CHANNEL 400 x 100 MM - IS2062GRA
CHANNEL 400 x 100 MM - IS2062GRB
CHQ PLATE 6 - IS3502
DIA 10mm-IS2062FE410GRA
ERW PIPE NB 80 HEAVY - IS1239
ERW PIPE NB100 LIGHT - IS1239
ERW TUBE NB 25 MEDIUM X5300-IS1161YST240
ERW TUBE NB 32 MEDIUMX5300-IS1161YST240
ERW TUBE NB 32 MEDIUMX6100-IS1161YST240
ERW TUBE NB 50 MED x 6000 - IS1161YST240
ERW TUBE NB 65 LIGHT- IS1239
HEX HD BOLT M12X40-4.6 IS1363(P-1) CAD
PIPE OD 114.30 x 6.02 - SA106GRB
PIPE OD 168.30 x 7.11 X 6000 - SA106GRB
PIPE OD 88.9 X 5.49 - ASTMA53GRB
PLATE 10 - ASTMA36
PLATE 10.0 MM - IS2062GRB
PLATE 10-IS2062 Fe410A
PLATE 12 MM - ASTMA36
PLATE 12.0 MM
PLATE 12.0 MM - IS2062GRB
PLATE 16 - ASTMA36
PLATE 16.0 MM - IS2062GRA

ANNEXURE-K
PLATE 16.0 MM - IS2062GRB
PLATE 20 - ASTMA36
PLATE 20.0 MM - IS2062GRB
PLATE 25 - ASTMA36
PLATE 25.0 MM - IS2062GRB
PLATE 32.0 MM - IS2062GRB
PLATE 36.0 MM - IS2062GRB
PLATE 40.0 MM - IS2062GRB
PLATE 5.0 MM - IS2062GRB
PLATE 5.00 MM IS2062FE410GRA
PLATE 50 - IS2062GRB
PLATE 6 MM - ASTMA36
PLATE 6.0 MM - IS2062GRB
PLATE 6mm-IS 2062 Fe 410A
PLATE 7.0 MM - IS2062GRB
PLATE 7.00 MM - IS2062GRA
PLATE 8 MM - ASTMA36
PLATE 8.0 MM - IS2062GRB
PLATE 8.00 MM - IS2062GRA
PUNCHED WASHER A 18(ID) IS:2016
PUNCHED WASHER A14 (ID) IS 2016-CAD
ROUND DIA 6.0 MM - IS2062GRA
ROUND DIA 16.0 MM - SA105
ROUND DIA 22.0 MM - SA105
ROUND DIA 25.0 MM - SA105
ROUND DIA 32.0 MM - SA105
ROUND DIA 40.0 MM - SA105
ROUND DIA 50.0 MM - SA105
ROUND DIA 63.0 MM - SA105
ROUND DIA 80.0 MM - SA105
SHEET 2.5MM - IS1079D
SHEET 3.15mm-IS 1079 FE 330
SHEET 4.00 MM - IS1079
SHT 2.50 MM - IS5986FE410
STEPTREAD 50X250X850MMDRG 23682000399/03
THREADED CLEVIS M20
THREADED CLEVIS M20(LH)
THREADED CLEVIS M27
THREADED CLEVIS M27(LH)
THREADED CLEVIS M36X3
THREADED CLEVIS M36X3(LH)
THREADED CLEVIS M45X3
THREADED CLEVIS M45X3(LH)
TUBE OD 60.3 X 5 X 12150 - SA210GRA1
TUBE OD 60.3 X 5 X 7000 - SA210GRC
TUBE OD 60.30 x 8.74 MM - SA106GRB
TUBE OD 60.30 x 3.91 MM - SA106GRB
TUBE OD 76.1 X 4.5 X 11000 - ASTMA53 GRB
TUBE OD 76.1 X 4.5 X 4000 - ASTMA53 GRB
TUBE OD 76.1 X 4.5 X 5000 - A53GRB
WPHB 700 X 300 -IS2062 Gr.B, @204.5 Kg/m
WPLB 700 X 300 -IS2062 Gr.B, @149.9 Kg/m

ANNEXURE-K
GENERAL FABRICATION FOR 500 MW BOILERS
(A)GENERAL FABRICATION
MATERIAL DESCRIPTION
ANGLE 50x50x6 MM
ANGLE 65 x 65 x 6 MM - IS2062GRA
ANGLE 75 x 75 x 6 MM - IS2062GRA
ANGLE 80 x 80 x 8 MM - IS2062GRA
ANGLE 100 x 100 x 10 MM - IS2062GRA
ANGLE 130 x 130 x 12 MM - IS2062GRA
BEAM 125 x 70 - IS2062GRA
BEAM 150 x 75 - IS2062GRA
BEAM 150 x 75 - IS2062GRA(CB)
BEAM 200 x 100 - IS2062GRA
BEAM 250 x 125 - IS2062GRA
BEAM 300 x 140 - IS2062GRA
BEAM 350 x 140 - IS2062GRA
BEAM 400 x 140 - IS2062GRA
BEAM 450 x 150 - IS2062GRA
BEAM 500 x 180 - IS2062GRA
BEAM 500 X 200 - IS2062GRB
BEAM 600 x 210 - IS2062GRA
BEAM 600 X 220 - IS2062GRB
CHANNEL 75 x 40 MM - IS2062GRA
CHANNEL 100 x 50 MM - IS2062GRA
CHANNEL 125 x 65 MM - IS2062GRA
CHANNEL 150 x 75 MM - IS2062GRA
CHANNEL 200 x 75MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRB
CHANNEL 300 x 90 MM - IS2062GRA
CHANNEL 300 x 90 MM - IS2062GRB
CHANNEL 400 x 100 MM - IS2062GRA
CHANNEL 400 x 100 MM - IS2062GRB
CHQ PLATE 8 - IS3502
ERW PIPE NB150 MEDIUM - IS1239
ERW TUBE NB 32 MEDIUMX5300-IS1161YST240
ERW TUBE NB 32 MEDIUMX6100-IS1161YST240
H-BEAM 254X146 - IS2062GRB
H-BEAM 305X165 - IS2062GRB
H-BEAM 406 X 178 - IS2062GRB
H-BEAM 450 X 190 - IS2062GRB
PIPE OD 88.90 x 5.49 - SA106GRB
PIPE OD 88.90 x 12.50
PIPE OD 114.30 x 6.02 - SA106GRB
PIPE OD 127 X 11.5 - ASTMA53GRB
PLATE 10.0 MM - IS2062GRB
PLATE 10-IS2062 Fe410A
PLATE 12 MM - ASTMA36
PLATE 12.0 MM - IS2062GRB
PLATE 16 - ASTMA36
PLATE 16.0 MM - IS2062GRB
PLATE 20.0 MM - IS2062GRB
PLATE 25 - ASTMA36
PLATE 25.0 MM - IS2062GRB
PLATE 32 MM - ASTMA36
PLATE 32.0 MM - IS2062GRB
PLATE 36 MM - ASTMA36
PLATE 36.0 MM - IS2062GRB
PLATE 40.0 MM - IS2062GRB
PLATE 5.0 MM - IS2062GRB
PLATE 5.00 MM IS2062FE410GRA
PLATE 50 - IS2062GRB
PLATE 56 X 2000 X 10000 - ASTMA36
PLATE 56.0 MM - IS2062GRB
PLATE 6.0 MM - IS2062GRB

ANNEXURE-K
PLATE 63.0 MM - IS2062GRB
PLATE 6mm-IS 2062 Fe 410A
PLATE 8.0 MM - IS2062GRB
PLATE 8.00 MM - IS2062GRA
ROUND DIA 6.0 MM - IS2062GRA
ROUND DIA 12.0 MM - SA105
ROUND DIA 16.0 MM - SA105
ROUND DIA 22.0 MM - SA105
ROUND DIA 32.0 MM - SA105
ROUND DIA 40.0 MM - SA105
ROUND DIA 50.0 MM - SA105
ROUND DIA 63.0 MM - SA105
ROUND DIA 80.0 MM - SA105
ROUND DIA 100.0 MM - SA105
ROUND DIA 200.0 MM - SA105
SHEET 2.5MM - IS1079D
SHEET 3.15mm-IS 1079 FE 330
SHEET 4.00 MM - IS1079
THREADED CLEVIS M27
THREADED CLEVIS M27(LH)
THREADED CLEVIS M45X3
THREADED CLEVIS M45X3(LH)
TUBE OD 60.3 X 5.6 X 12150 - SA210GRC
TUBE OD 76.1 X 4.5 X - ASTMA53 GRB
TUBE OD 76.1 X 4.5 X 4000 - ASTMA53 GRB
WPHB 700 X 300 -IS2062 Gr.B, @204.5 Kg/m
WPLB 700 X 300 -IS2062 Gr.B, @149.9 Kg/m

ANNEXURE-K
MAJOR RAW MATERIALS FOR 500 MW BOILERS
(B) AUTOWELD
MATERIAL DESCRIPTION
ANGLE 50x50x6 MM
ANGLE 65 x 65 x 6 MM - IS2062GRA
ANGLE 75 x 75 x 6 MM - IS2062GRA
ANGLE 80 x 80 x 8 MM - IS2062GRA
ANGLE 100 x 100 x 10 MM - IS2062GRA
ANGLE 130 x 130 x 12 MM - IS2062GRA
BEAM 125 x 70 - IS2062GRA
BEAM 150 x 75 - IS2062GRA
BEAM 200 x 100 - IS2062GRA
BEAM 250 x 125 - IS2062GRA
BEAM 300 x 140 - IS2062GRA
BEAM 350 x 140 - IS2062GRA
BEAM 400 x 140 - IS2062GRA
BEAM 450 x 150 - IS2062GRA
BEAM 500 x 180 - IS2062GRA
BEAM 500 X 200 - IS2062GRB
BEAM 600 x 210 - IS2062GRA
BEAM 600 X 220 - IS2062GRB
H-BEAM 254X146 - IS2062GRB
H-BEAM 305X165 - IS2062GRB
H-BEAM 406 X 178 - IS2062GRB
H-BEAM 450 X 190 - IS2062GRB
WPHB 700 X 300 -IS2062 Gr.B, @204.5 Kg/m
WPLB 700 X 300 -IS2062 Gr.B, @149.9 Kg/m
CHANNEL 75 x 40 MM - IS2062GRA
CHANNEL 100 x 50 MM - IS2062GRA
CHANNEL 125 x 65 MM - IS2062GRA
CHANNEL 150 x 75 MM - IS2062GRA
CHANNEL 200 x 75MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRA
CHANNEL 250 x 82 MM - IS2062GRB
CHANNEL 300 x 90 MM - IS2062GRA
CHANNEL 300 x 90 MM - IS2062GRB
CHANNEL 400 x 100 MM - IS2062GRA
CHANNEL 400 x 100 MM - IS2062GRB
ELEC.FORGD. STEP TREAD 50 X 250 X 1000
PLATE 10.0 MM - IS2062GRB
PLATE 10-IS2062 Fe410A
PLATE 12.0 MM - IS2062GRB
PLATE 16 - ASTMA36
PLATE 16.0 MM - IS2062GRA
PLATE 16.0 MM - IS2062GRB
PLATE 20 - ASTMA36
PLATE 20.0 MM - IS2062GRA
PLATE 20.0 MM - IS2062GRB
PLATE 25 - ASTMA36
PLATE 25.0 MM - IS2062GRB
PLATE 32 MM - ASTMA36
PLATE 32.0 MM - IS2062GRB
PLATE 36 MM - ASTMA36
PLATE 36.0 MM - IS2062GRB
PLATE 40.0 MM - IS2062GRB
PLATE 5.0 MM - IS2062GRB
PLATE 5.00 MM IS2062FE410GRA
PLATE 50 - IS2062GRB
PLATE 56 X 2000 X 10000 - ASTMA36
PLATE 6 MM - ASTMA36
PLATE 6.0 MM - IS2062GRB
PLATE 63 X 1800 X 10000 - ASTMA36
PLATE 63.0 MM - IS2062GRB
PLATE 6mm-IS 2062 Fe 410A
PLATE 7 X 1800 X 6000 - ASTMA36
PLATE 8.0 MM - IS2062GRB
PLATE 8.00 MM - IS2062GRA
SHEET 1.6 MM - IS513D
SLIDE BEARAING PLATE

[illegible]

SCHEDULE	QTY. IN MT	AREA SQM.
GENERAL FABRICATION	1340	30400
DUCT	1000	28570
COLUMN	1250	9890
AUTOWELD	880	12020
Grand Total	4470	80880

Note: The above data is only indicative and exact data will be provided after final design.

Note: The above data is only indicative and exhaustive. However, the wt. And schedule may vary at the time of actual document release.

INDICATIVE RATE SCHEDULE BREAK UP FOR PGMA's FOR 500 MW														
				TYPICAL										
PG	MA	PGMA Description	Est Wt. (Kgs.)	001	002	003	004	005	006	007	008	009	010	011
		(A) GENERAL FABRICATION												
08-	007	Furnace Lower Buckstays	79132.890								2125.600	63831.090		
35-	311	Horizontal Bracing I Pass I Mbl	18202.800	1638.300	8494.500	1052.900								
35-	312	Horiz Bracing li Pass Imbl	12364.500	1289.800	5730.500									
35-	321	Horiz Bracing I Pass li Mbl	24596.500	2114.900	7621.700	5811.300	1021.100							
35-	322	Horiz Bracing li Pass li Mbl	9016.600	1920.400	3112.200									
35-	331	Horiz Bracing I Pass lii Mbl	20397.200	1462.000	9115.400									
35-	332	Horiz Bracing li Pass lii Mbl	22541.400	2940.100	9548.000	558.800								
35-	341	Horiz Bracing I Pass Iv Mbl	17811.800	1095.900	5313.400	6159.600	600.000							
35-	351	Horiz Bracing I Pass V Mbl	32933.400	877.100	10118.700	10799.400	2280.500							
35-	352	Horiz Bracing li Pass V Mbl	18017.200	214.300	5669.900	4842.600	860.100							
35-	361	Horiz Bracing I Pass Vi Mbl	28490.800	2384.300	7045.800	10259.600	1330.700							
35-	362	Horiz Bracing li Pass Vi Mbl	17804.800	1567.300	6117.700	5107.300	866.000							
35-	390	Platform At Drum Floor Level	59898.800	18503.900	19470.200	8438.900	104.500						509.700	
35-	511	Front Bracing-Lower	49286.800					29165.400						
35-	512	Front Bracing Middle	30523.500					20984.500						
35-	513	Front Bracing-Upper	22541.800					14664.900						
35-	521	Side Bracing-Lower	155663.500	1503.100				93100.700						
35-	522	Side Bracing Middle	84849.700	688.300				51872.400						
35-	523	Side Bracing-Upper	71505.000					43827.000						
35-	531	Rear Bracing-Lower	99040.500	1183.100				59262.000						
35-	532	Rear Bracing- Middle	53610.100	105.000				31816.300						
35-	533	Rear Bracing-Upper	88980.000	310.000		13065.900		39556.100						
36-	314	Non-Mbl Floor Between Mbl landii	19112.642	2580.319	131.877		14544.318						351.776	
36-	315	Non-Mbl Floor Between Mbl landii	25132.097	3344.377	7465.532		3908.124							
36-	316	Non-Mbl Floor Between Mbl landii	35004.596	5834.871	5482.560	3842.897	446.188						1083.176	
36-	322	Main Floor li Mbl 2nd Pass	22160.981		116.611		472.000						1115.968	
36-	324	Non-Mbl Floor Between Mbl liandiii	14489.962			1923.199							313.048	
36-	325	Non-Mbl Floor Between Mbl liandiii	93557.718	22635.677	36577.766	3347.350	1649.512						746.024	
36-	326	Non-Mbl Floor Between Mbl liandiii	16617.413				2697.336						145.032	
36-	327	Non-Mbl Floor Between Mbl liandiii	80354.585	10286.581	18450.578	2933.314	4892.182						3122.992	
36-	331	Main Floor lii Mbl 1st Pass	17983.928			237.496	2500.036						1619.202	
36-	333	Non-Mbl Floor Between Mbl liiandiv	22696.857			5941.508	2001.002						451.674	
36-	334	Non-Mbl Floor Between Mbl liiandiv	12377.851			851.536	1248.180						177.036	
36-	335	Non-Mbl Floor Between Mbl liiandiv	45283.992	13143.309	7870.414	2638.039	6394.710						747.112	
36-	342	Main Floor Iv Mbl 2nd Pass	13661.006	1347.648	717.500		2424.576	240.553						

				TYPICAL											RA
PG	MA	PGMA Description	Est Wt. (Kgs.)	001	002	003	004	005	006	007	008	009	010	011	
36-	345	Non-Mbl Floor Between Mbl Ivandv	86314.026		42744.356		543.864						363.296		
36-	353	Non-Mbl Floor Between Mbl Vandvi	22592.112			3191.716	6871.868						955.994		
36-	354	Non-Mbl Floor Between Mbl Vandvi	21242.353	5522.638	7484.482		2386.416						879.404		
36-	355	Non-Mbl Floor Between Mbl Vandvi	40625.337	7290.968	9502.098	6050.816	4347.028						1153.074		
36-	362	Main Floor Vi Mbl 2ndpass	8460.910				3425.028								
36-	391	Miscellaneous Platforms-Part I	71948.016	8013.541	21378.931	1228.680	1056.920						685.632		
36-	392	Miscellaneous Platforms-Part li	76142.501	9874.000	20240.410	913.350	7088.670						4782.147		
36-	394	Miscellaneous Platforms Part Iv	19031.742	4338.858	2663.270		7243.328								
36-	395	Miscellaneous Platforms Part V	8632.109	2617.010	211.332	1017.038							530.688		
38-	210	Inter Conn Platformsbetn Boiler/Elevat	41200.875	7731.476	6177.168	385.436	8720.986						377.507		
38-	310	Conn Platforms To Mill Deaerator Bay	18518.952	9261.600	5073.614								450.552		
38-	381	Mill Maintanance Platforms	147337.950	11779.690	43643.140	1135.470							387.280		
38-	510	Lift Beams And Bracings	89803.635				23427.060						51563.846		
38-	610	Lift Machine Room Detailsandmisc Struct	59508.657	4133.626		17515.932	1449.668						2090.122		
39-	150	Col Frames Betn I.D.Fan And Chimney	60679.174	9600.644		11065.192	1394.536	17609.613					9736.960		
39-	300	Platforms - External Structure	308355.674	16192.809	71464.627	22772.214	12728.288	4633.768					4470.982		
39-	302	Struc For Motor Hood Covering	5631.222												
39-	305	Fan Handling Structure For Pa Fan	8575.580			4948.748									
39-	306	Fan Handling Structure For Id Fan	56415.888		14219.380		9449.270						5853.540		
		TOTAL	2586659.931	195327.442	418973.646	158036.231	140373.994	406733.234	0.000	0.000	2125.600	63831.090	94663.764	0.000	
PG	MA	PGMA Description	Est Wt. (Kgs.)	001	002	003	004	005	006	007	008	009	010	011	
		(B) AUTO WELD													
08-	400	Furnace Guide	6195.704	523.058											
35-	342	Horiz Bracing li Pass Iv Mbl	38961.000	3619.100	4172.200	6322.300									
35-	441	Horizontal Beams-Lower	110176.200			25960.800	2250.400								
35-	442	Horizontal Beams Middle	98663.200			2997.900	13306.100								
35-	443	Horizontal Beams-Upper	67566.400	859.600		4451.900	18938.000								
35-	451	Horizontal Beams - Lower 2nd Pass	78183.500			8835.600	11204.800								
35-	452	Horizontal Beams - Middle - 2nd Pass	55000.000			2124.100	8518.400								
35-	453	Horizontal Beams - Upper - 2nd Pass	41025.800	286.500		383.800	6981.000								
36-	311	Main Floor I Mbl 1st Pass	29489.986			733.246	804.958						12.566		

				TYPICAL											RA
PG	MA	PGMA Description	Est Wt. (Kgs.)	001	002	003	004	005	006	007	008	009	010	011	
36-	312	Main Floor I Mbl 2nd Pass	34511.572		299.728		2198.172						172.276		
36-	313	Non-Mbl Floor Between Mbl landii	102069.381		10283.788		7337.274						49.400		
36-	321	Main Floor li Mbl 1st Pass	82164.077		1916.104										
36-	323	Non-Mbl Floor Between Mbl liandiii	25374.249			2607.194							787.824		
36-	341	Main Floor Iv Mbl 1st Pass	46503.857	592.658	5465.655		2212.352								
36-	348	Non-Mbl Floor Between Mbl Ivandv	78596.912	1653.466	9856.937		1114.948								
36-	393	Miscellaneous Platforms Part lii	65702.054	7059.855	7417.008		336.906						160.920		
36-	740	Posts And Hangers	67543.867				3832.120						261.588		
38-	299	Mill Handling Monorails	92800.116		3507.416								166.900		
39-	101	Columns Frames Before Esp-Left	141209.840					34461.774							
39-	102	Columns Frames Before Esp -Right	282155.612	27663.096		26949.936	22919.566						9616.068		
39-	141	Cols Frames Near Id Fan - Left	129506.348												
39-	142	Cols Frames Near Id Fan - Right	281059.574	27166.546		37730.962	38691.052						16842.256		
39-	304	Fan Handling Structure For Fd Fan	12403.546			1657.568									
		TOTAL	1966862.795	69423.879	42918.836	120755.306	140646.048	34461.774	0.000	0.000	0.000	0.000	28069.798	0.000	
PG	MA	PGMA Description	Est Wt. (Kgs.)	001	002	003	004	005	006	007	008	009	010	011	
		(C) COLUMN													
35	111	Main Columns Left 1st Pass	736386.900												
35	112	Main Columns Lert 2nd Pass	346331.200												
35	121	Maincolumns Right 1st Pass	736386.900												
35	122	Main Columns Right 2nd Pass	346331.200												
35	130	Main Columns Middle	708689.200										14875.700		
35	140	Auxiliary Columns-Left Side	330993.900												
35	150	Auxiliary Columns-Rightside	330993.900												
		TOTAL	3536113.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14875.700	0.000	
PG	MA	PGMA Description	Est Wt. (Kgs.)	001	002	003	004	005	006	007	008	009	010	011	
		(D) DUCT													
48-	012	Rect Duct Bet F.D Fan And Airheater	100098.792						1512.764	89915.028		8671.000			
48-	022	Rect Duct Sec.Air Interconnection	13715.760						12079.200	1636.560					
48-	032	Rect Duct A.H Bypass Sec Air Side	46604.610							42790.230		3814.380			
48-	112	Rect Ducts Pri Fan To Airheater Prisd	61799.062						3443.840	50414.598		7940.624			
48-	132	Rect Duct Pri Air Fan To Coldairbusdu	33014.952						3409.872	29605.080					
48-	142	Rect Duct Coldairbus(Temp Air To Mill	42801.733						26177.626	3530.428		12084.669	1009.010		

				TYPICAL											RA
PG	MA	PGMA Description	Est Wt. (Kgs.)	001	002	003	004	005	006	007	008	009	010	011	
48-	152	Rect Duct Pri Air Fan Interconnection	46923.554						38486.648	8436.906					
48-	202	Rect Ducts Airheater To Windboxduct	237694.876						76029.278	161080.598			585.000		
48-	212	Wind Box Connecting Ducts - Rectangula	35375.868							28944.140					
48-	222	Rect Duct-Airheater Prisedetohotair B	115198.732						58928.800	56269.932					
48-	232	Rect Ducts Hot Air Busduct(Hotairtomil	131105.427						25659.456	105445.971					
48-	382	Rect Duct Economiser To Airheater2nop	98828.389						15482.338	83346.051					
48-	386	Duct Below Divertor	112714.026							112714.026					
48-	388	Sq Duct,Economiser-Pri Ah	134415.737						2756.224	131659.513					
48-	432	Rect Duct Airheater Boiler Outlet-Gas	85091.146						7945.052	77146.094					
48-	438	Sq Duct,Pri Ah-Blr Outlet Flange	33121.030							30364.806		2756.224			
48-	439	Sq Duct,Sec Ah-Blr Outlet Flange	43993.312							43993.312					
48-	462	Rect Duct Boiler Outlet To Elec Precp	259862.964							252044.178		7362.528	276.800		
48-	468	Sq Duct,Blr Outlet Flange-Ep,Right	100154.866							100154.866					
48-	482	Rect Ducts-Elec Prptr/M.S To Inddrafft	97778.948						44061.824	53717.124					
48-	486	Ep Spool Duct	150596.584						48612.936	101983.648					
48-	489	Sq Duct,Ep Interconn-Id Fan	71178.820							67410.004		3768.816			
48-	492	Rect Duct Ind Draft Fan To Chimney	325724.806						92899.674	221114.584		9626.548		2084.000	
48-	662	Rect Duct Hot Air Bus To Mills	75006.423						6824.700	35577.390		32604.333			
		TOTAL	2452800.417	0.000	0.000	0.000	0.000	0.000	464310.232	1889295.067	0.000	88629.122	1870.810	2084.000	
		SCHEDULE	QTY (MT)	SURFACE AREA											
		GENERAL FABRICATION	2590												
		AUTO WELD	1970												
		COLUMN	3540												
		DUCTS	2450												
		TOTAL	10550												
Note: The above data is only indicative and exhaustive. However, the wt. And schedule may vary at the time of actual document release.															

INDICATIVE RATE SCHEDULE BREAK UP FOR PG														
			TE SCHEDULES FOR 500 MW											
PG	MA	PGMA Description	012	014	018	021	023	047	048	050	084	086	087	368
		(A) GENERAL FABRICATION												
08-	007	Furnace Lower Buckstays		13176.200										
35-	311	Horizontal Bracing I Pass I Mbl		7017.100										
35-	312	Horiz Bracing li Pass Imbl		5344.200										
35-	321	Horiz Bracing I Pass li Mbl		8027.500										
35-	322	Horiz Bracing li Pass li Mbl		3984.000										
35-	331	Horiz Bracing I Pass lii Mbl		9819.800										
35-	332	Horiz Bracing li Pass lii Mbl		9494.500										
35-	341	Horiz Bracing I Pass Iv Mbl		4642.900										
35-	351	Horiz Bracing I Pass V Mbl		8857.700										
35-	352	Horiz Bracing li Pass V Mbl		3506.600				2923.700						
35-	361	Horiz Bracing I Pass Vi Mbl		7470.400										
35-	362	Horiz Bracing li Pass Vi Mbl		4146.500										
35-	390	Platform At Drum Floor Level		11172.300				1498.300		201.000				
35-	511	Front Bracing-Lower						20121.400						
35-	512	Front Bracing Middle		44.600				9494.400						
35-	513	Front Bracing-Upper		44.100				7832.800						
35-	521	Side Bracing-Lower		1042.500				60017.200						
35-	522	Side Bracing Middle		86.700				32202.300						
35-	523	Side Bracing-Upper						27678.000						
35-	531	Rear Bracing-Lower		815.300				37780.100						
35-	532	Rear Bracing- Middle		898.800				20790.000						
35-	533	Rear Bracing-Upper		1212.500				22954.800	11880.700					
36-	314	Non-Mbl Floor Between Mbl landii		1504.352										
36-	315	Non-Mbl Floor Between Mbl landii		6207.414			4206.650							
36-	316	Non-Mbl Floor Between Mbl landii		3594.282			14720.622							
36-	322	Main Floor li Mbl 2nd Pass		10791.895				7019.524		2644.983				
36-	324	Non-Mbl Floor Between Mbl liandiii		12253.715										
36-	325	Non-Mbl Floor Between Mbl liandiii		12589.545			9933.316	6065.968						12.560
36-	326	Non-Mbl Floor Between Mbl liandiii		10978.287			2796.758							
36-	327	Non-Mbl Floor Between Mbl liandiii		14586.912			25497.446			584.580				
36-	331	Main Floor lii Mbl 1st Pass		10078.460				3178.734		370.000				
36-	333	Non-Mbl Floor Between Mbl liiandiv		10829.009			3473.664							
36-	334	Non-Mbl Floor Between Mbl liiandiv		6821.217			2246.342			1033.540				
36-	335	Non-Mbl Floor Between Mbl liiandiv		8651.540			3687.714	2151.154						
36-	342	Main Floor Iv Mbl 2nd Pass		4143.837				4786.892						

			TE SCHEDULES FOR 500 MW											
PG	MA	PGMA Description	012	014	018	021	023	047	048	050	084	086	087	368
36-	345	Non-Mbl Floor Between Mbl Ivandv		6913.598			14734.388	21014.524						
36-	353	Non-Mbl Floor Between Mbl Vandvi		9302.842			2269.692							
36-	354	Non-Mbl Floor Between Mbl Vandvi		4969.413										
36-	355	Non-Mbl Floor Between Mbl Vandvi		12281.353										
36-	362	Main Floor Vi Mbl 2ndpass		5035.882										
36-	391	Miscellaneous Platforms-Part I		13799.778			25498.934			285.600				
36-	392	Miscellaneous Platforms-Part li		13999.978			19243.946							
36-	394	Miscellaneous Platforms Part Iv		4786.286										
36-	395	Miscellaneous Platforms Part V		4256.041										
38-	210	Inter Conn Platformsbetn Boiler/Elevat		17808.302										
38-	310	Conn Platforms To Mill Deaerator Bay		3733.186										
38-	381	Mill Maintenance Platforms		27852.166			62540.204							
38-	510	Lift Beams And Bracings		14812.729										
38-	610	Lift Machine Room Detailsandmisc Struct		6004.487	1923.890			1147.404		22476.400		2767.128		
39-	150	Col Frames Betn I.D.Fan And Chimney		8005.308			3266.921							
39-	300	Platforms - External Structure		54924.302			105482.964	15371.320		314.400				
39-	302	Struc For Motor Hood Covering Fan Handling Structure For Pa Fan		96.072	2943.750					2591.400				
39-	305	Fan Handling Structure For Pa Fan		3626.832										
39-	306	Fan Handling Structure For Id Fan		3412.385						5661.000			17820.313	
		TOTAL	0.000	429455.605	4867.640	0.000	299599.561	304028.520	11880.700	36162.903	0.000	2767.128	17820.313	12.560
PG	MA	PGMA Description	012	014	018	021	023	047	048	050	084	086	087	368
		(B) AUTO WELD												
08-	400	Furnace Guide		2205.525			2760.191	706.930						
35-	342	Horiz Bracing li Pass Iv Mbl		4897.400				19950.000						
35-	441	Horizontal Beams-Lower		1440.800			38121.000	42403.200						
35-	442	Horizontal Beams Middle		1421.900			9378.400	71558.900						
35-	443	Horizontal Beams-Upper		1151.000			2685.900	39480.000						
35-	451	Horizontal Beams - Lower 2nd Pass		910.000			37743.900	19489.200						
35-	452	Horizontal Beams - Middle - 2nd Pass		455.000				43902.500						
35-	453	Horizontal Beams - Upper - 2nd Pass		579.600			14666.300	18128.600						
36-	311	Main Floor I Mbl 1st Pass		10483.180			9038.572	8417.464						

[illegible]

Note: The above data is only indicative.

		ANNEXURE - N
		WORK CONTENT
SI. NO.	RS. NO.	DESCRIPTION
1	001	1) Performance Bank guarantee as per our format (2.5% of Order value) is to be furnished by the successful vendor/s.
2	002	End profiled structurals, plate shape cutting , Beam cut as 'T'.
3	003	Buckstays, supp. strls., galleries stairways (bolted type), platform, supports, collector channel, cleat, ladder, supp. plates, bearing plates, welded beam, supp. angles, bent plate, supp. beam and built-beams in all PGMAs. Trial assy of segments of chimneys and stacks, rolled beam with holes.
4	004	Castellated beams and columns (single piece with base) made out of rolled beams, box bracing of sizes 200 mm & above, slotted section, stairways (welded type), fabn. of segmental flanges.
5	005	Built-up beam and box up to 2.5 M length, rafters, built-up elevator column, roof enclosure column assy., spider bracing assy., welded beams including button plates, deck panel assembly fully welded angle bracing, bracing type star angle involving trial assembly. Box bracing of size 200mm and above with base plate welding , with trial assembly. Rolled beam column with base plate welding with trial assembly.
6	006	Rectangular ducts without truss (assembly weight 2 M.T and above) including collector channel assembly. Baffle with door, Vertical Baffle Plate.(Without trial assembly)
7	007	Transition, elbow ducts, divider ducts, bend ducts, fully welded box type ducts, rectangular ducts with truss assembly and without trial assembly guide vane inclusive of collector channel assy, truss assembly inside duct, wind box connecting duct, deflector plate, wall frames (assembly weight 2 M.T and above),
8	008	Fixing components for lining and insulation, boiler casings, frames and transport stands, cassette baffle (CS), forming of rolled section, CEEP, omega strip, locating plate, seal box, punched sheet, tubular truss, liner plate (loose). Casing Wall (>500 Kg), casing sheets more than 100 kgs.
9	009	Segmental bend fabn. (above 133 mm dia) out of pipes, reducer, shim plates with machining, Feeder Shell fabn, Plate end weldment, hood ladder, skirt assy. upto 2.5 metrs dia, 4 metre long, saddle support, hand rail with hollow spheres (weldment). CS Support(<30 Kg), Spacer tube with Guide, Guide PL Casing Wall upto 500Kg, Clad sheets, L Frame Assy Components, Side Casing Assy(Incl. of Polythene sh. packing), Carbon Steel Down Spout Assy, Pyrometer Assy, Drain Oil Tank without heater set. bunker and ash tank wall (CS) with trial assy. Etc
10	010	Built-up box & beam above 2.5 M length, " + " type columns out of rolled sections involving trial assy, channel box bracing upto 150mm, channel box column with base plate welding and trial assembly, built-up beam with plate 12mm & below. Channel box brazing up to and including 150mm with base plate welding. with trial assembly of any size
11	011	Circular ducts above dia 1000mm,(with trial assembly) rolling and welding of pipes out of plates, spring cover. CS down sprout / feed pipe.
12	012	Bellow type Exp Jt. C.S
13	013	Expansion Panel / Expansion plates and pleated panel
14	014	Small Despatchable Units
15	015	Stainless steel forming, SS Heat Shield more than 1 Kg.
16	016	Bellow type expansion joints (alloy steel / corten steel)
17	017	Stainless Steel bellow type Expansion Joint.
18	018	CS/AS shearing & straightening up to 10 mm and SS shearing upto 6 mm., guard plate
19	020	Stainless steel fabn. Of down spout/feed pipe made out of pipes, cassette baffle ,
20	023	Fabn. Of built-up beams, UC, by SAW including edge preparation, lay out, MPI/LPI as called for in QWI.
21	025	Circular damper (incl. of packing charges) upto 100 kg.

		ANNEXURE - N
		WORK CONTENT
SI. NO.	RS. NO.	DESCRIPTION
22	028	Circular damper (incl. of packing charges) above 100 kg.
23	029	Auto damper (including machining and assy.), duplex scanner assembly. (in nos)
24	031	Corrugated sheet
25	032	Alloy steel fabrications (including corten steel) except welded channels and welded beams. Seal air header, MDV header
26	033	Stainless steel fabns. Including down spout and feed pipe out of plates. Needle gate assembly with SS body.
27	034	Shell assy upto 16mm plate thick, skirt assy more than 2.5 dia, length more than 4 metres, seg.bends out of plates upto 16 mm, weld attachments for drum, salt mixing tank.
28	035	Shell Assembly above 16 mm plate thick, , chimneys, stack assemblies.
29	036	Fabrication of Alloy steel Ducts with fabricated AS structures and trial assembly. Alloy steel horizontal pipe clamp made out of plates., trunnian clamp
30	037	Alloy steel welded channels and welded beams fabricated out of AS plates Alloy steel welded type raiser clamp, shock absorber clamp.
31	039	Ducts of less than 2 MT(assembly weight)(without trial assembly), fully welded ducts of any weight, aerofoil, flow metre, ventury metre, liner assembly, , circular duct dia up to and including 1000mm, duct / duct wall of tower type design of any weight , elbow duct with multiple vane without partition wall of any weight, grab bar, air filter assembly. Bunker and ash tank wall assembly,(with trial assembly) where - AS / SS lining / content is involved
32	040	Alloy steel Crown Plate (Plate thickness more than 12mm.)
33	042	Strips, Plates, stiffners involving shearing and punching operations upto 6 mm, U clamp upto 6mm, Nut Cap Assy.
34	043	Strips, Plates, stiffners involving shearing and punching operations above 6 mm, corner support flat & U clamp above 6mm .
35	044	Small items like Peg fin, bent pin, U plate , socket pin
36	045	Pipe bend 45,90,135 deg. upto Tube dia 44.5 mm .
37	046	Multiple bends upto Tube dia 44.5 mm., Shear Pin, SS Heat Shield with curving operation.
38	047	Fabn. of box type beams from plates by SAW including edge preparation , lay out LPI/MPI as called for in QWI..
39	048	Fabn. Of " + " type beams from plates of any thickness by SAW including edge preparation, lay out, LPI/MPI as called for in QWI. .
40	050	Despatch of structural item, viz., angles, beams, channels, plates, tubes and rods as Running Meter
41	055	Press brake items and deck ribbed sheet, ribbed sheet, omega strip including steel crating as per sketch AD:OP&C:001 out of BHEL materials, wherever called for and omega strip, casing sheet less then 100 kg. Weight.
42	056	Linkage assy (CS/AS) - made out of rod up to and including dia 50mm, glycerile seal pot - B
43	058	Fabn. & Trial assy. Of Ceiling Girders upto 250 MW and Fabn. & Trial assy. Of 500 MW single girder.
44	059	Fabn. & trial assy. of 500 MW Ceiling Girder
45	066	Fabfication of Wind Box and panel supports.
46	067	Erection lug, partition plate, square nut, Cable opening tube, 1" Coupling, water loop, nipple, pipe clamp (AS), weldl stud M10, taper washer, stud.
47	068	rocker shaft lever, rocker shaft, impulse line vent, precision hex screw M30 x 60, stud M27.
48	070	U Shield, bend type tube shield, SS spacer tube, reinforce pad shield, Air Nozzle (SS) + Tube(SS/CS) welding SS clevis pin

		ANNEXURE - N
		WORK CONTENT
SI. NO.	RS. NO.	DESCRIPTION
49	074	Miscellaneous items such as panel erection/ handling attachment, washer, brackets, rack trays, collector plates, eco-straps, switch mounting bracket, off-set bar (plate type and rod without machining), lugs, lug plates, yoke plates, name plate holder, lifting handle
50	077	Frame with Undulated sheets
51	081	Fabn. Of built up beam, Universal column, by SAW including edge preparation, layout, MPI/LPI as call for QWI & Trial assy, inclusive of end packing for Assy wt more than 10 MT, I-Beams section including 200 and less
52	082	Fabn. Of built up beam, Universal column, by SAW including edge preparation, layout, MPI/LPI as call for QWI & Trial assy, inclusive of end packing for Assy.wt less than or equal to 10 MT
53	083	Fabn. Of box from plates by SAW including edge preparation, layout, MPI/LPI as call for QWI & Trial Assy, inclusive of end packing for Assy. wt more than 10 MT, Boxes of cross section including 200 and less
54	084	Fabn. Of box from plates by SAW including edge preparation, layout, MPI/LPI as call for QWI & Trial Assy, inclusive of end packing for Assy. wt less than or equal to 10 MT
55	085	Fabn. Of "+" type column from plates of any thickness by SAW including edge preparation, layout, MPI/LPI as call for QWI&trial assy, inclusive of end packing for assy. wt more than 10 MT
56	086	Fabn. Of "+" type column from plates of any thickness by SAW including edge preparation, layout, MPI/LPI as call for QWI & trial assy, inclusive of end packing for assy. wt less than or equal to 10 MT
57	087	Monorail beam fabn. & trial assy, vertical beam (buckstay), castellated beam (Auto weld).
58	088	Bracing Fabn. & Trial assy.
59	090	Buckstay assy. With welded beam by SAW,
60	091	Buckstay assy, with rolled beam by manual welding.
61	092	Single piece auto welded column with base plate and top plate.
62	120	Pipe clamp
63	121	Spacer clip, support clip (AS), support lug (AS), strip, stud, SS Heat Shield less than or equal to 1 Kg/piece , fin flat.
64	125	Corrugated Drier box, spray pipe clamp assembly.
65	127	AS strut, CS Sp box, SS Sp bar, thermowell, flame viewing port , glycerine seal pot - A.
66	129	Heat treatment of boiler components as per QCP:002/02. Stress-relieving / normalising shall be done.
67	131	CEEP to drg. 3-48-382-30016
68	133	Style 01- half size-CS/carton steel - Drg No. 2-48-999-47612/01
69	134	Style 02 half size-CS/carton steel - Drg No. 2-48-999-47612/01
70	135	Style 01-full size- CS/ Carton steel - Drg No. 2-48-999-47612/01
71	136	Style 02 - full size-CS - Drg No. 2-48-999-47612/01
72	137	Style02- full size -carton steel -Drg No. 2-48-999-47612/01
73	138	Stainless Steel Round Corner
74	145	Pipe Bend – Single , dia 48.3 (for hand rails)
75	146	Pipe bend – Multiple, dia 48.3 (for hand rails) nipple rod.
76	301	Welded Clevis
77	302	Hanger Rod etc
78	303	Hanger rod assy. with clevis
79	304	Scalloped Bar fabrication - weight more than 1 kgs.

		ANNEXURE - N
		WORK CONTENT
SI. NO.	RS. NO.	DESCRIPTION
80	306	Temperature / Pressure tapping assy (CS) including machined components, rocker washer.
81	307	Temperature / Pressure tapping assy (AS) including machined comp., fill / vent / drain plug, spray plate.
82	309	Threaded clevis M20 to M27, gauge connector, anchor pivot pin, measurement rod, measurement assy, condensing loop assembly, coupling nut M27.
83	310	Threaded clevis M32 to M36, nut M60.
84	311	Threaded clevis M45,. Fill pipe.
85	312	Hanger rod, Hanger rod assy with clevis, Tie rod, Tie rod assy, Deck hanger rod. Weight of these up to and 50 kg / No, foundation bolt with plate /rod up to and including 20 kgs.
86	316	Retainer - A
87	317	Retainer - C
88	318	Screwed Piece, Suspension Bolts,. CAP assembly
89	319	Machining Components (weight more than 100 grams and upto 5 kgs)
90	320	Washer plate, Buckstay corner plate, Buckstay link plate(All pl 40mm and above)
91	321	Fabrication of NMEJ frame, oil tank assembly with heater set, needle gate (CS), segmental bend fabricatiobn (less than or = 133mm dia.)
92	322	Hand rails and Hand rail posts (paintable) including hand ring , hand rails frame assembly.
93	323	Hand rails and Hand rail posts (Galvanizable).
94	324	Access door 100/250, 400/450, 610/610, 900/1800.
95	325	Elipitical door
96	326	Reducing stage (all types) - CS , orifice plate assembly machining with assembly
97	327	Reducing stage (all types) - AS
98	328	Water cooled door and scaffold door
99	329	Header with stub.
100	330	Machining components up to and including 50 grams by weight.
101	331	Machining components more than 50 grams and up to 100 grams by weight.
102	332	Oil gun assembly.
103	333	Fixing pin of length upto and including 250mm.
104	334	Fixing pin of length above 250mm.
105	335	Linkage assembly CS/AS made out of rod dia above 50mm.
106	336	Vertex finder
107	337	Air Nozzle Assy
108	340	Sliding gate up to and including 500mm opening
109	341	Sliding gate above 500mm opening
110	342	Scalloped Bar fabrication - of weight up to 1kg.
111	343	Pipe collar rolling , fabrication and machining
112	344	Pipe collar only machining
113	345	Tie rod R/R / LR upto M24 -including thread end protection thro' srewed in plastic cap
114	346	Tie rod R/R / LR from M25 to M 48 -including thread end protection thro' srewed in plastic cap
115	347	Tie rod R/R / LR from M 49 and above-including thread end protection thro' srewed in plastic cap
116	348	Blank flange, blind flange.

		ANNEXURE - N
		WORK CONTENT
SI. NO.	RS. NO.	DESCRIPTION
117	349	Hanger rod assembly - both end clevis, Hanger rod assembly with clevis and bracket
118	350	Girder pin connection
119	352	T.T.Burner Assembly - 500 MW.
120	353	T.T.Burner Assembly - less than 500 MW.
121	354	Oil system - LFO pump.
122	355	Oil system - HFO pump.
123	356	Heater, cooler and strainer of oil system.
124	357	Oil system skid assembly.
125	358	Coal valve - chain and motor operated upto 36".
126	359	Isolation gate assembly.
127	360	Gate assembly up to 22".
128	361	Gate assembly above 22".
129	362	Raw coal gate above 36".
130	363	Strainer assembly, heat exchanger assembly and cooler assembly of 24 PG.
131	364	Sheet metal work with sheet upto and including 3.15mm.
132	365	Fabrication work involving TIG root and Arc welding .
133	366	cyclone assembly (for recycling bed materials 48 PG)
134	367	Duct assembly of all types- with trial assembly
135	368	Small despatchable units with piece weight up to and including 25 kgs(of RS 001-005).
136	369	DUCTS--circular to any shape transition
137	370	CAF GASKETS /other Non-ferrous Gaskets up to and including 250 mm dia.
138	371	CAF GASKETS /other Non-ferrous Gaskets above 250 mm dia.
139	372	U- ROD 6mm to 24 mm dia- with or without threading
140	373	U- ROD 25mm to 50 mm dia- with or without threading
141	374	U- ROD 51mm dia- and above with or without threading
142	375	EYE BOLTS
143	376	Templates , sleeve pipes, shims
144	377	Temperature Probe with stellite welding

DISTANCE CHART																				
	PROJECT SITES	ACF VENDORS																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		LUDHIANA (PUNJAB)	ROPAR (PUNJAB)	CHANDIGARH	YAMUNA NAGA (CHANDHIGA)	DELHI	SIKANDRABAD-UP	FARIDABAD	GHAZIABAD	NAGPUR	HYDERABAD	VIZAG	VIJAYAWADA	ANGUL	KOLKATTA	KARAGPUR	BHILAI	CHENNAI	JABALPUR	TRICHY
1	ANPARA (UP)	1230	1213	1163	1125	925	873	954	874	700	1210	1427	1455	1086	764	650	728	1900	964	2118
2	BARAUNI (BIHAR)	1348	1426	1281	1326	1126	1074	1155	1107	1015	1565	1391	1755	763	549	671	882	2084	829	2453
3	BELLARY	2140	2166	2103	2035	1866	1918	1837	1884	854	367	828	476	1375	1797	1665	1108	518	1118	638
4	BHAVINI-KALPAKKAM	2460	2455	2393	2355	2155	2207	2184	2177	1143	748	870	456	1345	1736	1604	1436	60	1407	270
5	BHUSAWAL (MAHARASTRA)	1498	1378	1431	1278	1078	1026	1049	1130	416	903	1278	1103	1116	1534	1211	664	1440	680	1580
6	BOKARO (JHARKAND)	1479	1474	1412	1374	1174	1122	1148	1196	934	1558	1191	1573	639	376	244	680	1786	971	2189
7	BONGAIGAON (ASSAM)	1990	2045	1923	1945	1745	1633	1774	1736	1657	2388	1687	2468	1341	890	935	1927	2568	1393	2920
8	DURGAPUR (WB)	1532	1527	1465	1427	1227	1175	1198	1205	1154	1642	1019	1300	538	182	162	799	1680	969	2075
9	GOINDWAL (PUNJAB)	190	790	260	690	490	542	910	510	1510	1990	2350	2260	2320	1890	1758	1650	2590	1310	2820
10	GVK GOIDWAL	190	300	250	295	455	507	567	474	1466	1953	2334	2220	2210	1863	1992	1761	2549	1268	2852
11	HZL-DARIBA-RAJASTHAN	905	900	838	800	600	652	629	622	866	1353	1826	1553	1566	1990	1858	1120	1949	822	2265
12	IISCO BURNPUR (WB)	1494	1489	1427	1389	1189	1137	1160	1169	950	1526	1181	1545	553	234	424	599	1973	916	2289
13	JHAJJAR (HARYANA)	352	305	296	258	115	167	138	145	1127	1614	1995	1881	1830	1499	1612	1300	2208	722	2504
14	KHAPERKHEDA(MAHARA)	1295	1290	1228	1190	1022	1042	993	1012	22	509	878	764	722	1146	1014	276	684	242	1022
15	KODERMA (JHARKAND)	1344	1339	1277	1239	1039	987	1010	1017	909	1553	1062	1426	610	430	451	724	1872	762	2202
16	KORBA WEST (CHATISH)	1438	1433	1371	1333	1133	1081	1104	1243	484	978	796	1160	576	997	857	230	1452	440	1891
17	MAITHON (WB)	1481	1476	1414	1376	1176	1124	1147	1198	1046	1690	963	1327	717	249	588	770	1773	903	2105
18	MARWA (CHATTISH)	1378	1373	1311	1273	1073	1021	1044	1183	424	918	736	1100	536	957	817	175	2590	380	2906
19	MEJIA-WB	1570	1489	1503	1389	1265	1213	1236	1246	1041	1116	987	981	1262	226	206	771	1708	931	2040
20	NABINAGAR (BIHAR)	1213	1427	1365	1327	1127	1075	1098	1107	910	1485	1141	1451	561	551	526	658	1881	837	2073
21	NAGOTHANE, MUMBAI	1755	1750	1688	1650	1450	1502	1421	1472	911	638	1226	905	1611	2035	1903	1165	1334	1175	1409
22	NORTH CHENNAI (TN)	2874	2472	2774	2574	2194	2142	2165	2186	1218	619	758	448	1375	1668	1536	1271	65	1347	332
23	PIPAVAV, AHMADABAD	1542	1492	1512	1393	1179	1231	1208	1201	1178	1665	2095	1932	1878	2302	2172	1432	2137	1180	2467
24	PRAGATHI BAWANA (DELHI)	302	297	235	197	3	73	57	50	1015	1502	1690	1767	1718	1502	1500	1269	2194	810	2495
25	RINL VIZAG (AP)	2037	2213	1970	2082	1835	1757	1912	1827	818	608	20	402	585	989	756	634	830	1085	1076
26	SIKKA-GUJARAT	1560	1555	1493	1455	1255	1203	1284	1277	1297	1536	2117	1802	1997	2333	2201	1494	2086	1203	2173
27	SIMADHRI (AP)	2057	2233	1990	2102	1855	1777	1932	1847	838	628	40	422	605	1009	776	679	875	1005	1121
28	UKAI (GUJARAT)	1479	1528	1412	1428	1228	1176	1185	1206	677	832	1067	1099	1377	1915	1669	929	1699	878	1733
29	VALLUR (TN)	2911	2509	2811	2611	2231	2179	2202	2223	1255	656	795	485	1412	1705	1573	1308	37	1347	369
														NEWLY ADDED						

PRICE VARIATION FORMULA FOR RAW MATERIALS IN THE 60,000 MT TENDER

The following Price Variation Clause will be applicable.

ANNEXURE - P

- (A) SAIL / JINDAL Price List published on the date of tender opening date will be taken as the basis. The prevailing rates for Jan '09 is enclosed (Annexure 1).
- (B) The landed cost at Trichy from Steel Plant will be taken as the “**BASE PRICE**”.
- (C) The landed cost for a raw material is arrived by taking into account the following:

(Ex -Plant Price + ED + CESS + EDUCATION CESS + CST) – CENVAT.

For Example: (Rate / MT)

Basic Rate of Plate 25 mm. IS 2062 Gr. B as on Jan 2009 (freight to Trichy + stock yard margin)	-	Rs.34,810.00
ED 10% + CESS 2% + EDUCATION CESS 1%	-	Rs. 3,585.43
CST 2%	-	Rs. 767.91

TOTAL COST		Rs.39, 163.00
LESS CENVAT		Rs. 3,585.43

NET COST PER MT (TOTAL COST – MODVAT)		Rs.35, 577.57

This is considered as the base price for Plate 25 mm. for the month of Jan 2009. Similarly for all the major raw materials that are required for fabrication of Column for a 500 MW is to be computed. This is enclosed as “Annexure-1”. On perusal the weighted average cost of raw material for supply of 500 MW Columns works out to Rs.38,420/- MT. This is considered as the raw material “**BASE PRICE**” for supply of 500 MW Columns.

On a similar basis, the “**BASE PRICE**” **TWO** months prior to the IR or “Base Price” on the scheduled delivery date (excluding both the dates) whichever is earlier is to be computed based on the SAIL / Jindal price list applicable for that month. The “**BASE PRICE**” for the various schedules for the month of Jan 2009 is as under. This is based on the data arrived as in Annexure- 1 enclosed herewith.

Sl. No.	Schedule	250 MW	500 MW
01)	General Fabrication	40680/-	39200/-
02)	Auto Weld	37170/-	37030/-
03)	Column	35690/-	38420/-
04)	Duct	33870/-	35050/-

The increase / decrease in the Rate for each of the schedules would be governed by the following formula:

$$P_1 = P_0 + (S_1 - S_0)$$

- Where
- P₁** - Escalated / de-escalated price for each Schedule
 - P₀** - Contracted price for each schedule
 - S₁** - The MOU “**Base Price**” of SAIL or JINDAL as the case May be; Two months prior to actual despatch date or Scheduled Delivery Date; whichever is earlier
 - S₀** - The MOU “**Base Price**” of SAIL or JINDAL applicable on the Tender opening date.

Note: For full details please refer to the CD

ANNEXURE “Q”

235-003

Page 01 of 02

**BHARAT HEAVY ELECTRICALS LTD: TIRUCHIRAPPALLI 14
NON-DESTRUCTIVE TESTING**

ASSESSMENT FORMAT – UT / MT / PT

Date:

01. Name of the Firm :

02 . Type of NDT : UT / MT / PT

03. Names of Operators with level :

Name S/sri	Method & Level	Certification Date	Re-certification Date
-----------------------	---------------------------	-------------------------------	----------------------------------

04. Particulars of Equipments

Method	Make & Model	Sl. No.	Date of Calibration	Due date for recalibration
---------------	-------------------------	----------------	--------------------------------	---------------------------------------

05 Consumables :

(a) Details of Probes :
Normal :
Angle :
TR :

(b) Magnetic Particles : Brand
Wet :
Dry :

Equipment for sensitivity check : Available/Not Available

(NOTE: Use additional sheets/enclose Copies of Certificates wherever required)

(c) Penetrant Test**Brand**

Cleaner :
Penetrant :
Developer :
Penetrant remover

Equipment for sensitivity check : **Available/Not Available**

06. IBR Approval : **Obtained/Not obtained.**
: **Valid upto**

07 BHEL Approval : **Valid upto**

08. Remarks :

**Representative of
Contractor**

**Surveyed by
NDT/BHEL**

Head/NDT

ANNEXURE "R"

235-002

Page 01 of 02

**BHARAT HEAVY ELECTRICALS LTD: TIRUCHIRAPPALLI 14
NON-DESTRUCTIVE TESTING/QUALITY**

ASSESSMENT FORMT - RT

Date:

01. Name of the Firm :

02 . Type of NDT : RT

03. Name of RSO :

04. Names of Site-in-charge :

:

:

:

:

05. Names of Operators with level :

**Name
S/sri**

Level

**Certification
Date**

**Re-certification
Date**

06. Particulars of Equipments

(a). X-ray/Gamma ray Sources

Make

Model

Sl.No.

Strength/Range

(b).Survey meter

Make and Model

Range

**Date of
Calibration**

**Date of
Recalibration**

(c).Dosimeter

:

Make and Model

Sl.No.

Range

(d).Illuminator

: Available/Not available

Brand

:

(e) Densitometer/Strip

: Available/Not Available

Make

: Calibrated on

Recalibration date

(NOTE: Use additional sheets/enclose Copies of Certificates wherever required)

07. a. Film Processing Facility : With thermostat/without thermostat - airconditioned
 b. Drier : Available/Not Available

08. Image Quality Indicators

ASTM	: Designations	Calibrated on
DIN		Sizes

09. Details of Safety Equipment

- (i) Warning lamps/Siren : Available/Not available
 (ii) Display Boards with Stand and rope : Available/Not available
 :
 (iii) Film badge Services : Available/Not available
 (iv) Tongs : Available/Not available

10. Details of Consumables

Processing chemicals	: Brand
Developer	:
Fixer	:
Wetting Agent	:
X-ray films	:
Screens (thickness)	:

11. IBR Approval : Obtained/Not obtained.
 : Valid upto

12. BHEL Approval : Valid upto

13. PAN Number

14. Radiography works undertaken :

13. Remarks :

Representative of
Contractor

Surveyed by
NDT/BHEL

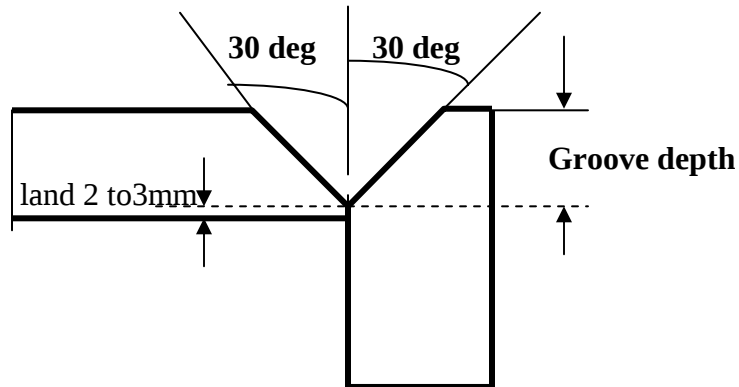
Head/NDT

ANNEXURE “S”

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPALLI – 620 014
QUALITY CONTROL – OFF LOADING INSPECTION**

GROOVE DETAILS FOR BOX CORNER JOINT MEANT FOR COLUMN, POST & BRACINGS FOR SAW PROCESS:

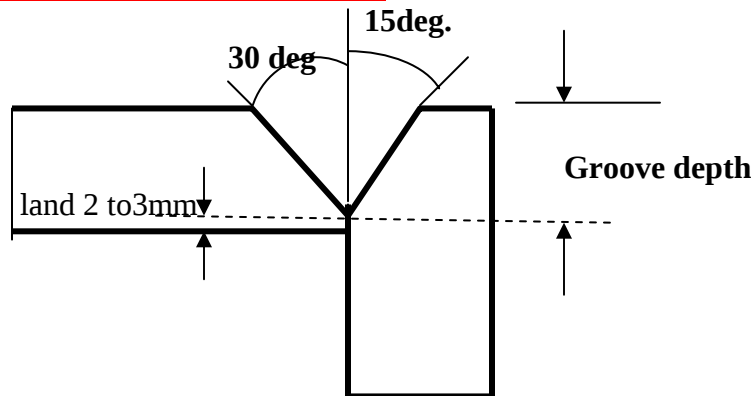
1) PLATE THICKNESS < 32mm:



Land 3mm, groove angle 30+30 deg. Root gap:0mm

Example: Plate t = 25mm, groove depth 22mm, land 3mm

2) PLATE THICKNESS = >32mm:



Land 3mm; groove angle 30+15 deg. Root gap:0mm

Example: Plate t = 63mm, groove depth 60mm, land 3mm

Plate t = 56mm, groove depth 53mm, land 3mm

Plate t = 50mm, groove depth 47mm, land 3mm

NON-DESTRUCTIVE TESTING

BHE:NDT:VL:02 -- Rev. 16

Dated: 31 / 03 / 2008

List of Approved NDT Sub-Contractors

Sl.No	Name of the Firm and Address	Approved Methods	
1	M/s G.B. NDT Engg. Services, E-52,Industrial Estate,Thuvakudi, Tiruchy-620015 Phone:(0431)2501112,2500891	RT, UT, MT, PT	
2	M/s C Premier NDE Services, CP-17, Electrical and Electronics Industrial Estate, Thuvakudi, Tiruchy 620015 Phone (0431)2500878	RT, UT	
3	M/s Super Quality Services, 95,SQS Building, Near Police Station, Palakkarai Main Road, Trichy-620001 Phone (0431)2415087,2414218, Fax-0431-2464218 E-Mail:sqs@vsnl.net	RT, UT, MT, PT	
4	M/s Metal Care Engg. Services Plot 13,14, B-1 Kether Manor,3rd Cross, North Extension, Thillai nagar,Trichy 620018 Phone(0431) 2762190, 2481593	RT	
5	M/s Industrial X-ray Inspnction Company, Test House, 26, 2nd Street, Kalaimagal Nagar, Eekkattuthangal, Chennai 600 032 Phone: 044- 22251091, 22250690 e-mail: ixico@satyam.net.in	RT	
6	M/s Scaanray Metallurgical Services, C-12, Industrial Estate,Mogappair (West) Chennai 600 037 Phone: 044-26250651, 23762613 Fax 26358741 e-mail: scaanray@vsnl.com	RT, UT, MT,PT	
7	M/s Escon Technical Services (P).Ltd 32, Bharathy Park Cross Road 8 , Coimbatore, 641011 Phone:0422-2451263, 2450737 Fax- 2437271 e-mail:vivu@giasmdo1.vsnl.net.in	RT, UT,	
8	M/s Industrial Radiographic Inspection Company SP-111, South Avenue, Ambattur Industrial Estate, Chennai 600 058 Phone: 044-26253235,26250790,26255602, Fax-044-26255838 e-mail : info@iricondt.com	RT	
9	M/s Testrade Technical Services, Vishnu Vihar,217, Dr. Ambedkar Road, P.O. Velandipalayam, Coimbatore 641 025. Phone: 0422-2450440 Site Office:165, SIDCO INDL.ESTATE, Malumichampatti, Coimbatore-641021 Phone:0422-2655772 Cell:9363242722	RT	

Prepared by

Reviewed and Accepted by

(M.Manimohan)
DM / NDT(R.J. Pardikar)
SDGM / NDT

**BHARAT HEAVY ELECTRICALS LTD: TIRUCHIRAPPALLI 14
NON-DESTRUCTIVE TESTING**

BHE:NDT:VL:02 -- Rev. 16

Dated: 31 / 03 / 2008

List of Approved NDT Sub-Contractors

Sl.No	Name of the Firm and Address	Approved Methods	
10	M/s Everest Industrial Radiographer, 189, Thyagaraja New St. No.3, Coimbatore 641 001 Phone: 0422-2472528 e-mail:everestndt@sify.com Site Office:1/25, Arisipalayam, Coimbatore-641032 Phone:0422-2638148,2638348, 2401842(K.Chockalingam) Cell:9843011031 (A.Rathinam)	RT	
11	M/s KGB Inspection Services, P-16, Electrical & Electronics Industrial Estate, Thuvakudi, Tiruchirappalli 620015 Phone (0431)2500164	RT, UT, MT, PT	
12	M/s Supreme Excel NDT Services, II Floor, Vairam Memorial Complex 24-A/B, Jeeva Street, Subramaniapuram, Tiruchirappalli - 620020 Phone:(0431)2333528, 2501241 e-mail:ndtsrvcs@yahoo.com	RT, UT, MT, PT	
13	M/s Evergreen NDT Engineers, No. 7, I Floor, Vairam Memorial Complex 24-A/B, Jeeva Street, Subramaniapuram, Tiruchirappalli 20- 620020 Phone(0431) 2333095, Cell-9842425765,9842435765	RT,UT	
14	M/s.NDE Inspections, 50,Raja Colony, 4th Cross,Collector Office Road, Trichy-620001. Phone (0431)2416388 e-mail:ndeinspections@sancharnet.in	UT, MT, PT	
15	M/s Technical Inspection Services 513-A6, Bharathi Road, Chinnavedampatti, Ganapathy, Coimbatore-641 006. Phone:0422-2667971	RT	
16	M/s Sri Vinayaga NDT Inspection Services, SF 303, Peria Thottam, Kadathur Road, Coimbatore- 641 107. Phone 0422-2653640	RT	

Prepared by

Reviewed and Accepted by

**(M.Manimohan)
DM / NDT**

**(R.J. Pardikar)
SDGM / NDT**

BHARAT HEAVY ELECTRICALS LTD: TIRUCHIRAPPALLI 14

NON-DESTRUCTIVE TESTING

BHE:NDT:VL:02 -- Rev. 16

Dated: 31 / 03 / 2008

List of Approved NDT Sub-Contractors

Sl.No	Name of the Firm and Address	Approved Methods	
17	M/s Bharat Inspection Services, 1-19,Electrical & Electronics Industrial Estate, Thuvakudi, Trichy-620015 Phone:0431-2500550 Mobile: 9444435196(Ramasamy), 9842536801(Shanmugavel) 9842302910(Robert)	RT, UT, MT, PT	
18	M/s Engineering Quality Inspection Services, 2 / 166 A, Mettukuppam Road, Vanagaram, Chennai- 600 095. Phone:044-24764770, Fax:044-24764773, E-mail:interkpsv@sify.com	RT,UT,MT	
19	New No 9, Old No 22, Parthasarathypuram, North Usman Road, T.Nagar, Chennai 600 017. Phone:044-42123180, Fax: 044-28142268, Cell:Leeladhar 9444062268, E-mail:uies@sify.com.	RT	
20	M/s Jai Inspection Agencies, Plot No 21, Natesan Nagar, Ayanampakkam, Chennai- 600 095, Phone: 044-26533028, Fax: 044-26531770	RT	
21	M/s Sakthi Radiographic Inspection Company,, No 1 / 1-14, Rajiv Gandhi Nagar, Walajapet 632 513 Phone 04172-230344, 245264	RT	
22	M/s UNIVERSAL NDT SYSTEMS S.F.No 350 / 2C, Near M/s Rosver Steels Ltd,) KATTAMPATTI Villaage, Ganesapuram P.O S.S.Kulam (Via) Coimbatore-614 107 Phone:0422-2653446 Mobile:9363100792, 9944343201	RT	
23	M/s INSTITUTE OF INSPECTION TECHNOLOGY AND NDT RESOURCES, 31, Rubin Complex, IAS Nagar, Thiruverumbur, TRICHY-620013 Phone 0431-2512269 Cell:Rajendran-9865007583, Shareef-9865407475 e-mail:info@iitndt.com	RT	
24	Ms.GLOBAL ENGINEERING&NDT SERVICES HASIMPUR, PATULIGRAM P.O, HOOGLY DISTRICT, WEST BENGAL-712 501 Cell 09831609926(S.Das) ,9831626059(S.Sarkar)	RT	

Prepared by

Reviewed and Accepted by

(M.Manimohan)
DM / NDT

(R.J. Pardikar)
SDGM / NDT

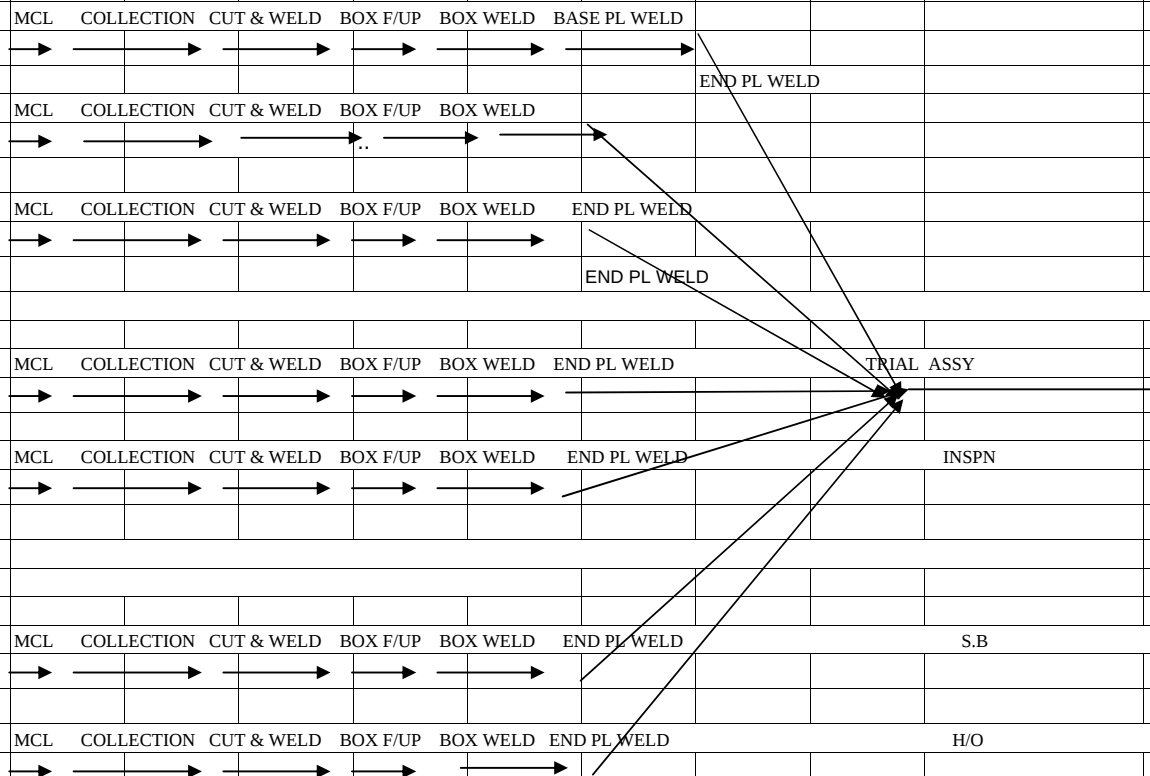
ANNEXURE "U"

VENDOR NAME: M/s

VENDOR CODE:

AS ON

BOX COLUMN ACTIVITY CHART



PO NO

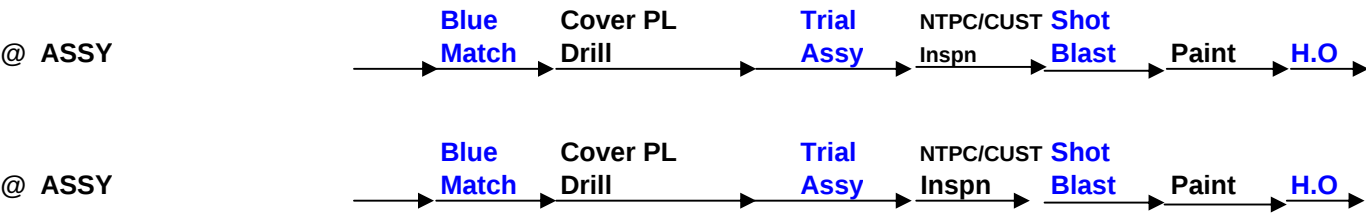
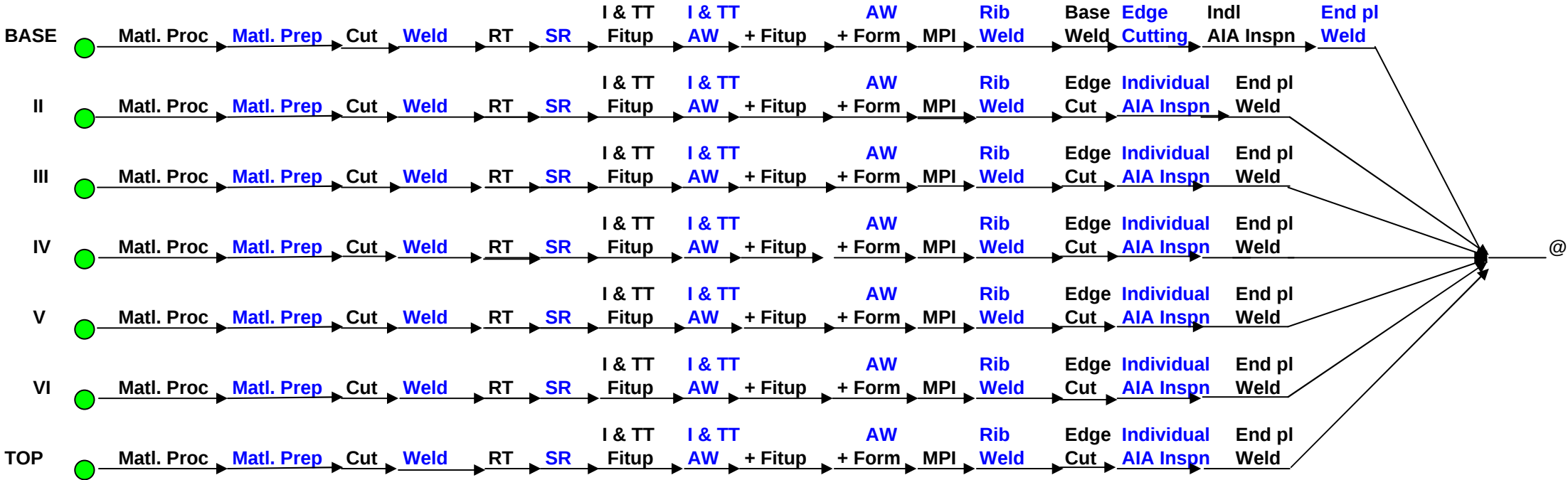
WORK ORDER

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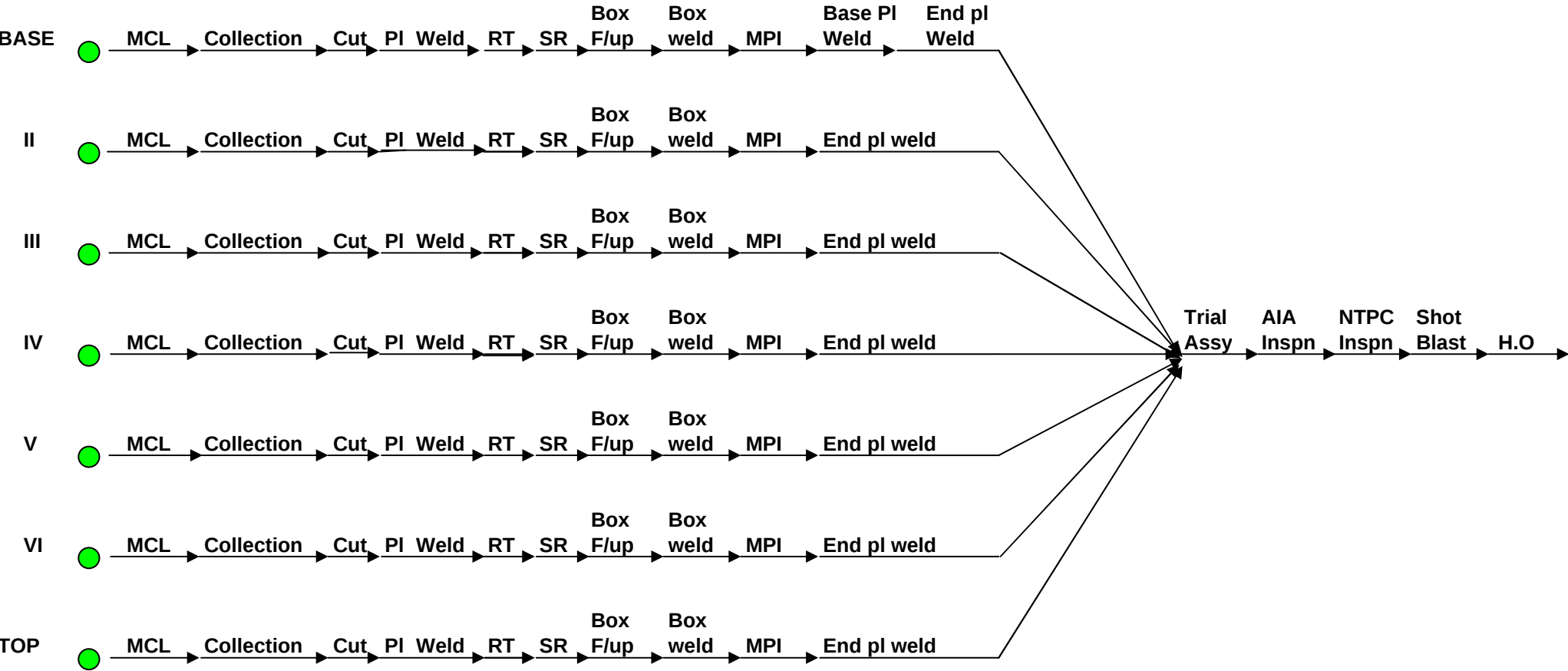
[illegible]

PLUS COLUMN



CUST	CUST NAME	COL NO	WT	VENDOR

BOX COLUMN



CUST

CUST NAME

COL NO

WT

FIRM

TYPICAL 500 MW BOILER													COLUMN DISPOSITION(TYPICAL 500 MW)						
PGMA	DESCRIPTION	COL NO	WT IN MT	TYPE OF COLUMN		PLUS COLUMN PLATE REQUIREMENT- TYPICAL (OTHER THAN THE BASE PLATE)							COLUMN DISPOSITION(TYPICAL 500 MW)						
						Dimension	Flange	Web	length	Qty	Total								
35-111	Main Columns Left	S10L	111.34	PLUS															
35-121	Main Columns Right Ist Pass	S10R	131.10	PLUS	35-111	S7 L & R													
35-112	Main Columns Left 2nd Pass	S11L	110.30	PLUS		1st Piece	600 x 300	63	16	11618	2x2	4	S2L	S3L	S4L	S5L	S6L		S21L
35-122	Main Columns Right 2nd Pass	S11R	110.30	PLUS		2nd Piece	600 x 300	63	36	12150	2x2	4							
35-112	Main Columns Left 2nd Pass	S12L	65.42	PLUS		3rd Piece	600 x 300	56	16	8900	2x2	4				S11L	S12L		S20L
35-122	Main Columns Right 2nd Pass	S12R	65.42	PLUS		4th Piece	600 x 300	40	25	13175	2x2	4	S8L	S9L	S10L				
35-130	Main Columns Middle	S13L	54.20	PLUS		5th Piece	600 x 300	32	20	11675	2x2	4							
35-130	Main Columns Middle	S13R	54.20	PLUS		6th Piece	600 x 300	20	16	12700	2x2	4	S14L	S15L	S16L				
36-130	Middle Columns in Boiler	S14L	12.49	BOX		7th Piece	600 x 300	25	20	14607	2x2	4						S22L	S23L
36-130	Middle Columns in Boiler	S14R	12.49	BOX															
36-130	Middle Columns in Boiler	S15L	14.26	BOX	35-112	S8 L & R													
36-130	Middle Columns in Boiler	S15R	14.26	BOX		1st Piece	800 x 400	40	25	11618	2x2	4				S17	S18		S19
35-130	Main Columns Middle	S16L	16.02	PLUS		2nd Piece	800 x 400	36	20	12150	2x2	4							
35-130	Main Columns Middle	S16R	16.02	PLUS		3rd Piece	800 x 400	32	20	8900	2x2	4							
36-130	Middle Columns in Boiler	S17	8.19	BOX		4th Piece	800 x 400	36	20	13175	2x2	4						S22R	S23R
35-130	Main Columns Middle	S18	71.26	PLUS		5th Piece	800 x 400	32	20	11675	2x2	4	S14R	S15R	S16R				
36-110	Columns near Air Preheater	S19	20.97	PLUS		6th Piece	800 x 400	32	20	12700	2x2	4							
36-110	Columns near Air Preheater	S20L	18.09	PLUS		7th Piece	800 x 400	36	20	11302	2x2	4	S8R	S9R	S10R				
36-110	Columns near Air Preheater	S20R	18.09	PLUS												S11R	S12R		S20R
36-110	Columns near Air Preheater	S21L	11.18	BOX	35-121	S9 L & R													
36-110	Columns near Air Preheater	S21R	11.18	BOX		1st Piece	800 x 400	50	20	11618	2x2	4	S2R	S3R	S4R	S5R	S6R		S21R
36-110	Columns near Air Preheater	S22L	6.62	BOX		2nd Piece	800 x 400	63	20	12150	2x2	4							
36-110	Columns near Air Preheater	S22R	6.62	BOX		3rd Piece	800 x 400	63	20	8900	2x2	4							
36-110	Columns near Air Preheater	S23L	6.62	BOX		4th Piece	800 x 400	63	20	13175	2x2	4							
36-110	Columns near Air Preheater	S23R	6.62	BOX		5th Piece	800 x 400	56	20	11675	2x2	4							
35-111	Main Columns Left	S7L	57.31	PLUS		6th Piece	800 x 400	40	25	12700	2x2	4							
35-121	Main Columns Right Ist Pass	S7R	57.31	PLUS		7th Piece	800 x 400	40	25	11302	2x2	4							
35-111	Main Columns Left	S8L	98.49	PLUS															
35-121	Main Columns Right Ist Pass	S8R	98.49	PLUS	35-122	S10 L & R													
35-111	Main Columns Left	S9L	100.43	PLUS		1st Piece	900 x 450	56	16	11618	2x2	4							
35-121	Main Columns Right Ist Pass	S9R	100.43	PLUS		2nd Piece	900 x 450	40	32	12150	2x2	4							
38-110	Lift Columns	LC1	33.72	PLUS		3rd Piece	900 x 450	56	16	8900	2x2	4							
38-110	Lift Columns	LC2	20.54	PLUS		4th Piece	900 x 450	63	56	13175	2x2	4							
		Grand Total	1539.95			5th Piece	900 x 450	63	36	11675	2x2	4							
						6th Piece	900 x 450	56	20	12700	2x2	4							
						7th Piece	900 x 450	56	20	11302	2x2	4							
						S11 L & R													
						1st Piece	800 x 400	40	20	11618	2x2	4							
						2nd Piece	800 x 400	40	20	12150	2x2	4							
						3rd Piece	800 x 400	40	20	8900	2x2	4							
						4th Piece	800 x 400	40	25	13175	2x2	4							
						5th Piece	800 x 400	40	32	11675	2x2	4							
						6th Piece	800 x 400	40	20	12700	2x2	4							
						7th Piece	800 x 400	40	32	11302	2x2	4							
						S12 L & R													
						1st Piece	600 x 300	63	32	11618	2x2	4							
						2nd Piece	600 x 300	63	36	12150	2x2	4							
						3rd Piece	600 x 300	40	20	9900	2x2	4							
						4th Piece	600 x 300	32	16	12175	2x2	4							

[illegible]



BHEL / TRICHY-620014
OUT SORCING DEVELOPEMENT

ANNEXURE "V"

Page: 01 of 01

REF:
TO

Date:

Dear Sir,

SUB: General feedback on Performance - reg.

REF: I) Our Purchase Order no: Dated

II) W.O.:DC NO:IR NO.....

III) SCHEDULE:

1V) Despatch Detail:

With reference to the above we have made a review of Performance on Quality, Delivery and service.

Please note the following feedback for taking corrective action in future supplies.

a) General Performance:.

b) Level of Performance:

i) **QUALITY:** The flg is site feedback on the Quality of the goods delivered to SITE.

ii) **DELIVERY:** As against the delivery period indicated in P.O. the actual supply has been completed only on ----- resulting in the delay of ----- months.

iii) **SERVICE:** We would like to remark about your service as

We request you to take note of this feedback and improve your performance to our fullest satisfaction.

Further, we would like to be informed of the actions planned/initiated at your end to improve the performance in the above areas for the subsequent supplies/future orders.

Thanking you.

For and on behalf of
BHARAT HEAVY ELECTRICALS LTD

EXECUTIVE / OUT SOURCING

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Address http://vis.bheltry.co.in/vis/outsourcing/payment02.jsp?what=C

Links

B2B SERVICES
ENTERPRISE RESOURCE PLANNING
BHARAT HEAVY ELECTRICALS LTD
TRICHY -14.

Committed to making a better world

MISSION
 A World-Class Enterprise
 Committed to bringing
 Quality Products, Systems & Services
 in the Fields of Energy, Industry,
 Transportation, Infrastructure & Services
 with assured delivery.

VALUES
 To be an Indian leader in
 Engineering Enterprise providing
 Total Business Solutions through
 Quality Products, Systems & Services
 in the Fields of Energy, Industry,
 Transportation, Infrastructure & Services
 with assured delivery.

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Logout

Dr E.KIRUBAKARAN

CLEARED BILL DETAILS *Date : 19-4-2008*

select

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Best viewed in 1024 X 768 True Color (32 bit)

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AD PLAN-CUSTOMERWISE - Microsoft Internet Explorer

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B2B SERVICES

ENTERPRISE RESOURCE PLANNING

BHARAT HEAVY ELECTRICALS LTD

TRICHY -14.



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Dr E.KIRUBAKARAN

Outsourcing plan -CUSTOMERWISE

STAGE CUST PG MA DU

U5/0635-HT-375-1-05-137	0635	Dadri 500mw	DM/MK
30061 G.K & SONS ENGG ENTERPRISES PVT. LT		mail@gksons.com	8200113863
PO DT:23.03.2008	TER DT:24/08	RATE SCH:	
DU CATEGORY - B - WT :8.24		LAST CLEARED DATE:23.03.2008	
001(8)8.24 ;			
U5/0637-HT-375-1-05-137	0637	DADRI 6	DM/MK
30061 G.K & SONS ENGG ENTERPRISES PVT. LT		mail@gksons.com	8200113863
PO DT:23.03.2008	TER DT:24/08	RATE SCH:	
DU CATEGORY - A - WT :8.24		LAST CLEARED DATE:23.03.2008	
001(8)8.24 ;			
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http://vis.bheltry.co.in/vis/outsourcing/bhel.swf

start

AD PLAN-CUSTOMER... b2b_facilities - Micros... Document2 - Microsof...

Address 10:53 AM