



**Bharat Heavy Electricals Limited**  
**(A Govt. of India Undertaking)**

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REF: ENQ NO:PC:8004

DT: 17.04.2008

Sub: Procurement of pipe fittings.

**Ref: Enquiry No:PC:8004 dt 11.04.2008**  
**Rate Contract**

Please find the following tender documents for reference.

1. Annexure to Enquiry
2. Tech. delivery condition TDG: 103:01

Pre qualification is the criteria for consideration for other than BHEL approved vendors. After qualifying for registration, the new vendors may be considered for future requirements, in line with BHEL system and policy. Such vendors will not be considered for this enquiry.

The New vendors may download vendor registration forms from BHEL web site [www.bhel.com](http://www.bhel.com) and relevant data for formal registration.

  
Sr. Manager / Purchase  
BHEL / Piping Centre  
80,GN Road, T.Nagar  
Chennai-600017

| SL NO | Material code | DESCRIPTION                              | SPECIFICATION | QTY / ANNUM | RATE IN RS |
|-------|---------------|------------------------------------------|---------------|-------------|------------|
| 1     | 921054450200  | SW UEQT NB 25/15 CL6000(WITH MPI) SA105  | SA105         | 10          |            |
| 2     | 921054460200  | SW UEQT NB 50/25 CL6000(WITH MPI) SA105  | SA105         | 40          |            |
| 3     | 921054500200  | SW EQT NB 15 CL 3000 (WITH MPI) SA105    | SA105         | 650         |            |
| 4     | 921054510200  | SW EQT NB 25 CL 3000 (WITH MPI) SA105    | SA105         | 1500        |            |
| 5     | 921054520200  | SW EQT NB 40 CL 3000 (WITH MPI) SA105    | SA105         | 300         |            |
| 6     | 921054530000  | SW EQ TEE 2"CL3000 ANSIB16.11 SA105      | SA105         | 10          |            |
| 7     | 921054530200  | SW EQT NB 50 CL 3000 (WITH MPI) SA105    | SA105         | 165         |            |
| 8     | 921054540200  | SW EQT NB 15 CL 6000 (WITH MPI) SA105    | SA105         | 70          |            |
| 9     | 921054550200  | SW EQT NB 25 CL 6000 (WITH MPI) SA105    | SA105         | 40          |            |
| 10    | 921054560200  | SW EQT NB 40 CL 6000 (WITH MPI) SA105    | SA105         | 10          |            |
| 11    | 921054570200  | SW EQT NB 50 CL 6000 (WITH MPI) SA105    | SA105         | 25          |            |
| 12    | 921054620200  | SW UEQT NB 25/15 CL3000(WITH MPI) SA105  | SA105         | 900         |            |
| 13    | 921054640200  | SW UEQT NB 40/25 CL3000(WITH MPI) SA105  | SA105         | 300         |            |
| 14    | 921054650200  | SW UEQT NB 50/25 CL3000(WITH MPI) SA105  | SA105         | 350         |            |
| 15    | 921054660200  | SW UEQT NB 50/40 CL3000(WITH MPI) SA105  | SA105         | 90          |            |
| 16    | 921171340200  | SW RED NB 50 / 40 CL 3000 SA105          | SA105         | 210         |            |
| 17    | 921171410200  | SW RED NB 25 / 15 CL 3000 SA105          | SA105         | 750         |            |
| 18    | 921171420200  | SW RED NB 25 / 15 CL 6000 SA105          | SA105         | 300         |            |
| 19    | 921171430200  | SW RED NB 40 / 15 CL 3000 SA105          | SA105         | 35          |            |
| 20    | 921171440200  | SW RED NB 40 / 25 CL 3000 SA105          | SA105         | 250         |            |
| 21    | 921171450200  | SW RED NB 50 / 25 CL 3000 SA105          | SA105         | 300         |            |
| 22    | 921171460200  | SW RED NB 50 / 25 CL 6000 SA105          | SA105         | 10          |            |
| 23    | 921171470200  | SW RED NB 50 / 40 CL 6000 SA105          | SA105         | 30          |            |
| 24    | 925043750000  | SW 90DEG ELL NB 50 CL 9000 SA105         | SA105         | 250         |            |
| 25    | 925043760000  | SW 90DEG ELL NB 40 CL 9000 SA105         | SA105         | 400         |            |
| 26    | 925043770000  | SW 90DEG ELL NB 40 CL 3000 SA105         | SA105         | 450         |            |
| 27    | 925043780000  | SW 90DEG ELL NB 25 CL 3000 SA105         | SA105         | 2500        |            |
| 28    | 925043790000  | SW 90DEG ELL NB 50 CL 3000 SA105         | SA105         | 500         |            |
| 29    | 925043800000  | SW 45DEG ELL NB 50 CL 3000 SA105         | SA105         | 25          |            |
| 30    | 925044480000  | SW 90DEG ELL NB 15 CL 3000 SA105         | SA105         | 800         |            |
| 31    | 925048330000  | SW 90DEG ELL NB 25 CL 9000SA105          | SA105         | 50          |            |
| 32    | 925049780000  | SW 90DEG ELL NB20 CL3000SA105            | SA105         | 40          |            |
| 33    | 925052460000  | SW UEQT NB 40 / 15 CL 3000 SA105         | SA105         | 30          |            |
| 34    | 925052710000  | SW UEQT NB 50 / 15 CL 3000 SA105         | SA105         | 125         |            |
| 35    | 925055060000  | SW EQT NB 50 CL 9000 SA105               | SA105         | 50          |            |
| 36    | 925055130000  | SW UEQT NB 50 / 40 CL 9000 SA105         | SA105         | 100         |            |
| 37    | 925161570000  | G & S COUPLING NB 15 CL 3000SA105        | SA105         | 85          |            |
| 38    | 925162060000  | SW FULL COUPLING NB 50 CL 3000 SA105     | SA105         | 400         |            |
| 39    | 925162070000  | SW FULL COUPLING NB 40 CL 3000 SA105     | SA105         | 100         |            |
| 40    | 925162080000  | SW FULL COUPLING NB 25 CL 3000 SA105     | SA105         | 750         |            |
| 41    | 925162180000  | SW FULL COUPLING NB 25 CL 6000 SA105     | SA105         | 500         |            |
| 42    | 925175430000  | SW RED NB 50 / 15 CL 3000 SA105          | SA105         | 10          |            |
| 43    | 925179840000  | SW RED NB 25 / 15 CL 9000 SA105          | SA105         | 10          |            |
| 44    | 925195300000  | SW END CAP NB 50 CL 3000 SA105           | SA105         | 25          |            |
| 45    | 925240280000  | SW 90DEG ELL NB 25 CL 6000 SA105         | SA105         | 600         |            |
| 46    | 925240940300  | SW 90DEG ELL NB 15 CL 6000 SA105         | SA105         | 50          |            |
| 47    | 925242310000  | SW 45DEG ELL NB 25 CL 3000 SA105         | SA105         | 10          |            |
| 48    | 925242340000  | SW 45DEG ELL NB 40 CL 3000 SA105         | SA105         | 10          |            |
| 49    | 925242360000  | SW 90DEG ELL NB 50 CL 6000 SA105         | SA105         | 15          |            |
| 50    | 925243610000  | SW LR 90DEG ELL 33.4 X 9.09 CL9000 SA105 | SA105         | 50          |            |

| SL NO | Material code | DESCRIPTION                              | SPECIFICATION | QTY / ANNUM | RATE IN RS |
|-------|---------------|------------------------------------------|---------------|-------------|------------|
| 51    | 925250280000  | SW UEQT NB 50 / 25 CL 9000 SA105         | SA105         | 200         |            |
| 52    | 925251000000  | SW EQT NB 40 CL 9000 SA105               | SA105         | 40          |            |
| 53    | 925252440000  | SW UEQT NB 40 / 25 CL 6000 SA105         | SA105         | 250         |            |
| 54    | 925252550000  | SW UEQT NB 40 / 25 CL 9000 SA105         | SA105         | 10          |            |
| 55    | 925252560000  | SW UEQT NB 50 / 40 CL 6000 SA105         | SA105         | 10          |            |
| 56    | 925270040000  | SW RED NB 50 / 25 CL 3000 SA105          | SA105         | 30          |            |
| 57    | 925272820000  | SW RED NB 20 / 15 CL 3000 SA105          | SA105         | 10          |            |
| 58    | 925272890000  | SW RED NB 50 / 40 CL 9000 SA105          | SA105         | 10          |            |
| 59    | 925272900000  | SW RED NB 40 / 25 CL 6000 SA105          | SA105         | 10          |            |
| 60    | 925276940000  | SW RED NB 50 / 25 CL 9000 SA105          | SA105         | 10          |            |
| 61    | 921054170000  | SW UEQT NB 50 / 25 CL 3000SA182F22CL3    | SA182F22CL3   | 15          |            |
| 62    | 921054470200  | SWUEQTNB50/25CL6000(WITHMPI) SA182F22CL3 | SA182F22CL3   | 25          |            |
| 63    | 921054590200  | SW EQT NB 25 CL 6000 SA182F22CL3         | SA182F22CL3   | 35          |            |
| 64    | 921054600200  | SW EQT NB 50 CL 6000 SA182F22CL3         | SA182F22CL3   | 10          |            |
| 65    | 921054880000  | SW EQT NB 25 CL 3000SA182F22CL3          | SA182F22CL3   | 85          |            |
| 66    | 925043720000  | SW 90DEG ELL NB 40 CL 9000 SA182F22CL3   | SA182F22CL3   | 75          |            |
| 67    | 925043730000  | SW 90DEG ELL NB 40 CL 3000 SA182F22CL3   | SA182F22CL3   | 10          |            |
| 68    | 925043740000  | SW 90DEG ELL NB 25 CL 3000 SA182F22CL3   | SA182F22CL3   | 400         |            |
| 69    | 925043740400  | SW 90DEG ELL NB 25 CL 3000 SA182F22CL3   | SA182F22CL3   | 50          |            |
| 70    | 925044710000  | SW 90DEG ELL NB 50 CL 3000 SA182F22CL3   | SA182F22CL3   | 800         |            |
| 71    | 925048230000  | SW 90DEG ELL NB 25 CL 9000 SA182F22CL3   | SA182F22CL3   | 100         |            |
| 72    | 925052440000  | SW UEQT NB 25 / 15 CL 3000 SA182F22CL3   | SA182F22CL3   | 10          |            |
| 73    | 925053060000  | SW EQT NB 40 CL 3000 SA182F22CL3         | SA182F22CL3   | 10          |            |
| 74    | 925055570000  | SW EQT NB 50 CL 3000 SA182F22CL3         | SA182F22CL3   | 250         |            |
| 75    | 925162230000  | SWFULLCOUPLING NB50CL3000 SA182F22CL3    | SA182F22CL3   | 50          |            |
| 76    | 925162250000  | SWFULLCOUPLING NB50CL9000 SA182F22CL3    | SA182F22CL3   | 30          |            |
| 77    | 925164430000  | SWFULLCOUPLING NB25CL9000 SA182F22CL3    | SA182F22CL3   | 75          |            |
| 78    | 925173370000  | SW RED NB 25 / 15 CL 3000 SA182F22CL3    | SA182F22CL3   | 800         |            |
| 79    | 925173370400  | SW RED NB 25 / 15 CL 3000 SA182F22CL3    | SA182F22CL3   | 20          |            |
| 80    | 925173470000  | SW COUPLING NB25/15CL6000SA182F22CL3     | SA182F22CL3   | 125         |            |
| 81    | 925173470400  | SW RED NB 25 / 15 CL 6000 SA182F22CL3    | SA182F22CL3   | 800         |            |
| 82    | 925175170000  | SW RED NB 50 / 40 CL 3000 SA182F22CL3    | SA182F22CL3   | 10          |            |
| 83    | 925175600000  | SW RED NB 50 / 25 CL 6000 SA182F22CL3    | SA182F22CL3   | 40          |            |
| 84    | 925195310000  | SW END CAP NB 50 CL 3000 SA182F22CL3     | SA182F22CL3   | 10          |            |
| 85    | 925240750000  | SW 90DEG ELL NB 50 CL 6000 SA182F22CL3   | SA182F22CL3   | 150         |            |
| 86    | 925240910000  | SW 90DEG ELL NB 50 CL 9000 SA182F22CL3   | SA182F22CL3   | 10          |            |
| 87    | 925240930300  | SW 90DEG ELL NB 15 CL 9000 SA182F22CL3   | SA182F22CL3   | 50          |            |
| 88    | 925244230000  | SW 45DEG ELL NB 25 CL 3000 SA182F22CL3   | SA182F22CL3   | 15          |            |
| 89    | 925244260000  | SW 45DEG ELL NB 50 CL 3000 SA182F22CL3   | SA182F22CL3   | 40          |            |
| 90    | 925246800200  | SW 90DEG ELL NB 25 CL 6000 SA182F22CL3   | SA182F22CL3   | 30          |            |
| 91    | 925248870000  | SW 90DEG ELL NB 25 CL 6000 SA182F22CL3   | SA182F22CL3   | 10          |            |
| 92    | 925250010000  | SW UEQT NB 50 / 25 CL 6000 SA182F22CL3   | SA182F22CL3   | 10          |            |
| 93    | 925250030000  | SW EQT NB 50 CL 3000 SA182F22CL3         | SA182F22CL3   | 25          |            |
| 94    | 925250270000  | SW UEQT NB 50 / 25 CL 9000 SA182F22CL3   | SA182F22CL3   | 10          |            |
| 95    | 925250320000  | SW EQT NB 25 CL 9000 SA182F22CL3         | SA182F22CL3   | 25          |            |
| 96    | 925257990000  | SW EQT NB 50 CL 9000 SA182F22CL3         | SA182F22CL3   | 25          |            |
| 97    | 925270490000  | SW RED NB 40 / 25 CL 6000 SA182F22CL3    | SA182F22CL3   | 10          |            |
| 98    | 925276300000  | SW RED NB 50 / 25 CL 3000 SA182F22CL3    | SA182F22CL3   | 40          |            |
| 99    | 925276310000  | SW RED NB 40 / 25 CL 3000 SA182F22CL3    | SA182F22CL3   | 10          |            |
| 100   | 925276410000  | SW RED NB 25 / 20 CL 3000 SA182F22CL3    | SA182F22CL3   | 10          |            |

| SL NO | Material code | DESCRIPTION                              | SPECIFICATION | QTY / ANNUM | RATE IN RS |
|-------|---------------|------------------------------------------|---------------|-------------|------------|
| 101   | 925276680000  | SW RED NB 25 / 15 CL 9000 SA182F22CL3    | SA182F22CL3   | 200         |            |
| 102   | 925276700000  | SW RED NB 50 / 25 CL 9000 SA182F22CL3    | SA182F22CL3   | 30          |            |
| 103   | 925276930000  | SW RED NB 50 / 40 CL 3000 SA182F22CL3    | SA182F22CL3   | 10          |            |
| 104   | 925043840000  | SW 90DEG ELL NB 25 CL 3000 SA182F304H    | SA182F304H    | 750         |            |
| 105   | 925044630000  | SW 90DEG ELL NB 40 CL 3000 SA182F304H    | SA182F304H    | 75          |            |
| 106   | 925049860000  | SW 90ELL NB25 CL6000SA182F304H           | SA182F304H    | 75          |            |
| 107   | 925052960000  | SW EQT NB 25 CL 3000 SA182F304H          | SA182F304H    | 500         |            |
| 108   | 925052970000  | SW EQT NB 25 CL 6000 SA182F304H          | SA182F304H    | 50          |            |
| 109   | 925052980000  | SW UEQT NB 25 / 15 CL 3000 SA182F304H    | SA182F304H    | 600         |            |
| 110   | 925052990000  | SW UEQT NB 25 / 15 CL 6000 SA182F304H    | SA182F304H    | 30          |            |
| 111   | 925055930000  | SW UEQT NB 40 / 15 CL 3000 SA182F304H    | SA182F304H    | 40          |            |
| 112   | 925161340000  | SW FULLCOUPLING NB25 CL 3000 SA182F304H  | SA182F304H    | 500         |            |
| 113   | 925161360000  | SW FULLCOUPLING NB25 CL 6000 SA182F304H  | SA182F304H    | 150         |            |
| 114   | 925161490000  | SW FULLCOUPLING NB50 CL 3000 SA182F304H  | SA182F304H    | 75          |            |
| 115   | 925162110000  | SW FULLCOUPLING NB40 CL 3000 SA182F304H  | SA182F304H    | 100         |            |
| 116   | 925162260000  | SW FULLCOUPLING NB15 CL 3000 SA182F304H  | SA182F304H    | 125         |            |
| 117   | 925244070000  | SW 90DEG ELL NB 50 CL 3000 SA182F304H    | SA182F304H    | 150         |            |
| 118   | 925244160000  | SW 90DEG ELL NB 15 CL 3000 SA182F304H    | SA182F304H    | 900         |            |
| 119   | 925244480000  | SW 90DEG ELL NB 25 CL 6000 SA182F304H    | SA182F304H    | 200         |            |
| 120   | 925246550000  | SW 90DEG ELL NB 40 CL 3000 SA182F304H    | SA182F304H    | 10          |            |
| 121   | 925248660000  | SW LR 90 ELL 33.4X4.55 SA182F304H-CL3000 | SA182F304H    | 40          |            |
| 122   | 925254060000  | SW EQT NB 15 CL 3000 SA182F304H          | SA182F304H    | 80          |            |
| 123   | 925254140000  | SW UEQT NB 50 / 15 CL 3000 SA182F304H    | SA182F304H    | 50          |            |
| 124   | 925254180000  | SW UEQT NB 40 / 25 CL 3000 SA182F304H    | SA182F304H    | 30          |            |
| 125   | 925254350000  | SW EQT NB 50 CL 3000 SA182F304H          | SA182F304H    | 15          |            |
| 126   | 925254420000  | SW EQT NB 40 CL 3000SA182F304H           | SA182F304H    | 25          |            |
| 127   | 925254700000  | SW UEQT NB 50 / 25 CL 3000 SA182F304H    | SA182F304H    | 50          |            |
| 128   | 925254800000  | SW EQT NB 25 CL 3000SA182F304H           | SA182F304H    | 50          |            |
| 129   | 925257300000  | SW UEQT NB 50 / 40 CL 3000 SA182F304H    | SA182F304H    | 15          |            |
| 130   | 925274080000  | SW RED NB 25 / 15 CL 3000 SA182F304H     | SA182F304H    | 250         |            |
| 131   | 925274150000  | SW RED NB 40 / 25 CL 3000 SA182F304H     | SA182F304H    | 25          |            |
| 132   | 925274400000  | SW RED NB 50 / 25 CL 3000 SA182F304H     | SA182F304H    | 25          |            |
| 133   | 925274720000  | SW RED NB 50 / 40 CL 3000 SA182F304H     | SA182F304H    | 15          |            |
| 134   | 925276750000  | SW RED NB 25 / 15 CL 6000 SA182F304H     | SA182F304H    | 25          |            |
| 135   | 925277630000  | SW RED NB 25 / 15 CL 3000 SA182F304H     | SA182F304H    | 10          |            |
| 136   | 955254420000  | SW EQT NB 40 CL 3000SA182F304H           | SA182F304H    | 10          |            |
| 137   | 925244390000  | SW 90DEG ELL NB 15 CL 3000 SA182F316     | SA182F316     | 20          |            |
| 138   | 925244400000  | SW 90DEG ELL NB 25 CL 3000 SA182F316     | SA182F316     | 250         |            |
| 139   | 925246930000  | SW 90DEG ELL NB 40 CL 3000 SA182F316     | SA182F316     | 10          |            |
| 140   | 925055390000  | SW UEQT NB40 / 25 CL 3000 SA403WP304H    | SA403WP304H   | 10          |            |
| 141   | 925259590000  | SW UEQT 60.3X2.77/33.4X3.05 SA403WP304H  | SA403WP304H   | 15          |            |

**BHARAT HEAVY ELECTRICALS LIMITED**  
**PIPING CENTRE, CHENNAI – 600 017.**

|                   |                                                                           |
|-------------------|---------------------------------------------------------------------------|
| Title :           | Technical Delivery Conditions for socket welded – fittings SA105 & SA182. |
| Specification No: | TDG : 103 Rev : 01                                                        |
| Project :         | ALL PROJECTS.                                                             |
| Material :        | ASME SA105 & SA182                                                        |
| Equipment :       | Socket welded fittings.                                                   |

Accepted By:-  
Engineering



Materials  
Management



OP & C



Rev : NO:-

01

02

03

04

Date :-

08.08.2003

Prepared /  
Revised by



Reviewed /  
Approved by



Issued by Piping Centre / Quality Assurance

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SOCKET WELDED-FITTINGS  
SA105, & SA182

: TDG : 103 : 01  
: Dt : 08.08.2003

| Revision | Date       | Description                                           |
|----------|------------|-------------------------------------------------------|
| 01       | 08/08/2003 | Fully revised for better clarity.<br>CI 2.0 a) added. |

*0.01-07*

SOCKET WELDED-FITTINGS  
SA105, & SA182

: TDG : 103 : 01  
: Dt : 08.08.2003

1.0 CODES

The fittings shall meet Indian Boiler Regulations, (IBR) in addition to the standards specified in the Purchase Order (PO).

2.0 RAW MATERIALS

- (a) Steel for SA 182 F11, F12 & F22 if indigenously procured, to be from following manufacturers approved under IBR for creep resistant steels: i ) Alloy Steel Plant , Durgapur, ii ) Tata Iron & Steel company, Jamshedpur & iii ) Mahindra Ugine Steel Company , Bombay.
- (b) The raw materials shall be ultrasonically tested (UT) as per SA 388 and AM 203.2 of ASME Sec . VIII Div.2.

3.0 PROCESS

Process of manufacture, Heat Treatment, Hardness etc., shall conform to applicable standards.

4.0 FITTINGS:

- (A) Carbon content of Carbon steel fittings (SA 105) shall be restricted to 0.25% max.
- (B) All ferrous fittings shall be tested by MPI as per ASTM E-709 and SS fittings shall be LPI tested as per ASTM E 165.
- (C) One fitting of each specification, heat, heat treatment lot and size shall be subjected to Tension Test as per applicable standard. Test on representative sample acceptable.
- (D) Hardness test shall be carried out on each fittings of F91; for other fittings on 10% of the fittings.
- (E) Dimensions shall be as per ASME B 16.11
- (F) SUPPLEMENTARY TEST:- The test shall be carried out as indicated below, and the results shall be reported in the Test Certificate .

| Specification         | Product Analysis<br>One / heat /heat lot/size. | Tension Test<br>One / heat /heat lot/size. |
|-----------------------|------------------------------------------------|--------------------------------------------|
| SA 105                | Required                                       | Required                                   |
| SA 182F11/F12/F22/F91 | Required                                       | Required                                   |

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**SOCKET WELDED-FITTINGS**  
**SA105, & SA182**

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- (G) Metallography:- Metallography shall be carried out one per heat, per size, per heat treatment lot of F91 fittings.
- (H) Unless otherwise specified in the P.O fittings shall be supplied as  
SA182 F11/12 shall be supplied as per class 2, SA182 F22 shall be of Cl 3 only.

**5.0 WORK MAN SHIP, FINISH AND REPAIR**

All fittings shall have smooth, workman like finish, and to be free from scale & defects like laps, seams folds, cracks, etc. Repairs by fusion welding are prohibited. Surface defects can be repaired by mechanical means and defective areas smoothly dressed up with the adjacent surface. Final dimension after repair to meet drawing / Specification.

**6.0 MARKING, COLOUR CODING & PACKING**

All fittings shall be PUNCHED OR ETCHED with specification, Grade, Heat Number and Inspection Authorities Seal.  
Colour Coding shall be as below.

**COLOUR CODING:-**

|              |   |                |
|--------------|---|----------------|
| SA105        | = | Blue           |
| SA182 F11    | = | Green & White  |
| SA182-F12    | = | Black & Red    |
| SA182 F22    | = | Blue & Red     |
| SA182 F91    | = | Brown & Red    |
|              |   |                |
| SA 182 F 304 | = | Blue & Yellow  |
| 316          | = | Black & Green  |
| 321          | = | Blue & Brown   |
| 347          | = | Yellow & Black |

**PACKING**

All fittings shall be suitably packed in boxes / crate to avoid transit / other damages.

**7.0 INSPECTION & CERTIFICATION :-**

All fittings are to be Inspected at the manufacturer's works by the Inspection authorities per IBR and as indicated in the P.O. Inspection certificate in IBR Form IIIC (for fittings under their purview) shall be submitted along with the Work Test Certificate countersigned by any of the inspection authorities and shall include the following.

1. Test Certificate Number & date.
2. BHEL P.O Number & Amendment Number
3. BHEL P.O. Serial Number
4. BHEL TDC Number
5. Size-wise Quantity

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SOCKET WELDED-FITTINGS  
SA105, & SA182

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: TDG : 103 : 01  
: Dt : 08.08.2003

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6. Specification, Grade & Year of code.
  7. Heat/Melt Number
  8. Steel making / forming process
  9. Laddle Analysis of Raw Material and product analysis of fittings wherever applicable.
  - \*10. Supplementary Test S2/S3/S4 as applicable.
  - \*11. Heat Treatment Chart.
  - \*12. NDE report. (VISUAL.MPI, LPI,UT)
  - \*13. Tensile Test Report
  - \*14. Hardness Test Report
  - \*15. Metallography as applicable
  - \*16. Dimensional conformance.
  - \*17. Starting material details.
  - \*18. Guarantee of HTP shall be given as follows:- "Fittings are capable of with standing without failure, breakage or impairment of their serviceability a hydrostatic test pressure equal to that prescribed for the specified matching pipe of equivalent material".
- \*Details furnished in the Tests certificate in lieu of chart/report is acceptable.

*Signature*

## **ANNEXURE - II**

### **SPECIAL TERMS AND CONDITIONS FOR RATE CONTRACT ENQUIRY COMMON TO INDIGENOUS / FOREIGN VENDORS**

1) This is a **Rate Contract Enquiry**. The quantity mentioned are tentative. The rate agreed upon in Rate Contract shall be firm for a period of minimum **one year** from the date of agreement. No revision of rates are allowed after finalization of the Rate Contract.

2) The Fittings shall be manufactured as per our TDC:TDG:102:3-for **Butt-welded fittings** / TDC:TDG:103:01-for **Socket Welded fittings**/ TDC:TDG:104:02-for **Forgings,stub etc.**/TDC:TDG:12:0-for **IS1239 Black & Galvanised fittings**. . Compliance to all the clauses of TDC shall be specifically indicated and deviation if any shall be indicated.

3) **Payment terms(Indigenous) - 100% payment within 45 days with 10% PBG** against presentation of documents to BHEL/PC-finance with a copy of invoice alone to purchase department.**DOCUMENTS TO BE DIRECTLY SUBMITTED TO BHEL/PC.**

INVOICE IN TRIPLICATE

DELIVERY CHALLAN IN DUPLICATE.

C GUARANTEE CERTIFICATE IN DUPLICATE.

D LORRY WAY BILL COPY- ONE COPY ( ORIGINAL COPY OF LWB SHOULD BE SENT THROUGH THE CARRIER)

E INSPECTION REPORT COPY – ONE COPY

F IBR FORM III-C- ONE COPY

G ED GATE PASS ORIGINAL OR COPY WITH A CONFIRMATION THAT THE ORIGINAL IS SENT WITH THE GOODS.

**Payment terms(Foreign) - 100% payment through Letter of credit at site.**  
with 10% PBG and all **Original** shipping documents, invoice and Test certificates to be routed through bank.

4) BHEL reserves the right to negotiate or re-float the tender opened if L1 price / or other details are not acceptable to them.

5) BHEL reserves the right to negotiate the L1 rate.

6) BHEL reserves the right to order on more than one vendor at the lowest acceptable price to BHEL.

7) Delivery should be 12 to 16 weeks from the placement of order-for Indigenous.  
and 16 to 24 weeks(FOB) - for foreign vendors.

8) LD - Supplier failing to deliver raw material / equipment / component within the period specified in the Contract, the Purchaser shall deduct Liquidated damages the same equivalent to **0.5% of the price for each week of delay up to a maximum of 15% of the price of delayed / undelivered goods** to be reckoned from the contract delivery date of Cargo readiness date (ie) final inspection agencies signed date in the Certificate, with reference to **foreign vendors (for FOB contracts only)** and with reference to **indigenous vendors ( for Ex-works contracts only)**. For **'CFR Chennai sea port ( foreign vendors ) and FOR Trichy stores ( for indigenous vendors )** LD will be reckoned from the B/L date and Lorry weigh bill date respectively.

9) Performance and Progress of the Vendor will be monitored and reviewed periodically and Purchase Order will be placed based on the Performance of the Vendor.

10) This being rate contract the negotiated L1 rates may be counter offered to other suppliers.