ANNEXURE



Scope of work for replacement of worn out/old valves, pipes & fittings at various places in Water Recirculation System in Shell Forge shop:

- 1) The scope includes removal of old valves of various sizes and corroded pipe fittings and fasteners.
- 2) Firm has to fabricate suitable pipe line for installation of new valves at various locations as directed by OFAJ.
- 3) Valves, fittings, flanges, pipes and fasteners shall be provided by OFAJ.
- 4) Firm has to lay pipe line of various sizes including valves and fittings.
- 5) Firm has to dismantle existing damaged pipelines.
- 6) Approx. Qty. of various sizes pipes, fittings & valves to be installed are as mention below.

St.	Description	Approx. Qty
1.	C.I. Butterfly Valve Flow Control Lever having Nylon coated C.I. disc and Nitrile rubber lining PN 16, Size 10" (250 mm) (2IWN8GSL) Acceptable makes: L&T/Leader/Audco	8 Nos.
2.	C.I. Butterfly Valve Flow Control Lever having Nylon coated C.I. disc and Nitrile rubber lining PN 16, Size 8" (200 mm) (2IWN8GSL) Acceptable makes: L&T/Leader/Audco	14 Nos.
3.	C.I. Butterfly Valve Flow Control Lever having Nylon coated C.I. disc and Nitrile rubber lining PN 16, Size 6" (150 mm) (2IWN8GSL) Acceptable makes: L&T/Leader	8 Nos.
4.	C.I. Butterfly Valve Flow Control Lever having Nylon coated C.I. disc and Nitrile rubber lining PN 16, Size 4" (100 mm) (2IWN8GSL) Acceptable makes: L&T/Leader/Audco	20 Nos.
5.	C.I. Butterfly Valve Flow Control Lever having Nylon coated C.I. disc and Nitrile rubber lining PN 16, Size 3" (80 mm) (2IWN8GSL) Acceptable makes: L&T/Leader/Audco	15 Nos.
6.	C.I. Butterfly Valve Flow Control Lever having Nylon coated C.I. disc and Nitrile rubber lining PN 16, Size 2-1/2" (65 mm) (2IWN8GSL) Acceptable makes: L&T/Leader/Audco	10 Nos.
7.	C.I. Butterfly Valve Flow Control Lever having Nylon coated C.I. disc and Nitrile rubber lining PN 10, Size 2" (50 mm) (2IWN8GSL) Acceptable makes: L&T/Leader/Audco	
8.	CCS 3 piece Ball valve (A216GR.WCB) size 1"(25 mm) with SS ball and Teflon rings screwed ends full bore (L3RBTC) Make: L&T /Leader/Audco	30 Nos.
9.	CCS 3 piece Ball valve (A216GR.WCB) size 3/4"(20 mm) with SS ball and Teflon rings screwed ends full bore (L3RBTC) Make: L&T /Leader/Audco	30 Nos.
10.	CCS 3 piece Ball valve (A216GR.WCB) size ½"(15 mm) with SS ball and Tellon rings screwed ends full bore (L3RBTC) Make: L&T /Leader/Audco	30 Nos.
11.	M. S. ERW Pipe Class C Size 10" (250 mm) IS 3589	6 mtr.
12.	M. S. ERW Pipe Class C Size 8" (200 mm) IS 3589	36 mtr.
13.	M. S. ERW Pipe Class C Size 4" (100 mm) IS 1239	12 mtr.
14.	M. S. ERW Pipe Class C Size 3" (80 mm) IS 1239	12 mtr.
15.	M. S. ERW Pipe Class C Size 2-1/2"(65 mm) IS 1239	12 mtr.
16.	M.S. Slipon flanges ASA # 150 Thk. 21 mm Size 10"	12 Nos.
17.	M.S. Slipon flanges ASA # 150 Thk, 21 mm Size 8"	22 Nos.
18.	M.S. Slipon flanges ASA # 150 Thk. 21 mm Size 6"	12 Nos.
19.	M.S. Slipon flanges ASA # 150 Thk. 16 mm Size 4"	34 Nos.
20.	M.S. Slipon flanges ASA # 150 Thk, 16 mm Size 3"	24 Nos.
21.	M.S. Slipon flanges ASA # 150 Thk. 16 mm Size 2-1/2"	16 Nos.
22.	M.S. ERW C Class 90 degree Elbow made from fresh pipe B/W Ends R = 1.5 D, Size 8"	8 Nos.
23.	Fasteners Hexagonal head Size M20 x 125 mm Full thread + Nut + 2 machined washers	600 Nos.

- 7) Firm has to give proper support and clamps wherever necessary.
- 8) The pipelines shall be totally leak proof.
- 9) Firm has to paint all new pipeline and fitting as per ISO colour code. (i.e. One coat of red oxide primer and two coats of reputed make synthetic enamel paint).
- 10) Firm has to carry complete work in working day and to be connected to existing system in shut down period.
- 11) Firm has to arrange gaskets, red oxide, paint, welding machine, welding electrodes and gas cutting set tools and tackles to execute the work.
- 12) OFAJ will provide electricity, air, water and lifting tackles free of cost.
- 13) Firm has to follow all the safety and security norms while working in OFAJ.
- 14) Firm may visit OFAJ site to access the actual quantum of work before quoting.
- 15) Firm has to give warranty for 12 months for above work

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