

**Completion cum Earth Resistance Measurement Report**

Report No: <b>IT/205</b>		Date: <b>28/01/2016</b>		
Name & address of the Customer :		Bhushan Steel Ltd., Corporate office, Bhikaji Cama Place, New Delhi- 110 066		
Purchase Order ref :		BSL/ITT/SBD/28/4/2504 dated 10/10/2015		
Name of the contact person/s :		Sh. Rajesh Kumar Gaütam Dy. Manager - Electrical		
To be completed :		30 Days		
Dept: Tube Division		Tel: 91 9582502849		
Electrode/s Installation undertaken by :		Inter - Tech, New Delhi		
Installation Completed on :		23 Nov 15		
Soil Resistivity Measurements of location, if available $\Omega$ -m :		Not Available		
Soil Found:		Sandy Soil		
Specifications of the Earth Electrode/s :		Marconite Conductive Concrete Earth Electrodes with Cu Bonded MS rod Dia 16 mm.		
		Type of Electrode/s	Sr. Nos.	Length
		Standard	5	12000 mm
			1 - 4, 6 - 29	10500 mm
				100 mm
				100 mm
				1 nos.
				28 nos.
Use/s of Electrode/s :		Connected to various machines and electrical equipment of Tube Mill at 28/4 Sahibabad, UP		
Measurement Carried out by :		Sh. K K Gupta, Inter-Tech		Date : 24/01/2016
Method of Measurement :		Fall of Potential Method		Standard Applicable : CI 36 of IS 3043
Testing Instrument Used :		Digital Earth Tester		Make: Fluke Model : 1621
Sr. no of Testing Instrument :		S124204399A3		Calibration ref: No. A24466 Valid up-to 04/06/16 Copy of certificate attached.


Earth Resistance Measurement Results :	Electrode no	Location	Value Measured - $\Omega$	Maximum Acceptable Value - $\Omega$
	1	CNC teeth cutter	<b>1.67 <math>\Omega</math></b>	< 2 $\Omega$
	2	Tube mill no 7 ( Mill Panel )	<b>1.45 <math>\Omega</math></b>	< 2 $\Omega$
	3	Tube mill no 5 ( C.O.C)	<b>1.55 <math>\Omega</math></b>	< 2 $\Omega$
	4	Tube mill no 5 ( Mill Panel )	<b>1.65 <math>\Omega</math></b>	< 2 $\Omega$
	5	Tube mill no 5 ( H.F welder )	<b>0.25 <math>\Omega</math></b>	< 2 $\Omega$
	6	Tube mill no 6 ( C.O.C Drive)	<b>1.66 <math>\Omega</math></b>	< 2 $\Omega$
	7	Tube mill no 6 ( C.O.C PLC)	<b>1.71 <math>\Omega</math></b>	< 2 $\Omega$

	Electrode no	Location	Value Measured - $\Omega$	Maximum Acceptable Value - $\Omega$
Earth Resistance Measurement Results :	8	Tube mill no 6 ( Mill Panel )	1.88 $\Omega$	< 2 $\Omega$
	9	Tube mill no 6 ( H F welder )	1.98 $\Omega$	< 2 $\Omega$
	10	Tube mill no 7 ( H.F welder RLA)	1.74 $\Omega$	< 2 $\Omega$
	11	Tube mill no 7 ( C.O.C )	1.68 $\Omega$	< 2 $\Omega$
	12	Tube mill no 7 ( C.O.C Drive)	1.95 $\Omega$	< 2 $\Omega$
	13	Tube mill no 7 ( Control Desk)	1.66 $\Omega$	< 2 $\Omega$
	14	Tube mill no 4 ( C.O.C )	1.61 $\Omega$	< 2 $\Omega$
	15	Tube mill no 4 ( H.F welder )	1.61 $\Omega$	< 2 $\Omega$
	16	Tube mill no 4 ( Mill & RLA )	1.94 $\Omega$	< 2 $\Omega$
	17	CNC roll	1.71 $\Omega$	< 2 $\Omega$
	18	Tube mill no 2 ( C.O.C Drive)	1.33 $\Omega$	< 2 $\Omega$
	19	Tube mill no 2 ( C.O.C PLC)	1.53 $\Omega$	< 2 $\Omega$
	20	Tube mill no 2 ( H.F welder RLA	1.66 $\Omega$	< 2 $\Omega$
	21	Tube mill no 2 ( Mill )	1.76 $\Omega$	< 2 $\Omega$
	22	Tube mill no 1 ( C.O.C )	1.51 $\Omega$	< 2 $\Omega$
	23	Tube mill no 3 ( C.O.C panel )	1.83 $\Omega$	< 2 $\Omega$
	24	Tube mill no 3 ( C.O.C & RLA )	1.92 $\Omega$	< 2 $\Omega$
	25	Tube mill no 3 ( Oscillator )	1.83 $\Omega$	< 2 $\Omega$
	26	Tube mill no 1 ( C.O.C )	1.71 $\Omega$	< 2 $\Omega$
	27	Tube mill no 1 ( H F Welder )	1.48 $\Omega$	< 2 $\Omega$
	28	Soco Machine no 4	1.46 $\Omega$	< 2 $\Omega$
	29	PLC room Furnace ( Con Cast )	1.96 $\Omega$	< 2 $\Omega$

Measurements witnessed by :



(K K Gupta)  
Inter-Tech  
New Delhi



(Rajesh Kumar Gautam)  
Dy Manager - Electrical  
Bhushan Steel Ltd.,  
Sahibabad