



**BUREAU OF INDIAN STANDARDS**  
**BENGALURU BRANCH LABORATORY**



Ref.: BNBL/ IS 13488

Date: 04.10.2023

Below are the details of test facility created by Mechanical Section of BNBL and the same is for information of all ROs/ BOs/ Laboratories and Departments of BIS.

1.	I.S. No.	13488:2008
2.	Product	Irrigation Equipment - Emitting Pipe Systems
3.	Test(s) with clause No. for which facility has been created.	All Tests
4.	Type/ Size/ Grade/ Variety for which test facility has been created.	Nominal Diameter: 12 mm, 16 mm, 20 mm, 25 mm Class: 1, 2, 3, 4.
5.	Test Section	Mechanical and Chemical
6.	Major equipment(s) procured for creation of test facility.	<ol style="list-style-type: none"> <li>1. Emission Rate Test Rig.</li> <li>2. Test Rig for Resistance to Tension at Elevated Temperature.</li> <li>3. Go, No-Go Gauges.</li> <li>4. Pull Out Apparatus.</li> <li>5. Constant Temperature Bath for E.S.C.R. Test.</li> </ol>
7.	Status of facility created	Complete
8.	Test (s) with Clause No. for which facility yet to be created for complete testing.	N.A.
9.	Sample Size	30 m with 40 (Nos.) fittings
10.	Testing capacity/ month	20 samples
11.	Remarks	Nil

In view of the above, all Regional/ Branch/ Laboratories are requested to send the samples to BNBL for testing as detailed above.

Siddesh K M  
T.A. (Lab.)

OIC (Mech.)

H (BNBL)

193225/2023/BNBOL

**भारतीय मानक ब्यूरो / Bureau of Indian Standards**  
**बैंगलोर शाखा कार्यालय प्रयोगशाला / Bengaluru Branch Laboratory**

सन्दर्भ : BNBL/ MECH./ TC/ IS 13488

दिनांक: 04-10-2023

Testing Charges for IS 13488:2008 (Irrigation Equipment – Emitting Pipe Systems)

Sl. No.	Clause No.	Requirement / Characteristic	Manhours spent in testing	Manhour cost of testing	Power consumption (if intensive) (kWh)	Cost of power	Consumables cost (if significant) Rs.	Total cost of test	Testing time for the purpose of time norms	Sample preparation/ conditioning/ curing time etc for the purpose of time norms	Total time for the purpose of time norms	Remarks	
				5=4xRs	6	7=6xRs	9	8	9=5+7+8	10	11	12=10+11	13
				300									
1	Cl. 10, IS 2530:1963	Carbon Black Content	2	600	3	27	0	627	2.5	0.5	3		
2	Cl. 16, IS 2530:1963	Carbon Black Dispersion	3	900	3	27	0	927	3.0	0	3		
3	8.1	Uniformity of Emission Rate	3	900	1	9	0	909	2.0	1	3		
4	8.2	Emission Rate of Emitting Unit as a Function of Inlet Pressure	2	600	1	9	0	609	2.0	1	3		
5	8.3	Dimensions	2.5	750	0	0	0	750	2.5	0.5	3		
6	8.4	Resistance of Emitting Pipes to Hydrostatic Pressure.	5	1500	50	450	0	1950	48.0	2	50		
7	8.5	Resistance to Tension at Elevated Temperature	2	600	1	9	0	609	1.5	0.5	2		
8	8.6	Resistance to Pull Out of Joints Between Fitting and Emitting Pipe	1	300	0	0	0	300	1.0	1	2		
9	8.7	Resistance of PE Emitting Pipe to Environmental Stress Cracking	3	900	50	450	500	1850	48.0	2	50		
10	8.8	Determination of Emitting Unit Exponent	2	600	0	0	0	600	2.0	0	2		
11	Preparation of Test Report		2	600	0	0	0	600	0.0	0	2		
<b>Total</b>			<b>27.5</b>	<b>8250</b>	<b>109</b>	<b>981</b>	<b>500</b>	<b>9731</b>	<b>112.5</b>	<b>8.5</b>	<b>123</b>		

<b>Cost of total manhours</b>	Rs.	8250
<b>Total electricity consumption:</b>	Rs.	981
<b>Total cost of consumables:</b>	Rs.	500
<b>Charges for preparation of test report</b>	Rs.	600
<b>Testing charges for the product:</b>	Rs.	9731
<b>Total time for the purpose of time norms</b>	Hrs.	123

**Remarks:**

OIC (M)

HBNBL

Siddesh K M  
T.A. (Lab.)