



भारत सरकार/GOVERNMENT OF INDIA

जल शक्ति मंत्रालय/Ministry of Jal Shakti

जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग

Department of Water Resources, River Development & Ganga Rejuvenation



केन्द्रीय जल एवं विद्युत् अनुसंधान शाला/Central Water & Power Research Station

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HYDRAULIC MACHINERY AND CAVITATION DIVISION

TEST CERTIFICATE FOR PRESSURE DROP IN STRAINER

CERTIFICATE No: CWPRS/HMC/20-21/G – 004

TEST DATE: 03.07.2020

1	Test referred by	M/s Nisan Scientific Process Equipments ( P ) Ltd., Mumbai
2	Tested for	Client: M/s GE Global Parts and Products GmbH, Switzerland Customer: M/s KSB Limited Project: JAWA1, CCGTPP (1760MW)
3	Type of Strainer and Make	Basket Strainer & NSPEPL
4	Drawing No.	NS/BSTR/B44 Rev.01
5	Design Flow Rate of Strainer	493 m <sup>3</sup> /hr
6	Mesh Size	40 Mesh, 38 SWG
7	Inlet / Outlet Line Size	18" (450mm), 150#
8	Fluid media	Clear cold water
9	Test Flow Range	120 – 620 m <sup>3</sup> /hr
10	Method of flow measurement	Gravimetric Method with an uncertainty of $\pm 0.3\%$
11	Pressure taps	At inlet and outlet nozzle pipes

RESULTS

Sr. No.	Flow Rate ( m <sup>3</sup> /hr)	Head Loss across the strainer (kg/cm <sup>2</sup> )
<b>100% CLEAN STRAINER</b>		
1	121.826	0.0021
2	238.540	0.0055
3	374.077	0.0119
4	493.598	0.0189
5	620.092	0.0263
<b>50% CLOGGED STRAINER</b>		
1	120.833	0.0017
2	238.672	0.0048
3	384.103	0.0102
4	494.364	0.0166
5	607.042	0.0256

Note:

1. The graph indicates head loss across the strainer in 100% clean & 50% clogged conditions at different flow rates.
2. This certificate refers only to the particular strainer tested under the stated condition of test.
3. Only the original certificate and associated graph duly stamped be considered as authentic.
4. Head Loss at 493 m<sup>3</sup>/hr in 100% clean is 0.0183 kg/cm<sup>2</sup> and in 50% clogged is 0.0165 kg/cm<sup>2</sup>.

TEST PARTICIPANTS

TESTED BY CWPRS	WITNESSED BY
Shri T. K. Sahu, ARO Shri R. A. Kadam, RA	Shri Pratik Karekar, Q. C. Engineer, M/s Nisan Scientific Process Equipments

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