



Thermax Corporation, one of the largest boiler manufacturers in the world, recorded a **13.15%** increase in Steam/KG of natural gas after installing the Fitch Fuel Catalyst on it's 4 Ton Boiler

Baseline Data Average (31 days)

<u>Gas Consumption/Day</u>	<u>Steam Production/Day</u>	<u>Steam Production/ KG Of Fuel</u>
2,595.48 KG	5,818,313.16 KG	20.23 KG

Fitch Installed Average Data (7 days)

<u>Gas Consumption/Day</u>	<u>Steam Production/Day</u>	<u>Steam Production/ KG Of Fuel</u>
2,528.57 KG	6,849,105.86 KG	22.89 KG

Improvement after Fitch Installed

Baseline Average Ratio in KG of Steam per 1 KG to Natural Gas	Fitch Installed Average Ratio in KG of Steam per 1 KG to Natural Gas	Fitch installed Improvement in KG of Steam to Natural Gas	% of Steam per 1 KG to Natural Gas (13%)
20.23	22.89	2.66	13.15



4 Ton **Thermax Boiler** used 24 hours per day, 7 days per week



Fitch Model FHD-2-6-3 NG

Thermax Corp. also recorded pollution levels well below permissible limits allowed by the (GPCB) Gujarat Pollution Control Board

Particulates	GPCB Permissible Limits	With Fitch Installed	% Below Permissible Limits With Fitch
PM	150	7.16	95.23%
SO2	100	4.17	95.83%
Nox	50	6.24	87.52%

Aqua-Air® Environmental Engineers Pvt. Ltd.
(Pollution Control Consultants & Engineers)



GPCB Recognized Schedule-II Environmental Auditor • OHSAS-18001:2007 Certified Company • ISO 9001:2015 Certified Company
NABET /QCI Accredited EIA Consultant • NABL Accredited Testing Laboratory • MOEFCC Approved Environmental Laboratory

TEST REPORT

F-LB-15/5.10/01-3

Customer's Name and Address

M/s. THERMAX LIMITED
(CHEMICAL DIVISION)
Plot No.: Z/96/C, Dahej SEZ-II,
Dahej-392 130, Tal: Vagra,
Dist.: Bharuch, Gujarat, INDIA

ISSUE DATE	03.12.2021
REF. NO.	AEE/480-B/2021
ULR NO.	--

Description of sample	: EMISSION FROM STATIONARY SOURCES (STACK/VENT)	Sampling procedure	: As per IS method
Date of Sampling	: 01.12.2021	Sampling Time	: 11:40 am To 12:40 pm
Sample Collected By	: AEEPL TEAM (Mr. Vishal Nakum (Jr. Env. Engineer))	Duration of Sampling (Minutes)	: 60 Min.
		Packing/Seal	: Sealed with Proper Identification
Description of Source	: STACK ATTACHED TO BOILER-01 & BOILER-02 (CAPACITY:8 TPH each) (1 STAND BY) (APCM: WET SCRUBBER)	Lab ID Code	: 420-A/LB/20/ST₁
Quantity /No. of Sample	: Thimble for PM, Abs. Soln. 30 ml for Gaseous Sample & Bladder For NO_x Sampling /Parameter	Protocol (Purpose)	: Monthly Monitoring (November-2021)
Test Parameters	: AS PER C.C.A. (GPCB)	Date of Starting of Test	: 02.12.2021
Sample Receipt Date	: 02.12.2021(10:45 am)	Date of Completion of Test	: 03.12.2021
Test Method	: As per Result Table		

DETAILS OF STACK/VENT

SR. NO.	DESCRIPTION	UNIT	DATA
1.	Stack Height	m	39.0
2.	Temperature of flue gas	°C	161
3.	Velocity of flue gas	m/sec	6.03
4.	Type of fuel	--	Natural Gas

RESULT TABLE

SR. NO.	PARAMETER	UNIT	GPCB PERMISSIBLE LIMIT	RESULTS	TEST METHOD
1.	Particulate Matter (PM)	mg/Nm ³	150	7.16	IS:11255:(P-1):1985
2.	Sulphur Dioxide (SO ₂)	ppm	100	4.17	IS:11255:(P-2):1985
3.	Oxides of Nitrogen (NO _x)	ppm	50	6.24	IS:11255:(P-7):2005

M/s. AQUA-AIR ENVIRONMENTAL ENGINEERS PVT. LTD.

Ankit
03.12.2021
AUTHORIZED SIGNATORY
ANKIT TALAVIYA
(CO-TECHNICAL MANAGER)

Drashti
03.12.2021
PREPARED BY
DRASHTI PATEL
(SR. ENV. ENGINEER)

-----End of Test Report-----

• GPCB Approved

• Recognized by MoEF & CC, New Delhi Under
Sec. 12 of Environmental (Protection) Act-1986

• NABET/QCI Accredited EIA
Consultant

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