

**EMISSION AND FUEL ECONOMY
BOILER TEST REPORT
OF FITCH FUEL CATALYST**

FOR

**GODREJ TYSON FOODS LTD.
BANGALORE**



**FITCH FUEL CATALYST
IN-LINE F-150 HDG**

PREPARED BY

KPK IMPEX COMPANY

**1196/B, SHRISHTI CHAMBERS,
GHOLE ROAD, PUNE – 411 005**

EXECUTIVE SUMMARY

Purpose:

A test program to measure the potential benefits of installing permanent fuel treatment device FITCH® Fuel Catalyst F-150 HDG on a 5 TPH Boiler at Godrej Tyson Foods Ltd., Bangalore plant for fuel emission and energy efficiency.

Location:

Godrej Tyson Foods Ltd.
M401-RGC Bangalore
Sy. No. 77/1, 83/2 & 84/1,
Jangamanakote Road,
Doddahullur Village, Hoskote,
Bangalore – 562114

Boiler: 5 TPH Boiler

Oil used: F.O

Catalyst installed: F-150 HDG FITCH® Fuel Catalyst





Conserving Energy
Through Technology
ISO-9001-2000 certified company

KPK IMPEX

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Test Procedure Without Catalyst

Name of the Agency :	Godrej Tyson Foods Ltd.
Address:	Sy. No 77/1, 83/22 & 84/1, Jangamanakote Road, Bangalore - 562114
Make and size: Year of Manufacture	5 TPH Boiler
Contact Person: Site Name:	Mr. Vishal Chauhan Bangalore

Date	Running Hours	Steam Generated	Total Fuel Consumed
1/6/18	9h	11900	1240
2/6/18	10h	12400	1384
4/6/18	10h	11700	1230
5/6/18	10h	11800	1220
6/6/18	11h	14900	1464
7/6/18	11h	15000	1400
8/6/18	17h	21700	2080
TOTAL:	78h	99,400 Kg	10018 Liters

Fuel Consumed: **10018 Liters**

Fuel Consumed per hour: **128.43 Liters/hr**

Representative of KPK Impex

Representative of Vendor

Authorized Signatory

Authorized Signatory

Remarks:-



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Test Procedure With Catalyst

Name of the Agency :	Godrej Tyson Foods Ltd.
Address:	Sy. No 77/1, 83/22 & 84/1, Jangamanakote Road, Bangalore - 562114
Make and size: Year of Manufacture	5 TPH Boiler
Contact Person: Site Name:	Mr. Vishal Chauhan Bangalore

Date	Running Hours	Steam Generated	Total Fuel Consumed
9/6/18	11h	12700	1060
10/6/18	2h		80
11/6/18	9h	12800	1120
12/6/18	10h	13400	1300
13/6/18	9h	13300	1320
14/6/18	11h	11700	1142
15/6/18	10h	13600	1318
18/6/18	10h	10400	1040
19/6/18	15h	12300	1280
TOTAL:	87h	1,00,200 Kg	9660 Liters

Fuel Consumed: **9660 Liters**

Fuel Consumed per hour: **111.03 Liters/hr**

Representative of KPK Impex

Representative of Vendor

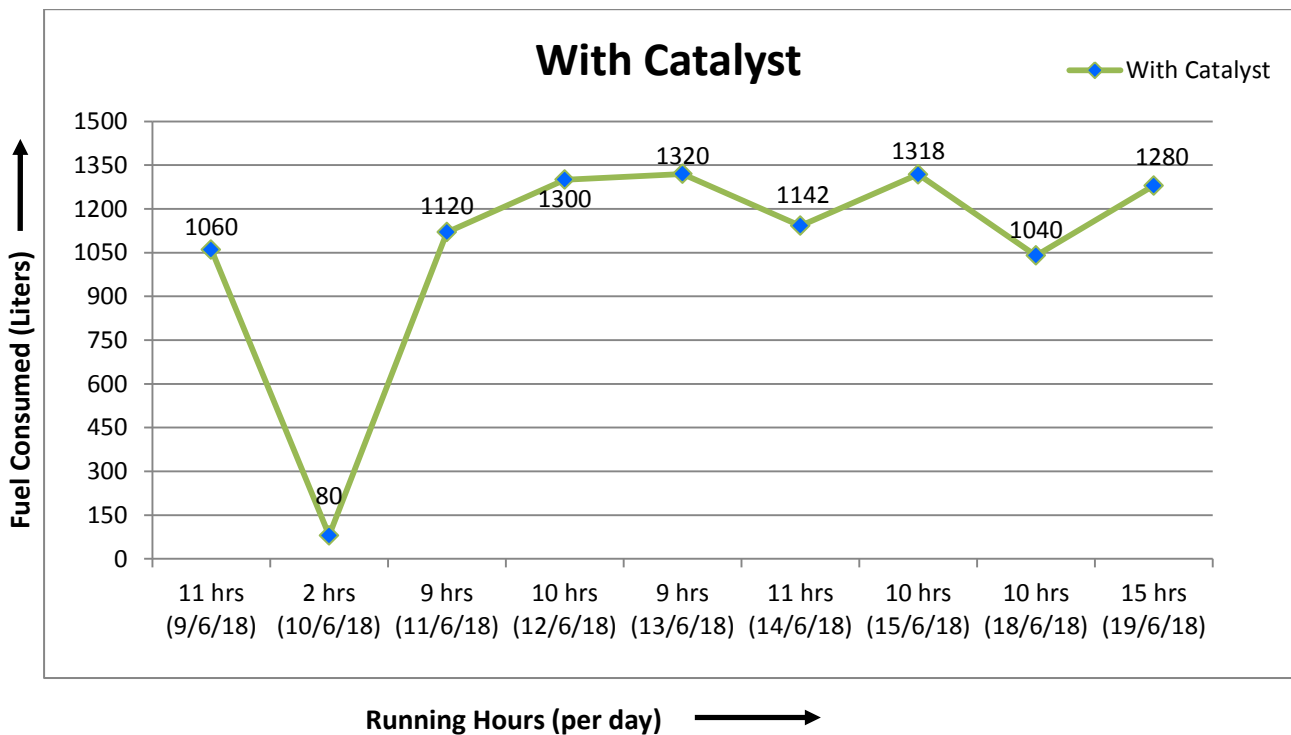
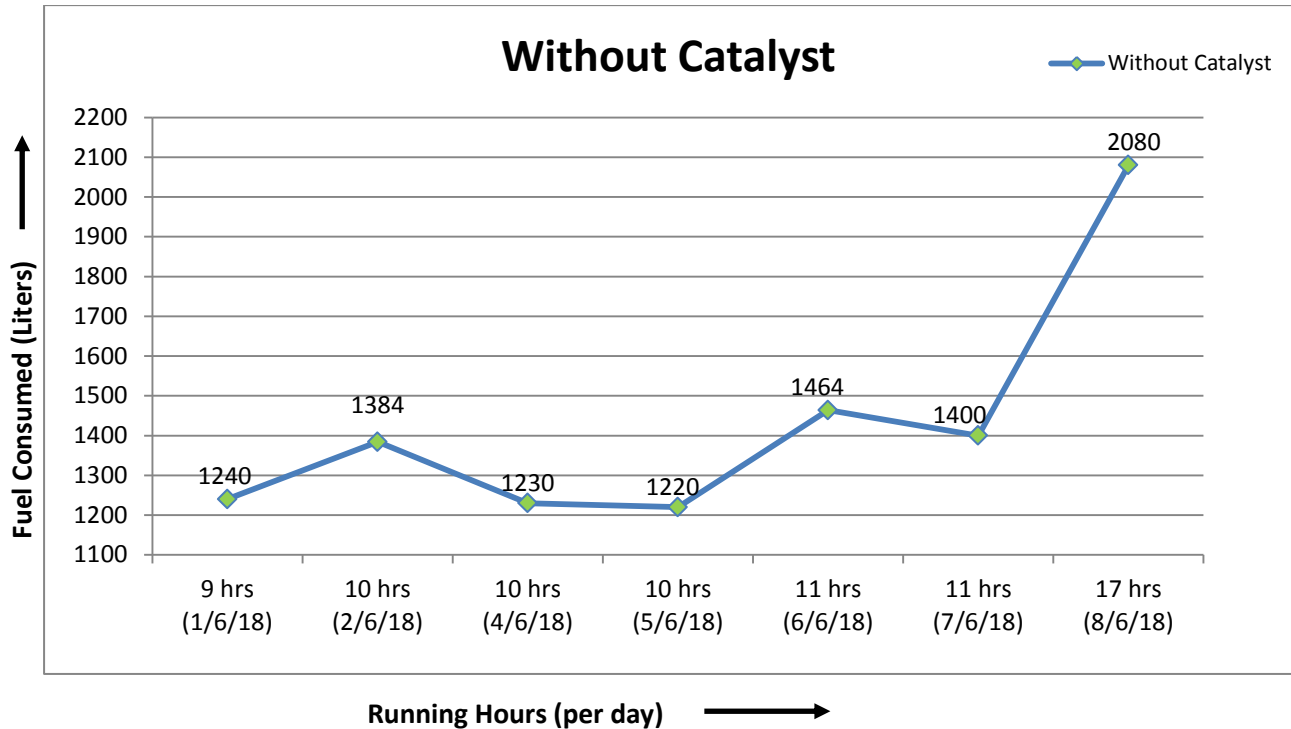
Authorized Signatory

Authorized Signatory

Remarks:-

FITCH PERFORMANCE REPORT (Godrej Tyson Foods Ltd.)

Fuel Consumption

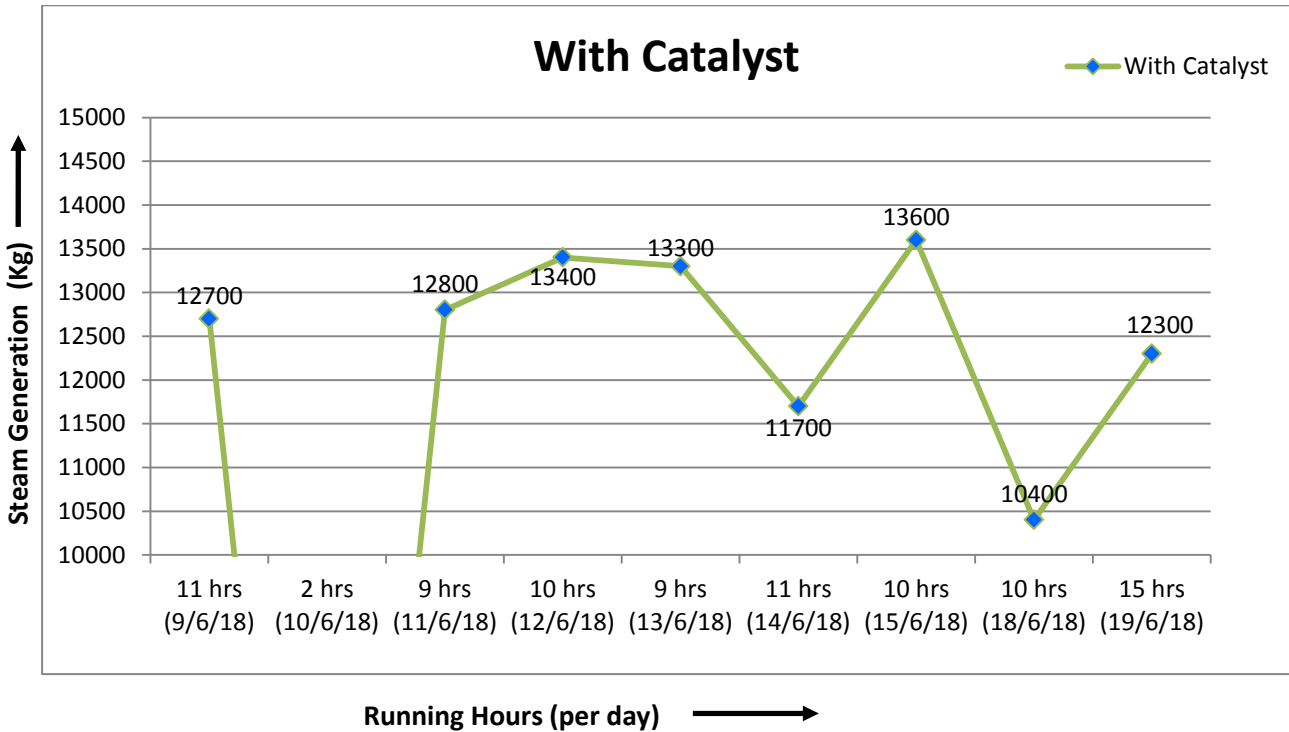
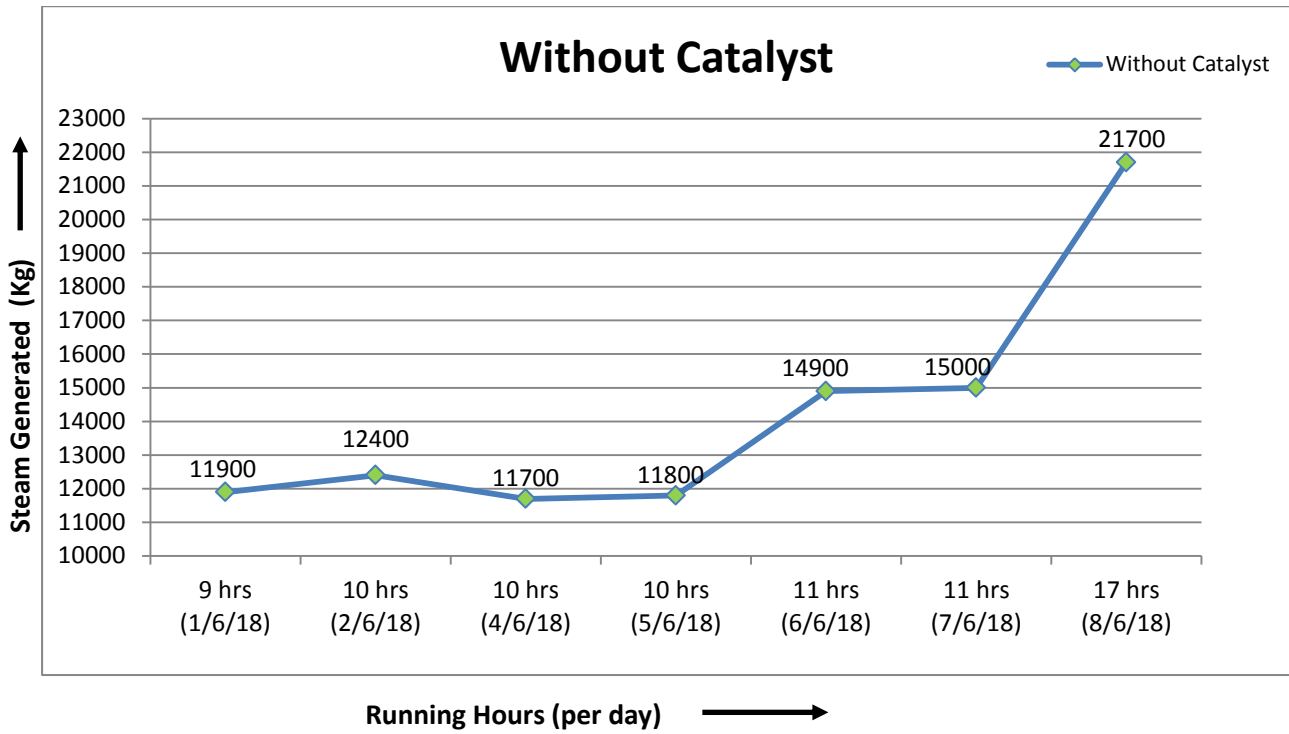


Average Fuel consumed per hour (without catalyst): **128.4358 Liters/hr**

Average Fuel consumed per hour (with catalyst): **111.0344 Liters/hr**

Fuel Savings: **13.54%**

Steam Generation



Average Steam Generated per liter (without catalyst): **9.92 Kg/Liter**

Average Steam Generated per liter (with catalyst): **10.37 Kg/Liter**

Improvement in Steam Generation: **4.54%**

CONCLUSION

It has been observed that there is a definite saving of approximately 13.5% in fuel consumption by the use of FITCH® Fuel Catalyst.

Also, the efficiency of the boiler has improved as the average steam generated without catalyst was 9.92 kg/liter while it is 10.37 kg/liter with the use of FITCH® Fuel Catalyst. There is an improvement of approximately 5% in steam generation along with fuel saving of 13.5%.

Besides fuel saving of 13.5% and improvement in steam generation, the exhaust emission will also decrease by at least 40%.

We would also like to mention that the fuel used is F.O, which is heavy fuel. When the boiler is switched off, F.O is in the catalyst. When the boiler is switched on after some hours, for the first 30-35 minutes there may be some difficulty in the passage of fuel from the catalyst. Once the required temperature is attained, F.O will pass from the catalyst without any issue.

For any other clarification, contact KPK Impex Company.