Fuel Efficient PNG Burner

(Breakthrough Technology for Energy Efficiency, Consumer Safety and GHG Reduction)



Components of Fuel Efficient PNG Burner Designed by CFD Modeling and CAD

Indian Patent Application No.: 201711046975, 28 Dec, 2017 PCT Patent Application No.PCT/IN2019/050482, 26 June, 2019

Bangladesh Application No.166/2019, 27 June, 2019 Design Registration No.: 303178, 5 March, 2018 Exceeding the Specification of IS: 17153

CSIR – Indian Institute of Petroleum (CSIR-IIP), Dehradun with the financial support of Petroleum Conservation Research Association (PCRA), New Delhi has developed a dedicated fuel efficient PNG burner to replace the existing PNG burner, which has been created by converting LPG burner for PNG use by jet enlargement to achieve PNG burning. The dedicated burner will have following advantages over the existing burner in use:

- > 25-30% improvement in thermal efficiency
- Ensures safety by eliminating the flame lift and flash back
- Controls loss of unburned fuel to the environment thus avoiding unnecessary incremental GHG emissions
- Ensures smooth and stable burner flame
- Provides optimized temperature profile for efficient cooking
- A national product designed for dedicated PNG use

FIELD TRAILS:

The improved PNG burner has been tested at Shashtri Bhawan, New Delhi (Pantry of Honorable Minister of Petroleum & Natural). The field trials have confirmed the fuel saving potential this Burner.

Field Trail Data

Data generated over a period of one week	
With Existing modified burner	With CSIR-IIP PNG burner
0.0039 m3/ cup of tea	0.0027 m3/ cup of tea
31% PNG Saving	

OUR LICENSEE:

- 1. Sunflame Enterprises (P) Ltd., Faridabad, Haryana
- 2. Nipun Appliances, Faridabad, Haryana
- 3. Gas Conservation Innovative Technologies, Solan, H.P.
- 4. Greenchef Appliances Limited, Solan, Himachal Pradesh
- 5. Dynamic Industries, Himachal Pradesh
- 6. Inflame Appliances Limited, Haryana
- 7. Super LPG Appliances & Pvt Ltd, Delhi
- 8. R.S Enterprises, Faridabad
- 9. Shri Adinath Enterprises, Ambala
- 10. Bawa Kitchen Appliances Pvt. Ltd., Saharanpur, U.P.
- 11. Stufa Manufacturing Enterprise, Dstt. Solan, H.P.
- 12. Maa Sharda Industries, Parwanoo, (H.P.)
- 13. New Allied L.P.G. Appliances, Delhi-110092
- 14. Bright Moulding Works, Delhi
- 15. Pride Uttam Metal Appliances Inc., Solan, Himachal Pradesh
- 16. Pearl Print Pack Pvt. Ltd., Haridwar, Uttarakhand
- 17. Vansh Industries, Himachal Pradesh
- 18. Jindal Home Products (P) Ltd., Faridabad, Haryana
- 19. Ravi Engineering Works, Vadodara, Gujarat
- 20. Delta Industries, Delhi
- 21. Ritishaa Home Apppliance, Delhi
- 22. Shiva Industries, Delhi
- 23. Stove Kraft Ltd., Karnataka
- 24. Kaiser Appliances, Solan, HP
- 25. A.K Industries, Delhi
- 26. Shree Ram Enterprises, Karkardooma, Delhi
- 27. Yash Appliances, Solan, H.P.
- 28. Raja Enterprises, Prawanoo, H.P.
- 29. Super Kitchen Appliances, Delhi-110039
- 30. Swasti structure and Concretes, Haridwar
- 31. Shikhar Rubber Udyog, Ghaziabad, U.P.
- 32. Lakshmi Industries, Ghaziabad, U.P.
- 33. Daiwik Appliances Co., Delhi
- 34. Micronova Power Systems, Solan, H.P.
- 35. Shree Balaji Gas Appliances, Delhi-110094
- 36. R.S. Industries, New Delhi

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