ADL ENGINEERING CONSULTANTS

Indian Office
Tower A5 – 106, Kelambakkam, Tamil Nadu, 603103
Marketing & Design Office
E – 277, Sector 22, Noida, Uttar Pardesh, 201307

FAN STOVE F-18

The F-18 fan stove has a gasifier design that makes your cooking very efficient with complete combustion, good heat transfer, and low smoke. Charcoal, wood pellets or small pieces of wood can be burned as fuel. It's a great cho`ice for clean cooking!

Highlights

***Highly efficient:** 47.2% (Tier 4)

***Smokeless:** 1.58g/MJ (Tier 5)

***Closed Combustion Chamber:** means fuel burns inside a sealed chamber with fan-controlled the airflow, more cleaner, more efficient, and fuel-saving.

MRP : 7,000 EXCLUDING GST : 18%
18 * 70 =1,260 (Total : 8,260)

Materials

Item	Part name	Specification
1	Stovetop	Cast iron, outer dia.260mm, inner dia.100mm
2	Stove body	0.5mm stainless steel 201
3	Door frame	1mm cold rolled steel with painting
4	Handles	Heat-resistant plastic and steel
5	Combustion Chamber	1mm stainless steel
6	Fan	5V,1.5A.CE approved
7	Warranty	1 year
8	Lifespan	3-5 years

Note: The warranty and lifespan based on proper use and maintenance.

Shipping Specification

Box Size	Shipping weight	20GP Container Qty	40HQ Container Qty
325*270*288mm	6.5kgs	1152pcs	2709pcs

WBT Results

F-18	Metric	Data of Without pot skirt	Tier Rating
1	Thermal Efficiency with char	47.2%	4
2	PM2.5 per useful energy	150.42mg/MJ	3
3	CO per useful energy	1.589g/MJ	5

Name and address of client	ADL ENGINEERING CONSULTANTS Address: Indian office: Tower A5 – 106, Kelambakka, Tamil Nadu, 603103 Marketing & Design Office: E – 277 Sector 22, Noida, Uttar Pardesh, 201307

Fig 1. F-18

Brand name	SSM F-18
Number of samples:	One (1)
Sampling:	n. a
Lab assigned code	2025/B069
Manufacture stove code	n. a
Sample receipt date	3rd June 2025
Testing dates	16th-25th June 2025
Environment conditions	Temp (22°C-25°C),
Fuel used: Non carbonized pellets (CV=18618.8) kJ/kg	
Quantity of fuel: **H**-0.650kg, **M**-0.550kg, **L**-0.400kg	

Standard Used: ISO 19867-1:2018 Standard (Power Levels: High (H), Medium (M) and Low (L)

Testing Centre: CREEC located at Plot 7, Cornwall Crescent, K10 Village, Kyambogo Lower Estate, Nakawa Division, P.O. Box 118800, Kampala, Uganda. Tel: (+256) 41 4532008

Metric		Test Sequence Phase				Tier Rating
		High	Medium	Low	Combined	
Thermal Efficiency **with** char (%)	Mean	46.4	46.6	48.5	47.2	4
	SD	0.07	0.17	0.05	0.10	
	90 % CI	46.3 - 46.5	46.4 - 46.7	48.5 - 48.6	47.1 - 47.3	
Thermal Efficiency **without** char (%)	Mean	44.95	45.70	45.86	45.50	4
	SD	0.16	0.17	0.10	0.07	
	90 % CI	44.8 - 45.1	45.5 - 45.9	45.8 - 46	45.4 - 45.6	
Char Energy Productivity (%)	Mean	3.10	1.09	3.13	3.49	N/A
	SD	0.19	0.00	0.18	0.04	
Char Mass Productivity (%)	Mean	1.77	1.09	3.13	2.00	N/A
	SD	0.11	0.00	0.18	0.02	
Cooking Power (W)	Mean	2198.01	2451.13	1894.07	2181.07	N/A
	SD	7.60	8.86	4.20	4.09	
Fuel Burning Rate (g/min)	Mean	17.16	18.82	14.49	16.83	N/A
	SD	0.00	0.00	0.00	0.00	
PM2.5 per useful energy (mg/MJ)	Mean	182.33	110.32	158.60	150.42	3
	SD	1.68	0.60	0.21	0.83	
	90 % CI	184 - 181	111 - 110	159 - 158	151 - 150	
CO per useful energy (g/MJ)	Mean	0.516	1.603	2.648	1.589	5
	SD	0.002	0.006	0.006	0.001	
	90 % CI	0.5 - 0.5	1.6 - 1.6	2.7 - 2.6	1.6 - 1.6	

COOKSTOVE PERFORMANCE CERTIFICATE FOR SSM F-18

Certificate for Report No: B/TR/182025/02

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	SD	0.002	0.006	0.006	0.001	
	90 % CI	0.5 - 0.5	1.6 - 1.6	2.7 - 2.6	1.6 - 1.6	

Results in this report relate only to the samples tested, and the samples as received from the client.

Prepared by:	**Reviewed by:**	**Approved by:**
Jimmy Agaba. Lab Technician	Derrick Kiwana. Lab Technician	Agnes Naluwagga Head of Laboratory

CENTRE FOR RESEARCH IN ENERGY AND ENERGY CONSERVATION
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