



NEPAL ACADEMY OF SCIENCE & TECHNOLOGY (NAST)
RENEWABLE ENERGY TEST STATION (RETS)



RETS

RCB No. 18011/095118

Certificate No: BL-ICS1251

10 October 2018

To,
Mr. Darbo Wang
Regional Manager
Shengzhou Stove Manufacturer
Ganlin Town, Shengzhou, China

Subject: Product Introduction test (PIT) Results of ICS1251/Single Pot Charcoal stove

Dear Mr. Wang,

Please find the report summary of *performance, emissions, safety and durability test* of cook stove using protocols recommended by Nepal Interim Benchmark for solid biomass Cook stoves (NIBC 2016) of following details of stove model.

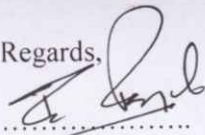
1. Details of Cook Stove / Methodology	
Manufacturer/ Address:	Shengzhou Stove Manufacturer / Ganlin Town, Shengzhou, China
Local Supplier/Address:	Jhankar Multiple Concern /Balkhu, Kathmandu
Type:	Biomass / Natural Draft / Metallic /Single pot
Brand/Model:	SSM COOK / C26-23Plus
Test equipment used :	Laboratory Emission Measurement System (LEMS) of Aprovecho Research Centre (ARC), USA with PM 2.5 Gravimetric measurement, CO measurement with Electrochemical cell sensor and CO2 measurement with non-dispersive infrared (NDIR) sensor
Test Repetition :	3 times
Average firepower used:	High power phase 2.09 KW Low power phase 1.01 KW

2. Report Summary					
S.N	Performance Matrices (value)	Units	Average (Results)	NIBC 2016 Criteria	Compliance (Y/N)
1	High Power Thermal Efficiency *	%	37.13	≥ 25	Y
2	Low Power Specific Consumption	MJ/min/L	0.015	≤ 0.039	Y
3	High Power CO *	g/MJ _d	17.13	≤ 10	N
4	Low Power CO	g/min/L	0.15	≤ 0.09	N
5	High Power PM 2.5 *	mg/MJ _d	55.69	≤ 513	Y
6	Low Power PM 2.5	mg/min/L	0.41	≤ 4	Y
7	Indoor Emission rate of CO	g/min	0.80	≤ 0.49	N
8	Indoor Emission rate PM 2.5	mg/min	2.53	≤ 40	Y
9	Safety *		85.50	≥ 75	Y
10	Durability*				Y

* Mandatory performance indicators of NIBC2016

Note: -On the basis of test results, we hereby certify that Cook Stove is **Non-Compliance** with NIBC 2016

Regards,


Roshan Parajuli
General Manager

(CC: - Programme Manager, Biomass Energy Sub Component, NRREP/AEPC)