DBI–Gastechnologisches Institut gGmbH Freiberg
Feuerstättenprüfstelle
Halsbrücker Straße 34; D-09599 Freiberg

Accredited testing laboratory by regional building order, index number SAC 24
Accredited testing laboratory by construction products directive 89/106/EEC, notified body number: 1721
Accredited DIN CERTCO testing laboratory, registry number PL 015
Accredited testing laboratory by the Swiss Assoc. of Fire Insurance Companies VKF

Report on the type test of a Pellet burner in accordance with DIN EN 15270:2008-03

File no. / Test report no. **DBI F 10/04/0119**

Test object Pellet burner DIN EN 15270

Type	SPL65
Version	--
heat input	65 kW

Wood pellet burner for utilization in boilers for solid fuels. The appliance consists of a burner with igniter and a centrifugal fan. Furthermore the system consists of a fuel store box and a fuel supply system by screw and hose for gravity feeding. All fire exposed components are made of high temperature resistant steel. The applianace works with an electrical panel and programming system for completely automatic operation.

Client Termocabi S.r.l. Biomass Burners Technology
Via Borghisani 13
26035 Pieve San Giacomo (CR) Italy

Manufacturer Like Client

Scope of testing (Initial) type test in the context of the conformity assessment procedure and assessment of the appliance for compliance with the product requirements as per DIN EN 15270, Annex I.2

Test basis DIN EN 15270:2008-03

The essential product features in accordance with Annex I.2 to DIN EN 15270 for pellet burners were reviewed and were found to comply with the requirements.

Prüfstelle für Feuerstätten nach Bauproduktengesetz 1721 DBI -GTI B * Sachsen *

Dipl.-Ing. Ronald Aßmann
Signature of director of laboratoy

Dipl.-Ing. (BA) Rico Eßbach
Signature of test engineer

Freiberg, 23.04.2010

Summary

Test period	19.06. – 30.06.2009	
Test location	Test laboratory Freiberg	
Client / Manufacturer	Termocabi S.r.l. Biomass Burners Technology Via Borghisani 13 26035 Pieve San Giacomo (CR) Italy	
Test object	Pellet burner fo small heating boilers, DIN EN 15270	
Conveyor type	Automatic	
Type designation	SPL65	
Design, allowing for various versions	Body enclosure	Closed sheet-steel body with opening for combustion air, Connection/Mounting of the burner via bolted joint to a suitable heating boiler, Viewing window for optical control of combustion
	Type of burner	Multistage burner, Feeding the pellets from top (vertical) into the burner head
	Conveyor system	Via adjustable feed screw, From a fuel hopper over a tube (drop chute) into the burner head
	Ignition device	Electric glow plug in burner head, Ignites automatically
	Fuel hopper	External (separate from the burner)
	Ash discharge	Semi automatic, Automatic ash discharge from burner head via air pressure system, manual ash discharge from combustion chamber via opening the combustion chamber
Betriebsweise	Depending on ambient air conditions	
Fuel	Wood pellets	

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1 Keydata of the burner[1)]

Burner	Type: SPL65 Version: --			
Fuel	--	Wood pellets	--	--
Fuel throughput	kg/h	14,7	--	--
Heat input	kW	70,8	--	--
Heat output (indirect)	kW	62,5	--	--
CO emission based on 10% O_2	mg/m³	29,5	--	--
CO-emission – referred to fuel	mg/MJ	19,7	--	--
OGC-emission emission based on 10% O_2	mg/m³	185,7	--	--
OGC-emission – referred to fuel	mg/MJ	123,8	--	--
NO_x-emission based on 10% O_2 (NO_2)	mg/m³	0,1	--	--
NO_x-emission – referred to fuel (NO_2)	mg/MJ	0,07	--	--
Dust-emission based on 10% O_2	mg/m³	14,4	--	--
Dust-emission – referred to fuel	mg/MJ	9,6	--	--
Emission class acc. to DIN EN 15270	--	5	--	--
Efficiency (indirect)	%	88,2	--	--
Flue gas temperature	°C	221,7	--	--
Flue gas mass flow	g/s	35,4	--	--
Distance between burner and bottom	mm	800	--	--
Height of the combustion chamber	mm	500	--	--
Width of the combustion chamber	mm	334	--	--
Minimum clearance distances from exposed / combustible materials:	from rear wall from side walls from floor from ceiling		-- -- -- --	mm mm mm mm

[1)] All values refer to firing stage 5 of the burner