



KWB

The Biomass Heating System

Product information

KWB PELLETFIRE PLUS

Pellet heating system

*We provide
energy
for life!*



KWB PELLETFIRE PLUS

Pellet heating system 45–135 kW

The robust pellet heating system for economical heating

clean⁺ **EFFICIENCY**
Combustion technology

Biomass is best!

Four good reasons why you should use biomass as a renewable power source.



**Save on
heating costs**



**Security of
supply**



**Protecting
the climate**



**Creates
local jobs**

Valuable partnership



Erwin Stubenschrott
KWB Management

More than 2,000 installers and more than 70,000 customers put their trust in us by deciding to purchase a KWB biomass system. We regard this as a Partnership with KWB and this "valuable asset" is an integral component of our company philosophy and the basis of our business relationships. In addition, KWB focuses on customers, reliability and importantly our responsibility for our environment and future generations. This is my personal guarantee!

„My trusted installer recommended me a cost effective & space saving solution from KWB!“
Markus Schneider from Achern



„For me reliable warmth is essential, KWB provides essential service!“
Mr. Ortner from Lipizzaner Stud Piber



270 kW with a very small footprint

KWB PELLETFIRE^{PLUS} AS A DOUBLE BOILER SOLUTION

There are many fully automated ways to keep your KWB pellet heating system supplied with fuel. The KWB pellet stirrer plus is a convenient and reliable option that is optimally adjusted to the circumstances on-site. Ideally suited for installation as a double boiler



Entire room used

Thanks to the flat base design giving maximum storage capacity.

Reliable technology

Thanks to a robust got flexible conveyor shaft.

Easy operation

KWB COMFORT 3

The KWB Comfort 3 interface has 2 buttons, a dial and a well laid out graphic display. The intuitive menu provides for easy control of the heating system.

It is also easy to configure the parameters for the boiler, heating circuits and buffer tank by using the logically structured menu system. As an option we offer two control units for the living area – the digital model or the analogue model.



Control platform components:



Boiler control unit / digital remote control unit

Makes it possible to control one or more heating circuits with room sensor and to configure and monitor the heating circuit, DHWC and buffer tank management directly at the boiler or from the living room.



Analogue remote control unit

Easy operation for one heating circuit with room sensor, respectively, consisting of a dial for adjusting the desired room temperature by $\pm 5^\circ\text{C}$ and a 4-position slide switch for selecting the heating program: automatic mode, lowering mode, frost protection mode or day operation mode.



Heating circuit expansion module

Enables the control of maximally 2 heating circuits, one DHWC and one buffer tank (with 2 sensors) per module. Operation and monitoring are carried out using the boiler control unit or optionally using digital remote control devices.



KWB Comfort Solar

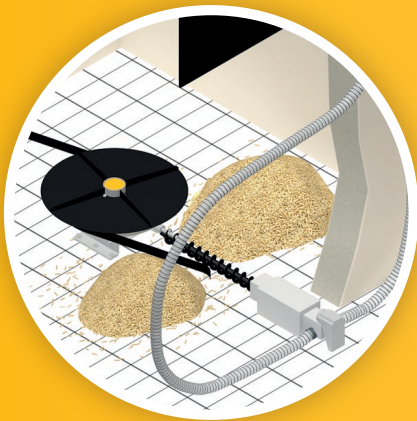
The solar control system ensures the optimized storage of sun energy in the storage system and is characterized by self-explanatory and easy user navigation. A convenient commissioning wizard is available to heating engineers.

Sturdy and economic heating

*The large power range of 45 to 135 kW combined with highest fuel flexibility makes it possible to deploy the **KWB Pelletfire^{Plus}** pellet heating system in larger single family homes, commercial facilities including smaller district heating networks.*



You can find more information regarding the combustion technology on www.youtube.com/biomasseheizungen



Independent fuel location

The fuel storage room can be located in up to 25 m distance from the pellet heating system



Low fuel consumption

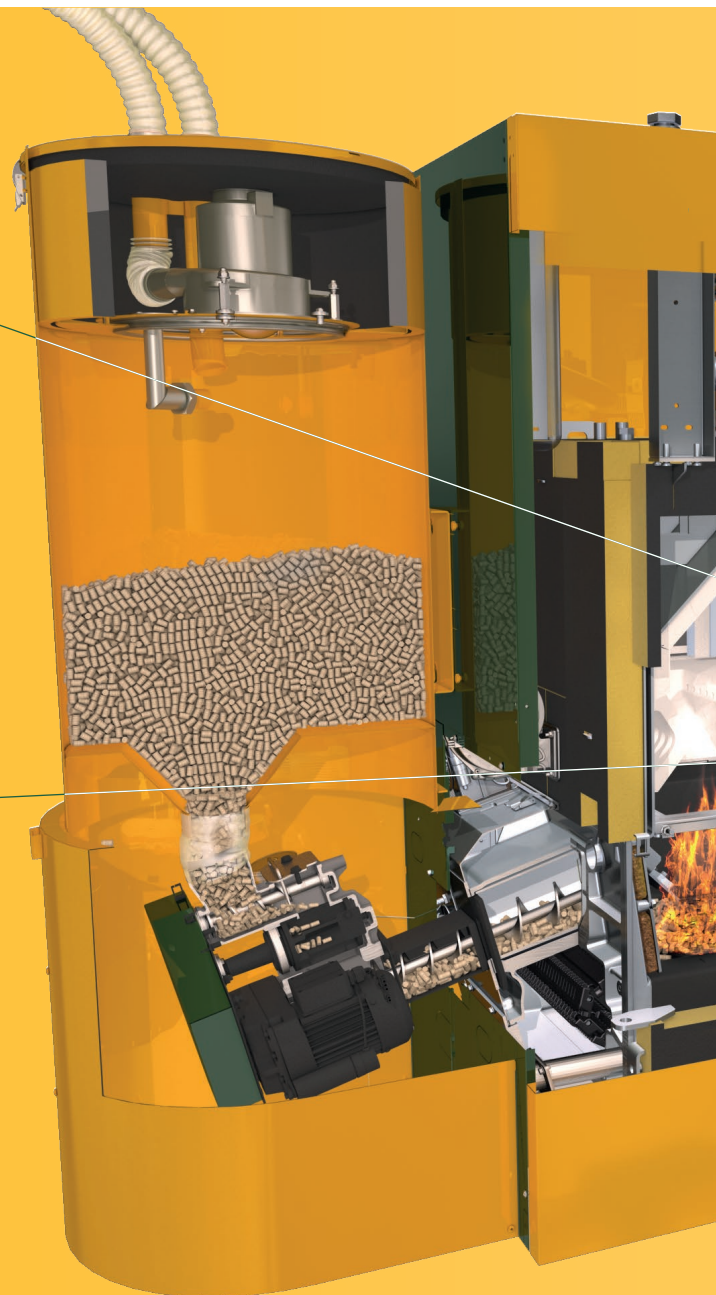
Nearly emission-free combustion thanks to a special design and the combustion chamber materials.

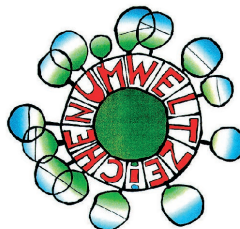
Low emissions

Thanks to optimal exhaust gas routing and high combustion temperatures in a flow-optimized silicon carbide combustion chamber

Low maintenance

Thanks to a fully self-cleaning system between service intervals – with optional fly ash screw





Easy heat exchange

Thanks to the integrated return flow boost – optimized hydraulics fully adjusted to the system

Easy operation

Thanks to the KWB Comfort 3's control: 2-button control unit with dial and intuitive graphic display

Convenient emptying of ash

Into a mobile ash container with integrated fill level monitoring

Sturdy combustion system

Crawler burner with high-alloy cast and self-cleaning revolving grate components

Maximum flexibility

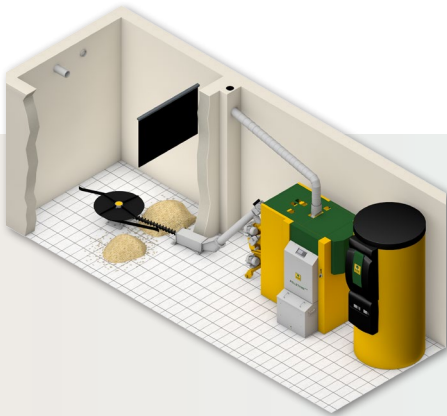
The system is able to use fuels of varying quality thanks to the crawler-burner technology

Clean combustion

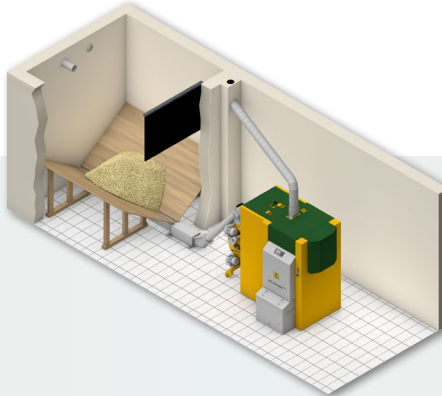
Highly efficient turbulators for lowest exhaust gas temperatures and a high degree of efficiency of 95%.

Customised solutions

KWB CONVEYOR SYSTEMS



**KWB Pellet Stirrer Plus
with elbow screw**



**Conveyor screw
with elbow screw**



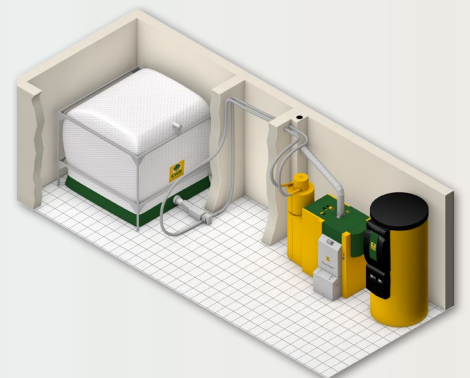
**KWB Pellet Big Bag
with elbow screw**



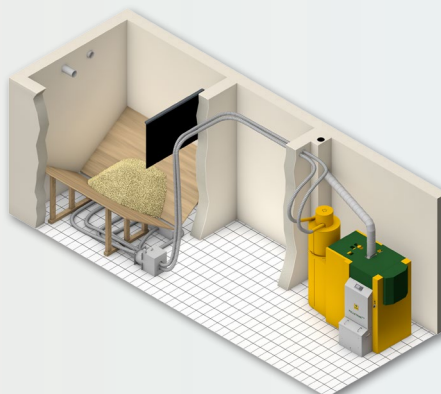
**KWB Pellet Stirrer Plus
with suction conveyor**



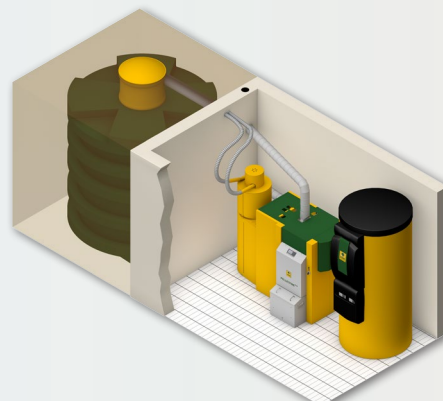
**Conveyor screw
with suction conveyor**



**KWB Pellet Big Bag
with suction conveyor**



**KWB sample probes
with suction conveyor**



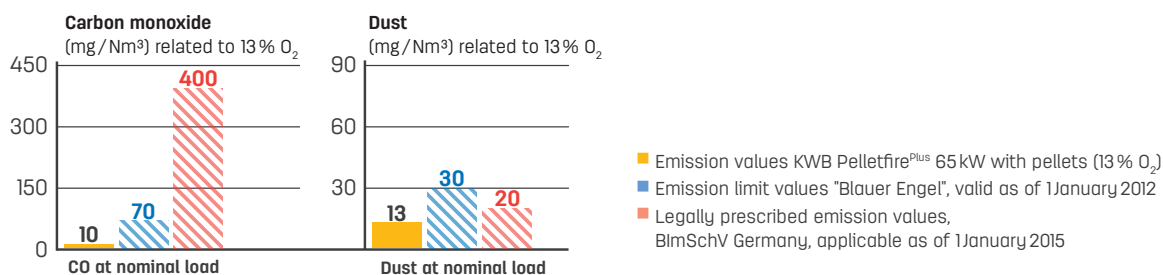
**Suction conveyor
with buried tank**

Clean combustion

clean⁺ EFFICIENCY – TECHNOLOGY

The cleanEfficiency chart shows that we have the lowest emission values, highest efficiency and low energy consumption as well as a perfect alignment of construction and control elements.

Emission values at nominal load



Quick heat and more efficiency

We recommend using a KWB thermal storage. This will not only allow you to run your heating cleaner and more efficiently, you will also be able to have heat available quickly when needed.

Easy thermal storage tank size calculations:

30 litre storage volume/kW nominal boiler load.

Technical specifications

MF2 S / MF2 GS	Unit	45 ¹	50 ¹	55 ¹	65 ¹	70 ¹	75 ¹	95 ¹	100 ²	108 ¹	115 ¹	135
Rated power	kW	45	49,5	55	65	69,5	75	95	99 / 101	108	115	135
Partial load	kW	13,5	14,9	16,5	19,5	20,9	22,5	28,5	30,0	32,4	34,5	40,5
Boiler efficiency at rated power	%	95,0	94,8	94,7	94,4	94,3	94,1	94,0	94,0	94,1	94,1	94,1
Boiler efficiency at partial load	%	93,7	93,7	93,9	94,2	94,3	94,5	94,4	94,4	94,3	94,2	94,0
Boiler class according to EN 303-5:2012	–	5	5	5	5	5	5	5	5	5	5	5
Exhaust-gas side (for chimney calculation)												
Connection height exhaust-gas pipe	mm	>1395	>1395	>1395	>1395	>1445	>1445	>1445	>1445	>1445	>1445	>1445
Exhaust-gas pipe diameter	mm	150	150	150	150	180	180	180	200	200	200	200
Ash												
Ash container volume	l	70	70	70	70	70	70	70	70	70	70	70
Electrical system												
Connection: CEE 5-pole 400 V _{AC} 3-pole 230 V _{AC}	–	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A	50 Hz 13 A
Suction conveyor type MF2 GS												
Max. suction length	m	25	25	25	25	25	25	25	25	25	25	25
Max. suction head	m	5	5	5	5	5	5	5	5	5	5	5
Contents storage container for type MF2 GS	l	135	135	135	135	135	135	135	135	135	135	135
Weights												
Boiler weight MF2 S	kg	822	862	862	862	1002	1002	1002	1102	1102	1102	1102

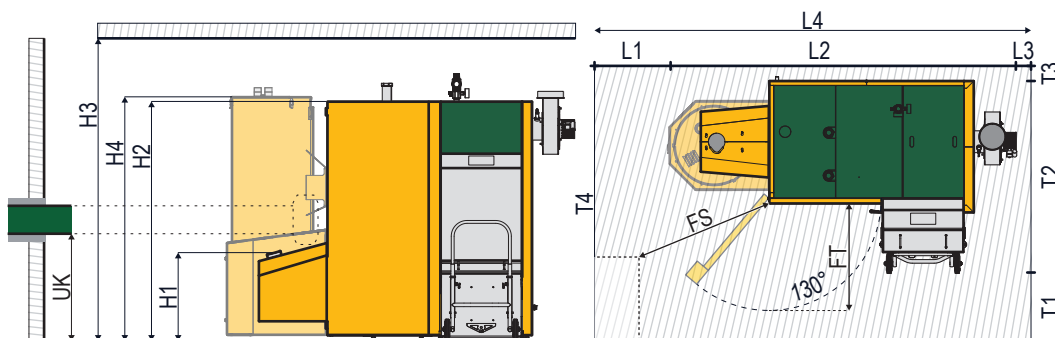
1 ... Drawing inspection

2 ... Typification variants

Note: You will find detailed KWB Pelletfire^{PLUS} technical specifications on our website's product pages.

Low space requirements

The KWB Pelletfire^{Plus} pellet heating system can be placed directly in room corners for optimal space utilization. Double-boiler systems can be placed back to back.



Heating room size 3 m² to 5 m²

Storage room size 34 m³ (45 kW) to 101 m³ (135 kW) without inclined floor

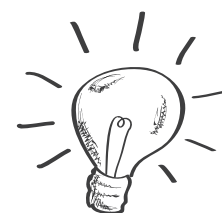
[cm]		45–65 kW		70–95 kW		100–135 kW	
		S	GS	S	GS	S	GS
H1	Connection Conveyor height: upper edge	62	–	62	–	62	–
H2	Height KWB Pelletfire ^{Plus}	159	159	167	167	167	167
H3	Min. room height	198 (empf. 210)	198 (empf. 210)	200 (empf. 215)	200 (empf. 215)	206 (empf. 215)	206 (empf. 215)
	Min. room height – exhaust pipe is placed above heat exchanger	219 (Ø 150)	219 (Ø 150)	231 (Ø 180)	231 (Ø 180)	233 (Ø 200)	233 (Ø 200)
H4	Connection height suction tank	–	177	–	177	–	177
UK	Bottom edge Conveyor channel M	78	–	78	–	78	–
L1	Clearance	42	18	47	23	47	23
L2	Heating system length	200	224	221	245	233	257
L3	Clearance	8	8	8	8	8	8
L4	Min. room length	> 250	> 250	> 276	> 276	> 288	> 288
T1	Clearance	40	40	40	40	40	40
T2	Heating system depth	124	124	135	135	135	135
T3	Clearance	7	7	7	7	7	7
T4	Min. room depth	> 171	> 171	> 182	> 182	> 182	> 182
FS	Espace libre repair	65	65	70	70	70	70
FT	Espace libre door	63	63	75	75	80	80

S ... KWB Pelletfire Plus type MF2 S

GS ... KWB Pelletfire Plus type MF2 GS

Dimensions for moving the boiler into the respective space

KWB Pelletfire ^{Plus}	As delivered	Disassembled Boiler body Dimensions	Disassembled Heat exchanger Dimensions
Type MF2 D / ZI 45–65 kW	154 x 66 x 166	96 x 66 x 120	86 x 65 x 166
Type MF2 D / ZI 70–135 kW	185 x 80 x 177	115 x 77 x 128	103 x 80 x 17



All dimensions in cm | Length x Width x Height | Distances stated are minimum distances! Information regarding the hydraulics requirements can be downloaded at our websites.



Clear and simple assembly

KWB'S MODULAR ASSEMBLY SYSTEM

*All KWB systems can be dismantled into several modules, which allows our products to be placed in almost every heating room and easily installed even in tight spaces. We call it the **KWB modular assembly system**.*



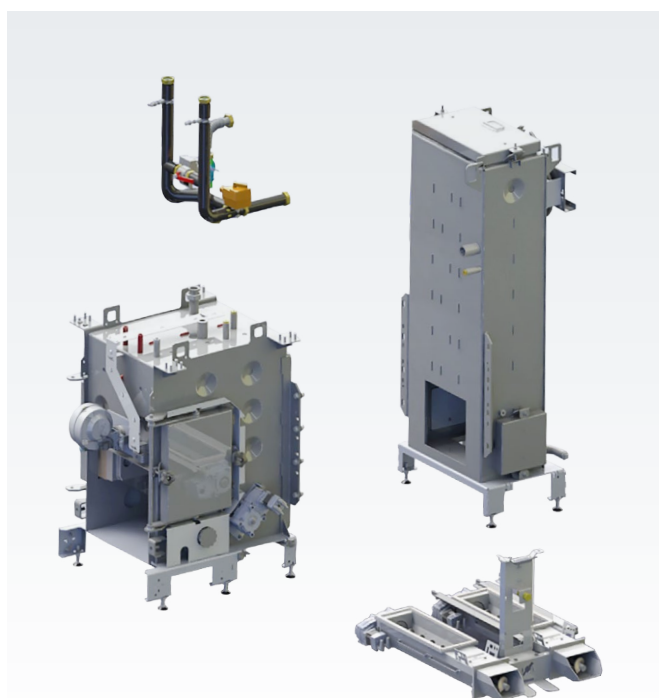
You can schedule less time because your technician can move the heating system into the heating room more quickly.



Simplified construction site coordination, since your technician does not require expensive installation aids.



The reduced weight of the individual pieces makes them less likely to scratch any surfaces thereby preserving and protecting the space.



KWB Pelletfire^{PLUS} – boiler can be dismantled into 4 separate parts



KWB partners

AVAILABLE ON-SITE

Your KWB Partner will be happy to help you if you have any questions or other requests. If you would like to contact KWB directly, you will find your local contacts here. We look forward to hearing from you!



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Interested party

first name, last name*
No./street name*
Postal code/town/city*
Tel./Mobile* E-mail

Sender (your address)

first name, last name*
No./street name*
Postal code/town/city*
Tel./Mobile* E-mail

* mandatory field

Porto zahlt
KWB gerne!

ANTWORTSENDUNG

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AUSTRIA

Your information will not be disclosed to third parties, but may be used for internal information purposes.

RECOMMEND US!

According to a recent customer survey, **97%** of all KWB customers recommend KWB and its products to others.

PI Pelletfire MF2 2016 EN
Index 0

As at: February 2016, Subject to changes and to type and printing errors.



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