



Zeroridge Biomass Ed 17A

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DELIVERY, FEED & ASH SYSTEMS

TBZ 80/90/150/200 & SHT fuel feed systems

Fuel feeding system for Compact 25-200

SHT and HDG feeding system / pellet delivery system

Design and features

The Pellet delivery system sucks the pellets from a pellet store via PSS or FRA-PSS, a pellet fabric silo by means of a suction turbine to the heating equipment (maximum 20m distance). The pellets are delivered into an intermediate container with a mechanical level sensor providing an intermediary store. From here, the rotary slice transfers pellet to the stoking auger which moves them into the combustion chamber. The auger below the sluice delivers the

fuel to the combustion chamber. During boiler operation it runs continuously and a percentage of the primary air is ducted to the auger to cool it and prevent "burn back". A thermal flow protection serves as an additional security measure, functioning as a water extinguisher device.

For wood pellets according to EN plus, A1. A2.

SHT pellet hopper delivery systems



Manual or vacuum intermediate (day hoppers)

Options include manual fill only, vacuum and manual fill or vacuum with emergency manual fill.



SHT TDA and PNA rotary sluice and insertion auger

The SHT rotary sluice controls the flow and quantity of pellet by start and stopping based on the demand of the boiler. The sluice acts as barrier between the burning area and the local fuel storage. The insertion auger which is linked to the same motor as the sluice moves the fuel into the burning chamber.

TBZ pellet delivery systems



TBZ 80 for HDG Compact 100/115/150/200

Two high quality geared motors, mechanical level sensor, steel pellet container for 100 kg pellets with service opening, suction turbine 240 V/50 Hz with noise protection cover, rotary sluice (type TBZ 80) and stoker auger and connecting flange, thermal flow protection installed as a water extinguisher.



TBZ 90 for HDG Compact 25/35/50/65/80

HDG feeding system TBZ 90 with pellet suction system for HDG Compact 25-80. Two high-quality geared motors, level indicator, steel suction container for 130 kg of pellets with inspection opening, external vacuum fan 230 V/50 Hz with noise insulation hood, cast rotary wheel (type TBZ 90) and stoker auger with auger pipe and connection flange, cladding made of powder-coated sheet steel (packaged separately), additionally on the HDG Compact 25/35: 2-way zone valve as bypass opening.

HDG feeding system TBZ 150 and TBZ 200

TBZ 150

The TBZ150 feeding system has a 26cm diameter four bladed rotary sluice. The sluice blades are 10mm steel with a sharpened leading edge. This has two primary functions, to create a fire block between the combustion chamber and the fuel store and to snip through oversized wood chip. If a larger lump needs to be cut through the TBZ auto-reverses 3 times before accepting that the foreign object is not wood, and stops the boiler.

The auger below the sluice delivers the fuel to the combustion chamber. During boiler operation it runs continuously and a percentage of the primary air is ducted to the auger to cool the auger and prevent "burn back".



TBZ200

The TBZ200 feeding system is purpose designed for the HDG M Series boiler. Different to TBZ150 in that the rotary sluice is larger and capable of dealing with larger lumps of non standard wood.

The auger acts as the dosage system to the combustion chamber and starts and stops as fuel is required.

The connection of the rotary slice is via a swivel joint which allows connections of up to 20 degrees by connecting fuel delivery systems, more than 21 degrees requires an additional wedge.



HDG TBZ 150



HDG feeding system TBZ 150 for HDG Compact 25-80 Compact 100-200 for chips (up to G50), shavings, shaving briquettes, pellets.

HDG TBZ 200



HDG feeding system TBZ 200 for HDG M Series, for wood chips (up to G50), shavings, shaving briquettes, pellets. Large rotary sluice directly connected to lift auger almost prevents most likely blockages even with unusual shaped fuel.

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Manual fill and intermediate hoppers

for TDA and PNA



170 Litre vacuum fill intermediate hopper with emergency manual fill



The 170 litre vacuum fill pellet hopper contains approximately 110 kg's of pellets. Its primary purpose is connection to a main pellet store which holds bulk pellet storage. On demand the TDA or PNA will activate a reload cycle and transfer pellet from the main bulk storage hopper to the intermediate (day hopper). The hopper features an access door on the front for easy filling with wood pellets in emergency situations.

The 170 system includes the rotary safety sluice and pellet insertion auger which is located below the main pellet hopper.

Ideal for the PNA or TDA boilers using bulk stored vacuum transferred pellet. Bulk storage can be silo or purpose built store.



200 Litre manual fill hopper TDA only



The 200 litre manual fill pellet hopper contains approximately 130 kg's of pellets, allowing for up to a week of use in pellet mode, (Depending on boiler size and demand). The hopper features a top access door with hydraulic strut and compression type rubber seal for dust reduction. The top access increases storage capacity and simplifies filling.

The hopper can also be retrofitted with one of the many vacuum delivery systems for those wishing to add a bulk pellet store to their TDA thermodual.

The 200 system includes the rotary safety sluice and pellet insertion auger which is located below the main pellet hopper.



Fabric manual fill silo



Designed for internal installation such as a garage, plant room, or outbuilding where it can be located next to the boiler. The silo is constructed of powder coated steel, with special UV protected high tech fabric. Includes auger, proximity sensor and drop tubes for connection to the TDA/PNA insertion auger.

The proximity sensor located in the base of the drop tube signals to the auger when to stop and start, and ensures the rotary sluice is covered in pellets. Features include webbed open top for easy filling. Vertical rising centreless auger. 3 model sizes from 210 kg to 450 kg for reduced reloading times up to three weeks.

The fabric silo kit includes the rotary safety sluice and pellet insertion auger which is located directly on the boiler.

Length cm	Width cm	Height cm	Volume Litres	Weight kg
70	70	110	350	210
95	95	120	600	360
100	100	140	750	450

Manual/intermediate pellet hoppers	Order No	£ ex VAT	PG
120 Litre vacuum fill hopper with emergency manual fill 65kg (special order only)	SHT4017	498.00	40
170 litre vacuum fill intermediate pellet hopper with emergency manual fill hatch. 110kg	SHT4102	645.00	
200 litre manual fill pellet hopper 130kg	SHT4101	1,269.00	
350 Litre fabric manual fill silo with lift auger 210kg	PS305	897.00	
600 Litre fabric manual fill silo with lift auger 360kg	PS306	997.00	
750 Litre fabric manual fill silo with lift auger 450kg	PS307	1,097.00	

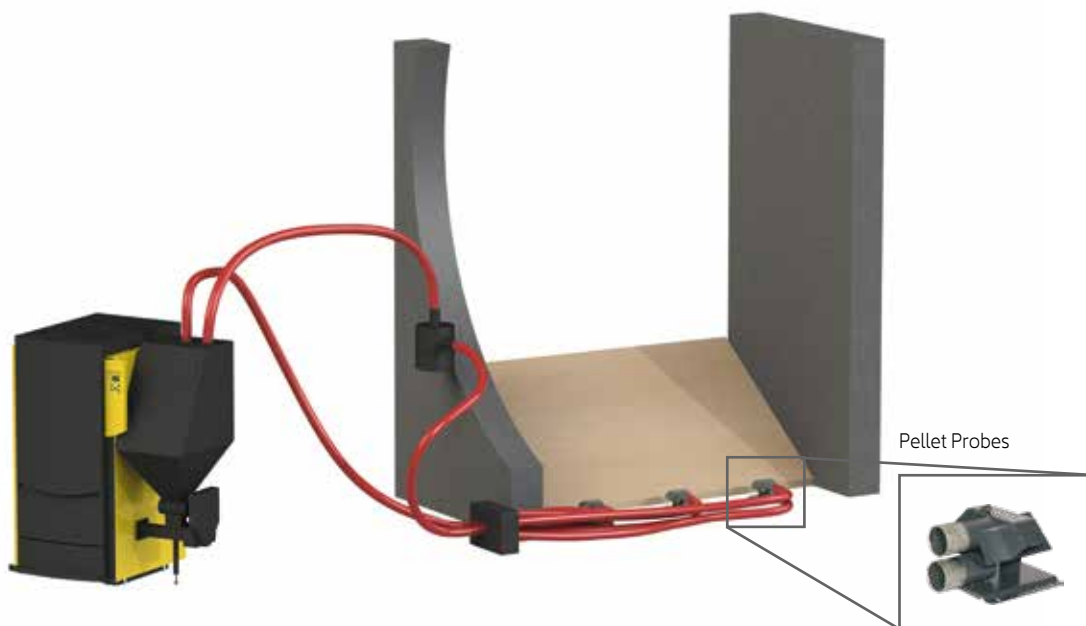
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Visionconvey Air

Pellet probes

The Visionconvey Air for pellet probes is suitable for installations where a longer duration between pellet filling is required than the manual fill hopper and where it is not possible to site the pellet store near to the boiler. Either singular or multiple pellet probes are located

in the base of the pellet store, delivering pellets into the suction delivery system. The system must be used in conjunction with either the 170l or 200l manual fill pellet hopper. The pellet store can be sited up to 20 metres away horizontally and 5 metres away vertically from the boiler.



Visionconvey options

1. Choose between the 170 or 200 intermediate pellet hoppers which include the rotary sluice and insertion auger.
2. Choose Visionconvey kit suitable for intermediate hopper.
3. Select the number of pellet probes for your system.
 - Single for very small stores without switching unit.
 - Three probes with manual change over.
 - Four probes with the automatic switching by the boilers on board control.
4. Add pellet hose.

Pellet Probes

Located in the base of the pellet store, the probes work independently to each other and can be controlled either manually, or automatically using a switching head to give even emptying of the store.

Visionconvey suction turbine

The suction turbine provides the necessary vacuum to transfer the pellets from the pellet probe to the intermediate pellet hopper.

Visionconvey Screw Suction System	Order No	£ ex VAT	PG
Visionconvey suction system starter kit for 170 litre intermediate hopper	SHT4107	1,025.00	40
Visionconvey suction system starter kit for 200 litre intermediate hopper	SHT4106	1,025.00	
Pellet hose 25m including mounting set	SHT4114	214.00	
Manual switching unit including 3 suction probes	SHT4111	502.00	
Automatic switching unit including 4 suction probes	SHT4112	1,270.00	
Single suction probe	SHT4113	50.00	

Visionconvey suction system

from vacuum pellet transfer bulk stores

The Visionconvey suction system is suitable for installations where a longer duration between pellet filling is required and where it is not possible to site the pellet store to the boiler. This system uses a suction system to deliver pellets from a remote store to the intermediate hopper. The pellet silo can be sited up to 20

metres horizontally and 5 metres vertically away from the boiler. Several silo options are available. Self build with an auger in the base which transfers pellet to a vacuum transfer head. Purpose built fabric silos with vibrating or auger transfer to a vacuum head.



Visionconvey options

1. Choose between the 170 or 200 intermediate pellet hoppers which include the rotary sluice and insertion auger.
2. Choose Visionconvey kit suitable for intermediate hopper.
3. Add pellet hose.
4. Choose from many of the remote store options including vibrator systems, silos with augers or purpose built pellet stores with auger extraction systems.

Visionconvey suction turbine

The suction turbine provides the necessary vacuum to transfer the pellets from the remote pellet store to the intermediate hopper. The Visionconvey kit includes electrical connection extension board, tube connectors, electrical connections and vacuum turbine.

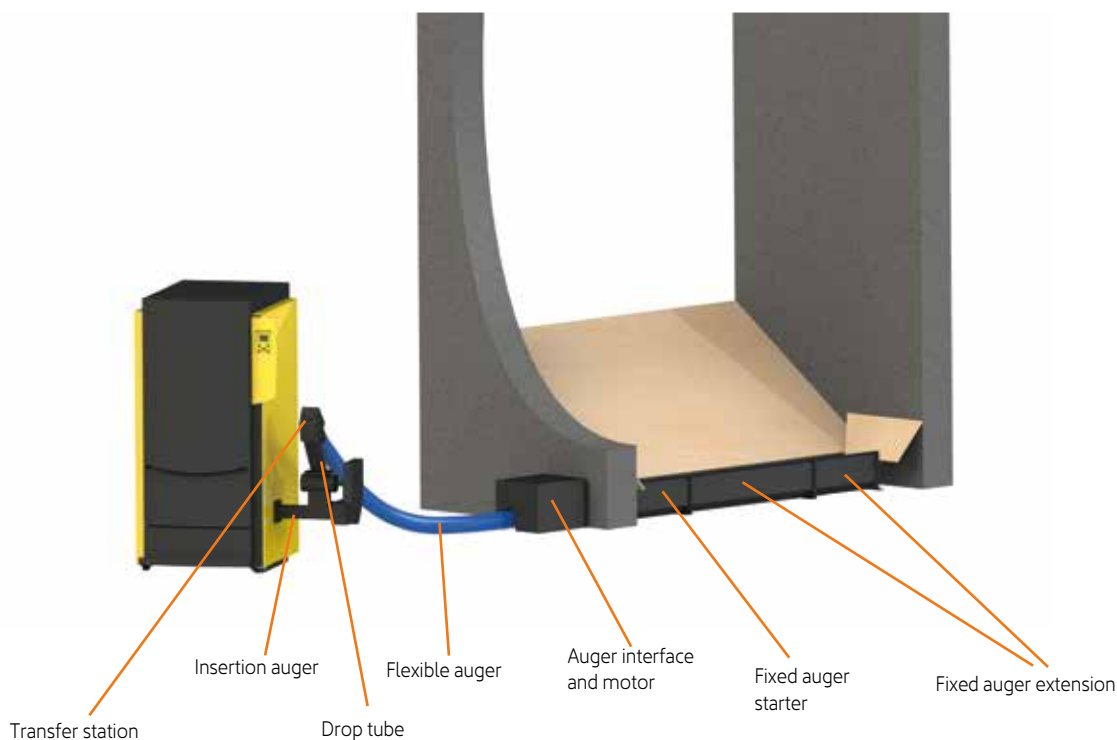
Visionconvey Suction System for vacuum bulk store connection	Order No	£ ex VAT	PG
Visionconvey suction system starter kit for 170 litre intermediate hopper	SHT4107	1,025.00	40
Visionconvey suction system starter kit for 200 litre intermediate hopper	SHT4106	1,025.00	
Pellet hose 25m including mounting set	SHT4114	214.00	

Vario flexible auger

Centreless auger for TDA and PNA

The Vario Flexible Auger system is suitable for installations where a longer duration between pellet filling is required and space exists for the pellet store

within four metres of the boiler. The Vario system comprises of a flexible auger and a fixed auger trough that is sited in the bottom of the pellet store.



Drop tube extension

The drop tube can be changed to a longer length for installations where the fuel store is higher than the boiler insertion auger.

Vario flexible auger starter kit

The Vario flexible starter kit includes the rotary valve, insertion auger, drop tube, pellet proximity sensor, transfer station, 3 metres of flexible auger, auger interface with drive motor. Auger starter kit 500mm length.

Extending the Auger

The starter kit includes all the components for a short/small bulk store. To extend the length of the auger and so the store size, choose from 1000mm or 500mm fixed auger extension modules. A maximum of 4 extension models can be added of mixture between 1000 and 500mm extension kits for a maximum auger length of 4,500mm.

Important Information

The flexible auger must follow a minimum curve radius of 1.2m. The flexible auger must not rise at an angle above 45° to the transfer station.

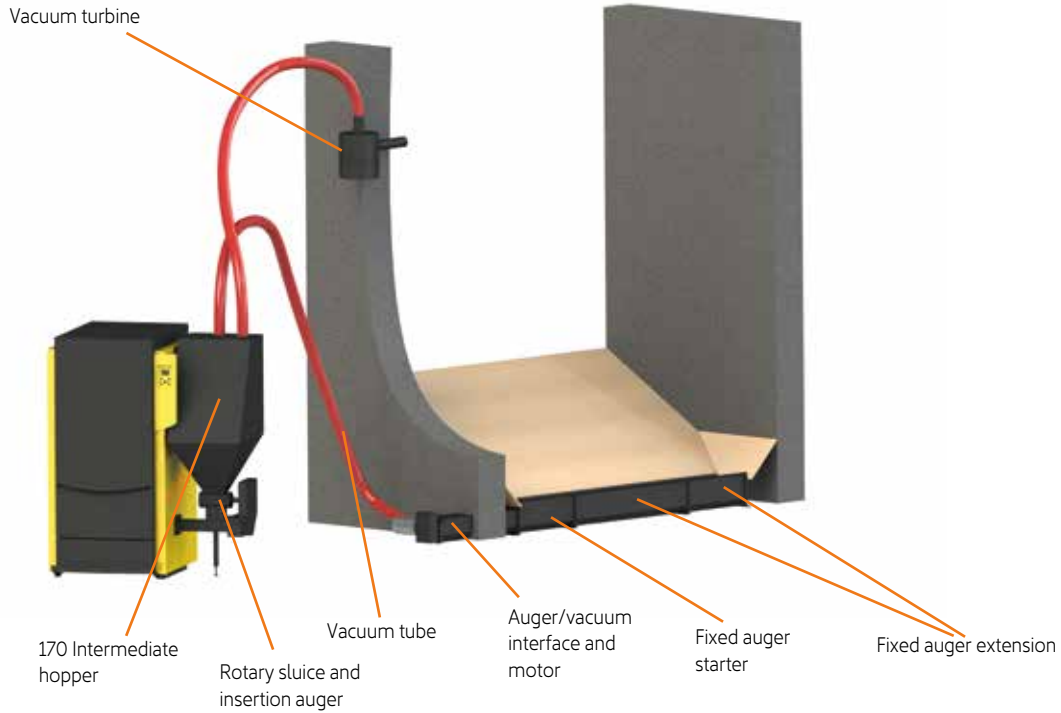
Vario Flexible Auger	Order No	£ ex VAT	PG
Vario flexible auger system starter kit	SHT4108	1,328.00	
Flexible auger extension, surcharge to increase from 3 metres of starter kit to 4 metres.	SHT4015	137.00	
Fixed auger extension 500 mm	SHT4109	171.00	40
Fixed auger extension 1000 mm	SHT4110	238.00	
Drop tube extension	SHT4049	234.00	

Visionconvey auger to vacuum system

Auger to vacuum transfer for TDA and PNA

The Visionconvey screw suction system is suitable for installations where a longer duration between pellet filling is required and where it is not possible to site the pellet store near to the boiler. This system utilises an auger within the bulk pellet

store to deliver the pellets to the suction delivery system. The system must be used in conjunction with either the 170 litre or 200 litre pellet hopper.



1. Visionconvey options

Choose between the 170 or 200 intermediate pellet hoppers which include the rotary sluice and insertion auger.

2. Visionconvey auger to vacuum kit

The Visionconvey auger to vacuum starter includes: Vacuum turbine, auger to vacuum interface, electrical connection kit and auger starter kit 500 mm length.

3. Extending the Auger

The starter kit includes all the components for a short/small bulk store. To extend the length of the auger and so the store size choose from 1000 mm or 500 mm fixed auger extension modules. A maximum of 4 extension models can be added of mixture between 1000 & 500 mm extension kits for a maximum auger length of 4500 mm.

Visionconvey auger to vacuum	Order No	£ ex VAT	PG
Visionconvey auger to vacuum starter kit for 170 litre intermediate hopper	SHT4105	1,835.00	40
Visionconvey auger to vacuum starter kit for 200 litre intermediate hopper	SHT4104	1,835.00	
Pellet hose 25m including mounting set	SHT4114	214.00	
Fixed auger extension 500 mm	SHT4109	171.00	
Fixed auger extension 1000 mm	SHT4110	238.00	

PSS pellet delivery system

Pellet delivery system fuel store with sloping sides -TBZ 80 / 90

Pellet delivery system PSS

used in conjunction with TBZ 80 for HDG Compact 25-200 for wood pellets according to EN plus, A1. A2



Design and features

The HDG PSS pellet delivery system is used to extract wood pellet from a store to an intermediate hopper (TBZ80 / 90) on the boiler. The boiler then extracts pellet from the intermediate hopper at a rate dictated by the combustion control. The process of moving pellet to the intermediate hopper occurs after a given boiler running time. The vacuum delivery system on the TBZ80 / 90 carries pellet in a stream of air from the PSS auger. The PSS pellet auger pulses to drop small quantities of pellet into the air stream until the hopper is filled. The vacuum stops, and waits for the pellet hopper to be emptied by the boiler.

This process can be prevented from happening during the night if the noise of the vacuum is likely to cause a nuisance. The PSS auger is fixed to the pellet store floor, and a sloping floor is built down to the auger at an angle of 35°. The maximum fill depth of pellet is 3m.

The PSZ auger comes in eight lengths to accommodate smaller stores. Each PSS is manufactured specifically for a project and Euroheat will produce a 3D drawing of the project layout to ensure that the correct systems is selected before manufacture.

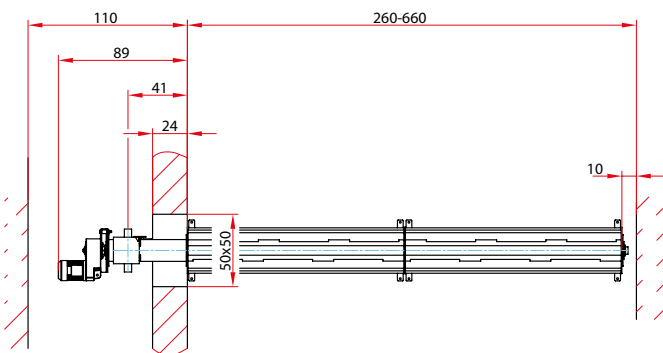
Pellet delivery system PSS for TBZ 80 with pellet delivery system

PSS	Room length	Total length inc motor	Order code	£ ex VAT	PG
PSS250	from 2.6 to 3.1m	3.4m	HDG3170	2,720.00	40
PSS300	from 3.1 to 3.6m	3.9m	HDG3171	2,830.00	
PSS350	from 3.6 to 4.1m	4.4m	HDG3172	2,945.00	
PSS400	from 4.1 to 4.6m	4.9m	HDG3173	3,055.00	
PSS450	from 4.6 to 5.1m	5.4m	HDG3174	3,170.00	
PSS500	from 5.1 to 5.6m	5.9m	HDG3175	3,280.00	
PSS550	from 5.6 to 6.1m	6.4m	HDG3176	3,395.00	
PSS600	from 6.1 to 6.6m	6.9m	HDG3177	3,515.00	

Surcharge for auger split, maximum one split possible

HDG3207 335.00

Minimum distances:
Pellet delivery system PSS (top view).



The installation example shows the Pellet delivery system PSS with HDG Compact 80 and HDG feeding system TBZ 80 with pellet delivery system.



See page **G22** for discounted kit pricing

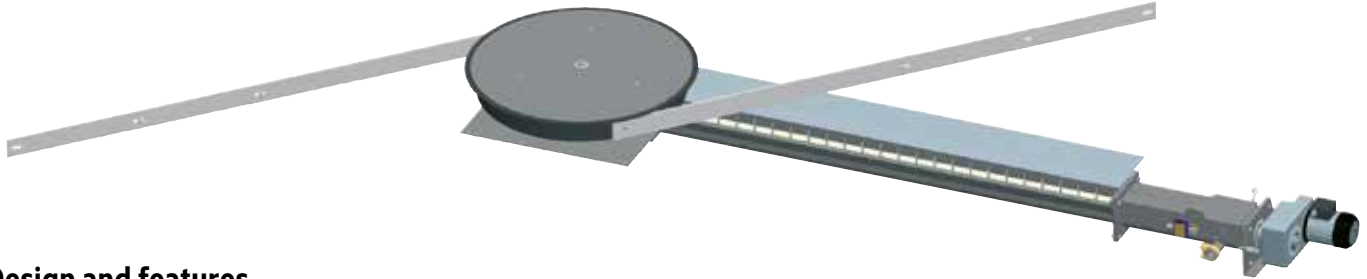
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FRA-PSS flexi blade delivery system

Pellet feed system with spring arms - TBZ 80 / 90

FRA flexi blade delivery system FRA-PSS

used in conjunction with TBZ 80 with pellet delivery system for HDG Compact 25-200 for wood pellets according to EN plus, A1. A2




Design and features

The HDG FRA-PSS pellet delivery system is used to extract wood pellet from a store to an intermediate hopper (TBZ80 / 90) on the boiler. The boiler then extracts pellet from the intermediate hopper at a rate dictated by the combustion control. The process of moving pellet to the intermediate hopper occurs after a given boiler running time. The vacuum delivery system on TBZ80 carries pellet in a stream of air from the FRA-PSS auger. The FRA-PSS pellet auger pulses to drop small quantities of pellet into the air stream until the hopper is filled. The vacuum stops, and waits for the pellet hopper to be emptied by the boiler. This process can be prevented from happening during the night, if the noise of the vacuum is likely to cause a nuisance.

In the store a floor is built up to the level of the FRA-PSS auger. When the store

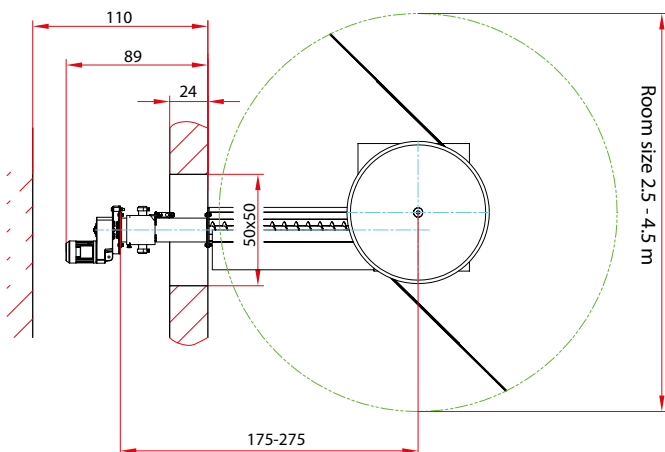
is full the nested spring is wrapped tightly around the central dome. As the store empties the spring arms stretch out and sweep the pellet into the open channel. The flat base enables better use of the available space for pellet storage. The maximum fill depth of pellet is 3m.

The FRA-PSS auger comes in three sizes to accommodate smaller stores. Larger stores can be created by building sloping sides and corners down to the sweep radius at an angle of 35°. The basic models below come with 0.5m of closed auger channel, additional 1m extensions can be added up to a maximum overall length of 4m. Each PSS is manufactured specifically for a project.

FRA-PSS flexi blade delivery system for pellets, auger length = radius + 0.5m	Model/size	Effective sweep Ø (mm)	Order code	£ ex VAT	PG
	FRA-PSS 2.0	2200	HDG3275	4,445.00	40
	FRA-PSS 2.5		HDG3208	4,495.00	
	FRA-PSS 3.0		HDG3276	4,895.00	
	FRA-PSS 3.5	3200	HDG3209	4,945.00	
	FRA-PSS 4.0		HDG3277	5,240.00	
	FRA-PSS 4.5		HDG3210	5,290.00	
Accessories			Order code	£ ex VAT	PG
3.5 metre spring blade (effective sweep 3.2m) spring blade set as substitute to standard FRA 2.0 or FRA 2.5			HDG3278	130.00	40
4.5 metre spring blade (effective sweep 4.2m) spring blade set as substitute to standard FRA 2.0 /FRA 2.5/ FRA 3.0/FRA 4.0			HDG3279	130.00	
Extension for closed screw trough for each metre, maximum 4m total length			HDG3185	230.00	

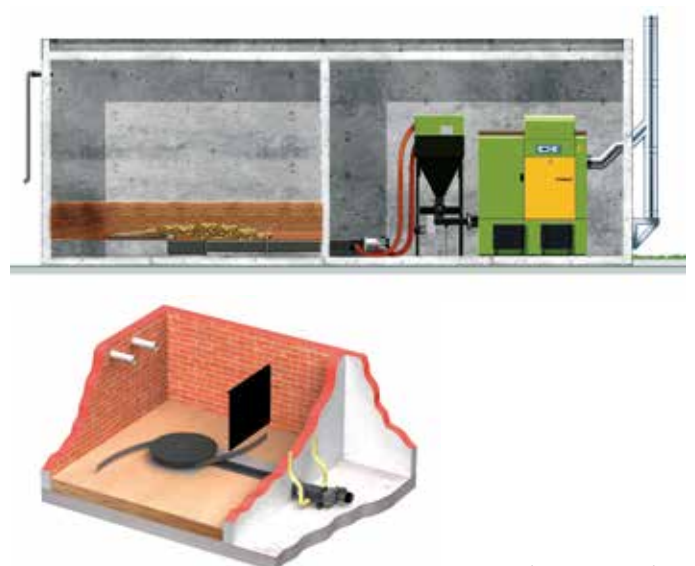
Minimum distances:

Pellet delivery system FRA-PSS (top view).



Dimensions in cm

The installation example shows the pellet delivery system FRA-PSS with HDG Compact 80 and HDG feeding system TBZ 80 with pellet delivery system.



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Fabric silo

Internal and external domestic application pellet store

Vibrating base fabric silo

Designed for internal installation such as garage or outbuilding up to 20 metres from the boiler. They can be sited externally with the addition of the external protection kit. The silo is constructed of box section powder coated steel, with special UV protected high tech fabric with integrated breathable membrane. Includes inspection hatch for level control, anti-shatter mat, filling storz (with blown models), and vibration motor with vacuum transfer head. The design improves the fuel storage within confined spaces. The special flat bottom design increases the capacity. The integrated vibrator and dosing membrane encourages the pellet towards the centre of the silo ready for vacuum extraction.



The silo is available in three shape designs and 2 vibrator interface setups. For the square and rectangular R1 models one vibrator interface is used. For larger rectangular stores R2 two vibrator interfaces are used in series. The height of the pellet fill tube is adjustable to suit the site. Pellet filling can be via blown or manual feed. The blown delivery transfer is almost dust-free into the room of installation. No return suction is necessary due to the porous fabric which allows the pressure to be released while retaining the dust.

Features and Design

- Version VM = square design single vibration interface
- Version VM R1 = rectangular design single vibration interface
- Version VM R2 = rectangular design with two vibration interface
- Includes vibration pads, anti shatter mats and filling tube type storz
- High UV protection fabric
- Steel structure
- Optional manual feed zip opening
- Pellet inspection access from front
- Models from 1.3 to 8.9 tonnes
- Can be sited up to 20 metres from boiler
- Optional external protection kit for outside applications

Recommended for boilers up to 50 kW in domestic or light commercial installations.
For applications above 50 kW contact Euroheat for advice on design.



Example installation with PNA pellet boiler

Silo versions R2 with two vibrating interfaces

Silos fitted with two vibrators include an electrical control interface. This interface is a microprocessor switching system enclosed within a purpose design enclosure. The processor can be controlled via dip switches to change the pellet flow behaviour depending on store size. This helps ensure even pellet use from within the silo.









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External Protection Kit

The fabric silo can be sited externally with the addition of the Exterior Protection Kit.



Silo Version	Fill method	Length Metres	Width Metres	Height Metres	Frame Height	Volume m ³	Weight T	Standard Silo		External Cover		PG
								Order code	£ ex VAT	Order code	£ ex VAT	
Square silo - short version, one vibrating interface												
	Bag	1.17	1.17	1.8-2.15	1.65	2.1	1.3	PS200S	2,293.00	PS200SC	954.00	
	Bag	1.65	1.65	1.8-2.15	1.65	4.0	2.4	PS201S	2,455.00	PS201SC	1,003.00	
	Blown	1.95	1.95	1.8-2.15	1.65	5.7	3.4	PS202S	2,478.00	PS202SC	1,087.00	
	Blown	2.23	2.23	1.8-2.15	1.65	7.4	4.4	PS203S	2,697.00	PS203SC	1,341.00	
	Blown	2.54	2.54	1.8-2.15	1.65	9.4	5.6	PS204S	2,985.00	PS204SC	1,521.00	
Square silo - tall version, one vibrating interface												
	Bag	1.17	1.17	2.15-2.50	2.0	2.6	1.6	PS200T	2,399.00	PT200TC	1,076.00	
	Bag	1.65	1.65	2.15-2.50	2.0	4.8	2.9	PS201T	2,563.00	PT201TC	1,128.00	
	Blown	1.95	1.95	2.15-2.50	2.0	6.9	4.1	PS202T	2,624.00	PT202TC	1,226.00	
	Blown	2.23	2.23	2.15-2.50	2.0	8.8	5.3	PS203T	2,911.00	PT203TC	1,509.00	
	Blown	2.54	2.54	2.15-2.50	2.0	11.6	7.0	PS204T	3,323.00	PT204TC	1,713.00	
R1 Rectangular silo - short version, one vibrating interface												
	Blown	1.65	1.95	1.8-2.15	1.65	5.0	3.0	PS205S	2,538.00	PS205SC	1,133.00	
	Blown	1.95	2.23	1.8-2.15	1.65	6.8	4.1	PS206S	2,661.00	PS206SC	1,315.00	
	Blown	2.23	2.54	1.8-2.15	1.65	8.9	5.3	PS207S	2,895.00	PS207SC	1,550.00	
	Blown	2.54	2.68	1.8-2.15	1.65	10.4	6.2	PS208S	3,352.00	PS208SC	1,758.00	
R1 Rectangular silo - tall version, one vibrating interface												
	Blown	1.65	1.95	2.15-2.50	2.0	5.9	3.5	PT205T	2,705.00	PT205TC	1,178.00	
	Blown	1.95	2.23	2.15-2.50	2.0	8.1	4.9	PT206T	2,862.00	PT206TC	1,367.00	40
	Blown	2.23	2.54	2.15-2.50	2.0	10.5	6.3	PT207T	3,142.00	PT207TC	1,611.00	
R2 Rectangular silo - short version, two vibrating interfaces												
	Blown	1.65	2.54	2.15	1.65	6.7	4.0	PS208S	2,934.00	PS208SC	1,251.00	
	Blown	1.65	3.01	2.15	1.65	8.0	4.8	PS209S	3,028.00	PS209SC	1,368.00	
	Blown	1.95	3.01	2.15	1.65	9.3	5.6	PS210S	3,241.00	PS210SC	1,456.00	
	Blown	1.95	3.25	2.15	1.65	10.1	6.1	PS211S	3,475.00	PS211SC	1,509.00	
	Blown	1.95	3.73	2.15	1.65	11.4	6.8	PS212S	3,632.00	PS212SC	1,642.00	
	Blown	2.23	3.25	2.15	1.65	11.1	6.7	PS213S	3,456.00	PS213SC	1,725.00	
	Blown	2.23	3.73	2.15	1.65	12.8	7.7	PS214S	3,877.00	PS214SC	1,835.00	
	Blown	2.23	4.29	2.15	1.65	14.8	8.9	PS215S	4,144.00	PS215SC	1,988.00	
R2 Rectangular silo - tall version, two vibrating interfaces												
	Blown	1.65	2.54	2.5	2.0	6.7	4.0	PS208T	3,131.00	PS208TC	1,352.00	
	Blown	1.65	3.01	2.5	2.0	8.0	4.8	PS209T	3,313.00	PS209TC	1,409.00	
	Blown	1.95	3.01	2.5	2.0	9.3	5.6	PS210T	3,491.00	PS210TC	1,694.00	
	Blown	1.95	3.25	2.5	2.0	10.1	6.1	PS211T	3,777.00	PS211TC	1,736.00	
	Blown	1.95	3.73	2.5	2.0	11.4	6.8	PS212T	3,948.00	PS212TC	1,855.00	
	Blown	2.23	3.25	2.5	2.0	11.1	6.7	PS213T	3,900.00	PS213TC	1,794.00	
	Blown	2.23	3.73	2.5	2.0	12.8	7.7	PS214T	4,253.00	PS214TC	1,912.00	
	Blown	2.23	4.29	2.5	2.0	14.8	8.9	PS215T	4,547.00	PS215TC	2,076.00	
Options												
	Manual feed zip option									PS307	90.00	

† Stock items. All other items four to six week delivery.

Flexilo spring silo

Sprung loaded silo for maximum storage capacity

Spring load pellet silo with extraction auger



The Flexilo spring silo offers bulk pellet storage. There is an onboard auger which is controlled from the boiler's vacuum transfer system. Hoppers with augers are more reliable when dealing with dusty or degraded pellet than vibration systems.

The Flexilo spring achieves a very high storage capacity due to an innovative construction. Tensioned springs attached to the silo wall rise upwards as the pellets volume reduces, causing pellets which would not normally flow from a flat floor into the auger. It's common for 30-60% increase of potential pellet storage over sloping side V shaped hoppers.



Features and design

- Up to 60% more storage capacity
- Reliable auger extraction system
- Easy accessibility for maintenance
- Sewn in pellet impact wall, shatter mat
- Integrated pellet fill tube
- Galvanised steel frame

Maxi Fabric

For applications where the boiler size exceeds 60kW it's recommended to use a silo made from Maxi Fabric. With increased usage by larger boilers the Maxi Fabric will ensure a long life.

With Maxi fabric recommended maximum boiler size 100kW. For installations up to 200kW use the pellet hose switch, 3 silos can be linked to a maximum storage of 18 tons.



Room height	Length Metres	Width Metres	Height Metres	Volume m ³	Weight T	Order code	£ ex VAT	PG
Room height 2.1-2.2 metres. The silos upper surface will expand during pellet delivery. The maximum height of this model is 2.2 metres. The minimum is 2.1 metres for installation of the pellet fill tube. Full volume and tonnage is with the silo fully expanded. 600kg/m ³ .	1.9	1.6	1.9	5.1	3.0	PS417	4,125.00	40
	1.9	1.9	1.9	6.1	3.6	PS418	4,160.00	
	2.2	1.6	1.9	6.0	3.6	PS419	4,480.00	
	2.2	1.9	1.9	7.1	4.2	PS420	4,535.00	
	2.2	2.2	1.9	8.2	4.9	PS421	4,965.00	
	2.5	1.9	1.9	8.1	4.8	PS422	5,365.00	
	2.5	2.2	1.9	9.4	5.6	PS423	5,610.00	
Maxi Fabric option (surcharge)						PS420	528.00	
Room height	Length Metres	Width Metres	Height Metres	Volume m ³	Weight T	Order Code	£ ex VAT	PG
Room height 2.3-2.4 metres. The silos upper surface will expand during pellet delivery. The maximum height of this model is 2.3 metres. The minimum is 2.4 metres for installation of the pellet fill tube. Full volume and tonnage is with the silo fully expanded. 600kg/m ³ .	1.9	1.6	2.1	5.6	3.3	PS424	4,125.00	40
	1.9	1.9	2.1	6.7	4.0	PS425	4,160.00	
	2.2	1.6	2.1	6.6	3.9	PS426	4,480.00	
	2.2	1.9	2.1	7.8	4.6	PS427	4,535.00	
	2.2	2.2	2.1	9.1	5.4	PS428	4,965.00	
	2.5	1.9	2.1	9.0	5.4	PS429	5,365.00	
	2.5	2.2	2.1	10.4	6.2	PS430	5,610.00	
Maxi Fabric option (surcharge)						PS421	537.00	

Zeroridge Biomass Ed 17A



Flexilo outdoor silo

Weatherproof silo for outdoor installations

Design and features

Designed for external installation with galvanised steel construction and special coated polyester fabric casing for weather resistance, the Flexilo outdoor silo is suitable for outdoor storage of wood pellets before transporting to the intermediate hopper. The vacuum delivery system on the boiler carries pellet in a stream of air from the silo. The integrated pellet auger pulses to drop small quantities of pellet into the air stream until the hopper is filled. The vacuum stops, and waits for the pellet hopper to be emptied by the boiler.

Double frame

The Flexilo outdoor is modular in design so two units can be cascaded for larger storage capacities. High frame options ensure maximum storage with minimum footprint. Utilises screw extraction into extraction head for connection to vacuum system.

Improved pellet transfer reliability

Pellet is extracted from the silo's base via a purpose designed auger into a vacuum transfer head. This helps to ensure pellet will always move whatever its condition.



Maxi Fabric

For applications where the boiler size exceeds 60kW its recommended to use a silo made from Maxi Fabric. With increased usage by larger boilers the Maxi Fabric will ensure a long life.



Features and Design

- Modular in design
- Pellet extraction auger ordered separately to silo, single or 3 phase options
- Galvanised steel structure
- Special coated polyester fabric for external protection
- Includes pellet fill tubes with Storz connection

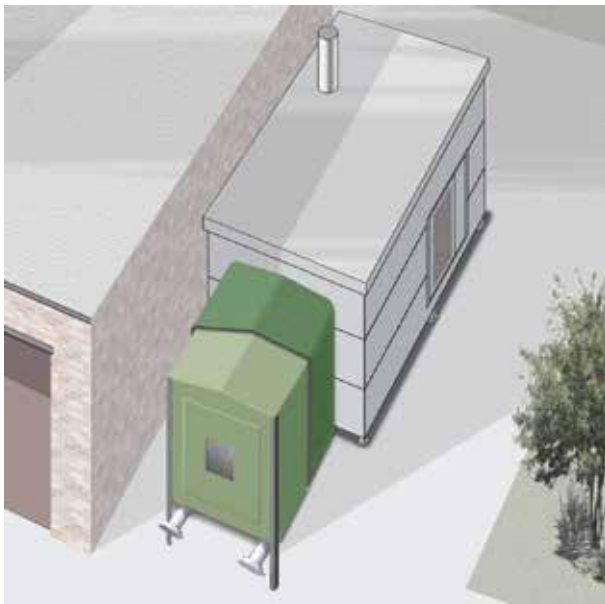
Flexilo outdoor silo single frame	Material type	Length m	Width m	Height m	Volume m ³	Weight t	Order code	£ ex VAT	PG
	High tech	1.9	1.9	3.8	6.6	4.0	PS401	5,895.00	40
	High tech	1.9	1.9	5.0	10.2	6.1	PS402	6,265.00	
	Maxi fabric	2.2	2.2	4.9	12.5	7.5	PS403	6,640.00	
	High tech	2.2	2.2	5.6	15.4	9.2	PS404	7,910.00	
	Maxi fabric	2.5	2.5	4.7	14.1	8.5	PS405	7,860.00	
	Maxi fabric	2.5	2.5	6.0	21.1	12.7	PS406	8,755.00	
	Auger extraction to vacuum interface including electric motor for single frame silo				Single phase 230V		PS413	1,025.00	
					3 Phase 400V		PS414	1,025.00	

Flexilo outdoor silo double frame	Material type	Length m	Width m	Height m	Volume m ³	Weight t	Order code	£ ex VAT	PG
	High tech	1.9	1.9	3.8	13.2	7.9	PS407	9,250.00	40
	High tech	1.9	1.9	5.0	20.4	12.2	PS408	9,850.00	
	High tech	2.2	2.2	4.9	25	15	PS409	10,445.00	
	Maxi fabric	2.2	2.2	5.6	30.8	18.4	PS410	12,480.00	
	Maxi fabric	2.5	2.5	4.7	28.2	16.9	PS411	12,395.00	
	Maxi fabric	2.5	2.5	6.0	42.2	25.3	PS412	13,830.00	
	For boilers upto 115 kW - Auger extraction to vacuum interface for double frame silos				Single phase 230V		PS415	2,323.00	
					3 phase 400V		PS416	2,323.00	
	For boilers over 116 kW - Auger extraction to vacuum interface for double frame silos				Single phase 230V		PS417	7,358.00	
					3 phase 400V		PS418	7,358.00	

Bespoke silos

Many styles and shapes can be design to suit an installation

If you have an installation that one of our current offerings will not suit a bespoke model may be possible. Special shapes, sizes, extraction systems both internal and external are possible. Contact the Euroheat design team for advice.



Zeroridge Biomass Ed 17A



DELIVERY, FEED & ASH SYSTEMS

Pellet probe transfer system

K Series bulk pellet storage

Remote pellet probe pellet transfer system



Pellets are conveyed by means of vacuum air movement from a remote store to the local store of the boiler. Normally three pellet probes are located in the bottom of a bulk wood pellet fuel store. These probes work independently to each other as they are controlled via a master vacuum switch. This vacuum switch is controlled by the K Series on-board controller. The controller uses intelligent decisions to change which probe the pellets are currently being drawn from. This ensures that whenever possible if fuel is available in the pellet store it can be transferred to the boiler.

Pellet probe



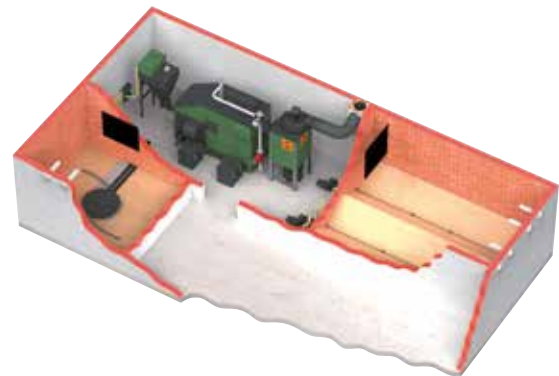
The pellet probe is a fixed location device which is connected via 2 vacuum



tubes. These vacuum tubes are connected to the vacuum switch. Alternative option is to use a single pellet probe which is connected directly to the boilers vacuum pellet transfer system. Maximum store size 1.5m x 1.5m.

Vacuum switch

When using 3 probes, these probes will be connected via two vacuum tubes to the vacuum switch. The switch incorporates an electric motor which is controlled from the controller of the K Series boiler. The motor rotates the centre circular selector which changes from which probe point the vacuum connection is made and which probe point has the returning air pressure. As each probe has two connections each connection can be used for pellet transfer in turn. The HDG K Series controller can also determine when a probe might become blocked and use another probe while returning the positive air pressure to the blocked probe to clear the issue.



Vacuum switch and pellet probe options



Vacuum switch with 3 pellet probes (without vacuum transfer hose, see accessories)

Order code

£ ex VAT

PG

Extension steel tube set to ensure good connection to flexible vacuum tubes (HDG recommended item for all vacuum switch installations)

HDG2144

1,045.00

Mounting foot for extension steel tube set when vacuum switch is free standing

HDG2145

85.00

Single pellet probe for direct connection without vacuum switch (without vacuum transfer hose, see accessories)

HDG2146

25.00

For pellet stores with a maximum size of 1.5m x 1.5m

SHT4113

50.00

40

Pellet hose switch for HDG 100-200 inc control cabinet and program extensions

HDG3280

1,825.00

Ideal for multiple stores such as 3 sack silos or mixture of silos and traditional stores

SHT4111

502.00

Manual vacuum switch switching unit including 3 suction probes



PSZ pellet delivery system

Augers pellet directly from fuel store - TBZ150

Pellet delivery system PSZ

used in conjunction with TBZ 150 for HDG Compact 25-200 for wood pellets according EN plus, A1. A2

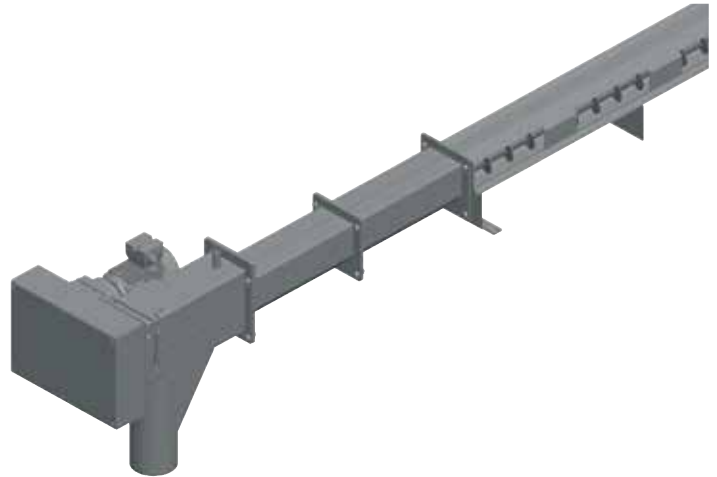


Design and features

The HDG PSZ pellet delivery system is used to extract wood pellet from a store to the boiler at a rate dictated by the combustion control.

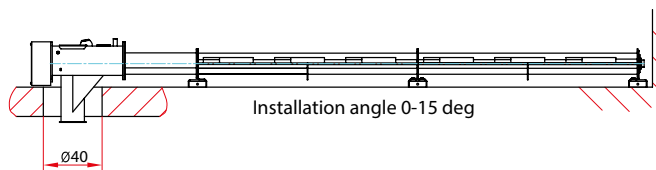
Where the pellet store is at the same level as the boiler room, the auger is inclined from the pellet store to the TBZ150 on the boiler. The maximum angle of ascent is 15°. When the pellet store is above the boiler the auger can be installed horizontally. In both cases a sloping floor is built down to the auger at an angle of 35° inside the store. The maximum fill depth of pellet is 3m.

The PSZ auger comes in five lengths to accommodate smaller stores, and the basic models below include 1m of closed section. Additional lengths can be added where the boiler is further from the store, and the maximum overall auger length is 6.5m. Each PSZ is manufactured specifically for a project and Euroheat will produce a 3D drawing of the project layout to ensure that all the angles, lengths and trigonometry are correct before manufacture.

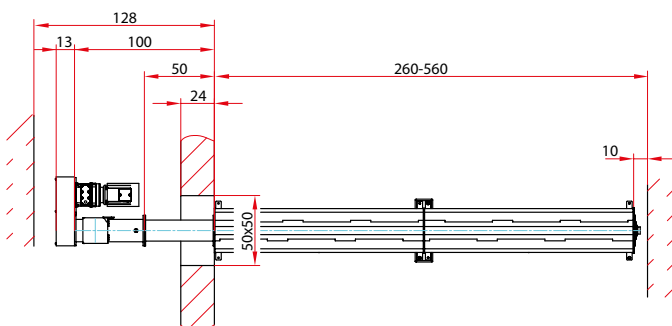


Closed auger trough 1m as standard	Order Code	Room length	Order code	£ ex VAT	PG
Pellet delivery system PSZ for TBZ 150	PSZ250	from 2.6 to 3.1m	HDG3178	3,515.00	40
	PSZ300	from 3.1 to 3.6m	HDG3179	3,625.00	
	PSZ350	from 3.6 to 4.1m	HDG3180	3,740.00	
	PSZ400	from 4.1 to 4.6m	HDG3181	3,850.00	
	PSZ450	from 4.6 to 5.1m	HDG3182	3,965.00	
	PSZ500	from 5.1 to 5.6m	HDG3183	4,075.00	
Extension for closed screw trough for each metre, max. 6.5m total length			HDG3185	230.00	
Surcharge for auger split, maximum one split possible			HDG3207	335.00	

Pellet delivery system PSZ (side view).



Minimum distances:
Pellet delivery system PSZ (top view).



Dimensions in cm



The installation example shows the Pellet delivery system PSZ with HDG Compact 200 and HDG cyclone dust separator



Pellet store bulk head

Ready to fit pellet store bulk head, including pellet fill tubes

Ready to fit manufactured steel, painted bulk head

The bulk head can be built into almost any construction to provide all the necessary safety requirements for storing and accessing pellet stores.

The bulk head is fitted with the following equipment.

Starter set of 2 fill and vacuum tubes. Access door with 12mm glass, 300 x 300mm viewing panel. Electrical safety switch to isolate boiler. Access steps.



Pellet fill and vacuum tubes. The style shape and design of these is very important. Each fill/vent tube is fitted with a Storz connection. This allows the delivery driver to connect his hose safely and reliably to the store. The position of these is important so the lorry driver can reach the connections without having to use portable steps or other unsafe supports.

Viewing panel. It is important to be able to view the pellet store level so more pellets can be ordered. Like wise it helps the delivery driver to know how many more pellets to fill. A 300 x 300 mm viewing panel made from toughened 12 mm thick glass is fitted.

Over and under pressure relief flaps. The bulk head is fitted with security flaps which open if the pressure or vacuum exceeds pre-set levels.

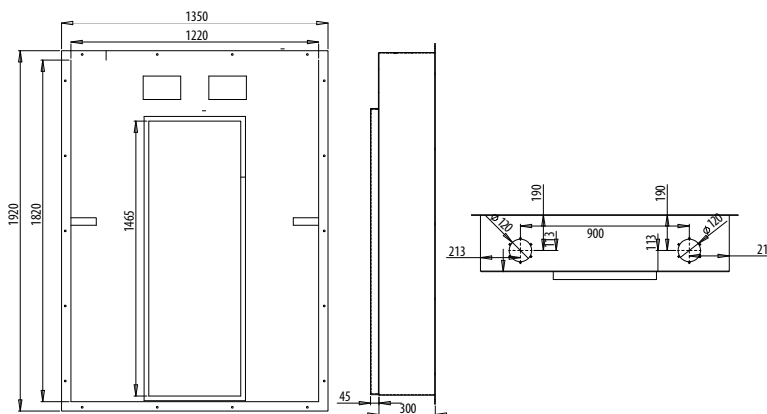
The bulk head has vertical and horizontal mounting edges. This allows the bulk head to be mounted on the inside edge of the pellet store, outside edge or built into the wall during construction.

Electrical safety switch is fitted to the upper door. This switches off the boiler for safety when the door is opened. IP658 rated.

Set of steps. As an option steps can be added to the bulk head when it is mounted above the ground.

Pellet tubes are securely mounted both with wall and ceiling supports. The pellet tube can be increased in height by adding an additional length to the vertical section. The horizontal support can be extended by increasing the length of the connecting threaded rod.

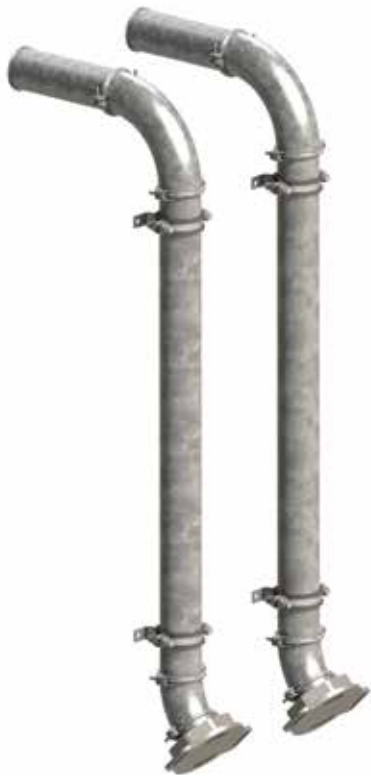
Access doors. The upper door includes the viewing glass and locks the lower door in place. The steel doors can easily be removed to allow access to the fuel store. Each door is held in place by knurled screw knobs.



Bulk head	Order code	£ ex VAT	PG
Complete bulk head including starter pellet tube kit, glass viewing panel, safety switch and access steps	MS4021	1,330.00	21

Pellet store fill and vent tubes

Technical information & pricing



Horizontal length depends on length of store and distance between fill and vent tube.

Long swept bends to reduced pellet damage during filling.

Wall and ceiling support brackets to ensure secure mounting

Wall type for direct mounting and ceiling type for spacing with M8 threaded bar. Two brackets per metre should be considered a minimum.

Vertical and horizontal pellet tubes allow for easy delivery tube connection and correct pellet store filling.

45 degree bend allows easy access for connection of pellet delivery tubes.

Pellet delivery connections (storz) clamp directly to fill tubes with external covers.



The Euroheat pellet tube U ring seals are made of EPDM. This allows easy earth connectivity between joints. A single earth connection is all that is required. However if the specification insist on additional earth connectivity, earth clamps can be installed.

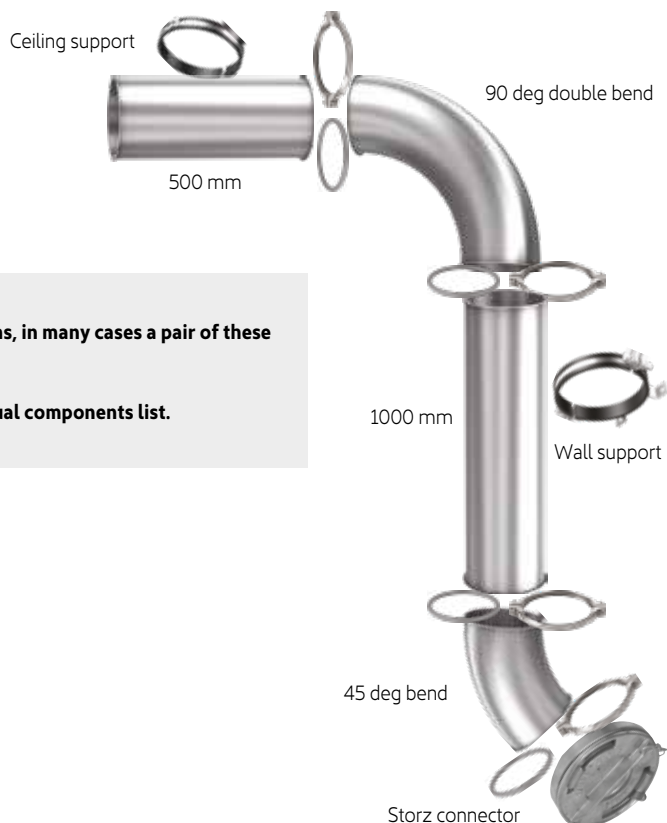


Pellet fill & vent starter kit


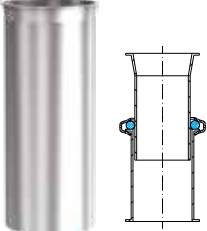



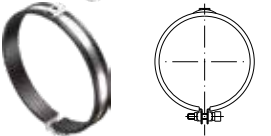
Starter kit components	Order code	£ ex VAT	PG
1 x 500 mm length, 1 x 1000 mm length, 1 x 90° bend, 1 x 45° bend, 4 x clamp band, 4 x "O" ring seal, 1 x ceiling support, 1 x wall support, 1 storz connector kit	TP502	233.00	40

Kit includes the most common starter kit items, in many cases a pair of these will be all that is required.

Add additional components from the individual components list.



Individual components list

Pellet tube equipment	Diagram no.	Size	Order code	£ ex VAT	PG
	1	2000mm	MS4000	44.00	40
		1000mm	MS4001	26.00	
		500mm	MS4002	16.00	
		200mm	MS4003	11.00	
	2	Telescopic length, galvanised diameter 100mm	500mm	MS4004	42.00
	3	Telescopic "O" seal for telescopic connection at tapered end		MS4012	6.00
Telescopic installation requires special telescopic "O" seal (MS4012) and clamp ring (MS4007)					
	4	90 deg double diameter length swept bend, galvanised diameter 100mm Flanged both ends Connection to additional pipes by "U" seal and clamp ring		MS4005	49.00
		45 deg double diameter length swept bend, galvanised diameter 100mm Flanged both ends Connection to additional pipes by "O" seal and clamp ring		MS4006	34.00
	6	Clamp ring (pull ring) galvanised diameter 100mm One required per flange		MS4007	9.00
	7	"O" Ring joint seal. EPDM colour black, electricity conductive One required per flange		MS4008	3.00
	8	Earth clamp. (Not normally required) The "O" seal & ring seals are suitable for transferring earth connectivity. In some circumstances additional earth may be requested. Spring loaded earth clamp bridges across 2 pipe sections. Per pack of 10		MS4009	44.00
	9	Wall support with rubber insert EPDM Galvanised diameter 100mm		MS4010	29.00
	10	Ceiling-mounting with rubber insert EPDM. Suitable for 10mm suspended M8 threaded bar connection. Galvanised diameter 100mm		MS4011	12.00
	11	Storz connector A Ø107mm, including, aluminium coupling with ventilated plastic weather proof cap and u-ring joint seal (Requires MS4007 clamp ring and MS4008 U seal to attach to pipe, please order separately)		HDG2140	34.00

Pellet bulk stores explained

Essential accessories for pellet installation

There are many common features that ensure safe and usable pellet store access. Shown below is a pellet store with auger to vacuum transfer head.



Viewing panel. Its important to be able to view the pellet store level so more pellets can be ordered, it also helps the delivery driver to know how many more pellets to fill.

A 300 x 300 mm toughened 12 mm glass viewing panel should be considered necessary.

Euroheat also supplies 100 x 300 mm panel.

Pellet fill and vacuum tubes. The style shape and design of these is very important. Each tube has a special connection called a Storz. This allows the delivery driver to connect his hose safely and reliably to the store. The position of these is important so the lorry driver can reach the connections without having to use portable steps or other unsafe supports. The pellet when passing through the tubes must take a gentle route without sharp bends to prevent break up of the pellet.

Anti-shatter mats. Special rubber reinforced material which hangs from the ceiling. As the pellets are blown into the store they hit the matt helping to prevent break up of the pellet.

The pellet tube should be well supported as the force of filling the store may otherwise loosen the tubes. Always use dedicated wall supports and/or ceiling supports at least two per metre.

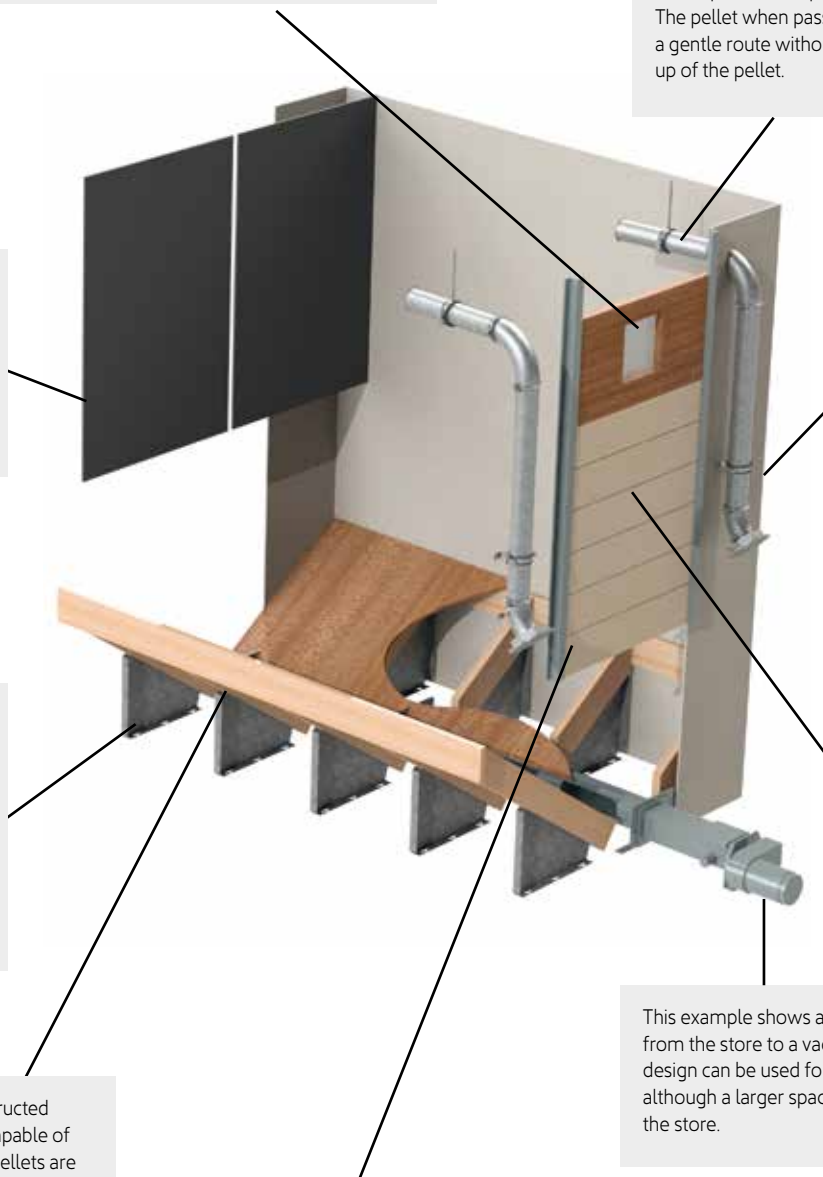
Slanted floor support 35°
Supplied in pairs. Galvanised angle plates to support sloping floor .
(Required number depends on size of store. As a guide one should be fitted every 400 mm) Order number HDG2104.

The pellet store requires access. A suitable door system which is sealed to the pellet dust is installed with each installation. An alternative to an on site build is to install Euroheat 's purpose design bulk head which includes pellet tubes and vision panel.

Sloping floor is normally constructed from suitable wood material capable of supporting the weight. Wood pellets are 650 kg/m³. This is low friction.

This example shows an auger transferring pellets from the store to a vacuum transfer head. Very similar design can be used for pellet probe installation although a larger space may be left in the centre of the store.

Door rails. Z shaped pre-folded to support wash board door system. Available from Euroheat in two lengths 900 and 1900 mm.



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DELIVERY, FEED & ASH SYSTEMS

Pellet installation accessories

Essential accessories for pellet installation

Commonly used pellet store installation equipment



Accessories		Order code	£ ex VAT	PG
	Pellet injection tube straight for sack silo applications For blown filling including Storz A Ø107 mm length 500 mm	HDG2101	105.00	40
	Pellet injection tube for sack silo applications Terminated at 45° for blown filling inc Storz A Ø107 mm length 500 mm	HDG2102	145.00	
	Injection tube extension for sack silo applications 500 mm Ø107 mm	HDG2107	55.00	
	Injection tube extension elbow 45° for sack silo applications	HDG2108	50.00	
	Pellet anti-shatter mat (140 cm x 100 cm) with mounting bracket for ceiling mounting	MS4025	85.00	
	Slanted floor support 35° Supplied in pairs. Galvanised angle plates to support sloping floor (Number depends on size of store. As a guide one should be fitted every 400 mm) Includes screw set 6x M10 coach bolts with raw plugs, 6x M6 coach bolts	HDG2104	60.00	
	HDG door rails with screws and screw anchors 1 pair Z- prefolded for door wash boards, length 900 mm	HDG2105	35.00	
	HDG door rails with screws and screw anchors 1 pair Z-prefolded for door wash boards, length 1900 mm	HDG2106	60.00	
	Pellet hose set – standard, with copper strand, PVC spiral coiled tube, inner diameter 50 mm – standard up to 50 kW, (20m roll) 65mm external diameter	HDG2109	215.00	
	Pellet hose set – special, with copper strand, PVC spiral coiled tube, inner diameter 50 mm – up to 200kW, PU- internal coating for reinforced standards, (20m roll) 65 mm external diameter	HDG2148	300.00	
	Munsen ring rubber lined for mounting pellet hose	MS4014	3.00	
	Mounting foot for Munsen ring	MS4015	2.75	
	Safety switch for pellet and chip store doors. IP 65 sealed for dust applications. Fitted with thermoplastic roller lever	MS4013	59.00	
	Pellet store inspection window. 12 mm toughened glass (300 x 300 mm)	MS2055	54.00	
	Pellet store inspection window. 12 mm toughened glass (1000 x 300 mm)	MS230	100.00	

FRA flexi blade delivery system - TBZ 150

Wood chip & wood pellet fuel transfer system



Design and features

The FRA flexi blade delivery system is used to extract fuel from the store and deliver it to the boiler at a rate dictated by the boiler's combustion requirements. It can be used to convey wood chip, shavings, briquettes or pellet. When used with wood chip or shavings, the auger can be set at an angle of up to 20°, and the fuel store can be filled to a depth of 5m, this is based on a fuel density of 250 kg/m³. When used to convey briquettes or wood pellets the maximum auger angle is 5° and the fill depth can be up to 3m.

FRA feed systems can be installed in square or round rooms such as silos and have an effective sweep diameter of up to 4.2m. Three sweep sizes are available, FRA2.2, FRA3.2 and FRA4.2, which will accommodate smaller stores when necessary. Larger stores can be made by building sloping sides and corners down to the sweep radius at an angle of 50°. The floor of the store is otherwise flat, and built on the plane of the auger. The nested spring arms, connected to a large

central dome, expand as the store empties and sweep chip into the open section of the transfer auger. The dome is driven by a shaft in tube system, which is a shaft in the centre of the auger. The shaft is connected to a low maintenance gear box under the store that drives the dome. The auger and drive shaft are driven simultaneously by a single motor outside the fuel store, but a link can be removed if the auger needs to be reversed.

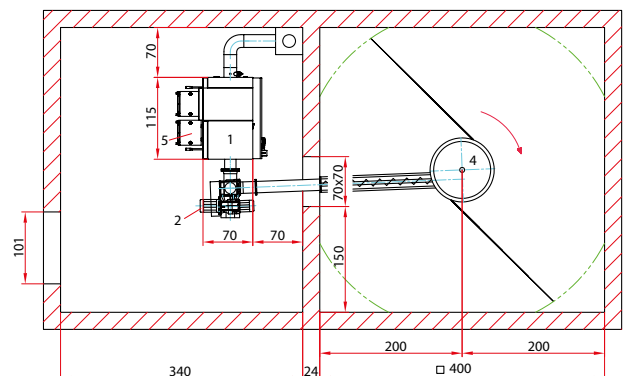
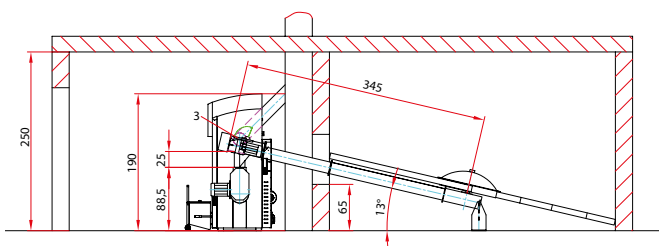
The FRA motor sizes range from 370W to 750W and can move up to 75 kg/hr (0.25m³/hr). The basic FRA below is priced with 1m of closed section auger, additional 1m extensions can be added up to a maximum over all auger length of 6m.

Each FRA is manufactured specifically for a project and Euroheat will produce a 3D drawing of the project layout to ensure that all the angles lengths and trigonometry are correct before manufacture.

FRA options	Model	Effective Sweep Ø (mm)	Order code	£ ex VAT	PG
FRA flexi blade delivery system FRA for chips (up to G50, P45), shavings, briquettes, pellets, auger length = radius + 1 metre = basic price	FRA 2.0	2200	HDG3281	4,945.00	42
	FRA 2.5		HDG3118	4,995.00	
	FRA 3.0	3200	HDG3282	5,325.00	
	FRA 3.5		HDG3119	5,385.00	
	FRA 4.0		HDG3268	5,645.00	
	FRA 4.5	4200	HDG3120	5,695.00	

Accessories	Order code	£ ex VAT	PG
3.5 metre (effective sweep 3.2m) spring blade set as substitute to standard FRA 2.0 or FRA 2.5	HDG3278	130.00	42
4.5 metre (effective sweep 4.2m) spring blade set as substitute to standard FRA 2.0 or FRA 2.5 or FRA 3.0	HDG3279	130.00	
Surcharge for auger extension - closed screw trough - up to 1 metre, max. 6m total length	HDG3125	230.00	
Drop tube up to 1.50m in length with flange for forwarding material	HDG3126	225.00	
Drop tube connection for quenching valve equipment	HDG3246	105.00	
HSF maintenance hatch for drop tube	HDG3237	135.00	
Magnetic separator MAS 560 to be installed in the auger trough	HDG3128	1055.00	
Additional strengthening blade for FRA 2.5 spring blade- single, two required per set	HDG3233	81.00	
Additional strengthening blade for FRA 3.5 - spring blade- single, two required per set	HDG3234	100.00	
Additional strengthening blade for FRA 4.5 - spring blade- single, two required per set	HDG3235	134.00	
Claw end (scraping design) for briquettes and variable quality chip, priced singularly, two required per delivery system	HDG3291	15.00	
Claw end (plough design) for saw dust and small variable quality chip, priced singularly, two required per delivery system	HDG3252	15.00	

The installation example shows the FRA flexi blade delivery system FRA 4.5 with HDG Compact 50/65

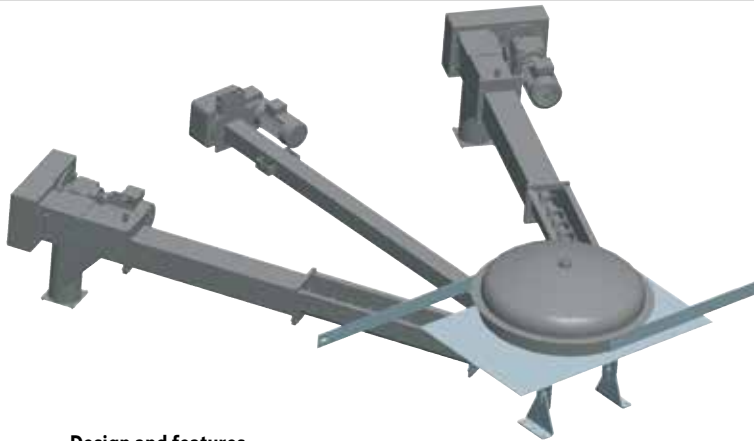


Dimensions in cm
Zeridge Biomass Ed 17A

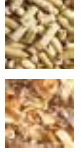


FRA-D dual flexi blade delivery system - TBZ 150

Wood chip & wood pellet fuel transfer system



Optional HSF Maintenance hatch



Design and features

The FRA-D, dual flexi blade delivery system is used to extract fuel from one store and deliver it to two boilers at a rate dictated by either or both boiler's combustion requirements. It can be used to convey wood chip, shavings, briquettes or pellet. When used with wood chip or shavings, the auger can be set at an angle of up to 20°, and the fuel store can be filled to a depth of 5m. This is based on a fuel density of 250 kg/m³. When used to convey briquettes or wood pellets the maximum auger angle is 5° and the fill depth can be up to 3m. FRA-D feed systems can be installed in square or round rooms such as silos

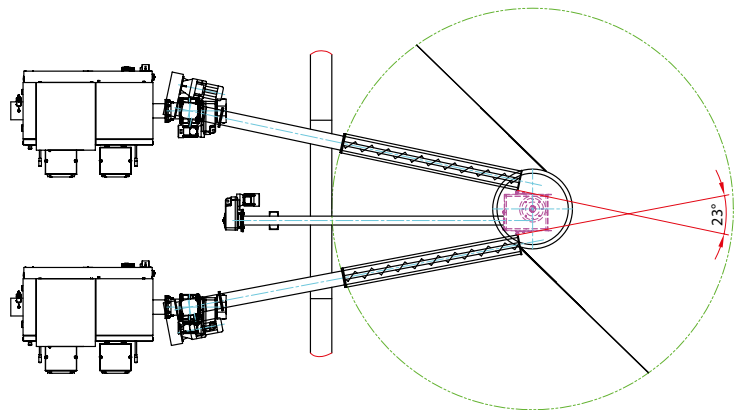
and have an effective sweep diameter of up to 4.2m. Three sizes are available, FRA2.5, FRA3.5 and FRA4.5, which will accommodate smaller stores when necessary. Larger stores can be made by building sloping sides and corners down to the sweep radius at an angle of 50°. The floor of the store is otherwise flat, and built on the plane of the augers. The nested spring arms, connected to a large central dome, expand as the store empties and sweep chip into the open section of the transfer auger. The dome is driven by a shaft which is connected to a low maintenance gear box under the store. The augers and dome are driven independently by motors outside the fuel store, each auger running on demand from its boiler and the dome running when either or both augers are running.

The FRA-D motor sizes range from 370W to 750W and can move up to 75 kg/hr (0.25m³/hr). The basic FRA-D below is priced with 1m of closed section on each auger, additional 1m extensions can be added up to a maximum overall auger length of 6m. Each FRA-D is manufactured specifically for a project and Euroheat will produce a 3D drawing of the project layout to ensure that all the angles lengths and trigonometry are correct before manufacture.

FRA-D options	Model	Effective Sweep Ø (mm)	Order code	£ ex VAT	PG
Dual flexi blade delivery system FRA-D for chips (up to G50), shavings, briquettes, pellets, auger length = radius + 1 metre = basic price	FRA-D 2.0	2200	HDG3295	11,125.00	42
	FRA-D 2.5		HDG3200	11,125.00	
	FRA-D 3.0	3200	HDG3296	11,340.00	
	FRA-D 3.5		HDG3201	11,340.00	
	FRA-D 4.0	4200	HDG3297	11,575.00	
	FRA-D 4.5		HDG3202	11,575.00	

Accessories	Order code	£ ex VAT	PG
3.5 metre spring blade (effective sweep 3.2m) set as substitute to standard FRA 2.0 or FRA 2.5	HDG3278	130.00	42
4.5 metre spring blade (effective sweep 4.2m) spring blade set as substitute to standard FRA 2.0 or FRA 2.5 or FRA 3.0	HDG3279	130.00	
Surcharge for auger extension - closed screw trough - up to 1 metre, max. 6m total length	HDG3125	230.00	
Drop tube up to 1.50m in length with flange for forwarding material	HDG3126	225.00	
Drop tube up to 4.00m in length with flange for forwarding material	HDG3127	250.00	
Drop tube connection for quenching valve equipment	HDG3246	105.00	
Magnetic separator MAS 560 to be installed in the conveyor trough	HDG3128	1,055.00	
HSF maintenance hatch for drop tube, two required for D version	HDG3237	135.00	
Additional strengthening blade see FRA			
Claw end options see FRA			

The installation example shows the FRA flexi blade delivery system FRA-D 4.5 with two Compact 80 units



Zeroridge Biomass Ed 17A

GRA articulated arm delivery system - TBZ 150 & 200

Wood chip & wood pellet fuel transfer system



Design and features

HDG GRA articulated arm delivery system

The GRA, articulated arm delivery system is used to extract fuel from the store and deliver it to the boiler at a rate dictated by the boiler's combustion requirements. It can be used to convey wood chip, shavings, briquettes or pellet. When used with wood chip or shavings, the auger can be set at an angle of up to 17°, and the fuel store can be filled to a depth of 5m, this is based on a fuel density of 250 kg/m³. When used to convey briquettes m³ 400kg a maximum level of 3 metres and a mounting angle of 10°. Wood pellets 650 kg/m³ maximum filling height is 3 metres and a mounting angle of 5°.

GRA feed systems can be installed in square or round rooms such as silos and have an effective sweep diameter of up to 5.7m. Four sweep sizes are available, which will accommodate smaller stores when necessary. Larger stores can be

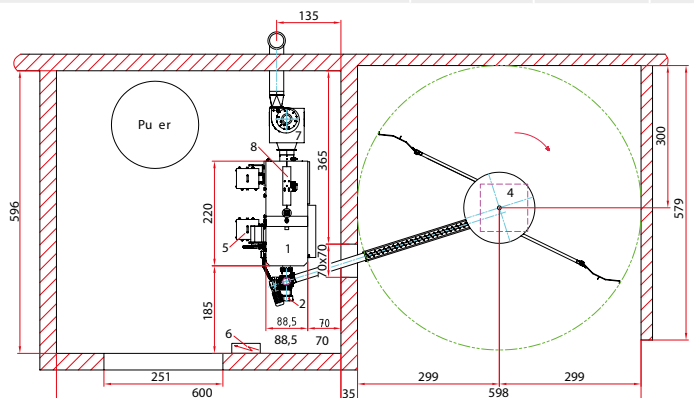
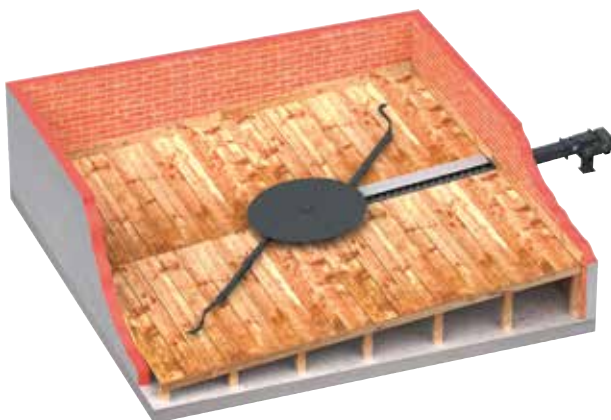
made by building sloping sides and corners down to the sweep radius at an angle of 50°. The floor of the store is otherwise flat, and built on the plane of the auger.

The articulated spring loaded arms are driven by a gearbox under the store, when the store is full they fold away to the underside of the central disc, and as the store empties they unfold, and sweep chip into the open section of the transfer auger.

The basic GRA below is priced with 1m of closed section auger, additional 1m extensions can be added up to a maximum over all auger length of 6m. Each GRA is manufactured specifically for a project and Euroheat will produce a 3D drawing of the project layout to ensure that all the angles lengths and trigonometry are correct before manufacture.

GRA fixed arm fuel delivery system	Type/output	Effective sweep mm	Order code	£ ex VAT	PG
GRA hinged arm delivery system. For wood chips up to P45, briquettes, pellets	GRA 160-3	3100	HDG3257	8,230.00	42
	GRA 200-3		HDG3261	9,335.00	
GRA 160 = 160 mm auger and trough 0.6m ³ /h - Typically upto 200 kW GRA 200 = 200 mm auger and trough 1.2m ³ /h - Typically 201 kW and over	GRA 160-4	4100	HDG3258	8,500.00	
	GRA 200-4		HDG3262	9,605.00	
Fixed arm must at no point touch the surrounding store walls	GRA 160-5	5100	HDG3259	8,805.00	
	GRA 200-5		HDG3263	9,910.00	
	GRA 160-6	5700	HDG3260	9,085.00	
	GRA 200-6		HDG3264	10,190.00	

Accessories	Order code	£ ex VAT	PG
Surcharge for closed section extension - GRA 160 for each metre, max. 6m total length	HDG3125	230.00	42
Surcharge for closed section extension - GRA 200 for each metre, max. 6m total length	HDG3134	310.00	
Drop tube up to 1.50m in length with flange for forwarding material	HDG3126	225.00	
Drop tube up to 4.00m in length with flange for forwarding material	HDG3127	250.00	
Drop tube connection for quenching valve equipment	HDG3246	105.00	
HSF maintenance hatch for drop tube	HDG3237	135.00	
Magnetic separator MAS 560 to be installed in the auger trough	HDG3128	1,055.00	
Surcharge for auger split, maximum one split possible	HDG3207	335.00	



Zeroridge Biomass Ed 17A

TFD 160, 200 TFQ 160, 200

Material auger systems

For extending the HDG delivery systems

HDG metering container TFD 160

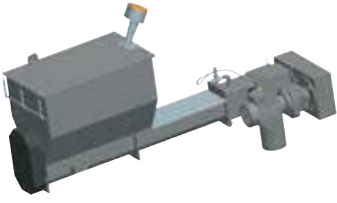
The metering container is used for fuel dosing from large HDG silo delivery systems (e.g. TAS 4/6 etc.) or external dischargers. Container with mechanical level sensor and stirrer mounted on a material auger.

HDG material auger TFQ 160 and TFQ 200

The HDG TFQ material auger is used for fuel transfer between the delivery system and the TBZ150. The progressive and strong design of the transfer auger and the generously dimensioned auger trough with removable housing provide for the problem-free transportation of fuel.

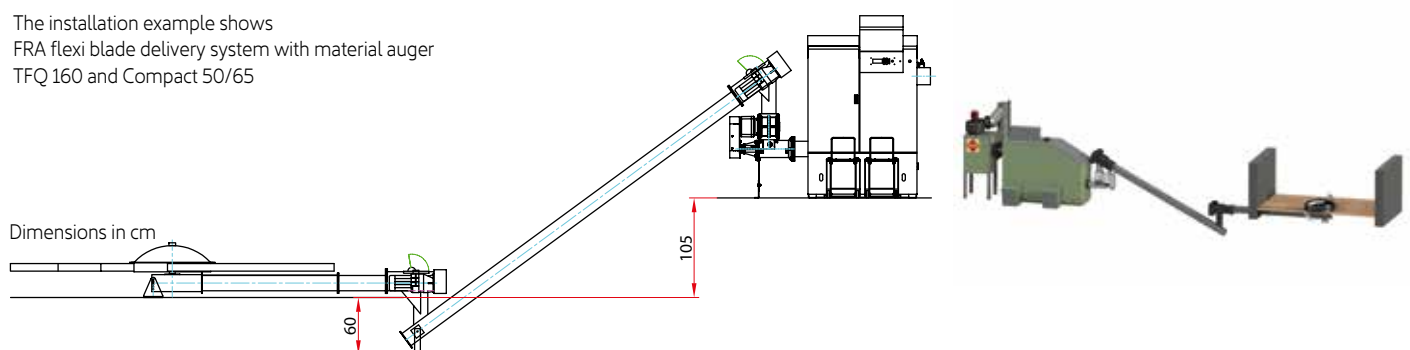
Used for planing and saw shavings, wood chips (G30/max. G50) and shaving briquettes (Ø max. 60 mm).



Model		Order code	£ ex VAT	PG
	HDG metering container TFD 160 with material auger 1.25m long (max. length 6m) <ul style="list-style-type: none"> • Drive power 0.37 kW/0.75 kW • Container capacity 0.4m³ • Mechanical level sensor • Set of fasteners • For extensions, see material auger 	HDG3132	4,880.00	
	HDG material auger TFQ 160 Drive unit and fastener set max. length 6m, max. slope 40° <ul style="list-style-type: none"> • Trough dimensions 160 mm x 160 mm • Drive power 0.37 kW to 0.75 kW 	HDG3133	2,495.00	42
	HDG material auger TFQ 200 Drive unit and fastener set max. length 6m, max. slope 40° <ul style="list-style-type: none"> • Trough dimensions 200 mm x 200 mm • Drive power 0.37 kW to 0.75 kW 	HDG3186	2,860.00	

Accessories and special Configuration	Order code	£ ex VAT	PG
Surcharge for auger extension - closed screw trough - up to 1m, max. 6m total length, with removable painted or galvanised cover	HDG3134	310.00	
Transfer hopper with level sensor for TFQ 160	HDG3135	680.00	
Transfer hopper with level sensor for TFQ 200	HDG3206	680.00	
Drop tube up to 1.50m in length with flange for forwarding material	HDG3126	225.00	
Magnetic separator MAS 560 to be installed in the conveyor trough for TFQ 160	HDG3212	970.00	42
Magnetic separator MAS 560 to be installed in the conveyor trough for TFQ 200	HDG3213	970.00	
Surcharge for auger split, maximum one split possible	HDG3207	335.00	
Control cabinet extension for additional drive motor	HDG3108	295.00	
Maintenance hatch	HDG3237	135.00	
Wedge for TFQ200 to increase angle from 21° - 30° (for 31° - 40° two wedges must be used)	HDG3298	230.00	

The installation example shows FRA flexi blade delivery system with material auger TFQ 160 and Compact 50/65



TAS 4 & TAS 6 Silo delivery system

Conversion of silo to chip store with fuel transfer


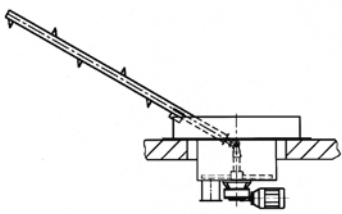
Silo delivery for briquettes up to Ø 60mm, shavings and wood chips up to G30



Design and features

The silo delivery system is used for rectangular or round store rooms of up to 4m (HDG TAS 4) or 6m diameter (HDG TAS 6). The fuelling height for chips and shavings is approximately 8m. For shaving briquettes the fuelling height is limited to approximately 3m. The material is discharged by means of a universal

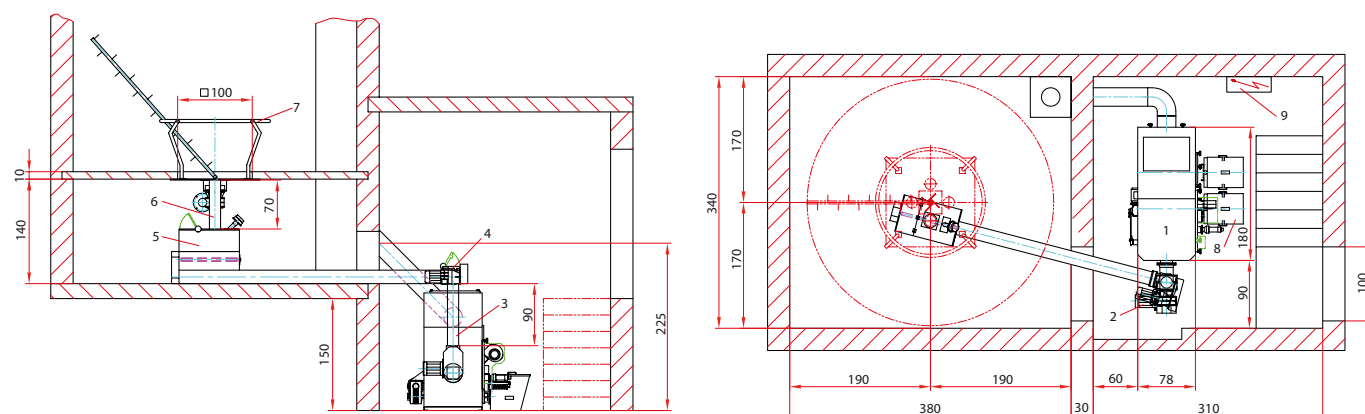
shaft-driven milling arm rotating in the silo. Installation is in the centre in the silo intermediate floor (installation opening 1 x 1m). From there, the material is discharged downwards through a 150 mm size opening which then requires TFD160 to supply the boiler.

Type/output	Order code	£ ex VAT	PG
 <p>HDG silo delivery system TAS 4 for chips (up to G30), shavings</p> <ul style="list-style-type: none"> • Delivery capacity approx. 150 kg/h or 1.0m³/h • maximum length of milling arm 2.50m • Drive power 2.2kW 	HDG3130	5,205.00	42
 <p>HDG silo delivery system TAS 6 for chips (up to G30), shavings, shaving briquettes</p> <ul style="list-style-type: none"> • Delivery capacity approx. 200 kg/h or 1.3m³/h • maximum length of milling arm 3.00m • Drive power 11kW 	HDG3131	8,705.00	42



DELIVERY, FEED & ASH SYSTEMS

The installation example shows the HDG silo delivery system TAS 4 with HDG metering container TFD 160 and HDG Compact 100.



Dimensions in cm

TFQ 360 feeding auger

Wood chips (maximum P45) and shavings

Design and features

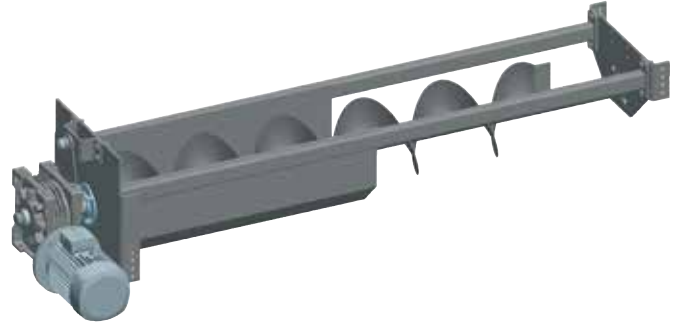
The HDG TFQ360 is used to load a fuel store or transfer fuel within a fuel store when loading access is limited.

To load an underground store a hopper is built around the auger adjacent to the store and when chip is tipped onto the auger it is conveyed horizontally past the middle of the store. Alternatively the TFQ360 can be suspended at high level inside the store.

When fuel is heaped up over the auger it is used to move chip to the inaccessible parts of the store. An explosion proof motor is available for when the auger is mounted inside a fuel store.

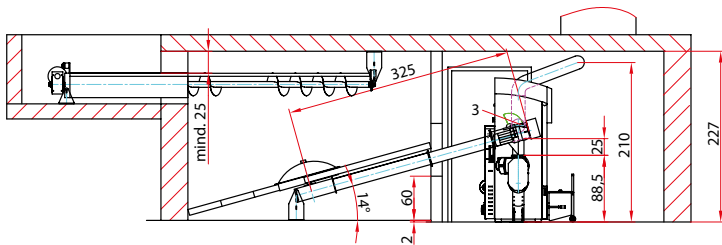
The operation of the TFQ360 is via a control cabinet with an auto off switch that requires constant manual activation to run.

The maximum length of the auger is 6m and is only available with 3 phase motors of 3 kW to 4 kW. The auger diameter is 300 mm and can convey up to 40m³/hr. Each TFQ360 is manufactured specifically for a project and Euroheat will produce a 3D drawing of the project layout to ensure that all the angles lengths and trigonometry are correct before manufacture.

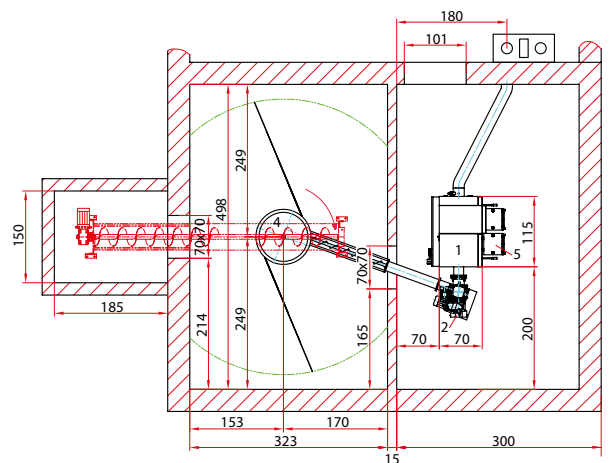


TFQ auger	Length	Order code	£ ex VAT	PG
HDG feeding auger TFQ 360 Drive power 3.0 kW, feeding capacity up to 40m ³ /h	up to 4.00m	HDG3136	3,200.00	42
HDG feeding auger TFQ 360 Drive power 4.0 kW, feeding capacity up to 40m ³ /h	up to 5.00m	HDG3137	3,620.00	
HDG feeding auger TFQ 360 Drive power 4.0 kW, feeding capacity up to 40m ³ /h	up to 6.00m	HDG3138	3,835.00	
HDG feeding auger TFQ 360 EX-protected design, drive power 3.6 kW, feeding capacity up to 40m ³ /h	up to 4.00m	HDG3139	4,045.00	
HDG feeding auger TFQ 360 EX-protected design, Drive power 3.6 kW, feeding capacity up to 40m ³ /h	up to 5.00m	HDG3140	4,250.00	
HDG feeding auger TFQ 360 EX-protected design, drive power 3.6 kW, feeding capacity up to 40m ³ /h	up to 6.00m	HDG3141	4,465.00	

The installation example shows the HDG feeding auger TFQ 360 with FRA flexi blade delivery system FRA 3.5 and HDG Compact 50 or 65.



Dimensions in cm



TAK walking floor conveyor

Large area storage for rectangular fuel stores

Design and features

The HDG moving floor conveyor TAK enables the simple and effective material discharge from rectangular store rooms. The fuel is transferred by a hydraulically driven rake element to a recessed transversal conveyor. Used for wood chip, shavings, sawdust and briquettes.



HDG moving floor conveyor TAK 1

1 rake system
 Moving floor conveyor drive module TAK 1
 Discharge area up to 25m²
 Width = up to 2.5m, Length = up to 10m

Complete unit consisting of:

- Hydraulic cylinder

Technical data:

- Joint eyes on both sides
- D140/75mm
- Displacement 500mm

- Hydraulic power unit

Technical data:

- Motor 1.5kW
- Capacity 4 l/minimum at 150 bar
- Oil capacity 70 l
- Pressure limiter valve
- Pressure switch 50-200 bar
- Installation block NG6

- Hydraulic connecting hoses
- Cylinder support construction for fixing in the base

The intermediate walls, the fixing of the cylinder support construction in the base (moulding in concrete) and the floor conditions will be provided by the customer.

Moving floor conveyor rack element TAK 1
 Discharge area up to 25m².

Used for widths of up to 2.5m and a max. fuelling level of approx. 4.0m (with a chip weight of approx. 250 kg/m³). Including cylinder fixture, guides, stop fins and wide flange carriers.

The walking floor guides are attached to the cast concrete floor, and then screeded up to by the customer. The walking floor mechanism is then fixed to the guides.

A 200mm auger then transfers fuel to an additional material auger.

HDG moving floor conveyor TAK 2

2 rake system
 Moving floor conveyor drive module TAK 2
 Discharge area up to 50m²
 Width = up to 5.0m, Length = up to 10m

Complete unit consisting of:

- Hydraulic cylinder

Technical data:

- Joint eyes on both sides
- D140/75mm
- Displacement 500mm

- Hydraulic power unit

Technical data:

- Motor 1.5kW
- Capacity 4 l/minimum at 150 bar
- Oil capacity 70 l
- Pressure limiter valve
- Pressure switch 50-200 bar
- Installation block NG6

- Hydraulic connecting hoses
- Cylinder support construction for fixing in the base

The intermediate walls, the fixing of the cylinder support construction in the base (moulding in concrete) and the floor conditions will be provided by the customer.

Moving floor conveyor rack element TAK 2
 Discharge area up to 50m².

Used for widths of up to 5.0m and a max. fuelling level of approx. 4.0m (with a chip weight of approx. 250 kg/m³). Including cylinder fixture, guides, stop fins and wide flange carriers.

The walking floor guides are attached to the cast concrete floor, and then screeded up to by the customer. The walking floor mechanism is then fixed to the guides.

A 200mm auger then transfers fuel to an additional material auger.

HDG moving floor conveyor TAK 3

3 rake system
 Moving floor conveyor drive module TAK 3
 Discharge area up to 75m²
 Width = up to 7.5m, Length = up to 10m

Complete unit consisting of:

- Hydraulic cylinder

Technical data:

- Joint eyes on both sides
- D140/75mm
- Displacement 500mm

- Hydraulic power unit

Technical data:

- Motor 1.5kW
- Capacity 4 l/minimum at 150 bar
- Oil capacity 70 l
- Pressure limiter valve
- Pressure switch 50-200 bar
- Installation block NG6

- Hydraulic connecting hoses
- Cylinder support construction for fixing in the base

The intermediate walls, the fixing of the cylinder support construction in the base (moulding in concrete) and the floor conditions will be provided by the customer.

Moving floor conveyor rack element TAK 3
 Discharge area up to 75m².

Used for widths of up to 7.5m and a max. fuelling level of approx. 4.0m (with a chip weight of approx. 250 kg/m³). Including cylinder fixture, guides, stop fins and wide flange carriers.

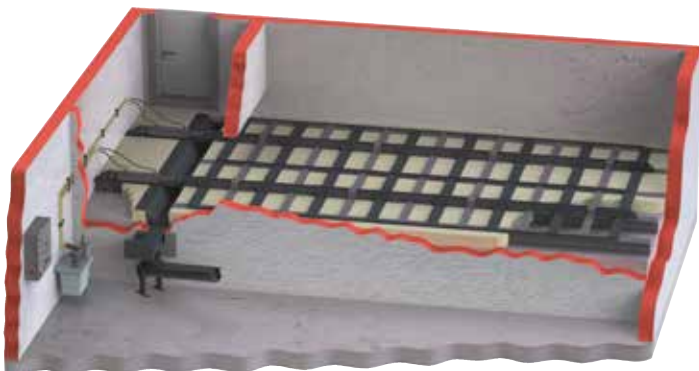
The walking floor guides are attached to the cast concrete floor, and then screeded up to by the customer. The walking floor mechanism is then fixed to the guides.

A 200mm auger then transfers fuel to an additional material auger.

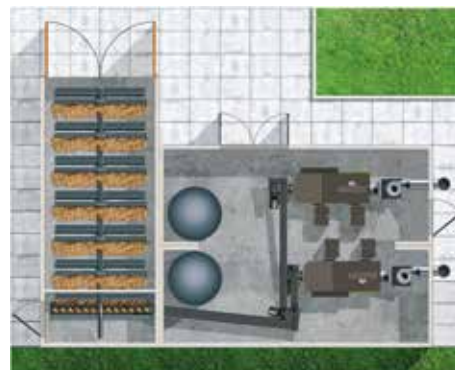
Transversal transfer auger for TAK 1	Transversal transfer auger for TAK 2	Transversal transfer auger for TAK 3
<p>Consisting of:</p> <ul style="list-style-type: none"> • Auger trough 200mm x 200mm • Drive motor 0.75kW with chain drive • Level monitoring with proximity sensor to control the moving floor elements • 1 rake system <p>Control Cabinet TAK 1</p> <p>PLC based control consisting of:</p> <ul style="list-style-type: none"> • PLC module • Hydraulic valves • Proximity sensor input <p>Requirements from the customer</p> <ul style="list-style-type: none"> • Concrete floor (suitable for fixing the wide flange carriers) • Support for recessed transversal auger • Construction of the intermediate walls • Preparation of the installation according to HDG specifications (Including all concrete constructions) • Hiring a crane if necessary <p>Rake extension TAK 1 Length = 1.0m, width up to 2.5m</p>	<p>Consisting of:</p> <ul style="list-style-type: none"> • Auger trough 200mm x 200mm • Drive motor 0.75kW with chain drive • Level monitoring with proximity sensor to control the moving floor elements • 2 rake system <p>Control Cabinet TAK 2</p> <p>PLC based control consisting of:</p> <ul style="list-style-type: none"> • PLC module • Hydraulic valves • Proximity sensor input <p>Requirements from the customer</p> <ul style="list-style-type: none"> • Concrete floor (suitable for fixing the wide flange carriers) • Support for recessed transversal auger • Construction of the intermediate walls • Preparation of the installation according to HDG specifications (Including all concrete constructions) • Hiring a crane if necessary <p>Rake extension TAK 2 Length = 1.0m, width up to 5.0m</p>	<p>Consisting of:</p> <ul style="list-style-type: none"> • Auger trough 200mm x 200mm • Drive motor 0.75kW with chain drive • Level monitoring with proximity sensor to control the moving floor elements • 3 rake system <p>Control Cabinet TAK 3</p> <p>PLC based control consisting of:</p> <ul style="list-style-type: none"> • PLC module • Hydraulic valves • Proximity sensor input <p>Requirements from the customer</p> <ul style="list-style-type: none"> • Concrete floor (suitable for fixing the wide flange carriers) • Support for recessed transversal auger • Construction of the intermediate walls • Preparation of the installation according to HDG specifications (Including all concrete constructions) • Hiring a crane if necessary <p>Rake extension TAK 3 Length = 1.0m, width up to 7.5m</p>

Item	Order code	£ ex VAT	PG
HDG moving floor conveyor TAK 1	HDG3192	21,740.00	42
HDG moving floor conveyor TAK 2	HDG3193	30,660.00	
HDG moving floor conveyor TAK 3	HDG3194	POA	
Accessories	Order code	£ ex VAT	PG
TAK 1 extension per metre	HDG3195	895.00	42
TAK 2 extension per metre	HDG3196	1,785.00	
TAK 3 extension per metre	HDG3197	POA	
Material intermediate container VBS for installation on two material augers of type TFQ 160/200	HDG3203	7,390.00	

The installation example shows the TAK 2 walking floor with TFQ160 fuel transfer. Material intermediate container and dual equipment Compact 200.



The installation example shows the TAK 1 walking floor conveyor with TFQ 160 material auger. Material intermediate container and dual equipment Compact 200.



ECS chip shifter

Wood chip auger transfer system

ECS chip shifter

The chip shifter (ECS) is used to load chip stores where access or loading to the optimum height is difficult. The large trough is loaded by a tipping trailer or front loader. Augers then convey the chip to the store at a rate of up to 60m³/hr P45 chip. Smaller chip may reduce the loading speed.

Specials build models are available, which can include additional requirements, change of direction and spreader heads.



Current design may vary from photograph

Design and features

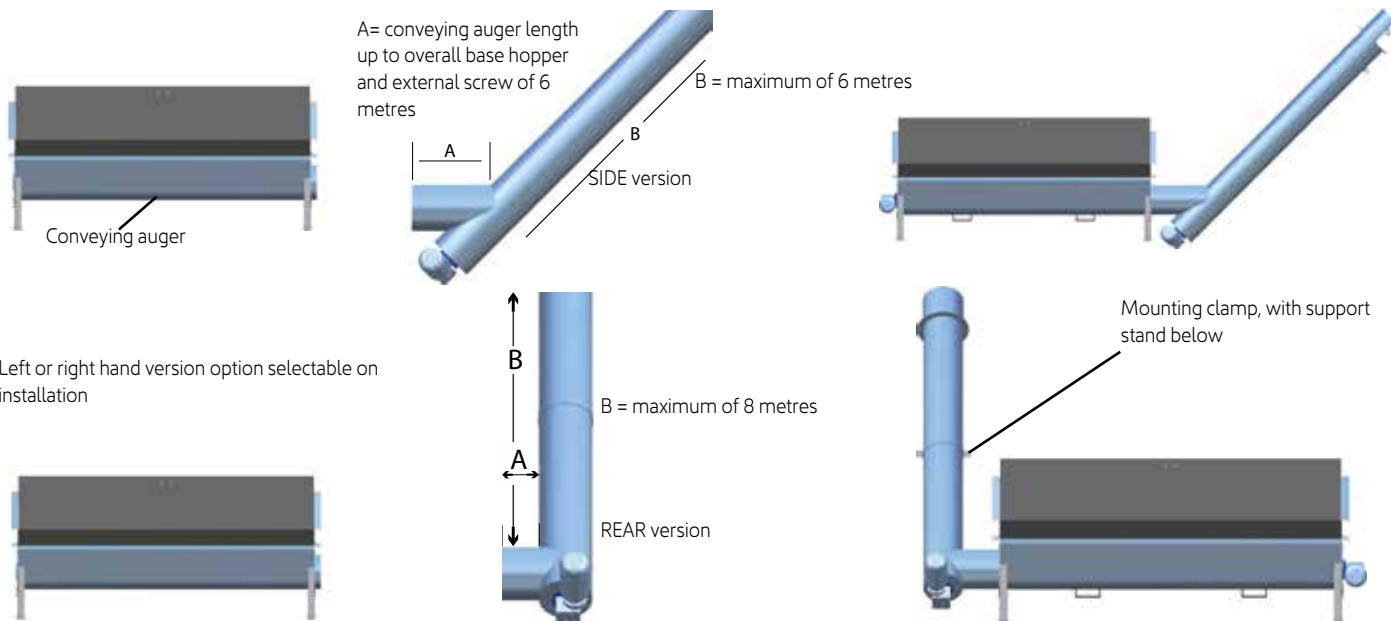
- Galvanised fuelling trough with a fuelling width of 2.8m, covered by a tilt able aluminium cover, forklift pockets on the bottom for easy transfer
- Galvanised external auger tubes with Ø 250mm, ascending auger
- Ascending auger 3m standard length, optional extension up to 6m overall length, drive motor 4kW. For applications up to 8m drive motor 5.5kW
- The transfer capacity of the system is approximately 60m³/h with P45 chip
- Motor covers for protecting drive motors
- Adjustable legs

Control cabinet designed with a dead man's circuit system according to the EU Machine Directive.
3 Phase power supply is required.



Build what you need


Starting with the base hopper choose the direction and type of ascending auger. SIDE or REAR. Side version has a fixed 45° ascending auger. Rear has the option of 0-45° adjustment on installation site via slotted holes. The SIDE version can as an option be manufactured at fixed degree 30-35-40-45° see option section. Choose any extra horizontal conveying auger length (A) up to 6m. Choose length of ascending auger length (B) up to 8m. Each Chip Shifter is manufactured specifically for a project and Euroheat will produce a 3D drawing of the project layout to ensure that all the angles lengths and trigonometry are correct before manufacture.



Zeroridge Biomass Ed 17A

ECS chip shifter

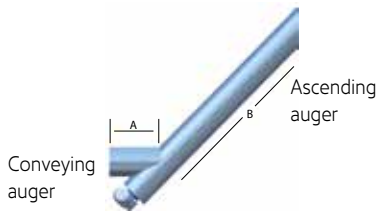
Wood chip auger transfer system

Chip shifter base hopper	Motor size	Order code	£ ex VAT	PG	
	Left or right exit base hopper with motor suitable for conveying auger of up to 4 metres (3m as standard).	3 kW	ECS145	5,030.00	42
	Left or right exit base hopper with motor suitable for conveying auger from 4.5m up to 6 metres (3m as standard).	4 kW	ECS146	5,435.00	
	Conveying auger extension (A) per 0.5 metre (if you order 3 or more, max. is 12, you will require the 4 kW motor).		ECS116	470.00	

Supplied suitable for left or right hand fuel exit.
Direction chosen during site installation

Includes control cabinet, push to run switch according to the EU Machine directive. Suitable for 4 kW or 5.5 kW version for 2 motors with start timer.
The base hopper is supplied with a 3 metre auger of which approx 0.5m is the conveying auger (A). The ascending auger (B) can extend the horizontal conveyer distance (A) by up to 6 metres. For total horizontal conveyer lengths up to 4m the 3 kW motor should be suitable, for applications up to 6 metres the 4 kW motor version is required.

Side 45° with 3 metre (B) ascending auger	Order code	£ ex VAT	PG
Standard side exit 45° with 3 metre of ascending auger with 4 kW motor	ECS133	2,520.00	31
Ascending auger extension per 0.5 metre (to increase to a max. of 6 metres)	ECS117	470.00	



Ascending auger is approximately 3 metres as standard with a maximum of upto 6 metres. It may be possible to have greater than 6 metres of ascending auger, please contact us to discuss.

Rear 0-45° on site adjustable with 3 metre (B) of ascending auger	Order code	£ ex VAT	PG	
	Standard rear exit 45° with 3 metre of ascending auger with 4 kW motor suitable for ascending auger of upto 5.5 metres	ECS137	2,520.00	42
	Superior rear exit 45° with 3 metre of ascending auger with 5.5 kW motor suitable for ascending auger of over 6 metres upto a max. of 8 metres	ECS141	2,925.00	
	Ascending auger extension per 0.5 metre (to increase from 3 to 8 metres)	ECS117	470.00	

Ascending auger (B) is supplied standard with 3 metre auger.
This can be extended to a total length of 8 metres using 0.5 metre extensions.
A quick release coupling section will be required at least every 3 metres of ascending auger.

Ascending auger is approximately 3 metres as standard. Additional auger length up to 5.5 metres can be added with the 4 kW motor version. With the 5.5 kW motor version the ascending auger can be extended to 8 metres.

Options	Order code	£ ex VAT	PG	
Base hopper wheel kit including quick release/connection section (for easy disconnection of ascending auger and moving of base hopper)	ECS121	1,075.00	42	
Mounting clamp for elevating auger	ECS122	86.00		
Support stand for ascending/conveying auger (will require mounting clamp ECS122 to be purchased)	Short	ECS148		136.00
	Tall	ECS149		179.00
Protective screen	ECS147	108.00		
Surcharge for each electric motor for dust protected version	ECS124	360.00		

Support recommendations

- 1 support stand for every 3 metres of ascending auger.
- Alternatively 2 mounting clamps can be used in conjunction with a stand or chain supplied by the site/owner.
- 1 support short stand short for conveying auger over 0.5 metres.



Ash removal systems

Compact 100-200

Ash container 80 litre

The ash container is part of the automatic ash removal system of the HDG Compact 100-200. Delivered with an interlock device and a flap to prevent ash spillage.

The container is included as standard with the Compact 100-200. Additional units are an option for quick change over requirements.

Transfer cart for the HDG ash container 80 litre

The transfer cart allows easy removal of the ash container, which could weigh up to 35kg when full. It is lifted using the fastening studs on the side.

Ash container 140 litre

A larger version of the ash container but comes with a lifting eye and wheels, as a full container could weigh around 80kg.

Can be ordered as standard or as an optional extra.



Description	Order code	£ ex VAT	PG
2 x 80 Litre included as standard with Compact 100-200	-	-	
Additional 80 litre ash container	HDG3221	315.00	40
Transfer cart for ash container 80 litre	HDG3232	245.00	
140 litre as a replacement for the 80 litre version included as standard, surcharge	HDG3219	215.00	40
Ash container 140 litre	1 piece as additional ash container HDG3220	525.00	



Central ash removal system

Compact 100-115-150-200

The central ash removal system expands the operation and maintenance intervals and allows longer operating hours. The generated fly and combustion chamber ash is collected by an auger and is transferred into a 240 litre ash container. By means of a simple lock, this dischargeable container can be easily and simply replaced.



Design and features

- 2 ash collecting containers including two intermediate reception containers for the ash auger
- Horizontally mounted ash auger including 0.75kW drive motor for collecting and discharging the ash
- Full control integration with PCL
- One 240 litre ash wheel bin with interlock mechanism suitable for ash up to 100 kg
- Standard 80 litre ash container not included with central system






Central ash system options	Order code	£ ex VAT	PG
Central ash removal system: Surcharge over the cost of 2 x 80 litre containers. Ash reception container and steel wheely bin, suitable for up to 100 kg. (2 x ash containers 80 litre not included).	HDG3158	2,940.00	33
Additional wheely bin 240 litre including interlock mechanism suitable for up to 100 kg.	HDG3247	610.00	

Zeroridge Biomass Ed 17A

M Series 300-350-400-500 wood boiler

Equipment prices and order codes

Ash collection options	Order code	£ ex VAT	PG
 <p>240 Litre ash bin For wheeled transport of combustion and main fly ash chamber</p>	HDG4140	625.00	40
 <p>400 Litre tipping ash container For transport by fork lift, with tipping mechanism of combustion and main fly ash chamber (Special designs available on request)</p>	MS91175	1,480.00	
 <p>Transfer cart For ash container heat exchanger 80 litre ash containers The width of trolley is 680 mm</p>	HDG3232	245.00	