WES
WOOD ENERGY SOLUTIONS



PELLET STORAGE
Solutions



Index

FABRIC – Internal Pellet Stores

WESilo.....3

EcoSilo.....4

MegaSilo.....5

MiniSilo.....5

Stove Silo.....6

Extraction System.....7

Cyclomatic.....8

Automation for Manual Boilers.....9

STEEL – External Pellet Stores

Square Footprint.....10

Rectangular Footprint.....12

Slimline Rectangular Footprint.....14

Small Manual Feed Hoppers.....16

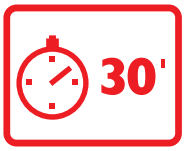
Vacuum Augers.....17

Screw Auger Systems.....18

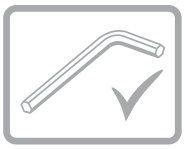
Optional Extras.....19

WESilo

The most robust Silo on the market



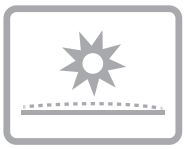
Assembly time: 30 minutes



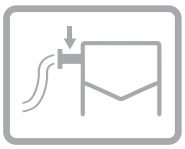
Only necessary an allen key



Robust and modern look



UV Ray resistant fabric

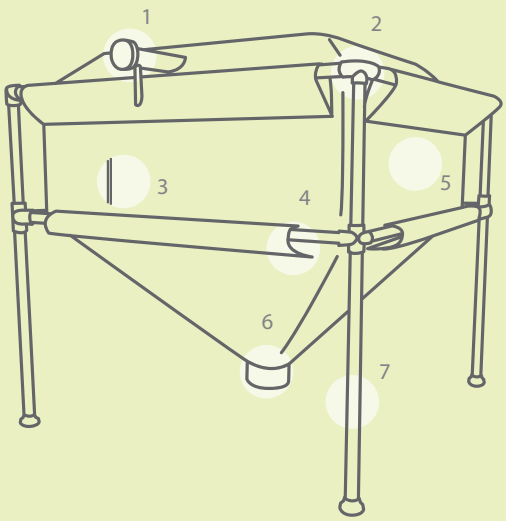


One filling pipe included



- Galvanised steel structure
- Dust permeability certificate
- Impact protection mat for pellet built in
- It does not require specific screws or tools
- Easiest and fastest assembly time on the market
- One filling pipe included
- Transport not incluced

Product Code	Length (cm)	Width (cm)	Height (cm)	Volume (m^3)	Tonnage (t)
880300	120	120	200-250	1.3-1.8	0.9-1.2
880301	150	150	200-250	2.1-2.8	1.3-1.9
880302	170	170	200-250	2.8-3.8	1.8-2.5
880303	200	200	200-250	3.8-5.2	2.4-3.4
880304	250	250	200-250	6.1-8.5	4.0-5.5
880305	300	300	200-250	8.0-11.7	5.2-7.6



1. Filling pipe for pneumatic truck.
2. Stay bolt casting piece.
3. Impact protection mat for pellets.
4. Intermediate attachment making the silo robust and aesthetic.
5. Made out of anti-static, high-resistance fabric that allows the material to aerate without any dust from exiting, in such a way that two filling pipes are not necessary in the infilling system.
6. Extraction point with different variations.
7. Galvanised steel bars.

Note: The measurement unit may vary in terms of the pellet density and the filling method; and also depending on whether it has used auger or suction system.

EcoSilo

No. 1 Silo regarding market sales

Assembly time: 60 minutes

Number 1 on sales

UV Ray resistant fabric

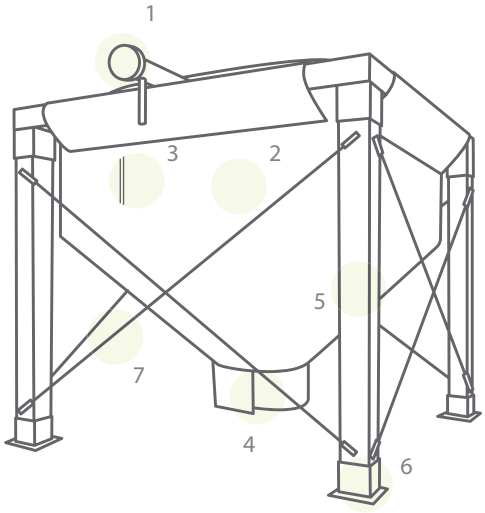
One filling pipe included

Natural and organic plywood



- Wooden structure with galvanised joints
- Dust permeability certificate
- Impact protection mat for pellets built in
- Robust and modern look
- Completely natural and organic plywood
- One filling pipe included
- Transport not included

Product Code	Length (cm)	Width (cm)	Height (cm)	Volume (m^3)	Tonnage (t)
880400	120	120	200-250	1.3-1.8	0.9-1.2
880401	150	150	200-250	2.1-2.8	1.3-1.9
880402	170	170	200-250	2.8-3.8	1.8-2.5
880403	200	200	200-250	3.8-5.2	2.4-3.4



1. Filling pipe for pneumatic truck.
2. Made out of anti-static, high-resistance fabric that allows the material to aerate without any dust from exiting, in such a way that two filling pipes are not necessary in the infilling system.
3. Impact protection mat for pellets.
4. Extraction point with different variations.
5. Special plywood structure completely natural and organic.
6. Galvanised joints.
7. Steel crossings to increase its hardiness.

Note: the measurement unit may vary in terms of the pellet density and the filling method; and also depending on whether it has used auger or suction system.

MegaSilo

20% more capacity than a standard Silo in the same space



Flat bottom: +20% capacity

Includes vibration unit and extraction system

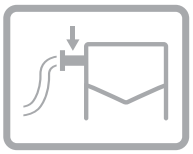
UV Ray Resistant Fabric



Suitable only for Vacuum System



Not suitable for Auger System



One filling pipe included



Product Code	Length (cm)	Width (cm)	Height (cm)	Volume (m³)	Tonnage (t)
880702	160	160	180-230	2.5-3.3	1.6-2.2
880703	180	180	180-230	3.3-4.4	2.1-2.9
880704	200	200	180-230	4.1-5.6	2.6-3.6
880705	220	220	180-230	5.1-6.9	3.3-4.5

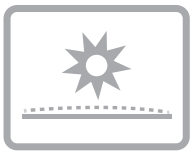
Each of our silos are made from a canvas with interior protection for the impact of pellets in such a way that we guarantee durability of the silo.

Note: The measurement unit may vary in terms of the pellet density and the filling method; and also depending on whether it has used auger or suction system. The manual filling accessory shown in the picture is an extra.

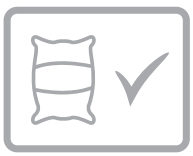
MiniSilo



Most economic option



UV Ray Resistant Fabric



Possible to fill with sacks

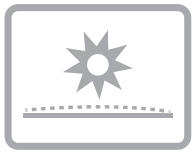
- Wooden structure
- Ideal for smaller locations
- Manufactured without top cover to allow manual filling

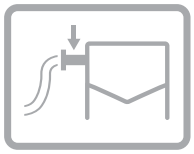


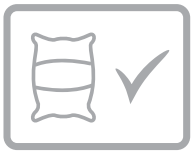
Product Code	Length (cm)	Width (cm)	Height (cm)	Volume (m³)	Tonnage (t)
880500	1000	1000	130	0.53	0.35
880510	1300	1300	130	0.95	0.62

Stove Silo

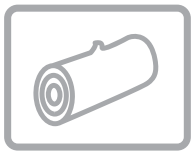
Perfect for your stove

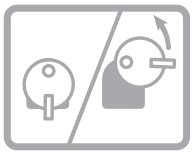

UV Ray resistant fabric


One filling pipe included


It is possible to fill with sacks


Ideal for stoves

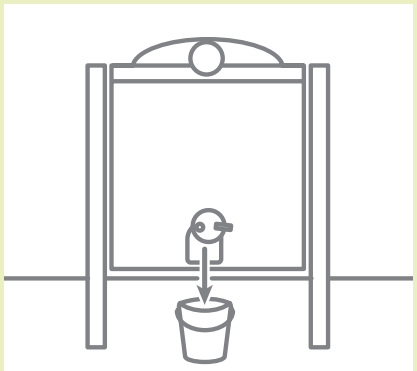

Natural and organic plywood


Manual extraction system



No need to carry any more pellets bags with this silo


Forget about carrying heavy sacks of pellet for your stove.


With this silo, you will be able to fill a bucket to carry the pellets.


And to fill your hopper in a comfortable and dust free way.

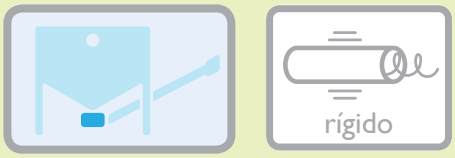
Product Code	Length (cm)	Width (cm)	Height (cm)	Volume (m^3)	Tonnage (t)
880602	150	150	200	2.4-3.0	1.5-2.0

Note: The bucket and the manual filling accessories shown on the picture are an extra. The measurement unit may vary because of the pellet density and the filling method.

Extraction System

Note: Whichever Silo one chooses one must also select one of the extraction systems below

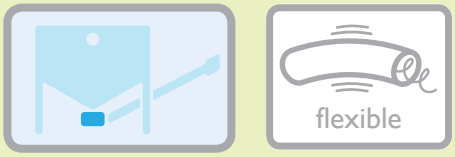
Connection for Rigid Auger



Product Code	880513



Connection for Flexible Auger



Product Code	880514



Double Connection For Rigid And Flexible Auger



Product Code	880515



Connection for Vacuum System





Product Code	880516



Product Code	880517

Cyclomatic

Transport for Pneumatic System



Avaiable only with vacuum system



Not available for auger system



Level sensor



- Designed specifically for the transport of biomass with a very powerful suction system.
- Maximum distance of suction: 20 metres.
- The maximum distance depends on the routing of the pipe. Curves and changes of direction of the hose will affect the maximum pellet transport distance.
- Functioning is simple and incorporates a programmer to control times of load, the hours and the days of activity.
- The warehouse of storage possesses 13 litres of capacity.

Totally automatic system that incorporates a level sensor to detect when it is necessary to bring more pellets to the hopper.



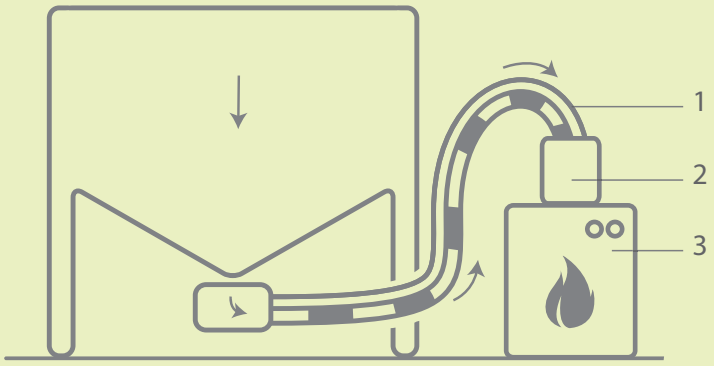
With this system you will be able to benefit of automating the filling supply of your boiler and forget to carry heavy pellet bags.

In addition, the Cyclomatic has a sensor to support the filling level of the hopper to the maximum. It's metallic filter of mesh of easy cleanliness guarantees an autonomy of functioning up to 6 months concerning maintenance.

Totally automatic, it allows an hourly programming of functioning personalized for your needs. You will be able to choose the days of functioning and the most suitable hours for you.

Automation for Manual Boilers

Pneumatic System advantage – Comfort



1 Aspiration hose diameter 50mm. Two hoses needed.

2 Pneumatic System for Biomass Boilers.

3 Biomass Boiler's Hopper.

For its installation it is necessary to make a hole in the hopper's boiler and to fix the Cyclomatic in its top part as the instructions of assembly indicate. Forthwith they will install the hoses of air and of return of the material and will then connect them to the extraction system of the silo. The Cyclomatic works always with two hoses.





Installation of a silo with a boiler and the Cyclomatic

By this simple installation of the Pneumatic System connected to the extraction unit of the silo, you will liberate yourself of the arduous task of loading manually the boiler's hopper with pellet bags. The Cyclomatic will transport the material automatically from the silo to the boiler.

Galvanised Steel Pellet Stores

SQUARE FOOTPRINT – Special Features

Our range of galvanised steel 2m X 2m square footprint pellet stores range in height from 2.2m to 5.4m with capacities from 3.0 to 10.0 tons. They come with a single feedbox which is ready to connect to our rigid screw augers as standard.

A vacuum connection point is also available if required as are various options for connecting other third party feeding systems. Stores are delivered flat packed and can be assembled quickly and easily using the instructions provided.

Both indoor and outdoormodels of all stores are available and timber cladding can also be provided for customers using their stores in an outdoor domestic setting.

Special Features

Bag Filling Panel
For bag filling and general maintenance

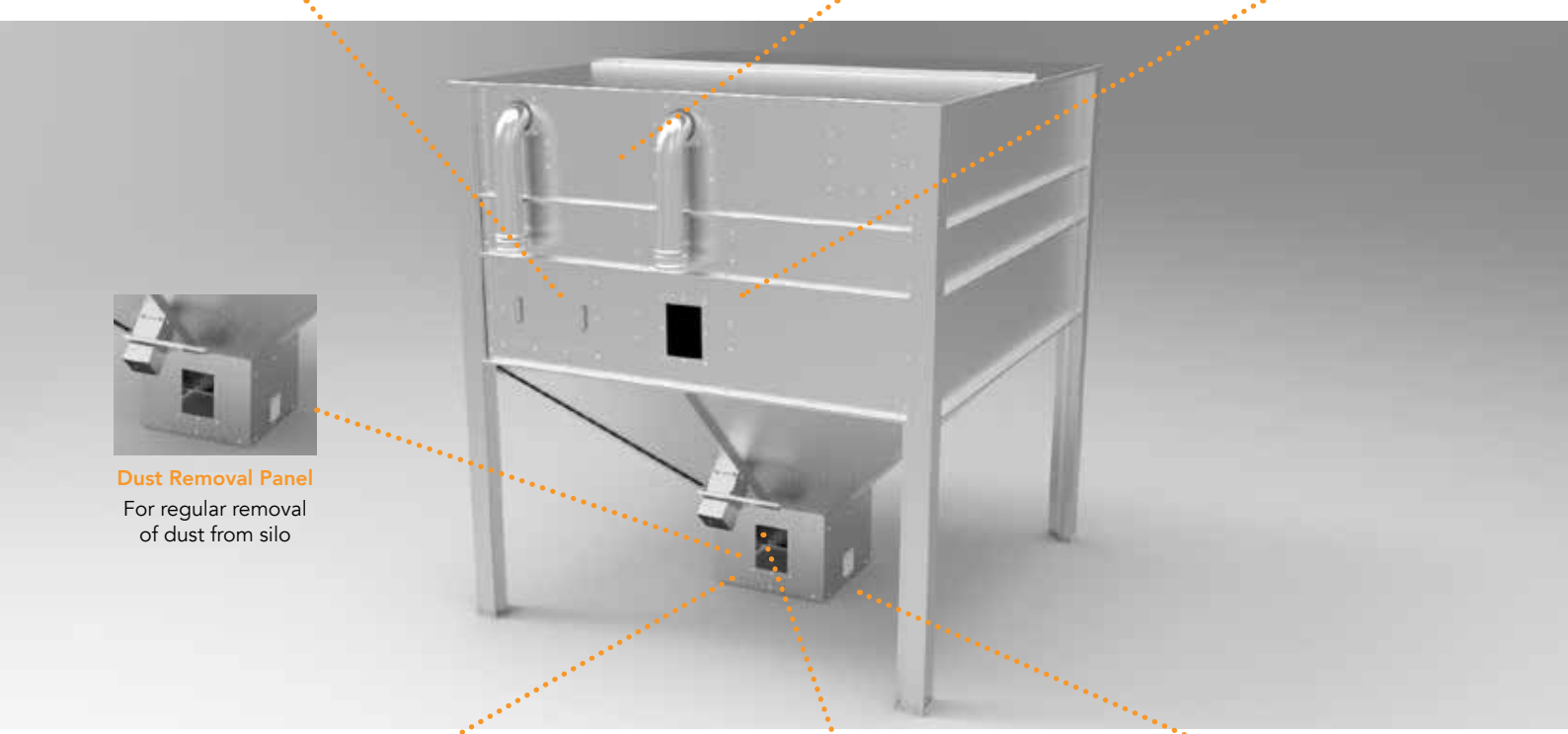


Bulk Delivery Connections
For filing and dust extraction



Inspection Window
For checking pellet levels





Dust Removal Panel
For regular removal of dust from silo



Feed Shut Off Slide
For Auger maintenance and adjustment



Manual Extraction Chute
For withdrawing pellets, can be positioned on any side



Feed Outlet
Can be positioned on any side and is suitable for connection to Auger or Vacuum Systems

Galvanised Steel Pellet Stores



3.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880103	2 x 2	2.225	5.165	3.3



3.5 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880102	2 x 2	2.425	5.900	3.8



4.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880104	2 x 2	2.855	7.480	4.5



5.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880105	2 x 2	3.285	9.060	5.6



6.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880106	2 x 2	3.715	10.640	6.7



8.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880108	2 x 2	4.575	13.800	8.8



10.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880110	2 x 2	5.435	16.960	11

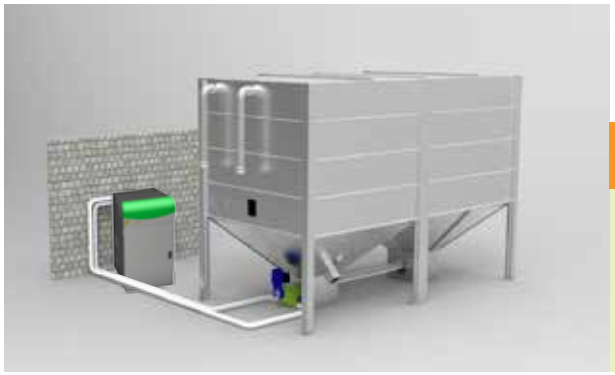
Galvanised Steel Pellet Stores

RECTANGULAR FOOTPRINT

Our rectangular stores have a 2m X 4m footprint and range in capacity from 6.0 to 20.0 tons. They come with two separate feedboxes as standard allowing customers to either feed two separate boilers if required or use either our flexible auger or vacuum auger systems to feed a single boiler.

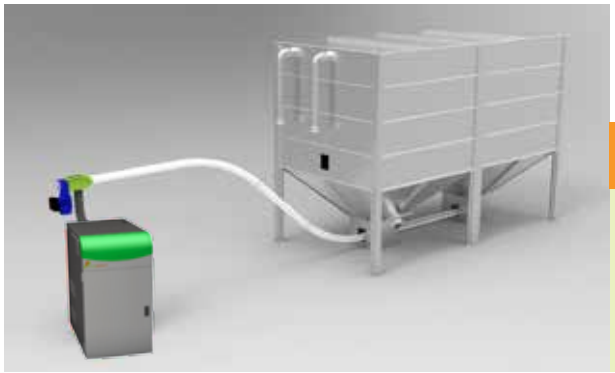
We can also supply a range of connections for integrating third party auger and vacuum systems into our stores. Optional extras include fuel level control systems, apex roofs, v shaped bases and explosion venting and we work with all of our customers to ensure they are getting their pellet store and feed system to the exact specification they require.

Feeding Options



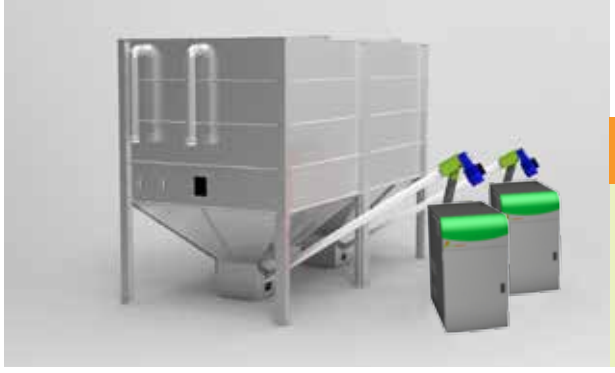
Auger with Vacuum Extraction

A 2m auger collects pellets from both outlets and feeds into a single vacuum take off point.



Flexible Auger direct to Boiler

A Flexible Auger System collects pellets from both outlets and feeds direct to the boiler.



Separate Feed Outlets

Both feed outlets are used to feed separate boilers either with two augers or two vacuum connections.

Galvanised Steel Pellet Stores



6.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880206	2 x 4	2.225	10.330	6.5



7.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880207	2 x 4	2.425	11.800	7.5



8.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880208	2 x 4	2.855	14.960	8.7



10.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880210	2 x 4	3.285	18.120	10.8



12.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880212	2 x 4	3.715	21.280	13.0



14.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880214	2 x 4	4.145	24.440	15.2



16.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880216	2 x 4	4.575	27.600	17.4



20.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880220	2 x 4	5.435	33.920	21.6

Galvanised Steel Pellet Stores

SLIMLINE RECTANGULAR FOOTPRINT

Our slimline range of pellet stores are geared toward the domestic market. They have a width of 1meter and a length of between 3 – 4 meters allowing customers to comfortably position their bulk store at the side of a dwelling without taking up the same kind of space as the standard square footprint models.

Heights range from 2.2m to 3.7m with capacities from 3.0 to 6.0 tons.

Much like the rest of our rectangular range these come as standard with two feedboxes which can be linked together using our auger options or alternatively can be supplied with connections for fitting third party feed systems.

Installation Example



Galvanised Steel Pellet Stores



3.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880113	1 x 3	2.85	5.165	3.0



4.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880114	1 x 3	3.28	7.480	4.0



5.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880115	1 x 3	3.71	9.060	5.0



3.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880116	1 x 4	2.22	5.165	3.0



4.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880117	1 x 4	2.85	7.480	4.0



5.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880118	1 x 4	3.28	9.060	5.0



6.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880119	1 x 4	3.71	10.640	6.0

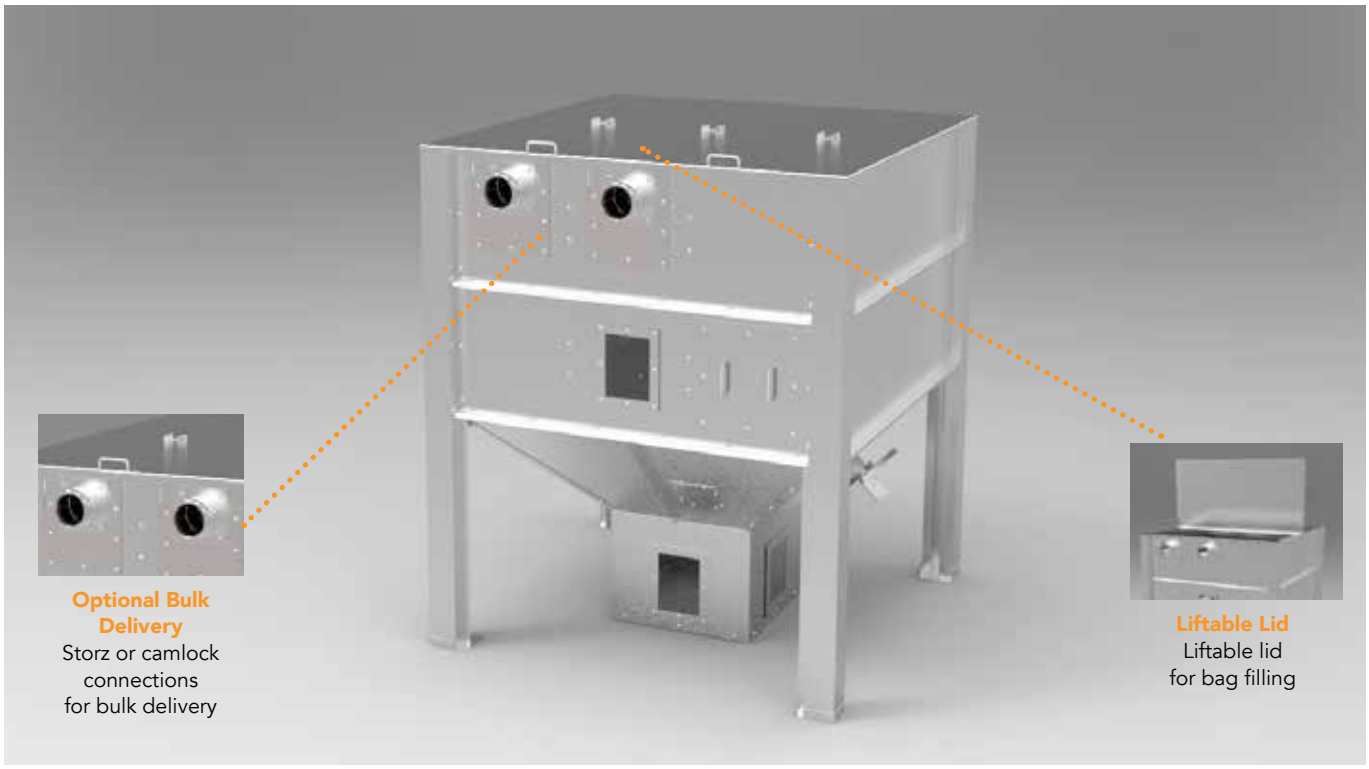
Small Manual Feed Hoppers

SQUARE FOOTPRINT

We also provide a range of small pellet stores of 0.5 and 1.0 ton capacities, which are similar in design to our standard square silos, but offer the option of either bag or bulk filling depending on how they are used.

These stores can be delivered flat packed or fully assembled and ready to use.

Standard Features





0.5 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880100	1 x 1	1.5	1.015	0.65



1.0 Ton

Product Code	Footprint (m)	Height (m)	Volume (m^3)	Capacity (tons)
880101	1.4 x 1.4	1.660	1.880	1.2

Vacuum Augers

Our **Straight Auger Systems** are 3m in length and designed to be used with our standard square footprint stores. A single pick up point allows pellets to enter into the auger pipe and feed direct into the boilers day hopper via a 45° drop box with viewing window for checking pellet quality.

An optional **Sensor Control System** allows customers to automate the feeding of the boiler by setting a high level point and activating a timer unit. A single phase motor and gearbox drive the auger, and average feed rate is approximately 150kgs per hour. All of our augers are designed to move pellets quickly and with as little dust creation as possible.

Our **Flexible Augers** range in size from 4 -6m but can be extended up to 10m by ordering extra lengths and spiral. They are designed to be used with our standard rectangular footprint stores. Customers have the option of having 1 - 2 pick up points and 1 – 2 drop off points. Two long radius 45° pipe bends enable customers to create the angles necessary to feed through multiple collection points and continue on direct to the boiler.

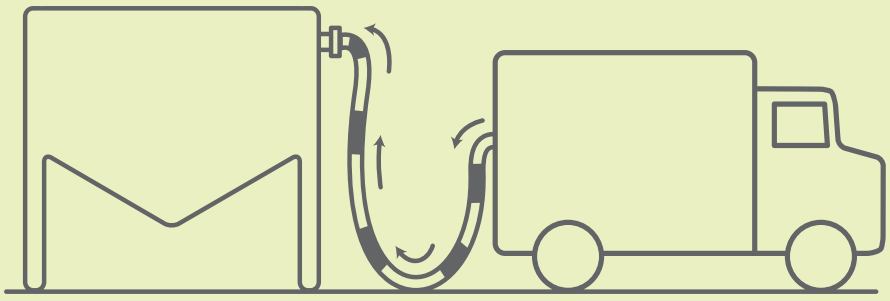
As with the Rigid Augers an optional Sensor Control System is available to automate the pellet feed and a 90° drop box with viewing window is provided for checking pellet quality. Varying motor sizes and speeds are available depending on the auger length and feed rate required.

Our **Vacuum Augers** come in lengths of 1m and 2m, respectively, to suit both our standard square and rectangular footprint stores. These augers allow customers the option of auger feeding their vacuum system to give a steady flow and help prevent blockages.

They sit horizontally at the base of the store and feed into a vacuum connection box consisting of 2 x 50mm pipes for connecting the vac systems flexible hoses and a viewing window for checking pellet quality.

Pneumatic System

Our silos can be filled automatically as well with a pneumatic truck that will blow the pellets across a hose up to the interior of our silo. All our silos come with the filling pipes necessary for the coupling with the hoses of these trucks.



Scheme of the filling of the silo by pneumatic system. With our silos it is only necessary to connect a hose from the truck and be aware of the filling pressure 0,8 bar.



Screw Auger Systems

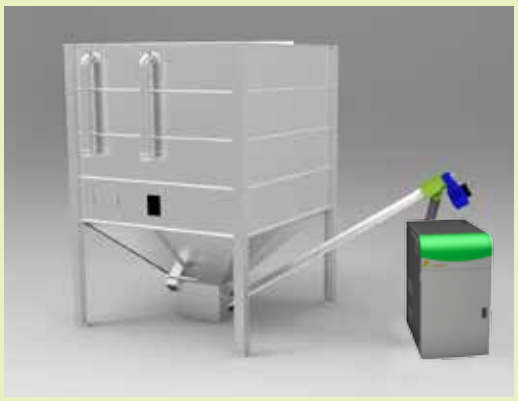
RIGID / FLEXIBLE

RIGID AUGERS

Rigid Augers with Sensor Controls

Single Pick Up – 45° Drop Box

Product Code	Description	Motor Size
770403	3m Rigid Auger	0.25 kw



FLEXIBLE AUGERS

Flexible Augers with Sensor Controls

Double Pick Up – 90° Drop Box

Product Code	Description	Motor Size
770214	4m Rigid Auger	0.25 kw
770215	5m Rigid Auger	0.25 kw
770216	6m Rigid Auger	0.37 kw



VACUUM AUGERS

Product Code	Description	Motor Size
770400	Single Pick-Up Auger	0.25 kw
770401	Double Pick-Up Auger	0.37 kw



Optional extra features for Silos

Apex Roofs

An optional Apex roof can be supplied on either the square or rectangular footprint stores.
These are necessary in colder climates with high snow loads and can also add extra capacity to the store if necessary.



V-Shaped Base

A range of V Shaped Bases can also be manufactured. These allow customers to use third party channel auger systems to feed from the base of our stores as well as adding extra capacity to the store.



Timber Cladding

Timber cladding sheets are also available for camouflaging your store in a domestic setting. These 2m long sections come in various heights depending on the size of your store and can be bolted directly onto the legs of our pellet stores.





Couplings & Pipework

Three types of coupling connections for blown deliveries are available to buy separately Storz 110A / camlcock and Guillemin. These can also be made to order with pipework, bends and attachment plates as required.



Rubber Mat

A rubber impact protection mat with an attachment strip can also be provided separately if required.





Booths Hall, Chelford Road,
Knutsford, England WA16 8GS
Tel / Fax: 00 44 161 2617497
www.woodenergysolutions.co.uk

Unit D, Cahir Business Park, Cahir,
Co. Tipperary, Ireland • Tel: 00 353 52 7445330
info@woodenergysolutions.com
www.woodenergysolutions.com

MANUFACTURERS OF RENEWABLE HEATING PRODUCTS