BDC Continuous Mixed Flow Driers

The Ultimate in Grain Care

















History

BDC Systems has unrivalled experience in grain drying and offers technologically advanced solutions for drying all cereal crops (including feed, milling, malting and seed), as well as oil seeds, small seeds, pulses and other granular products.

The Svegma Continuous Drier was originally developed to overcome the difficult drying conditions in Scandinavia. The first Svegma drier was installed in the UK in 1983 and now there are over 900 installations.

Incorporating the latest cutting edge technology, Svegma driers have an industry leading reputation for outstanding quality and efficiency. As a result they are used extensively by farmers, farming co-operatives, commercial users and maltsters. Svegma driers meet the most stringent standards of Local Authorities and Farm Assured Schemes.







Production Facilities

Svegma's state-of-the-art production facilities feature the latest high technology CNC controlled machines. These ensure that all components meet the exacting quality and performance standards for which the Svegma brand is renowned.

All parts are manufactured for stock and stored in temperature controlled warehousing. In this way, the short delivery schedules demanded by customers throughout the world are met with confidence. Continuous R+D programmes, full after sales service and technical support from BDC systems ensure that Svegma keeps its number one position in the market.

Svegma Driers - Key Features

- · Designed and engineered for the UK market by BDC Systems
- Auto control panel and shut down facility
- Coloured cladding available
- Low noise and dust levels
- Low power requirements
- · Compact modular design for easy installation and future extension
- Unique lateral fixing maintains clean grain column
- Air plenum flanges turned down to self clean
- Fan air volume control for ease of drying small seeds
- Optional turboclean dust extraction unit
- Efficient variable cooling or run 'all hot'
- Easy and flexible operation, small batches possible
- CE marking and compliant with quality assurance standards



Construction

Svegma driers are manufactured from heavy gauge galvanised steel sheet for long life and durability. The construction allows the drier to be installed indoors or outside without the need for cladding. However, the drier can be clad with coloured sheeting to meet planning or environmental requirements. The compact design and modular formation provides flexibility of installation in confined spaces and easy future extension.







The grain column comprises roof section with access door to drying column, buffer sections, drying and cooling sections above the discharge unit. Sight glasses show the grain level throughout the column.

The cooling section is normally up to 33% of the column. Ground operated cooling doors can be adjusted to give more or less cooling when in operation.

A large range of models are available with five different widths from 2m to 8m and capacities from 8tph to over 100tph.

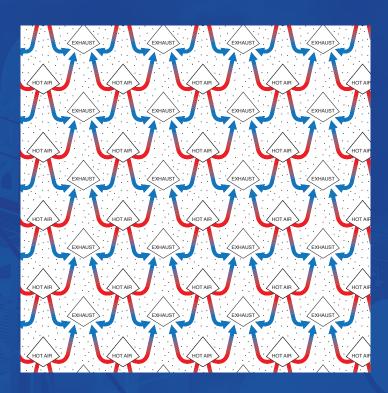


Mixed Flow

The proven mixed flow design allows the drier to operate at its optimum efficiency with low power consumption and minimum maintenance as there are no moving parts in the drier column.

With the Svegma mixed flow drier, the grain flows over special tapered air laterals. A series of hot air inlet laterals is followed by exhaust outlet laterals. This is repeated throughout the grain column and the tapered laterals are staggered to ensure even airflow, uniform drying and mixing of grain. Hot air half laterals are fitted to the side walls of the drier to prevent condensation and streaming of grain.

There are no fixings, flanges or ledges in the grain column, ensuring continuous unobstructed grain movement. This is essential when drying specialist seed crops to avoid contamination.



Discharge

Fully galvanised discharge section with either pulse roller or shutter discharge provides positive, even grain movement throughout the grain column. A simple single lever operation is all that is required to clean out between crops. Sight glasses and access doors in the discharge hopper provide easy visual inspection of the crop leaving the drier.







Burners

Nu-Way multijet burners, for oil and gas, provide the driers with full temperature range. Twin and three stage burners are available. Stainless steel furnace tubes with turbulator air mixing and swing down burner plates allow for easy cleaning and maintenance. Indirect burners are also available. Plus - the option of biomass heat sources using radiators or air to air heaters.

Fans

Highly efficient slow running, axial flow fan units ensure drier performance at minimum noise levels. Turboclean dust extraction units are available to meet exacting environmental standards on both noise and dust emissions.

Fans can be positioned on the front, side or vertically to suit the application. A range of accessories are available including silencers, shutters and the option of inverters to control air flow and save power.







Control Panel

Touch Screen Panel with PLC Control

This control panel is simple to operate via the touch screen which is set into a mimic display diagram, showing the constant status of the drier and incorporates failsafe auto shutdown facility. The hot air temperature, exhaust air temperature and discharge rate are displayed with set point on the touch screen display.

The panel has fully automatic discharge control to regulate grain moisture content being discharged. It has the facility to store and download, via a USB stick, a running history of the drier status and any alarm conditions (low level, hopper full, hot air and exhaust air overheat and any motor overload conditions). Information can be manually entered during operation to show crop being dried and also moisture content in and moisture content out of the drier. This facility will aid crop traceability and record keeping.

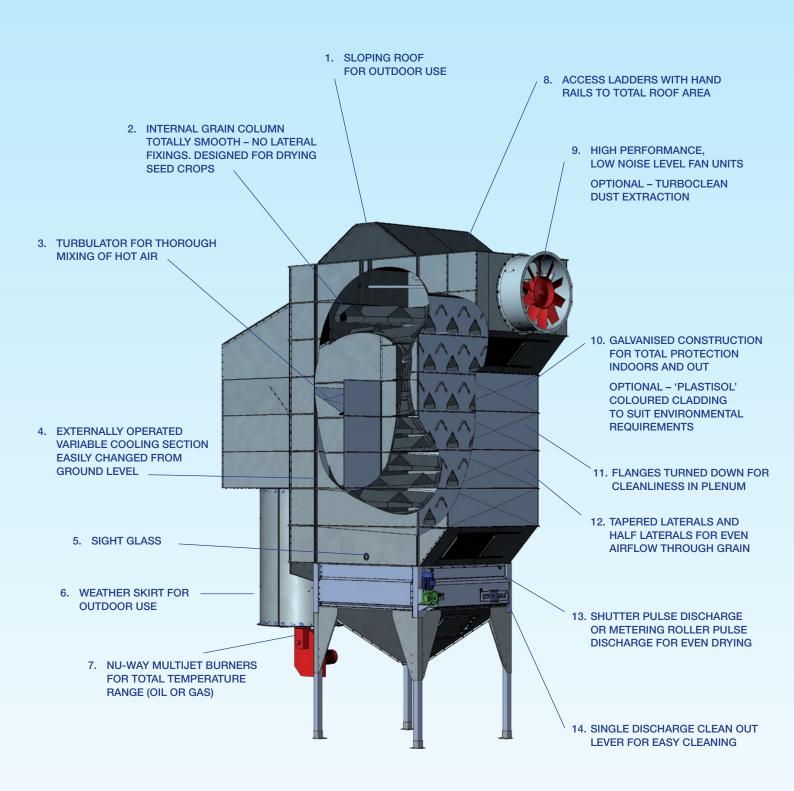
The screen has Ethernet connectivity enabling remote viewing and control. BDC Systems can also offer remote operation by smartphone, or text message alerts to keep the operator informed of the drier operation.

Digital Panel

The latest fully integrated digital control panel is hard wired with relay logic control. It is simple to operate with digital temperature controls and fail-safe auto shut down. The automatic discharge control regulates grain moisture content. Mimic display with digital readouts and indicator lights shows constant drier operating status.

Modular Design with Multiple Width Variations

Advanced Technology and Environmental Design Features







Overall Dimensions

Full planning-in details available on request



SVEGMA 2 METRE												
DRIER MODEL	SV 0/2	SV 1/2	SV 2/2	SV 3/2	SV 4/2	SV 5/2	SV 6/2	SV 7/2	SV 8/2	SV 9/2	SV 10/2	
Nominal capacity – 125°c	5.0	6.5	8.5	10.0	11.5	13.0	15.0	17.0	18.5	20	22	
Nominal capacity – 80°c	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12	13.5	
Holding capacity - tonnes	6.5	8.7	9.8	10.8	12.9	14.0	15.2	17.4	18.5	19.5	21.7	
Exhaust fans per drier	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Total installed power - Kw	7.75	9.75	9.75	13.25	13.25	14	18.00	19.50	23.00	23.00	26.50	
Drier height – mm	4615	5665	6190	6715	7765	8290	8815	9865	10390	10915	11965	



1000												
SVEGMA 3 METRE												
DRIER MODEL	SV 0/3	SV 1/3	SV 2/3	SV 3/3	SV 4/3	SV 5/3	SV 6/3	SV 7/3	SV 8/3	SV 9/3	SV 10/3	
Nominal capacity – 125°c	7.5	10.0	13.0	15.0	18.0	20.0	23.0	25.0	28.0	30.0	33.0	
Nominal capacity – 80°c	4.5	6.0	8.0	9.0	10.0	11.5	13.0	14.5	16.0	17.5	19.0	
Holding capacity – tonnes	10.0	13.1	14.6	16.2	19.3	20.9	22.4	25.5	27.1	28.6	31.8	
Exhaust fans per drier	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	
Total installed power - Kw	9.75	13.25	14.00	18.00	23	26.50	25	26.50	34.50	34.50	37.50	
Drier height – mm	4540.0	5,590	6,115	6,640	7,690	8,215	8,740	9,790	10,315	10,840	11,890	



SVEGMA 4 METRE													
DRIER MODEL	SV 0/4	SV 1/4	SV 2/4	SV 3/4	SV 4/4	SV 5/4	SV 6/4	SV 7/4	SV 8/4	SV 9/4	SV 10/4		
Nominal capacity – 125°c	10.0	13.5	17.0	20.0	23.5	27.0	30.5	34.0	37.0	40.0	44.0		
Nominal capacity – 80°c	6.0	8.0	10.0	12.0	14.0	16.0	17.5	19.0	20.5	23.0	25.0		
Holding capacity – tonnes	13.2	17.6	20.2	22.2	26.5	28.7	30.9	35.3	37.5	39.6	44.0		
Exhaust fans per drier	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0		
Total installed power – Kw	13.25	18.00	18.00	21.50	25.00	26.50	34.50	41.00	44.50	44.50	59.50		
Drier height – mm	4,615	5,665	6,190	6,715	7,765	8,290	8,815	9,865	10,390	10,915	11,965		



SVEGMA 5 METRE												
DRIER MODEL		SV 1/5	SV 2/5	SV 3/5	SV 4/5	SV 5/5	SV 6/5	SV 7/5	SV 8/5	SV 9/5	SV 10/5	
Nominal capacity – 125°c		16.5	21.0	25.0	29.0	33.0	38.0	42.0	46.0	50.0	54.0	
Nominal capacity – 80°c		10.0	12.0	14.0	17.0	19.0	22.0	24.0	27.0	29.0	31.0	
Holding capacity - tonnes		21.8	24.4	27.0	32.2	34.9	37.6	42.9	45.6	48.1	53.5	
Exhaust fans per drier		1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Total installed power – Kw	$A_{ij} = A_{ij}$	18.00	21.50	26.50	34.50	37.50	44.50	51.50	50.00	58.00	70.50	
Drier height – mm		5,665	6,190	6,715	7,765	8,290	8,815	9,865	10,390	10,915	11,965	



SVEGMA 6 METRE													
DRIER MODEL	SV 1/6	SV 2/6	SV 3/6	SV 4/6	SV 5/6	SV 6/6	SV 7/6	SV 8/6	SV 9/6	SV10/6			
Nominal capacity – 125°c	20.5	25.5	30.5	35.5	40.5	46.0	51.0	56.0	61.0	66.0			
Nominal capacity – 80°c	11.5	14.5	17.5	20.0	23.0	26.0	29.0	32.0	35.0	38.0			
Holding capacity - tonnes	26.2	29.1	32.3	38.5	41.6	44.8	51.0	54.1	57.2	63.5			
Exhaust fans per drier	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0			
Total installed power - Kw	21.50	26.50	34.50	41.00	51.50	50.00	58.00	70.50	66.00	76.50			
Drier height – mm	5,590	6,115	6,640	7,690	8,215	8,740	9,790	10,315	10,840	11,890			



SVEGMA 8 METRE													
DRIER MODEL			SV 2/8	SV 3/8	SV 4/8	SV 5/8	SV 6/8	SV7/8	SV 8/8	SV 9/8	SV 10/8		
Nominal capacity – 125°c			33.5	40.0	46.0	53.5	60.0	67.0	73.5	80.0	87.0		
Nominal capacity – 80°c			19.0	23.0	27.0	31.0	34.5	38.5	42.0	46.0	50.0		
Holding capacity – tonnes			39.0	43.2	51.5	55.8	60.0	68.4	72.7	76.7	85.4		
Exhaust fans per drier			2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	4.0		
Total installed power - Kw			41.00	48.50	58.00	67.50	67.50	76.50	79.50	87.50	103.50		
Drier height – mm			6,190	6,715	7,765	8,290	8,815	9,865	10,390	10,915	11,965		

Drier capacities in TPH are based on drying clean wheat, density 750kg/m³ at 125°C removing 5% moisture from 20% to 15% and ambient conditions of 15°C and 70% RH.

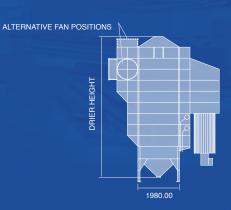
Drier height is from top inlet to bottom outlet. Standard discharge height is 450mm beneath the outlet slide, but may be increased/decreased to suit requirement. An integral discharge conveyor is available to reduce overall height.

For outdoor use, add 70mm to overall height.

Rates will vary depending on operating conditions, crop variety, cleanliness, maturity and ability of air to pass through it. Larger capacities available.

This information is provided to assist Svegma customers and should not be considered exhaustive.

ECONOMY model available using same drier construction and incorporating shutter pulse discharge, fixed cooling section and simple control panel.



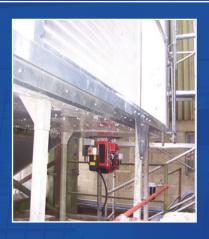
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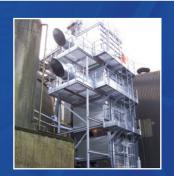
Integral Discharge Conveyor



Biomass Heat Source

Biomass heat source supplemented with oil burners





Elevator Access Platform



Plenum Access Doors

Insulation Kits
- Internal
insulation
kits available



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See separate leaflets for: Static and recirculation batch driers Turboclean dust extraction Air recirculation Cleaning, handling and storage