Master DRIERS

INDUSTRIAL IN DESIGN, STRENGTH & PERFORMANCE

MOBILE & STATIC GRAIN DRIERS 10 TO 45 TON

ABOUT US

THE HOME OF THE MASTER DRIER

Master Farm has been Supporting the British Farmer for nearly half a century!

Using our vast experience and knowledge, Master Farm supplies a range of specialised agricultural equipment to the UK and overseas markets. Our product range includes the highly acclaimed Master Turbo Grain Drier - suitable for drying all types of crops such as wheat, barley, oil-seed rape, maize, beans, peas, rice and most combinable crops. The new range of Master Turbo Driers has been designed to meet today's stringent drying requirements and incorporates all the new "CE" safety features.

Master Driers are suitable for handling a wide range of materials and can deal with different climatic conditions and cropping systems worldwide. With 15 basic capacities and specification alternatives to meet individual requirements, the Master Drier is suitable for most applications. The retractable screen (RS) models offer complete mobility from 'farm to farm'. Alternatively a static model may be more suitable for an 'in-barn' installation. Options such as the Master Dust Extraction System, touch screens, three stage burner and the newly introduced Moisture meter are available for all new driers. A 'Load full' Audible Warning System can be fitted to all PTO drive machines. Electric drive models have their own system. In addition Masterfarm are an approved supplier of Generators suitable for electric drive machines where three phase electricity supplies are not available.

We also supply a range of matching 'wet grain' bins for any of the Driers in our range along with trench conveyors, conveyors and elevators.

All new machines carry a 2 year factory warranty. The high standard of construction of Master Driers makes them durable giving a strong demand for second-hand machines.

Master Farm can also supply farmers with:

- **Mitsubishi Compact Tractors**
- **Hedge, Ditch and Verge Cutters**
- **Ground and Lawn Care Equipment**
- **Grass and Forestry Mulchers**

MASTER RANGE

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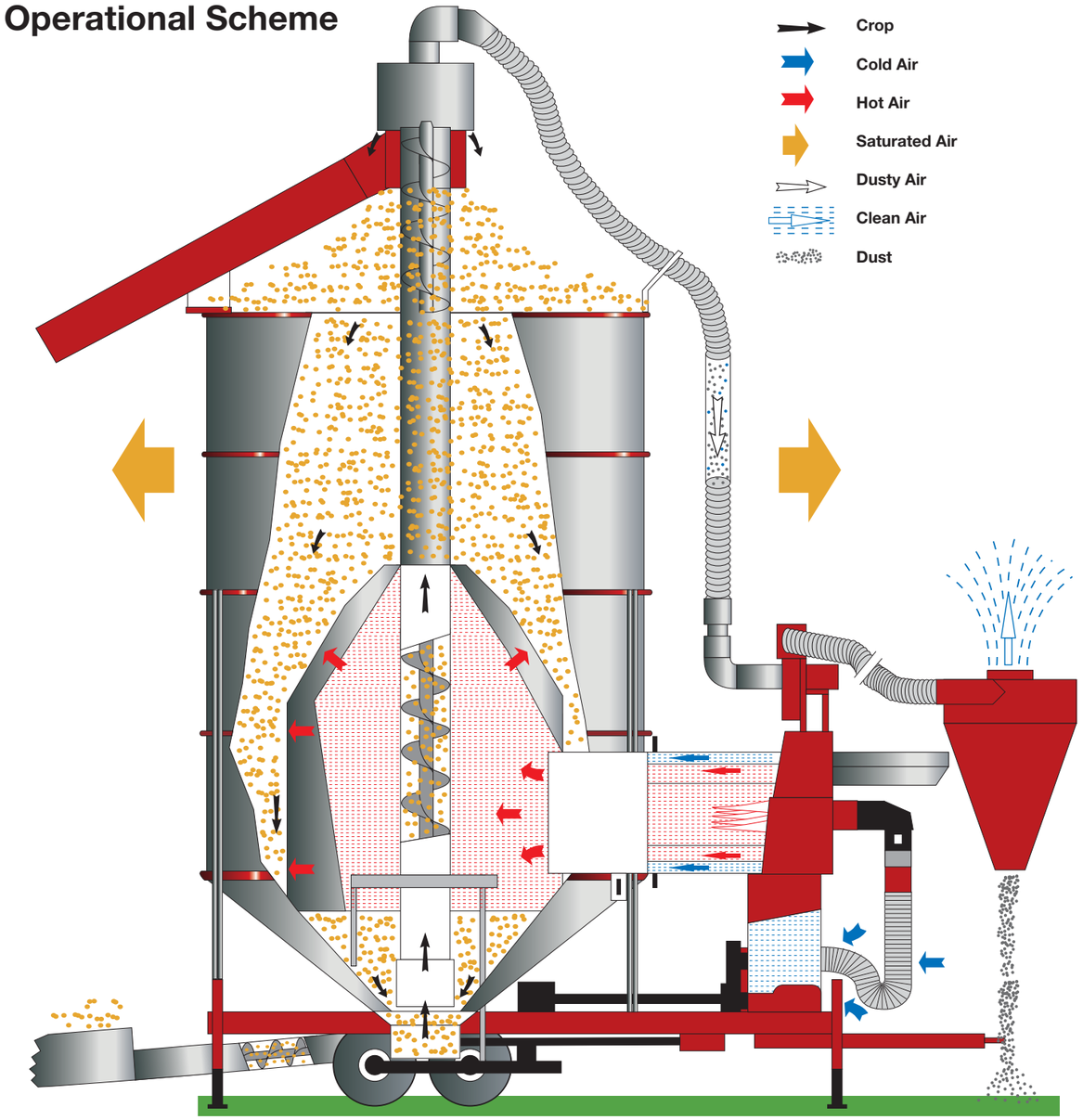
MASTER DRIERS

THE INSIDE STORY

Operational Scheme



MASTER DRIERS

TECHNICAL INFORMATION

Air Circulation, Heat Requirements & Temperature Control

All capacities are based on wet wheat assuming 1.3 cum per ton.

The Master Drier is constructed with a heavy duty chassis fitted with stabilising screw jacks and incorporating level bubbles. The drying chamber is fabricated from "Inox" perforated stainless steel and is framed for strength. Internal rotating agitators ensure continual grain recirculation giving the facility for fast unloading. The centre auger is driven by short belts incorporating a gearbox giving a more positive drive. A galvanised frame is offered as an option to the standard paint finish.

On all RS models the top auger is raised and lowered by a geared winch unit which engages with the centre auger drive and is automatically securely fastened in one operation. The same principle applies to the top screen.

Maximum Air Circulation

The centrifugal fan is quiet in operation and gives maximum possible air circulation throughout the drying chamber. The fan disengagement is very simple. A fan cover is provided on tractor drive models and on/off switch for electric drive machines, this gives control of air movement, especially during loading/unloading.

This large capacity fan together with continuous auger recirculation ensures that all grain is evenly heated, eliminating the possibility of hot spots, giving good even drying conditions.

Heat Requirements

The burner system incorporates a fail safe control system with photo cell cut off. Master Driers also have a 3 stage burner system which will operate in any combination to give a wide range of temperature settings. This means that it is not necessary to change the fuel jets when drying different crops as the air adjustment is automatically adjusted to the temperatures that have been programmed. The triple fuel burners can be operated with diesel or kerosene and are economical. Fuel consumption estimated at 5 litres per ton, giving 5% moisture extraction.

The fuel storage tank is mounted on the chassis with filtered fuel lines to the burner incorporating low level cut out in the bottom of the tank.

Cleaning facilities are incorporated on to the centre auger with the option of fitting inter changeable screens to suit crop requirements.

Temperature Control

The automatic temperature system is directly related to moisture and is controlled by three pre-set thermostats which are individually programmed to meet crop requirements and have automatic cut-off facilities for control of heat. All controls are mounted in weatherproof panels, incorporating operating and safety systems.

Drive Alternatives

- Tractor PTO
- Electric three phase
- Mains or generator
  Independent engine drive

Note: All fan circulations in respect of air flow are taken from the manufacturer's technical data and are calculated with unrestricted flow.

MASTER DRIERS

SPECIFICATION ALTERNATIVES

Capacities from 10 to 45 Ton

Capacity	Diameter	Fixed Screen	Retractable	PTO Drive	Electric Basic	"Mastermatic"	Dust Extraction	Auto Lube	Hydraulic Lift	Auto Unload	Fast Loading
10 Ton	2.5 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	
12 Ton	2.5 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	
13 Ton	2.5 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	
16 Ton	3.0 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	
18 Ton	3.2 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20 Ton	3.2 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
22 Ton	3.3 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25 Ton	3.3 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
27 Ton	3.3 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
30 Ton	3.3 m	✓		✓	✓	✓	✓	✓	✓	✓	✓
35 Ton	4.0 m	✓		✓	✓	✓	✓	✓	✓	✓	✓
38 Ton	4.0 m	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
38 Ton	4.0 m	✓		✓	✓	✓	✓	✓	✓	✓	✓
42 Ton	4.0 m	✓		✓	✓	✓	✓	✓	✓	✓	✓
45 Ton	4.0 m	✓		✓	✓	✓	✓	✓	✓	✓	✓

Unavailable on these models

NOTE: Auto unload only available with electric drive models.

Super Range

Intermediate Range

Large Range

XL Range

MASTER DRIERS

SPECIAL FEATURES

Included as Standard on All Models

Unique Burner Systems
All Master Driers are now fitted with dual or triple stage fuel burners, manufactured 'in-house', with no 'third party' involvement which ensures that parts are always readily available.
Both Twin and triple jet-oscillating flame systems are suitable for operation with dual fuels (diesel/kerosene) and incorporate burner 'fail safe' technology.

Tractor Drive Models (PTO Drive)
Powered by 12 Volt supply system incorporating battery and alternator.

Electric Drive (Mains supply or generator)
Three phase (earth & neutral) 65-150 amp line depending on model.

Safety
- Temperature control with automatic pre-set cut-off
- Drive line automatic 'cut-off'
- Inspection doors with automatic 'cut-off' link
- Screen safety pins
- Winches with ratchet control
- Automatic burner 'cut-off'

Drive Line Control
The Master DLC System is a unique mechanical 'fail-safe' system fitted to all Master Driers. It ensures continued monitoring of all mechanical components which drive the centre auger and inside agitators and should any failure occur, it ensures automatic and quick shut down of the burner.

High Quality
Stainless steel materials and galvanising have been incorporated wherever practical.

The base trash box is fabricated from stainless steel with two access doors, intake hopper, augers and tubes with a galvanised finish.

MASTER DRIERS

BURNER SYSTEMS

Unique Dual and Triple Stage Fuel Burners

All Master Driers are fitted with the unique Pedrotti range of dual and triple stage fuel burners, manufactured in-house with no third party involvement.

Twin and triple jet oscillating flame suitable for operation with dual fuel (diesel or kerosene) all incorporating fail safe technology with automatic temperature control with over-heat cutout facilities.

MASTER DRIERS

OPERATING & CONTROL SYSTEMS

Tractor PTO or Electric Three Phase Drive

All controls are 'pre-wired 'into a water/dust proof, heavy duty, lockable control box which is mounted on the front of the drier with a 'clear view' front panel. Components are securely located, but, with easy access.

There is a choice of Operating and Control systems as follows:

1) Low Power 12 Volt supply system incorporating alternator and battery for tractor drive. Low power as preferred by the Health & Safety Executive.

2) Three phase drive mains supply (or by suitable generator). 60/150 amp supply (depending on model). Optional, with automatic unloading, with mains supply only.

3) As above but with Mastermatic Auto Control System for self-loading – with manual override facilities. Electric drive models that are fully automated are operated by a small Seimens computer unit with touch screen controls providing a comprehensive menu of operating settings for the crop being dried.

This programmed controlled system requires:
Continual flow of wet grain into the drier, which can be programmed in conjunction with your existing facilities. The call off selection of 1-2-3 batches is dependent on the volume of wet grain available.

Programme sequence:
- **Automatic Loading (from wet store)**
- **Drying cycle (pre-programmed)**
- **Cooling cycle (pre-programmed)**
- **Automatic unloading (into suitable dry crop store)**

All PTO and Electric drive Driers can include an Audible alarm or an auto 'cut off' to avoid overflow of grain and a Moisture meter for monitoring moisture and temperature. A 'Master Eye' Telephone combinator messaging system will keep you in touch with your Drier when drying is complete or the drier is in need of attention.

The Mastermatic system incorporates manual override facilities for 'hands on' batch requirements.

SUPER TURBO RANGE

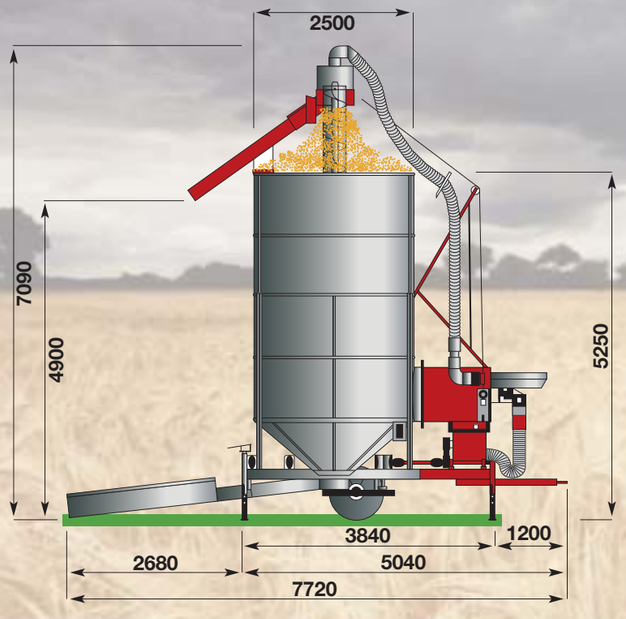
Model SUPER 120 Type R/S

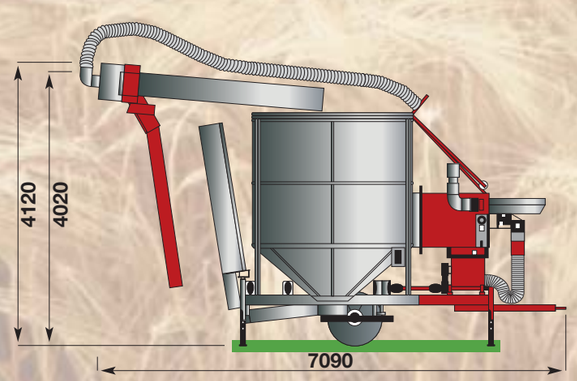
Retractable Screen Model

Technical Data

Batch Capacity (tons wet wheat)	12	(17m³)
Unloading Time (minutes)	9	
Power Required		
Model PTO Drive - Tractor min. size of HP	65	
Model Electric Drive - Mains supply line of AMPS	63	
Size Main Electric Motors	**Kw**	**(HP)**
Fan	11.5	(15)
Central Auger	15	(20)
Filling Auger	5.5	(7.5)
Dust Extractor	2.2	(3)
Burner	0.75	(1)
Centre Auger Drive	**Belts/Gearbox**	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	200	
Centre Auger Ø 350mm (capacity tons/h)	75	
Filling Auger Ø 200mm (capacity tons/h)	45	
Batch Circulation (per hour)	5	
Fuel Consumption (litre per hour)	35	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	480	
Burner Type (gas as option)	**Diesel, Automatic Twin Stage**	
Fuel Tank Capacity (litres)	700	
Burner Capacity (caloric power Kcal/h max)	700,000	
Fan Design	**Centrifugal**	
Fan Capacity (air flow m³/h max)	35,000	
Fan Diameter (mm)	720	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	**1.5mm Inox Stainless Steel**	
Maximum Towing Speed	**25Kmph Max Unbreaked**	
Adjustable Support Legs	6	
Weight (Kgs)	3,500	
PTO Speed (r.p.m)	540	

All performance figures are largely dependant on the ambient temperature, relative air humidity, maturity and cleanliness or crops to be dried. All models incorporate safety devices for auto cut off of burner system due to overheating or mechanical failure.





SUPER TURBO RANGE

Model SUPER 135 Type R/S (HP)

Retractable Screen Model

Technical Data

Batch Capacity (tons wet wheat)	13.5	(18m³)
Unloading Time (minutes)	10	
Power Required		
Model PTO Drive - Tractor min. size of HP	75	
Model Electric Drive - Mains supply line of AMPS	75	
Size Main Electric Motors	**Kw**	**(HP)**
Fan	15	(20)
Central Auger	18.5	(25)
Filling Auger	5.5	(7.5)
Dust Extractor	2.2	(3)
Burner	0.75	(1)
Centre Auger Drive	**Belts/Gearbox**	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	200	
Centre Auger Ø 350mm (capacity tons/h)	65	
Filling Auger Ø 200mm (capacity tons/h)	45	
Batch Circulation (per hour)	5	
Fuel Consumption (litre per hour)	35	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	480	
Burner Type (gas as option)	**Diesel, Automatic Twin Stage**	
Fuel Tank Capacity (litres)	650	
Burner Capacity (caloric power Kcal/h max)	500,000	
Fan Design	**Centrifugal**	
Fan Capacity (air flow m³/h max)	35,000	
Fan Diameter (mm)	720	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	**1.5mm Inox Stainless Steel**	
Maximum Towing Speed	**25Kmph Max Unbreaked**	
Adjustable Support Legs	6	
Weight (Kgs)	3,800	
PTO Speed (r.p.m)	540	

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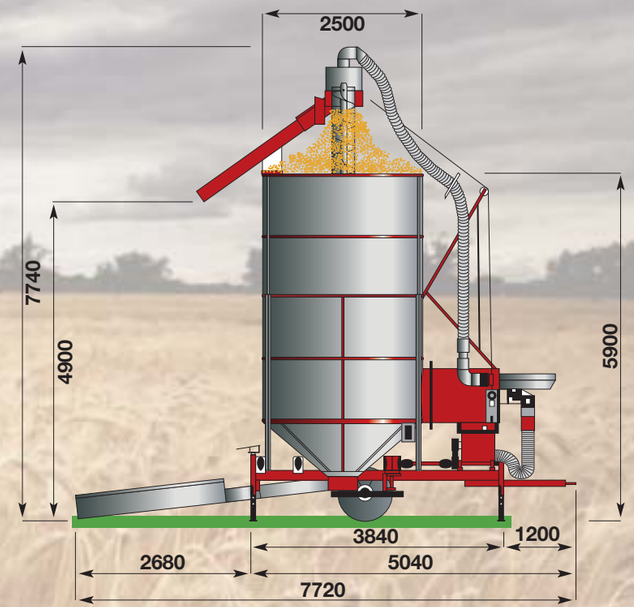

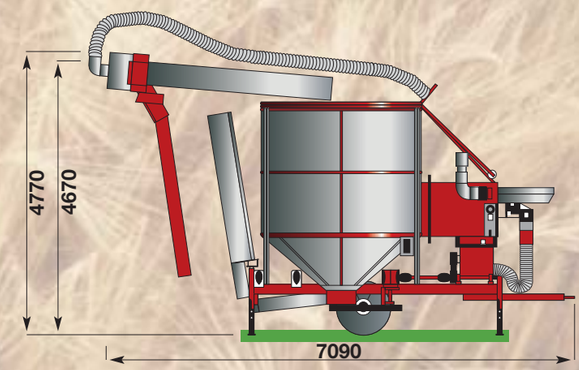

SUPER TURBO RANGE

Model SUPER 160 Type R/S

Retractable Screen Model

Technical Data

Batch Capacity (tons wet wheat)	16	(23m³)
Unloading Time (minutes)	12	
Power Required		
Model PTO Drive - Tractor min. size of HP	70	
Model Electric Drive - Mains supply line of AMPS	70	
Size Main Electric Motors	Kw	(HP)
Fan	15	(20)
Central Auger	15	(20)
Filling Auger	5.5	(7.5)
Dust Extractor	2.2	(3)
Burner	0.75	(1)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	200	
Centre Auger Ø 350mm (capacity tons/h)	75	
Filling Auger Ø 200mm (capacity tons/h)	45	
Batch Circulation (per hour)	4	
Fuel Consumption (litre per hour)	35	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	550	
Burner Type (gas as option)	Diesel, Automatic Triple Stage	
Fuel Tank Capacity (litres)	700	
Burner Capacity (caloric power Kcal/h max)	700,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	40,000	
Fan Diameter (mm)	720	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Maximum Towing Speed	25Kmph Max Unbreaked	
Adjustable Support Legs	8	
Weight (Kgs)	3,900	
PTO Speed (r.p.m)	540	

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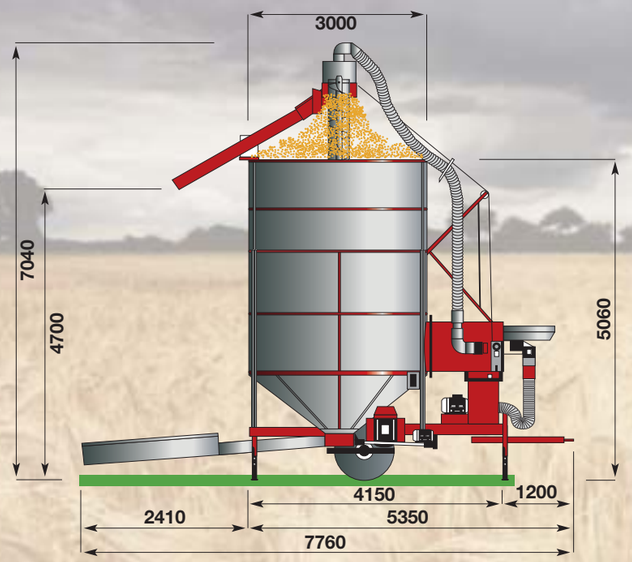

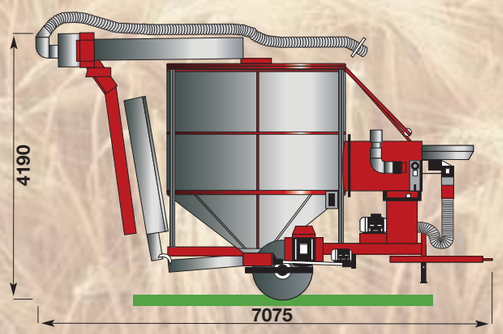

INTERMEDIATE RANGE

Model INTERMEDIATE 180 Type R/S-MRM

Retractable Screen Model (with fast loading)

Technical Data

Batch Capacity (tons wet wheat)	18	(23m³)
Unloading Time (minutes)	12	
Power Required		
Model PTO Drive - Tractor min. size of HP	80	
Model Electric Drive - Mains supply line of AMPS	100	
Size Main Electric Motors	Kw	(HP)
Fan	18.5	(25)
Central Auger	18.5	(25)
Filling Auger	11	(15)
Dust Extractor	2.2	(3)
Burner	1.5	(2)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 350mm (capacity tons/h)	65	
Filling Auger Ø 200mm (capacity tons/h)	90	
Batch Circulation (per hour)	4	
Fuel Consumption (litre per hour)	55	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	550	
Burner Type	Diesel, Automatic Twin Stage	
Fuel Tank Capacity (litres)	950	
Burner Capacity (caloric power Kcal/h max)	950,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	50,000	
Fan Diameter (mm)	810	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Maximum Towing Speed	25Kmph Max Unbreaked	
Adjustable Support Legs	6	
Weight (Kgs)	4,500	
PTO Speed (r.p.m)	540	

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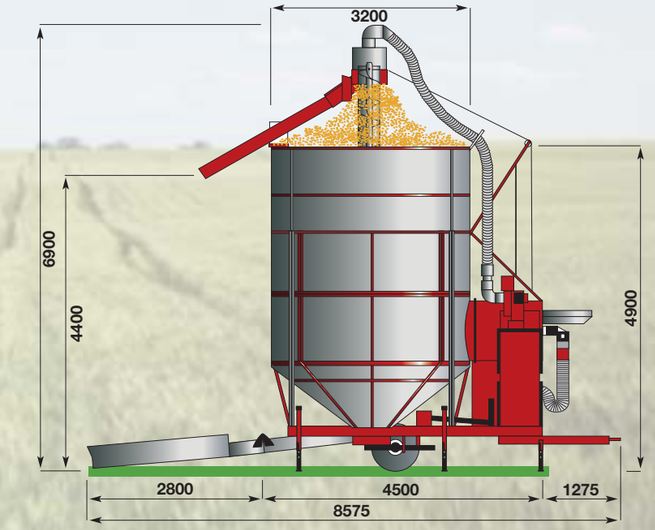
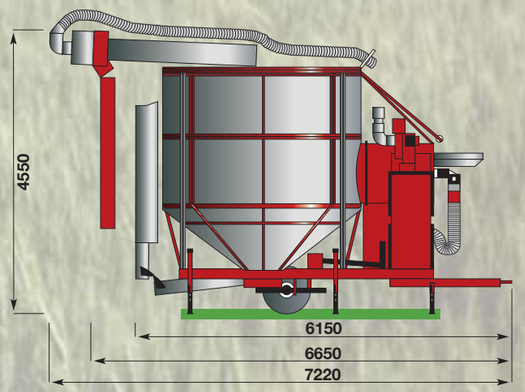




INTERMEDIATE RANGE

turbo range

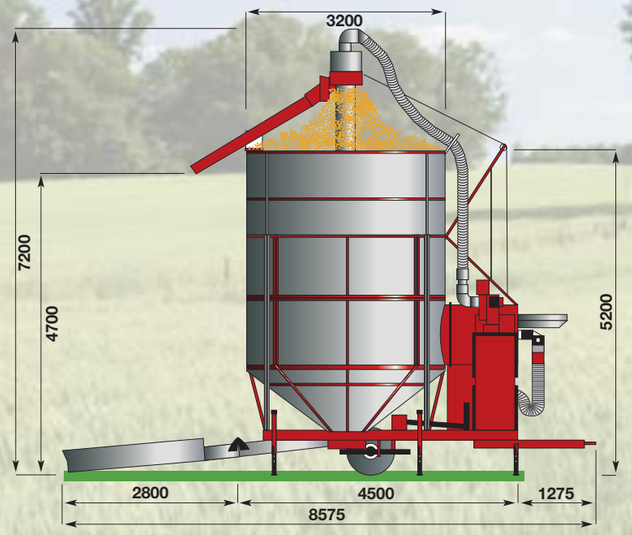
Model INTERMEDIATE 200 Type R/S-MRM

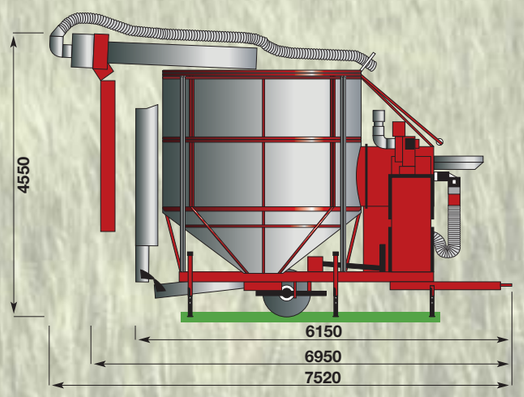
Retractable Screen Model (with fast loading)

Technical Data

Batch Capacity (tons wet wheat)	20	(26m³)
Unloading Time (minutes)	13	
Power Required		
Model PTO Drive - Tractor min. size of HP	80	
Model Electric Drive - Mains supply line of AMPS	100	
Size Main Electric Motors	Kw	(HP)
Fan	18.5	(25)
Central Auger	18.5	(25)
Filling Auger	11.5	(15)
Dust Extractor	2.2	(3)
Burner	1.5	(2)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 350mm (capacity tons/h)	75	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	4	
Fuel Consumption (litre per hour)	55	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	550	
Burner Type	Diesel, Automatic Triple Stage	
Fuel Tank Capacity (litres)	750	
Burner Capacity (caloric power Kcal/h max)	950,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	50,000	
Fan Diameter (mm)	810	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Maximum Towing Speed	25Kmph Max Unbreaked	
Adjustable Support Legs	6	
Weight (Kgs)	4,600	
PTO Speed (r.p.m)	540	

All performance figures are largely dependant on the ambient temperature, relative air humidity, maturity and cleanliness or crops to be dried. All models incorporate safety devices for auto cut off of burner system due to overheating or mechanical failure.





LARGE CAPACITY RANGE

turbo range

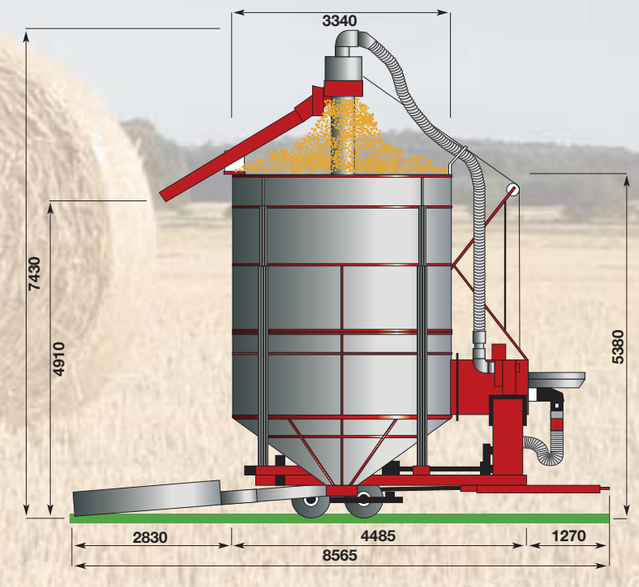
Model LARGE CAPACITY 220 Type R/S

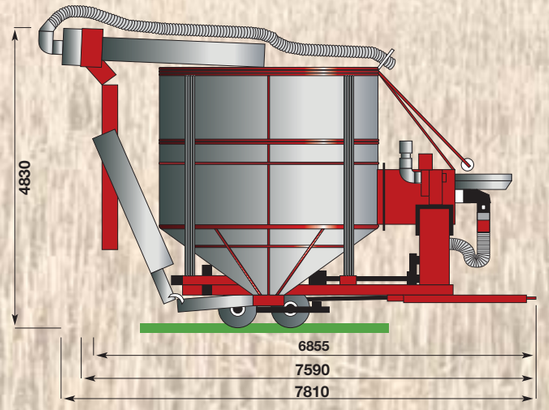
Retractable Screen Model

Technical Data

Batch Capacity (tons wet wheat)	22	(28.5m³)
Unloading Time (minutes)	15	
Power Required		
Model PTO Drive - Tractor min. size of HP	100	
Model Electric Drive - Mains supply line of AMPS	100	
Size Main Electric Motors	Kw	(HP)
Fan	18.5	(25)
Central Auger	18.5	(25)
Filling Auger	11	(15)
Dust Extractor	2.2	(3)
Burner	1.5	(2)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 350mm (capacity tons/h)	65	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	3	
Fuel Consumption (litre per hour)	55	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	550	
Burner Type	Diesel, Automatic Twin Stage	
Fuel Tank Capacity (litres)	950	
Burner Capacity (caloric power Kcal/h max)	950,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	50,000	
Fan Diameter (mm)	810	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Maximum Towing Speed	25Kmph Max Unbreaked	
Adjustable Support Legs	8	
Weight (Kgs)	4,700	
PTO Speed (r.p.m)	540	

All performance figures are largely dependant on the ambient temperature, relative air humidity, maturity and cleanliness or crops to be dried. All models incorporate safety devices for auto cut off of burner system due to overheating or mechanical failure.





LARGE CAPACITY RANGE

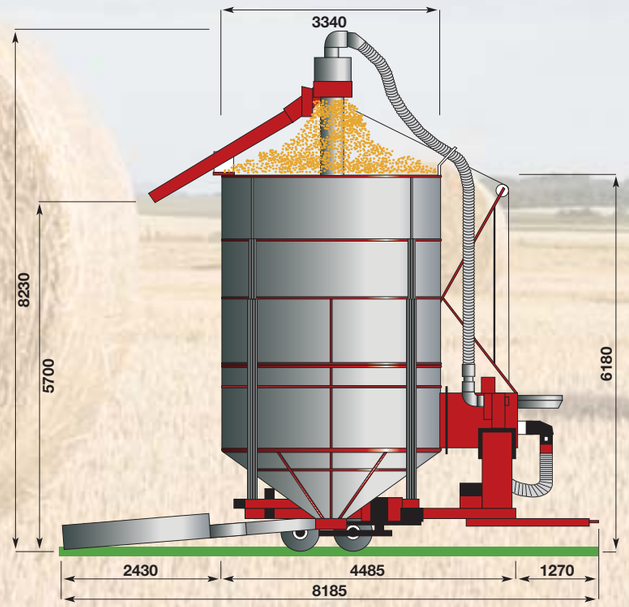
Model LARGE CAPACITY 270 Type R/S

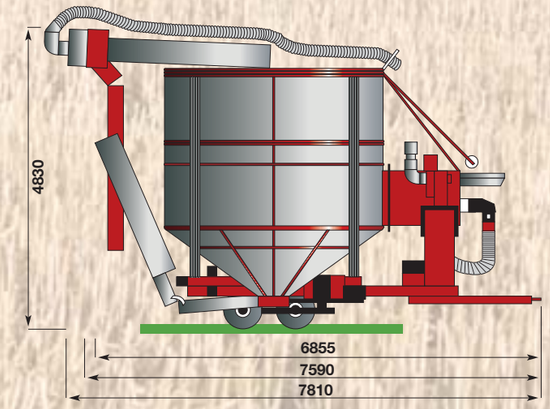
Retractable Screen Model

Technical Data

Batch Capacity (tons wet wheat)	27	(38m³)
Unloading Time (minutes)	16	
Power Required		
Model PTO Drive - Tractor min. size of HP	80	
Model Electric Drive - Mains supply line of AMPS	100	
Size Main Electric Motors	Kw	(HP)
Fan	22.5	(25)
Central Auger	22.5	(25)
Filling Auger	11.5	(15)
Dust Extractor	2.2	(3)
Burner	1.5	(2)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 350mm (capacity tons/h)	75	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	3	
Fuel Consumption (litre per hour)	55	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	550	
Burner Type	Diesel, Automatic Triple Stage	
Fuel Tank Capacity (litres)	750	
Burner Capacity (caloric power Kcal/h max)	950,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	50,000	
Fan Diameter (mm)	810	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Maximum Towing Speed	25Kmph Max Unbreaked	
Adjustable Support Legs	8	
Weight (Kgs)	4,800	
PTO Speed (r.p.m)	540	

All performance figures are largely dependant on the ambient temperature, relative air humidity, maturity and cleanliness or crops to be dried. All models incorporate safety devices for auto cut off of burner system due to overheating or mechanical failure.





LARGE CAPACITY RANGE

Model LARGE CAPACITY 300 Type F/S

Fixed Screen Model

Technical Data

Batch Capacity (tons wet wheat)	30	(40m³)
Unloading Time (minutes)	20	
Power Required		
Model PTO Drive - Tractor min. size of HP	90	
Model Electric Drive - Mains supply line of AMPS	100	
Size Main Electric Motors	Kw	(HP)
Fan	22.5	(30)
Central Auger	22.5	(30)
Filling Auger	11.5	(15)
Dust Extractor	2.2	(3)
Burner	1.5	(2)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	350	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 350mm (capacity tons/h)	75	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	2.5	
Fuel Consumption (litre per hour)	60	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	550	
Burner Type (gas as option)	Diesel, Automatic Triple Stage	
Fuel Tank Capacity (litres)	750	
Burner Capacity (caloric power Kcal/h max)	950,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	55,000	
Fan Diameter (mm)	810	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Adjustable Support Legs	8	
Weight (Kgs)	5,200	
PTO Speed (r.p.m)	540	

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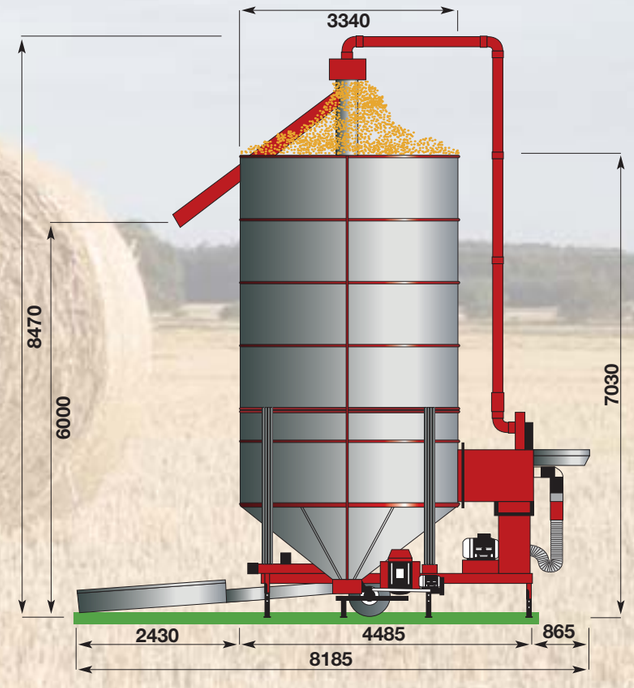


XL - GIANT RANGE

turbo range

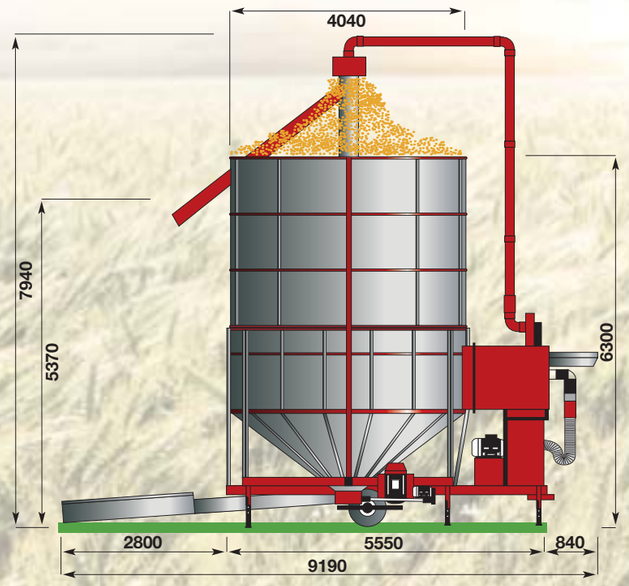
Model XL 350 Type F/S

Fixed Screen Model

Technical Data

Batch Capacity (tons wet wheat)	35	(45m³)
Unloading Time (minutes)	24	
Power Required		
Model PTO Drive - Tractor min. size of HP	120	
Model Electric Drive - Mains supply line of AMPS	150	
Size Main Electric Motors	**Kw**	**(HP)**
Fan (option "low power": fan Kw 22.5, 30HP)	37.5	(50)
Central Auger	30	(40)
Filling Auger	11	(15)
Dust Extractor	2.2	(3)
Burner	2.2	(3)
Centre Auger Drive	**Belts/Gearbox**	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	450	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 450mm (capacity tons/h)	120	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	2	
Fuel Consumption (litre per hour)	75	
5/6 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	510	
Burner Type (gas option)	Diesel, Automatic Three Stage	
Fuel Tank Capacity (litres)	950	
Burner Capacity (caloric power Kcal/h max)	1.300,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	75,000	
Fan Diameter (mm)	900	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Adjustable Support Legs	6	
Weight (Kgs)	5,800	
PTO Speed (r.p.m)	549	

All performance figures are largely dependant on the ambient temperature, relative air humidity, maturity and cleanliness or crops to be dried. All models incorporate safety devices for auto cut off of burner system due to overheating or mechanical failure.



XL - GIANT RANGE

turbo range

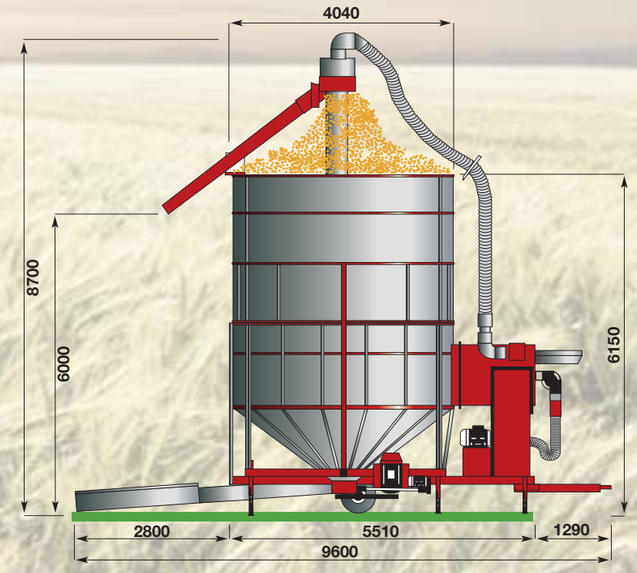
Model XL 380 Type R/S

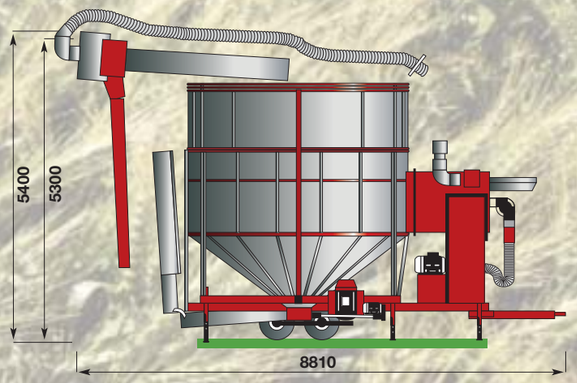
Retractable Screen Model. Also available in static format.

Technical Data

Batch Capacity (tons wet wheat)	38	(50m³)
Unloading Time (minutes)	20	
Power Required		
Model PTO Drive - Tractor min. size of HP	120	
Model Electric Drive - Mains supply line of AMPS	150	
Size Main Electric Motors	**Kw**	**(HP)**
Fan	37.5	(50)
Central Auger	30	(40)
Filling Auger	11	(15)
Dust Extractor	2.2	(3)
Burner	2.2	(3)
Centre Auger Drive	**Belts/Gearbox**	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	450	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 350mm (capacity tons/h)	120	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	3	
Fuel Consumption (litre per hour)	75	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	510	
Burner Type	Diesel, Automatic Three Stage	
Fuel Tank Capacity (litres)	750	
Burner Capacity (caloric power Kcal/h max)	1.300,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	75,000	
Fan Diameter (mm)	900	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Adjustable Support Legs	6	
Weight (Kgs)	6,500	
PTO Speed (r.p.m)	540	

All performance figures are largely dependant on the ambient temperature, relative air humidity, maturity and cleanliness or crops to be dried. All models incorporate safety devices for auto cut off of burner system due to overheating or mechanical failure.





XL - GIANT RANGE

turbo range

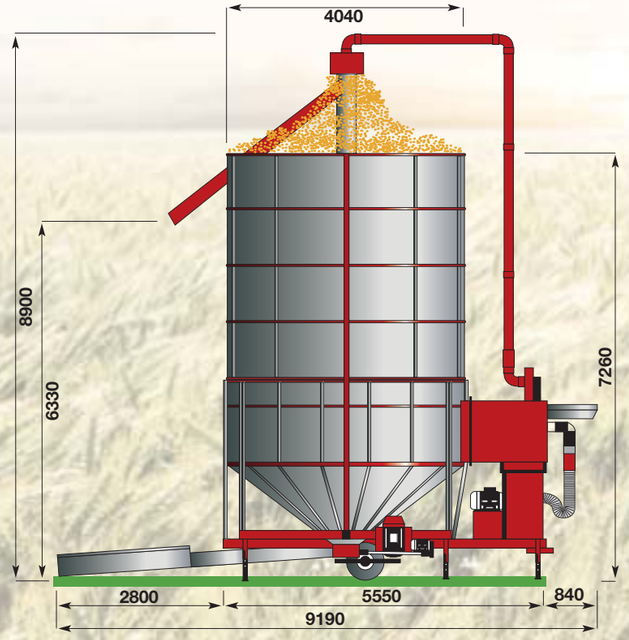
Model XL 420 Type F/S

Fixed Screen Model

Technical Data

Batch Capacity (tons wet wheat)	42	(57m³)
Unloading Time (minutes)	22	
Power Required		
Model PTO Drive - Tractor min. size of HP	120	
Model Electric Drive - Mains supply line of AMPS	150	
Size Main Electric Motors	Kw	(HP)
Fan	37.5	(50)
Central Auger	37.5	(40)
Filling Auger	11	(15)
Dust Extractor	2.2	(3)
Burner	2.2	(3)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	450	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 450mm (capacity tons/h)	120	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	3	
Fuel Consumption (litre per hour)	75	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	510	
Burner Type (gas as option)	Diesel, Automatic Three Stage	
Fuel Tank Capacity (litres)	750	
Burner Capacity (caloric power Kcal/h max)	1.300,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	75,000	
Fan Diameter (mm)	900	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Adjustable Support Legs	6	
Weight (Kgs)	6,800	
PTO Speed (r.p.m)	540	

All performance figures are largely dependant on the ambient temperature, relative air humidity, maturity and cleanliness or crops to be dried. All models incorporate safety devices for auto cut off of burner system due to overheating or mechanical failure.



XL - GIANT RANGE

turbo range

Model XL 450 Type F/S

Fixed Screen Model

Technical Data

Batch Capacity (tons wet wheat)	45	(60m³)
Unloading Time (minutes)	25	
Power Required		
Model PTO Drive - Tractor min. size of HP	150	
Model Electric Drive - Mains supply line of AMPS	150	
Size Main Electric Motors	Kw	(HP)
Fan	37.5	(50)
Central Auger Ø 350mm / Ø 450mm	37.5	(40 / 50)
Filling Auger	11.5	(10)
Dust Extractor	2.2	(3)
Burner	2.2	(3)
Centre Auger Drive	Belts/Gearbox	
Centre Auger Speed (r.p.m.)	250	
Centre Auger Diameter (mm)	450	
Filling Auger Diameter (mm)	250	
Centre Auger Ø 450mm (capacity tons/h)	120	
Filling Auger Ø 250mm (capacity tons/h)	90	
Batch Circulation (per hour)	3	
Fuel Consumption (litre per hour)	75	
5 litre per ton extracting 5% approx.		
Grain Wall Thickness (mm)	50	
Burner Type (gas option)	Diesel, Automatic Three Stage	
Fuel Tank Capacity (litres)	750	
Burner Capacity (caloric power Kcal/h max)	1.300,000	
Fan Design	Centrifugal	
Fan Capacity (air flow m³/h max)	75,000	
Fan Diameter (mm)	900	
Fan Speed (r.p.m.)	1,450	
Screen Perforation	1.5mm Inox Stainless Steel	
Adjustable Support Legs	6	
Weight (Kgs)	7,900	
PTO Speed (r.p.m)	540	

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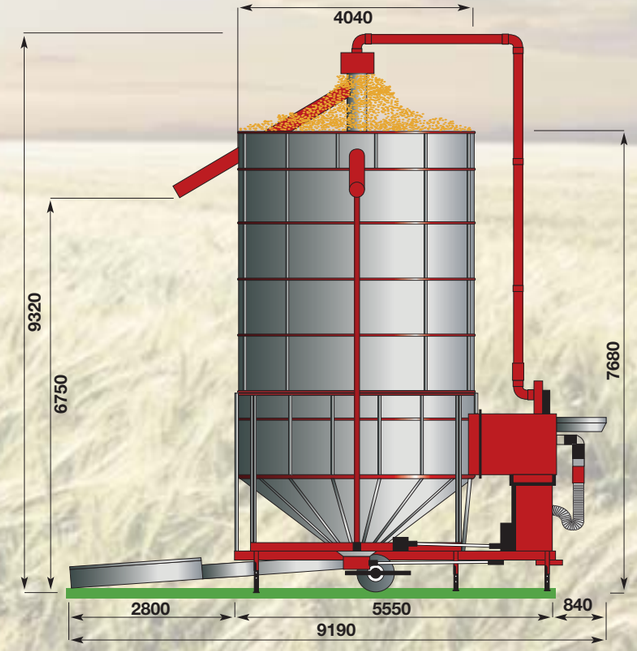


OPTIONAL FEATURES

MASTER DUST EXTRACTION SYSTEM

For a Cleaner Environment

Key:

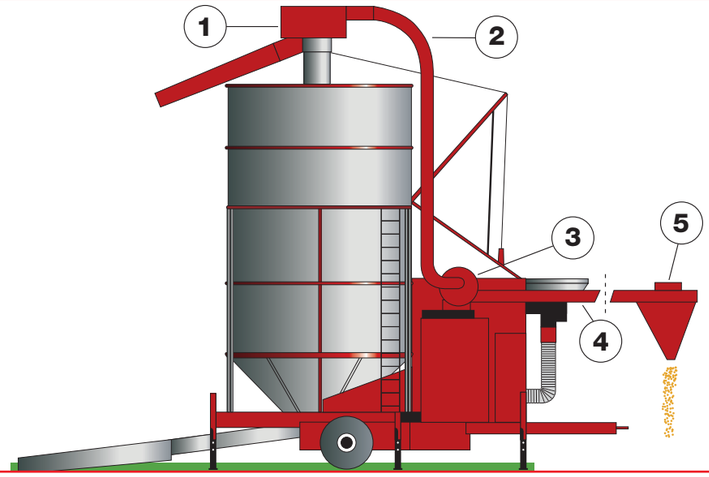
1 Top Hat

2 Dust Extraction Hose

3 Fan Unit

4 Discharge Hose

5 Cyclone Unit (optional)



Batch drying has always created a dusty atmosphere, due to the continual recirculation of the grain. With the Master Dust Extraction System and the Mastervac hand held suction cleaner it is possible to ensure a cleaner environment.

Driers fitted with the Master Dust Extraction System feature the bubble cascade discharge principle at the top of the central recirculating auger, incorporating a top internal baffle. The top hat unit has been redesigned to accommodate the intake of the suction hose from the fan, this enables the dust-contaminated air to be sucked through the recirculated grain.

The dust extraction fan is an independent unit mounted on the front of the drier, available with alternative drive options, belt or electric. In order to meet the varied crop requirements the suction airflow velocity can be controlled by a manually adjusted valve which is mounted in the airflow circuit. A discharge hose is fitted to the outlet of the fan to convey the dust-laden air away from the drier. The recommended final discharge is direct into a trailer, with the option of incorporating an end of line cyclone, free standing and mounted on adjustable legs.

The final location is recommended to be away from the air intake of the drier, the distance is controlled by the length of the discharge hose and the site conditions. By increasing the length of the hose and the fan capacity it is possible to increase the discharge distance up to 20m.

In addition we have a hand held suction cleaner which works in conjunction with the dust extractor and will rapidly clean all of the dust and chaff around the drier area.

A small cyclone attachment is also available for fitting on the outlet of the internal cleaner discharge pipe which enables the waste material to be taken out of the air stream, keeping dust at this discharge outlet to a minimum.

ENVIRONMENTALLY FRIENDLY!

OPTIONAL FEATURES

LUBRICATION & HYDRAULIC SYSTEMS

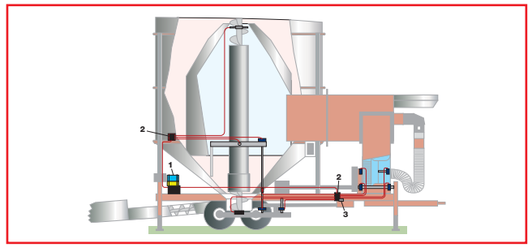
For Hassle-Free Operation

Automatic Lubrication System:

This system allows for automatic lubrication for approx 400 hours on tractor drive models, and approx 600 hours on electric models. To ensure your drier is well lubricated the grease container must be full at the start of every season.

The system has a grease pump operating from a container with a 4kg capacity *(1)*, discharging through dispenser valves *(2)*, with a sensor to check the correct operation *(3)*. The pump unit is mounted on the chassis and is powered (12-24 Volts) from the existing electrical circuit on the drier. The grease container ensures that the grease level is clearly visible at all times. The container can be filled from an external nipple. The pump timing between each lubrication point is recorded on an electronic circuit of the pump, which can easily be adjusted.

- **The dispenser valves distribute the grease in the correct proportions to meet individual requirements.**
- **An electric sensor checks that all parts are lubricated as required and then stops the pump.**
- **Display lights are mounted on the control panel of the drier to indicate the lubrication cycle:- operating, stand by, or lock out.**
- **In the case of emergency a grease gun or air compressor can override the system.**
- **This unit is available as an option on all new models or as a kit for all existing Master Driers.**



Hydraulic Operation of Retractable Screen Sections & Top Auger:

Incorporating a hydraulic distributor with two electro-solenoids *(1)*, a high capacity two stage hydraulic ram assembly *(2)* for the control of movement of the centre auger and a hydraulic motor *(3)* which operates the wire rope winch unit for the raising and lowering of the top screen sections.

Two high-pressure hoses *(4)* complete with quick-fit attachments can be quickly connected to the tractor hydraulic system or an independent power pack.

The electrics are supplied by a single operating cable, complete with plug *(5)* to insert into the light socket of the tractor or other 12V supply.

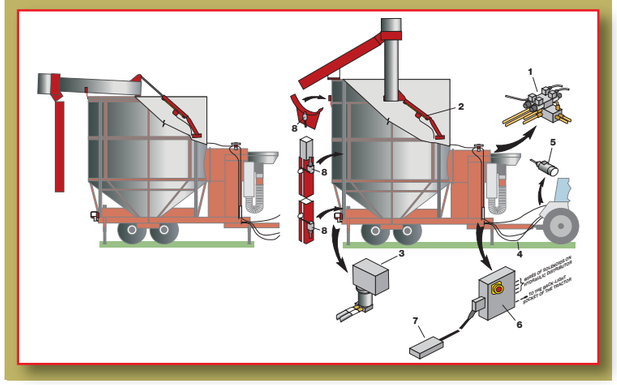
An electric press button control unit (7) on a 4m cable allows for operation at a distance, full remote control is optional.

If required, the hoses can be removed after the operation, as the system is self pressurised, with all necessary safety controls and security locking valves. This ensures full safety, in case of oil leakage or broken hose.

The oil pressure and operating speed are easily adjusted and can be adapted to meet the requirements of the incoming hydraulic pump pressure from the tractor or independent pump unit.

The system incorporates safety limit switches (8), which are wired to prevent operator error.

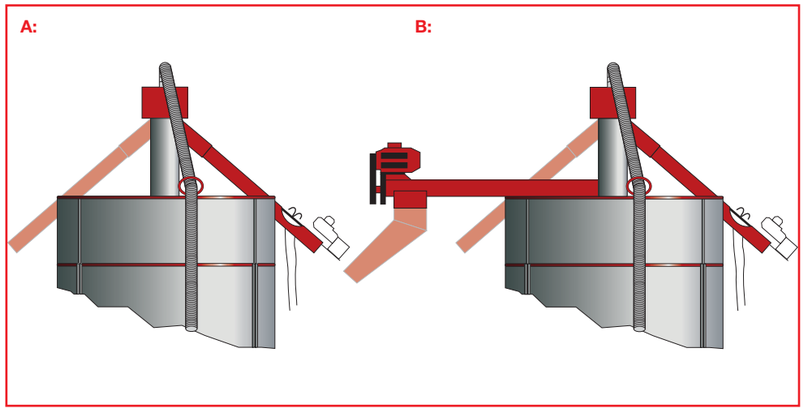
An ideal option for contractors who regularly move the machine.



OPTIONAL FEATURES

AVAILABLE FOR ALL MODELS

To Meet Individual Requirements



Discharge Alternatives

A) Single fix chute through the screen. Twin chute/motorised flap available as option. Loss in batch capacity of 1 to 2.5 ton depending on model.

B) Cross discharging auger plus fixed chute for alternative discharging. Loss in batch capacity of 1 to 2.5 ton depending on model.

Note: Alternative discharge format may reduce drier capacity.

Intake Hopper Extension

Following many requests, Master Driers have now designed a hopper extension (2 ton capacity approx.) to go over the intake trough, which offers increased capacity and facilitates ease of filling, especially with bucket loader.

We have also added a range of Master 'wet' Grain bins with a capacity from 3–31 tons especially designed for automatic loading. Available in either a 3m x 3m or 4m x 4m section these bins manufactured from high quality dipped galvanised steel plate are a perfect way to keep the Drier fully loaded with wet grain. They have a 45 degree discharge hopper and are delivered as a flat pack ready for 'self-assembly'.

Long-Life Augers & Tubes

Centre and top auger fabricated in Creusabro steel together with tubes in stainless steel. Gives longer life expectancy.

Available on all models as an optional extra.

SPECIALIST MODELS

TWIN SKIN & DUST FREE SYSTEMS

Offering a Dust Free Environment

With the Twin Skin Master Drier, grain drying in a dust free environment is no longer a dream!... The Master Drier model TS 200 is a unique totally enclosed system with a filtered exhaust incorporating the Master Dust Extraction System, which ensures the best possible crop drying in a dust free environment.

It is available with Driers having capacities from 12/45 ton and together with the Mastermatic control system can be programmed for a fully automatic operation.

The unique design incorporates a twin skin system with internal stainless steel perforated screens externally clad with profile panels.

The triangular base screens are formed from solid stainless steel and all the dust that is discharged through the side screens is automatically collected into a flexible rotating auger.

Designed to meet requirements where the necessity is to ensure a minimum dust environment is demanded. The first models for the UK were installed for the 2004 harvest.

ENVIRONMENTALLY FRIENDLY!

SPECIALIST MODELS

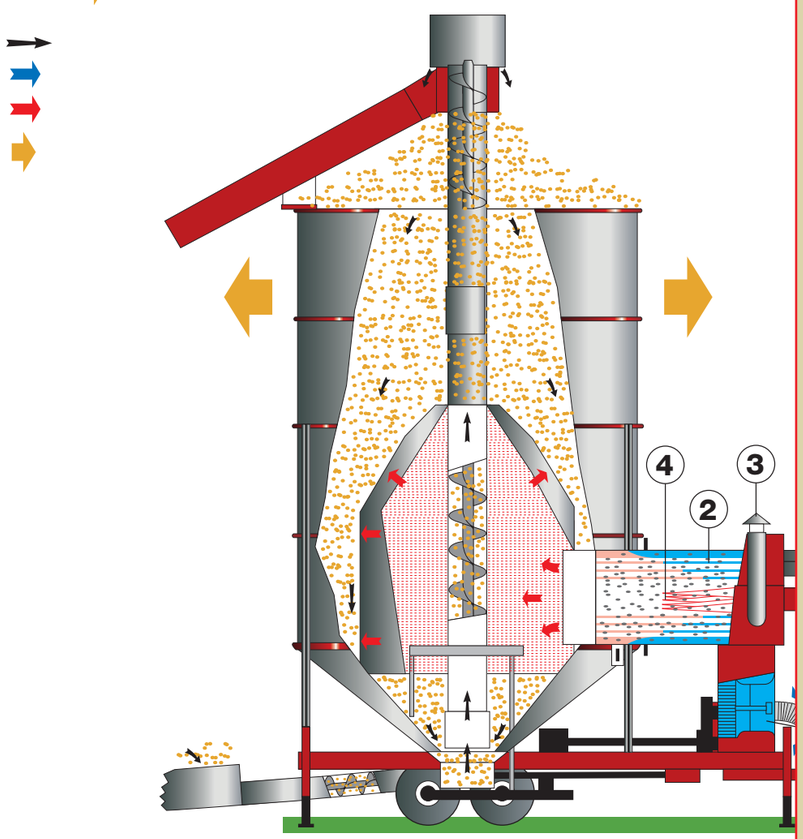
MASTER DRIER HEAT EXCHANGER SYSTEM

For an Ecological Drying System

Key:

- Crop
- Cold Air
- Hot Air
- Saturated Air

1 Burner
2 Radial Surfaces (Inox pipes)
3 Chimney Exhaust Smokes
4 Combustion Chamber
5 Fan



Master Drier In-Direct Fired System incorporates a heat exchanger system designed specifically for the handling of crop for human consumption, like rice and maize etc.

The in-direct drying prevents any mixing and contact between the drying air flow and the residuals of the combustion.

It is an option which offers the great advantage to always ensure a dried crop of faultless quality and fully uncontaminated.

Exchanger unit fabricated from stainless steel with an operating thermal performance of 90%.

- **Drying temperature up to 110˚C**
- **Manufactured 100% in stainless steel, prepared for long life**
- **Perfect quality of the combustion**
- **Minimal maintenance**

MASTER DRIERS

SERVICE & SUPPORT

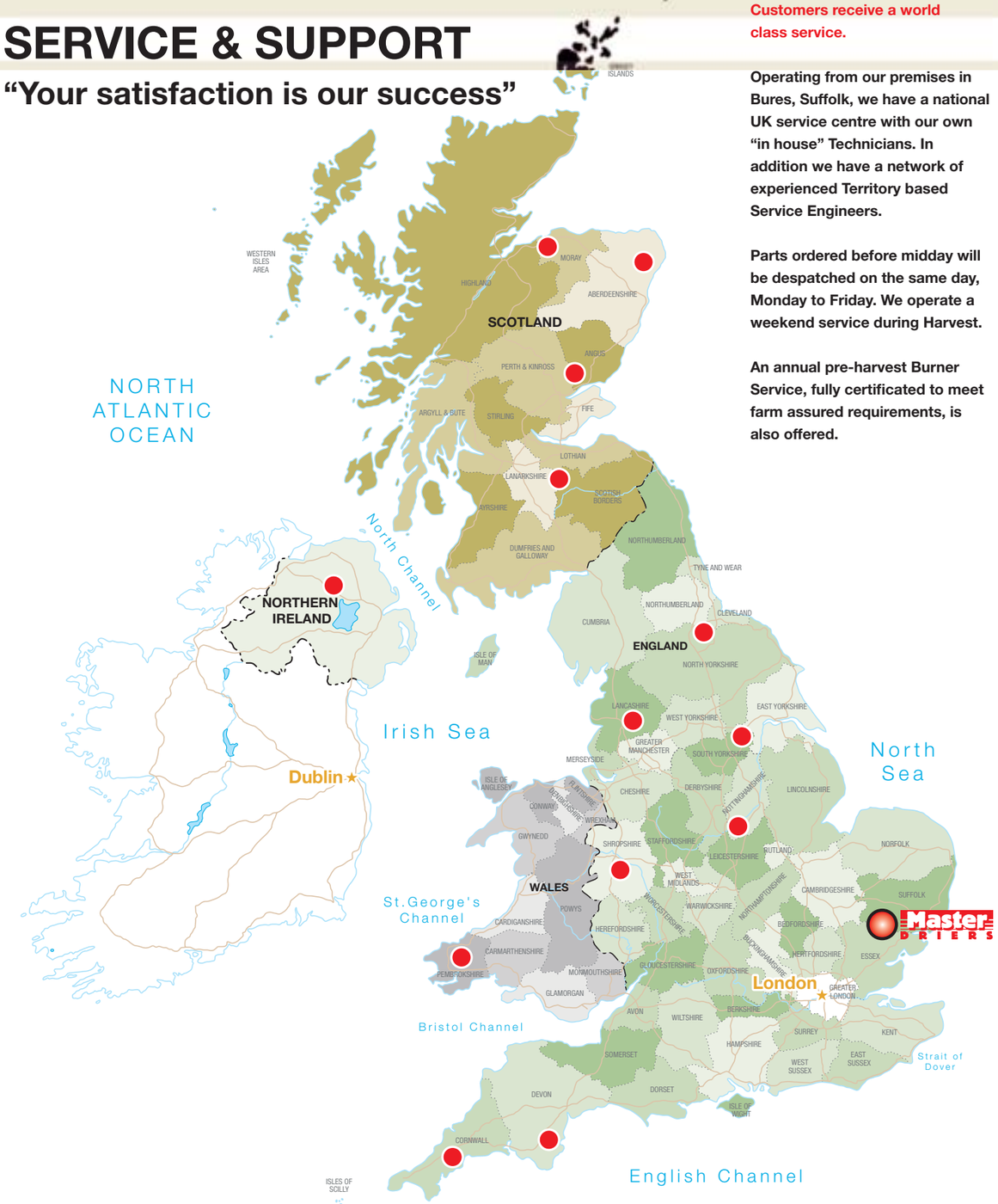
"Your satisfaction is our success"

During the past 50 years, Master Farm Services have established a comprehensive parts and service back up facility to ensure our Customers receive a world class service.

Operating from our premises in Bures, Suffolk, we have a national UK service centre with our own "in house" Technicians. In addition we have a network of experienced Territory based Service Engineers.

Parts ordered before midday will be despatched on the same day, Monday to Friday. We operate a weekend service during Harvest.

An annual pre-harvest Burner Service, fully certificated to meet farm assured requirements, is also offered.



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Master DRIERS