



Perry Agricultural Belt & Bucket Elevators

Models 200, 220, 280, 330, 440 & 560

The range of Perry elevators are available on the Ezi Quote system.

All details are correct at time of issue - 10/02/2016 (AE-160210)

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Perry Agricultural Belt & Bucket Elevator

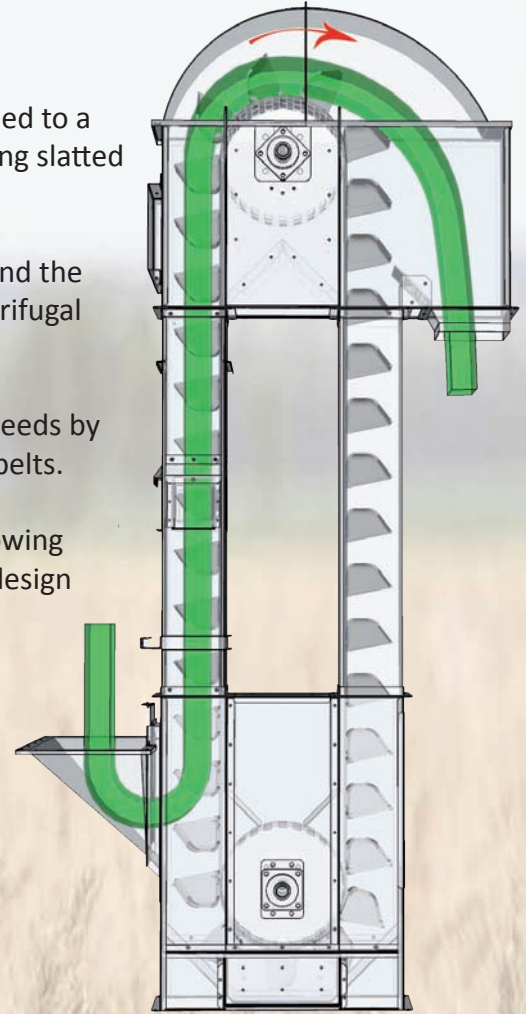
Principle of Operation

Belt & Bucket Elevators vertically convey product in buckets which are attached to a belt that revolves around a top driven slatted pulley and a bottom free running slatted pulley.

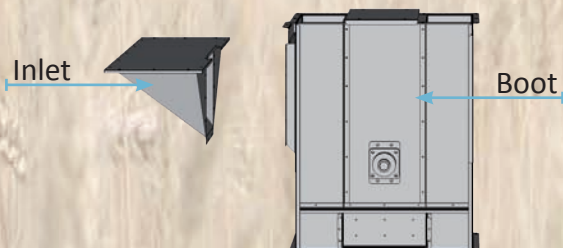
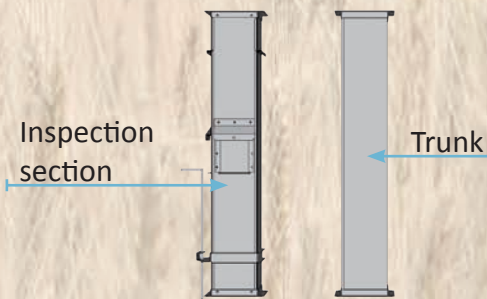
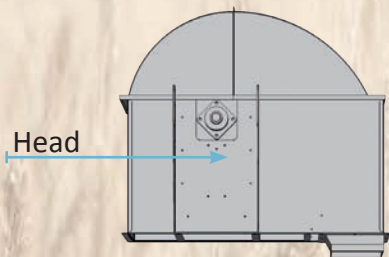
The belt is contained inside two trunks (legs) one for the belt on its way up and the other for the way down. Once the buckets reach the top, gravity and/or centrifugal force act to throw product out of the buckets and through the outlet.

The action of the product leaving the bucket can be tailored to suit specific needs by reducing belt speeds and changing the angles and distances of outlets from belts.

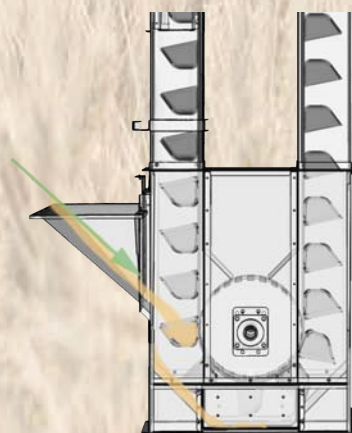
The versatility of belt and bucket elevators mean that the majority of free flowing and partially free flowing particles can be conveyed. Combined with simple design and construction, bucket elevators are the first choice for vertical conveying situations.



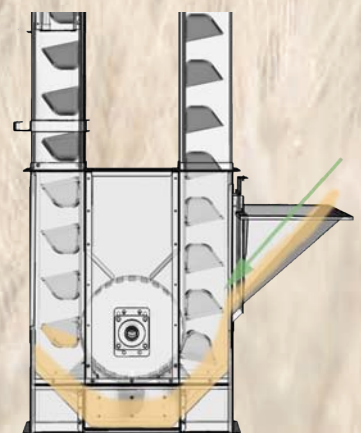
Basic Components



Feed Options



Standard Front Feed



Back Feed

Models 220/440 Agricultural Belt & Bucket Elevator

This elevator is specifically designed to offer a high specification single and double lift elevator at a very attractive price.

Summary

- Single lift (220) or double lift (440) belt & bucket elevator
- Capacities from 15tph to 80tph.*
- Max height 30m.
- Durable galvanised steel finish.
- V belt drive to shaft mounted gearbox.
- Optional 90° gear unit drives available.
- Slatted pulleys to help reduce the build-up of materials on pulleys as standard.
- Low stretch rubber, oil resistant EP belting as standard.
- Gearboxes pre-filled with lubricant for an easy installation.
- 3mm thick head & boot shell.
- Heavy duty welded construction & hot dip galvanised head cap.
- Range of speeds to provide centrifugal, slow centrifugal and gravity discharge.
- Master cup belt tensioner on the cup belt for easy joining tension.
- Access platforms with ladders & hoops available.
- Option to make elevator suitable for seed handling.
- Can be connected to the Perry PLC plant control panel
- Trunks supplied in standard lengths of 2.5m, 2m, 1.5m, 1.25m, 1m, 0.5m & 0.25m.
- Heights are made to the nearest 250mm increment.
- All trunks are sealed as standard.
- Buckets supplied loose with a pre-punched belt & master tensioner fitted.
- 1 backstop and 1 front inlet slide supplied as standard (please note this does not include an inlet hopper).
- All elevators can be painted for an additional fee.

Optional Extras

Our standard belt & bucket elevator can be customised to suit your requirements with additional optional extras.

These include access platforms and ladders, rotation sensors, solid pulley, belt alignment, plastic buckets, 90 degrees shaft mounted gear motors and explosion relief panels.

Our elevators can be put into an ATEX 22 zone with the addition of some specialist extras.



* Capacities based on dry wheat @ 750kg/m³ at 16% moisture content

Basic Specifications -220 Elevator

Model	220/15	220/20	220/30	220/40	220/50	220/60	220/80
Capacity*	15tph	20tph	30tph	40tph	50tph	60tph	80tph
Head	3mm	3mm	3mm	3mm	3mm	3mm	3mm
Boot	3mm	3mm	3mm	3mm	3mm	3mm	3mm
Trunking up to 20m	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm
Trunking up to 30m	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm
Bucket spacing	285mm	225mm	285mm	225mm	180mm	155mm	120mm
Duct size (Square)	181mm	181mm	207mm	207mm	232mm	232mm	257mm
Duct Size (Round)	150mm	150mm	150mm	200mm	200mm	200mm	250mm
Belt Strength	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m
Belt Speed (Fast Centrifugal)	2.7m/s	2.7m/s	2.7m/s	2.7m/s	2.7m/s	2.7m/s	2.7m/s
Belt Speed (Slow Centrifugal)	N/A	N/A	1.77m/s	1.77m/s	1.77m/s	1.77m/s	1.77m/s
Belt Speed (Gravity)	N/A	N/A	1.24m/s	1.24m/s	1.24m/s	1.24m/s	1.24m/s

Basic Specifications - 440 Elevator

Model	440/15	440/20	440/30	440/40	440/50	440/60	440/80
Capacity (Per Leg)*	15tph	20tph	30tph	40tph	50tph	60tph	80tph
Head	3mm	3mm	3mm	3mm	3mm	3mm	3mm
Boot	3mm	3mm	3mm	3mm	3mm	3mm	3mm
Trunking up to 20m	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm
Trunking up to 30m	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm
Bucket spacing	285mm	225mm	285mm	225mm	180mm	155mm	120mm
Duct size (Square)	181mm	181mm	207mm	207mm	232mm	232mm	257mm
Duct Size (Round)	150mm	150mm	150mm	200mm	200mm	200mm	250mm
Belt Strength	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m
Belt Speed (Fast Centrifugal)	2.7m/s	2.7m/s	2.7m/s	2.7m/s	2.7m/s	2.7m/s	2.7m/s
Belt Speed (Slow Centrifugal)	N/A	N/A	1.77m/s	1.77m/s	1.77m/s	1.77m/s	1.77m/s
Belt Speed (Gravity)	N/A	N/A	1.24m/s	1.24m/s	1.24m/s	1.24m/s	1.24m/s

* Capacities based on dry wheat @ 750kg/m³ at 16% moisture content

Basic Power Requirements - 220 Elevator

Height	220/15	220/20	220/30	220/40	220/50	220/60	220/80
4.5m	1.5kW	2.2kW	2.2kW	3kW	3kW	4kW	4kW
5.5m			3kW				5.5kW
6.5m	2.2kW				4kW		
10.5m				4kW		5.5kW	
12m							7.5kW
12.5m		3kW					
14.5m					5.5kW		
17m			4kW				
19m						7.5kW	
20m				5.5kW			11kW
20.5m	3kW						
23.5m					7.5kW		
25m		4kW					
27.5m				7.5kW			
29m						11kW	
29.5m			5.5kW				

Basic Power Requirements - 440 Elevator

Height	440/15	440/20	440/30	440/40	440/50	440/60	440/80
4.5m	2.2kW	3kW	4kW	4kW	5.5kW	5.5kW	7.5kW
5m						7.5kW	
5.5m	3kW			5.5kW			
6m							11kW
8m					7.5kW		
10m		4kW					
10.5m			5.5kW			11kW	
12m				7.5kW			
13m							15kW
14.5m					11kW		
16m	4kW						
19m			7.5kW				
19.5m						15kW	
20m		5.5kW					
20.5m				11kW			18.5kW
24.5m					15kW		
26.5m							22kW
29.5m	5.5kW					18.5kW	
30m			11kW				

* Capacities based on dry wheat @ 750kg/m³ at 16% moisture content

Basic Capacities Available - 220/440 Elevator (Fast Centrifugal)

Product	kg/m ³	220/15	220/20	220/30	220/40	220/50	220/60	220/80
Wheat	750	15tph	20tph	30tph	40tph	50tph	60tph	80tph
Corn (Cracked)	800	15tph	19tph	27tph	35tph	44tph	51tph	66tph
Oil Seed Rape	690	16tph	20tph	30tph	38tph	47tph	55tph	71tph

Basic Capacities Available - 220/440 Elevator (Slow Centrifugal)

Product	kg/m ³	3.5kW	4.4kW	5.6kW	6.5kW	8.3kW
Pellet (6mm)	600	17tph	21tph	27tph	31tph	40tph
Meals (Feeds)	520	14tph	18tph	23tph	27tph	35tph
Corn (Flaked)	450	12tph	16tph	20tph	23tph	30tph

Basic Capacities Available - 220/440 Elevator (Gravity)

Product	kg/m ³	3.5kW	4.4kW	5.6kW	6.5kW	8.3kW
Bran	320	3tph	4tph	5tph	6tph	8tph
Distillers Grain (Spent - Wet)	480	8tph	10tph	13tph	16tph	20tph
Flour	640	7tph	9tph	11tph	13tph	17tph

440 capacities are the same as the model 220 Elevator but the capacity is per leg.

Head/Drive Options



Drive Type

- Gear motor with external backstop (standard).
- Shaft mounted speed reducer with external backstop.
- Range of speeds to provide centrifugal, slow centrifugal and gravity discharge.

Drive Configurations

- Left/right hand back mounted (standard)
- Left/right hand front mounted
- Left/right hand mounted between legs*

Head/Drive Other (1m tall)

- Weather proofing available
- Slatted pulley
- V belt drive to shaft mounted gearbox
- Gearbox pre-filled with lubricant
- Factory assembled or kit form
- Optional wear plates
- The cap that covers the drive pulley can be split to allow easy removal in confined roof spaces
- 1.5kW to 22kW motors available (gearbox & motor size required depends on the height and required capacity)
- Head drum scrapers available



Outlet Adaptor Options

- Square slip fit
- Square flanged
- Round clip together



*Legs refers to the 2 pillars of trunks. The up leg carries product up from the boot to head, the down leg returns the empty buckets to the boot.

Boot Options



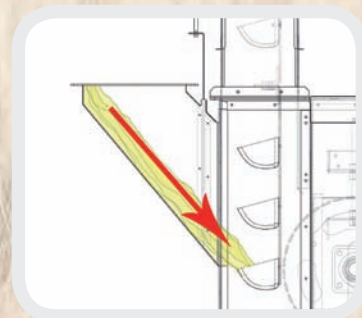
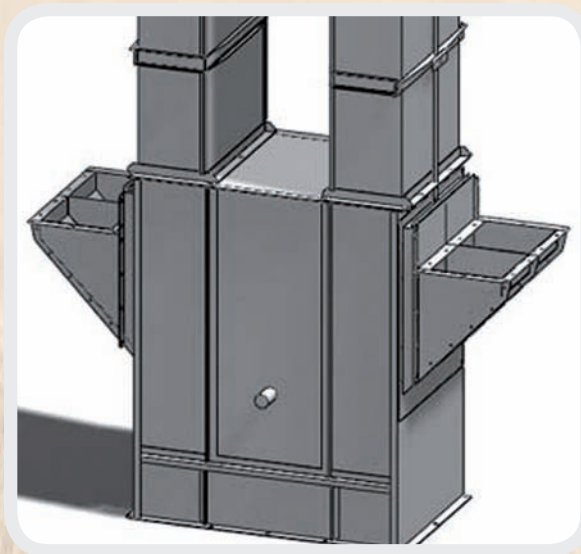
Basic Boot (1m tall)

- Boot is supplied fully assembled (hopper supplied loose)
- Boots are symmetrical and have 2 possible inlet positions, one at the front and one at the back.
- 3mm thick galvanised steel
- Seed boot option available (increase in height 154mm)
- Boot tensioner available (adjustable boot)
- Optional weather protection for inlet slide
- Wear plates available
- Boot drum scrapers available
- Special inlets catered for
- Can be fitted with belt alignment sensors

Please note back feeding an elevator can reduce capacity by up to 25%

Inlet Options

- 207mm square hopper & lid
- Super hopper & lid
- 232mm square flanged hopper at 45° & lid
- 257mm square flanged hopper at 45° & lid
- Inlet slide assembly
- Control rod extensions available



Trunk (leg) Options

Trunks supplied in standard lengths of 2.5m, 2m, 1.5m, 1.25m, 1m, 0.5m & 0.25m.
Heights are made to the nearest 250mm



Basic Trunks

- All trunks are sealed as standard
- Trunk thickness is dependant on overall height. Up to 20m will be supplied in 1.2mm galvanised steel, up to 30m will be supplied in 2mm galvanised steel
- Every elevator is supplied with an inspection section. These are primarily used to access the belt & bucket assembly and to tension the belt
- Inspection sections are 1.25m long.
- Optional explosion relief panel (ATEX also available) [see Universal Elevator Options]

Model 330 Agricultural Belt & Bucket Elevator

This elevator is specifically designed to provide high throughput capacities.

Summary

- Single lift belt & bucket elevator
- Capacities from 100tph to 150tph.*
- Max height 30.05m.
- Durable galvanised steel finish.
- V belt drive to shaft mounted gearbox.
- Optional 90° gear unit drives available.
- Slatted pulleys to help reduce the build-up of materials on pulleys as standard.
- Belt tension via adjustable boot pulley
- Low stretch rubber, oil resistant EP belting as standard.
- Gearboxes pre-filled with lubricant for an easy installation.
- 3mm thick head & boot shell.
- Heavy duty welded construction & hot dip galvanised head cap.
- Range of speeds to provide centrifugal, slow centrifugal or gravity discharge.
- Adjustable boot shaft for elevator belt tension
- Access platforms with ladders & hoops available.
- Option to make elevator suitable for seed handling.
- Can be connected to the Perry PLC plant control panel
- Boot supplied fully assembled as standard.
- Trunks supplied in standard lengths of 2.4m, 1.8m, 1.5m, 1.2m, 0.9m, 0.6m & 0.3m
- Heights are made to the nearest 300mm increment.
- All trunks are sealed as standard.
- Buckets supplied loose with a pre-punched belt & joiner fitted.
- 1 backstop and 1 front inlet slide supplied as standard (please note this does not include an inlet hopper).
- All elevators can be painted for an additional fee.

Optional Extras

Our standard belt & bucket elevator can be customised to suit your requirements with additional optional extras.

These include access platforms and ladders, rotation sensors, solid pulley, belt alignment, plastic buckets, 90 degrees shaft mounted gear motors and explosion relief panels.

Our elevators can be put into an ATEX 22 zone with the addition of some specialist extras.



* Capacities based on dry wheat @ 750kg/m³ at 16% moisture content

Basic Specifications

<i>Model</i>	<i>330/100</i>	<i>330/120</i>	<i>330/150</i>
<i>Capacity*</i>	100tph	120tph	150tph
<i>Head</i>	3mm	3mm	3mm
<i>Boot</i>	3mm	3mm	3mm
<i>Trunking up to 20m</i>	1.5mm	1.5mm	1.5mm
<i>Trunking up to 30m</i>	2.0mm	2.0mm	2.0mm
<i>Bucket spacing</i>	210mm	175mm	135mm
<i>Duct size (Square)</i>	311mm	311mm	362mm
<i>Belt Strength</i>	630kN/m	630kN/m	630kN/m
<i>Belt Speed (Fast Centrifugal)</i>	2.95m/s	2.95m/s	2.95m/s
<i>Belt Speed (Slow Centrifugal)</i>	1.95m/s	1.95m/s	1.95m/s
<i>Belt Speed (Gravity)</i>	1.36m/s	1.36m/s	1.36m/s

Basic Power Requirements

Height	330/100	330/120	330/150
4.25m	5.5kW	7.5kW	7.5kW
6.65m			11kW
7.85m	7.5kW		
10.25m		11kW	
13.85m	11kW		15kW
19.25m		15kW	
20.45m	11kW		
21.65m			18.5kW
25.25m	15kW		
28.85m			22kW
29.45m		18.5kW	

Basic Capacities Available (Fast Centrifugal)

Product	kg/m ³	330/100	330/120	330/150
Wheat	750	100tph	120tph	150tph
Corn (Cracked)	800	80tph	96tph	125tph
Oil Seed Rape	690	87tph	104tph	135tph

Basic Capacities Available (Slow Centrifugal)

Product	kg/m ³	4.8.kW	5.7kW	7.4kW
Pellet (6mm)	600	45tph	60tph	77tph
Meals (Feeds)	520	43tph	52tph	67tph
Corn (Flaked)	450	37tph	45tph	58tph

Basic Capacities Available (Gravity)

Product	kg/m ³	4.8kW	5.7kW	7.4kW
Bran	320	10tph	12tph	15tph
Distillers Grain (Spent - Wet)	480	25tph	30tph	39tph
Flour	640	20tph	25tph	32tph

Head/Drive Options



Drive Type

- Gear motor with external backstop (standard).
- Shaft mounted speed reducer with external backstop.
- Range of speeds to provide centrifugal, slow centrifugal and gravity discharge.

Drive Configurations

- Left/right hand back mounted (standard)
- Left/right hand front mounted

Head (1.3m tall)

- Slatted pulley
- V belt drive to shaft mounted gearbox
- Gearbox pre-filled with lubricant
- Factory assembled or kit form
- Optional wear plates
- The cap that covers the drive pulley can be split to allow easy removal in confined roof spaces
- 5.5kW to 22kW motors available (gearbox & motor size required depends on the height) and required capacity
- Head drum scrapers available



Outlet Adaptor Options

- Square flanged
- Square clip together



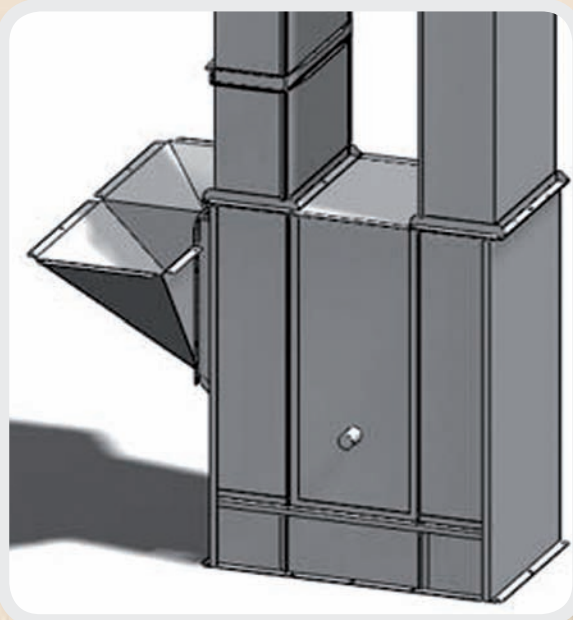
Boot Options



Basic Boot (1.15m tall)

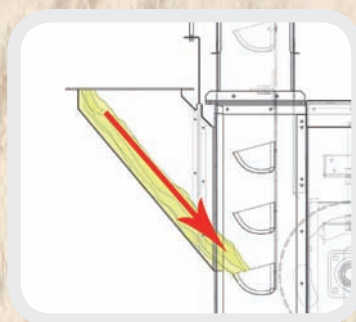
- Boot is supplied fully assembled
- Boots are symmetrical and have 2 possible inlet positions, one at the front and one at the back.
- 3mm thick galvanised steel
- Seed boot option available (increase in height 154mm)
- Boot tensioner adjustable boot
- Optional weather protection for inlet slide
- Wear plates available
- Boot drum scrapers available
- Special inlets catered for
- Can be fitted with belt alignment sensors

Please note back feeding an elevator can reduce capacity by up to 25%



Inlet Options

- 232mm square flanged inlet hopper at 45° & lid
- 257mm square flanged inlet hopper at 45° & lid
- 311mm square flanged inlet hopper at 45° & lid
- 300mm x 350mm square flanged inlet hopper at 45° & lid
- 300mm 350mm square flanged inlet hopper & lid
- Control rod extensions available



Trunk (leg) Options

Trunks supplied in standard lengths of 2.4m, 1.8m, 1.5m, 1.2m, 0.9m, 0.6m & 0.3m
Heights are made to the nearest 300mm



Basic Trunks

- All trunks are sealed as standard
- Trunk thickness is 1.5mm up to 20m & 2mm up to 30m
- Every elevator is supplied with an inspection section. These are primarily used to access the belt & bucket assembly and to tension the belt
- Inspection sections are 1.8m long.
- Optional explosion relief panel (ATEX also available) [see Universal Elevator Options]

Models 280/560 Agricultural Belt & Bucket Elevator

This elevator is specifically designed with a low boot inlet height and short head. It is ideally suited to old installations where space is tight.

Summary



- Single lift (200/280) or double lift (560) belt & bucket elevator
- Capacities from 15tph to 35tph.*
- Max height 20m.
- Durable galvanised steel finish.
- Slatted pulleys to help reduce the build-up of materials on pulleys as standard.
- Low stretch rubber, oil resistant EP belting as standard.
- Drive pre-filled with lubricant for an easy installation.
- 3mm thick head & boot shell.
- Large inspection panel at front and rear of leg
- Heavy duty welded construction & hot dip galvanised head cap.
- Slower speeds make these elevator kinder to some products
- Access platforms with ladders & hoops available.
- Option to make elevator suitable for seed handling.
- Can be connected to the Perry PLC plant control panel
- Boot supplied fully assembled as standard.
- Trunks supplied in standard lengths of 2.5m, 2m, 1.5m, 1.25m, 1m, 0.5m & 0.25m.
- Heights are made to the nearest 250mm increment.
- All trunks are sealed as standard.
- Buckets supplied loose with a pre-punched belt & master tensioner fitted.
- 1 backstop and 1 front inlet slide supplied as standard (please note this does not include an inlet hopper).
- All elevators can be painted for an additional fee

Optional Extras

Our standard belt & bucket elevator can be customised to suit your requirements with additional optional extras.

These include access platforms and ladders, rotation sensors, solid pulley, belt alignment, plastic buckets, 90 degrees shaft mounted gear motors and explosion relief panels.

Our elevators can be put into an ATEX 22 zone with the addition of some specialist extras.

* Capacities based on dry wheat @ 750kg/m³ at 16% moisture content

Basic Specifications

<i>Model</i>	<i>280/15</i>	<i>280/25</i>	<i>280/35</i>	<i>560/15</i>	<i>560/25</i>	<i>560/35</i>
<i>Capacity (Gravity)*</i>	15tph	25tph	35tph	15tph	25tph	35tph
<i>Head</i>	3mm	3mm	3mm	3mm	3mm	3mm
<i>Boot</i>	3mm	3mm	3mm	3mm	3mm	3mm
<i>Trunking up to 15m</i>	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm	1.2mm
<i>Trunking up to 20m</i>	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm	2.0mm
<i>Bucket spacing</i>	245mm	178mm	127mm	254mm	178mm	127mm
<i>Duct size (Square)</i>	181mm	181mm	181mm	181mm	181mm	181mm
<i>Duct Size (Round)</i>	150mm	150mm	150mm	150mm	150mm	150mm
<i>Belt Strength</i>	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m	500kN/m
<i>Belt Speed (Gravity)</i>	1.59m/s	1.59m/s	1.59m/s	1.59m/s	1.59m/s	1.59m/s

Basic Power Requirements - 280 Elevator

Height	280/15	280/25	280/35
4.5m	1.5kW	2.2kW	3kW
6.5m	2.2kW		
8m		3kW	
12.5m			4kW
18.5m	3kW		

Basic Power Requirements - 560 Elevator

Height	560/15	560/25	560/35
4.5m	1.1kW	1.5kW	2.2kW
5.5m	1.5kW	2.5kW	3kW
10m	2.2kW	4kW	4kW
15.5m	3kW	5.5kW	5.5kW
18.5m	4kW	7.5kW	7.5kW

Basic Capacities Available - 280/560 Elevator (Gravity)

Product	kg/m ³	3.9kW	5.6kW	7.8kW
Bran	320	5tph	8tph	11ph
Distillers Grain (Spent - Wet)	480	13tph	19tph	27tph
Flour	640	11tph	14tph	16tph

560 capacities are the same as the model 280 Elevator but the capacity is per leg.

Head/Drive Options



Drive Type

- Gear motor with external backstop (standard).
- Shaft mounted speed reducer with external backstop.
- Range of speeds to provide slow centrifugal and gravity discharge.

Drive Configurations

- Left/right hand back mounted (standard)
- Left/right hand front mounted

Head/Drive Other (650mm tall)

- Slatted pulley
- V belt drive to shaft mounted gearbox
- Gearbox pre-filled with lubricant
- Factory assembled or kit form
- Optional wear plates
- The cap that covers the drive drum can be split to allow easy removal in confined roof spaces
- 1.5kW to 7.5kW motors available (gearbox & motor size required depends on the height and required capacity)
- Head drum scrapers available

Outlet Adaptor Options

- Square slip fit
- Square flanged
- Round clip together



Boot Options



Basic Boot (600mm tall)

- Boot is supplied fully assembled
- Boots are symmetrical and have 2 possible inlet positions, one at the front and one at the back.
- 3mm thick galvanised steel
- Seed boot option available (increase in height 154mm)
- Boot tensioner adjustable boot
- Optional weather protection for inlet slide
- Wear plates available
- Boot drum scrapers available
- Special inlets catered for
- Can be fitted with mounting for belt sensors.

Please note back feeding an elevator can reduce capacity by up to 25%



Inlet Options

- Inlet hopper & lid
- Flared inlet hopper & lid
- Inlet slide assembly
- Control rod extensions available

Trunk (leg) Options



Trunks supplied in standard lengths of 2.5m, 2m, 1.5m, 1.25m, 1m, 0.5m & 0.25m.

Heights are made to the nearest 250mm

Basic Trunks

- All trunks are sealed as standard
- Trunk thickness is dependant on overall height. Up to 15m will be supplied in 1.2mm galvanised steel, up to 20m will be supplied in 2mm galvanised steel
- Every elevator is supplied with an inspection section. These are primarily used to access the belt & bucket assembly and to tension the belt
- Inspection sections are 1.25m long.
- Optional explosion relief panel (ATEX also available) [see Universal Elevator Options]

Models 200 Agricultural Belt & Bucket Elevator

This elevator is specifically designed with a low boot inlet height and short head. It is ideally suited to old installations where space is tight.

Summary



- Single lift belt & bucket elevator
- Capacities from 11tph to 22tph.*
- Max height 20m.
- Durable galvanised steel finish.
- Slatted pulleys to help reduce the build-up of materials on pulleys as standard.
- Low stretch rubber, oil resistant EP belting as standard. [See Universal Elevator Options]
- Drive pre-filled with lubricant for an easy installation.
- 3mm thick head & boot shell.
- Large inspection panel at front and rear of leg
- Heavy duty welded construction & hot dip galvanised head cap.
- Slower speeds make these elevator kinder to some products
- Access platforms with ladders & hoops available.
- Option to make elevator suitable for seed handling.
- Can be connected to the Perry PLC plant control panel
- Boot supplied fully assembled as standard.
- Trunks supplied in standard lengths of 2.5m, 2m, 1.5m, 1.25m, 1m, 0.5m & 0.25m.
- Heights are made to the nearest 250mm increment.
- All trunks are sealed as standard.
- Buckets supplied loose with a pre-punched belt & master tensioner fitted.
- 1 backstop and 1 front inlet slide supplied as standard (please note this does not include an inlet hopper).
- All elevators can be painted for an additional fee.

Optional Extras

Our standard belt & bucket elevator can be customised to suit your requirements with additional optional extras.

These include access platforms and ladders, rotation sensors, solid pulley, belt alignment, plastic buckets, 90 degrees shaft mounted gear motors and explosion relief panels.

Our elevators can be put into an ATEX 22 zone with the addition of some specialist extras.

Basic Specifications

<i>Model</i>	<i>200/11</i>	<i>200/16</i>	<i>200/22</i>
<i>Capacity*</i>	11tph	16tph	22tph
<i>Head</i>	3mm	3mm	3mm
<i>Boot</i>	3mm	3mm	3mm
<i>Trunking up to 20m</i>	1.5mm	1.5mm	1.5mm
<i>Bucket spacing</i>	254mm	178mm	127mm
<i>Duct size (Square)</i>	181mm	181mm	181mm
<i>Duct size (Round)</i>	152mm	152mm	178mm
<i>Belt Strength</i>	500kN/m	500kN/m	500kN/m
<i>Belt Speed (Gravity)</i>	1.59m/s	1.59m/s	1.59m/s

Basic Power Requirements

Height	200/11	200/16	200/22
4.5m	0.75kW	1.1kW	1.5kW
6m	1.1kW	1.5kW	2.2kW
11m	1.5kW	2.2kW	3kW
15.5m	2.2kW	3kW	4kW
18.5m	3kW	4kW	

Basic Capacities Available (Gravity)

Product	kg/m ³	3.9kW	5.6kW	7.8kW
Wheat	750	11tph	16tph	22tph
Pellets (6mm)	600	8tph	11tph	16tph
Meals (Feeds)	520	7tph	10tph	14tph
Oil Seed Rape	690	9tph	13tph	18tph
Flour	640	8tph	12tph	17tph

Head/Drive Options



Drive Type

- Gear motor with external backstop (standard).
- Shaft mounted speed reducer with external backstop.
- Range of speeds to provide centrifugal, slow centrifugal and gravity discharge.

Drive Configurations

- Left/right hand back mounted (standard)
- Left/right hand front mounted

Head (650mm tall)

- Slatted pulley
- V belt drive to shaft mounted gearbox
- Gearbox pre-filled with lubricant
- Factory assembled or kit form
- Optional wear plates
- The cap that covers the drive pulley can be split to allow easy removal in confined roof spaces
- 0.75kW to 4kW motors available (gearbox & motor size required depends on the height and required capacity)
- Head drum scrapers available

Outlet Adaptor Options

- Square slip fit
- Square flanged
- Round clip together

Boot Options



Basic Boot (600mm tall)

- Boot is supplied fully assembled
- Boots are symmetrical and have 2 possible inlet positions, one at the front and one at the back.
- 3mm thick galvanised steel
- Seed boot option available (increase in height 154mm)
- Boot tensioner available (adjustable boot)
- Optional weather protection for inlet slide
- Wear plates available
- Boot drum scrapers available
- Special inlets catered for
- Can be fitted with belt alignment sensors

Please note back feeding an elevator can reduce capacity by up to 25%



Inlet Options

- Inlet hopper & lid
- Flared inlet hopper & lid
- Inlet slide assembly
- Control rod extensions available

Trunk (leg) Options



Trunks supplied in standard lengths of 2.5m, 2m, 1.5m, 1.25m, 1m, 0.5m & 0.25m.

Heights are made to the nearest 250mm

Basic Trunks

- All trunks are sealed as standard
- Trunk thickness is 1.5mm
- Every elevator is supplied with an inspection section. These are primarily used to adjust the tension in the belt.
- Inspection sections are 1.25m long.
- Can be fitted with mounting for belt sensors.
- Optional sight glasses.
- Optional explosion relief panel (ATEX also available) [see Universal Elevator Options]

Universal Elevator Options

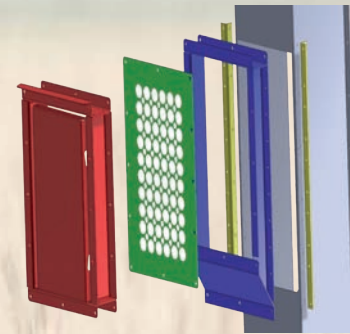
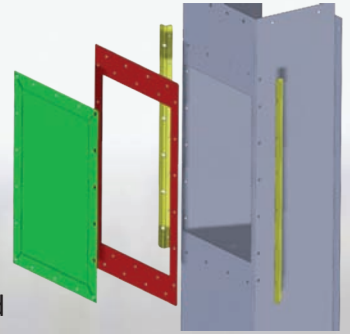
Explosion/Pressure Relief Options



Explosion Relief Options

Should an explosion occur, the vent bursts and releases pressure to minimise damage. An optional sensor is available which detects when an explosion occurs and shuts down the machine.

- Perry pressure relief panels (switched or non-switched available)
- ATEX Rated REMBE Explosion Relief (switched or non-switched available)
- Mounting flanges are factory fitted
- Switched versions can be wired to emergency stops and alarms
- Panels should be directed to a safe area



Painted Elevators



- All elevators can be painted in RAL 1015 (Ivory White) for an additional fee.
- Other colours available through special request

Access Platforms, Ladders & Hoops



Access platforms are supplied to enable safe access to machinery during operation and servicing.

- 2 variations available - Up & over or trap door
- Can be supplied in U-form or wrap around
- Supplied in kit form
- Must be built around 2.5m/2.4m trunks
- Heavy duty galvanised construction
- Meets all safety requirements & standards
- Trapdoor platforms are complete with ladder support brackets fitted to trunking



Ladders & Hoops

- Meet all safety requirements & standards
- Available in specialist lengths, but come in 1.1m increments as standard
- Rest platforms available
- Removable 3m ladder also available



Belt & Bucket Options

Elevator models 200, 220, 280, 330 & 440 are supplied with EP500/3 belting as standard, the 330 elevator is supplied as standard with EP630/4 belting.



Basic Belt & Buckets

- Nitrile (oil resistant) belt supplied as standard
- Low stretch rubber EP belting as standard
- Cup belts can be supplied factory assembled or in kit form
- Master cup belt tensioner mounted on the cup belt for easy joining & tensioning
- Plastic cups available for seed handling
- Optional belt scraper
- Spacer washers for buckets

Low stretch laminated elevator belt

- Nitrile provides good resistance to oil & fat
- Suitable for products containing oils & fats up to 80°C
- Polyester fabric wrap and polyamide fabricweft piles 9EP) separated by 0.3m thick synthetic rubber laminates of 100% nitrile
- Temperature range from -20°C to 80°C



Type	EP500/3	EP630/4
Stretch per ply	160kN/m	160kN/m
Number of plies	3	4
Total tensile strength	500kN/m	630kN/m
Max working strength (10:1 SF)	50kN/m	63kN/m
Belt thickness	5mm	7mm
Weight	6.5kg/m ²	8.7kg/m ²

Sensors & Monitors

Rotation Sensors



Rotation sensor with stop monitor.

- 1 off M100 Stopswitch Multi Voltage - ATEX Zone 20

The M100 Stopswitch is a simple inductive shaft speed-monitoring device. The self-contained unit has a single set point, which signals when the shaft has stopped rotating. It can be used for process control, motion detection and stopped shaft indication.



Rotation sensor with under speed monitor.

- 1 off M300 Slipspeed switch - ATEX Zone 20

The M300 Slipspeed switch is a simple inductive shaft speed monitoring device. The self-contained unit has a single set point, which signals when the shaft speed has dropped by 20% of normal running speed. It is used for detecting dangerous slow downs and underspeeds on conveyors, bucket elevators, airlocks, mixers, fans, grinders and many other machines.

Belt Alignment Monitors



Belt Alignment Monitor for upto 20m Elevator

- 1 off B400 Elite Alignment Monitor - Multi Voltage ATEX
- 2 off Touchswitch belt alignment sensors

Belt Alignment Monitor for over 20m Elevator

- 1 off B400 Elite Alignment Monitor - Multi Voltage ATEX
- 4 off Touchswitch belt alignment sensors

The B400 Elite is a microprocessor based control unit which uses sensors to detect belt misalignment by pressure (Touchswitch) from one or two elevators/conveyors. The unit is able to provide an alarm and automatic shutdown of the elevator/conveyor when a belt misalignment condition is detected.



The Touchswitch is an electro-mechanical limit-switch, with no moving parts, that detects the misalignment of both pulleys and belts in conveyors and bucket elevators. The sensor detects the lateral force of the belt or pulley and activates a voltage free relay contact. This relay contact can be used to send an alarm or shutdown the machine. The sensors are usually installed in pairs on opposite sides of the belt / pulley.

Bearing Temperature Monitors



Bearing Temperature Monitoring System

- 1 off T400 Elite Monitor - Multi Voltage
- 2 off WDB Bearing sensor 80 degree C tripping point

Bearing Temperature Monitoring System

- 1 off T400 Elite Monitor - Multi Voltage
- 4 off WDB Bearing sensor 80 degree C tripping point

The T400 Elite - Hotswitch is a microprocessor controlled temperature monitor, which works in conjunction with PTC temperature sensors to monitor up to 48 bearings and can provide an alarm and automatic shutdown when a high bearing temperature condition is detected.

WDB Bearing Temperature Sensors with thermistors type PTC, NTC, or PT100 (PTC 80°C stocked as standard -other temperatures available on request)



Full Watchdog Monitoring System



Bearing Temperature Monitoring System

- 1 off Watchdog Elite Monitor - Multi Voltage
- 4 off WDB Bearing sensor 80 degree C tripping point
- 4 off Touchswitch Belt Alignment Sensor
- 1 off Whirlygig Euro M12 thread - 2 pulse target
- 1 off Whirlygig magnetic connector
- 1 off P100 Inductive Proximity Switch
- 1 off Binswitch 90/240 VAC
- 1 off Switch Polyurathane wear guard

The Watchdog Elite is a microprocessor controlled unit with combined belt speed, belt alignment, bearing temperature, pulley alignment and plugged condition monitoring for bucket elevators and conveyors. An LCD screen displays machine status messages (available in four different languages) and a super-bright LED display shows belt speed. Calibration and set-up parameters are accessed via a password and front panel touch buttons.



The Whirlygig Heavy Duty makes shaft speed monitoring much simpler, easier and more reliable. Its all stainless steel heavy duty construction with sealed twin stainless steel bearings make it ideally suited to corrosive and highly demanding environmental conditions. Specify the type of sensor to be installed inside the unit (M100, M300, P100, or P300) and the number of targets/pulses required. Used on conveyors, elevators and other rotating shafts to monitor shaft speed for continuous, low speed or high speed conditions. Machine vibration or movement does not affect the performance of the sensor as the whole assembly moves with the shaft.