



JF MCKENNA LTD

Collinson 
Complete Feeding Solutions

Tip Batch weigher

The Diplomat batch weigher's are based on the continuous batch weighing system where the material flows constantly through the weigher at a given capacity.

Weighing feed ensures your animals receive the right amount of feed; saving time and helping you keep the cost price of feed and the production results under control.

Weighing is based on the well known principle of establishing a physical balance between the batch weighed out and the weigher setting, ensuring optimum accuracy.

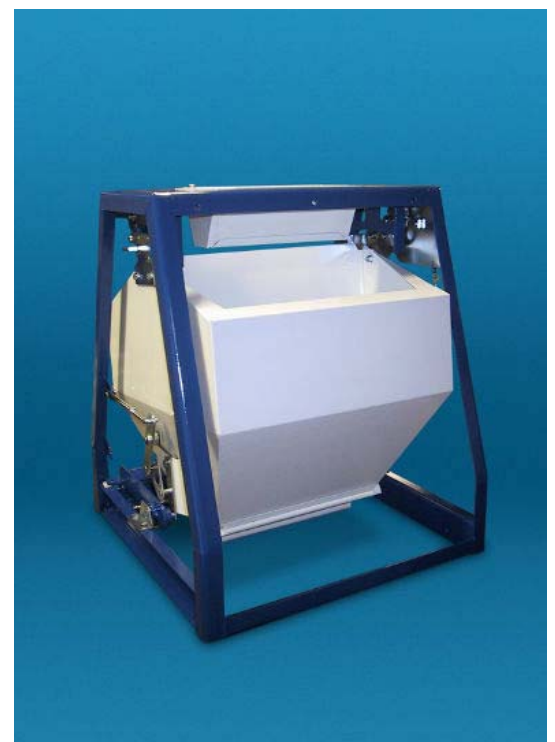
The weigher's are of simple, sturdy construction and this in conjunction with reliability of operation makes the individual models suitable for a range of applications.

Whether you choose unlimited feeding or ration the feed, a simple re-settable cumulative pulse counter on the weigher offers an accurate weight based control, a pulse being a single tip of a preset weight.

The counter records how many pulses/batches have been processed by the weigher, an additional remote pulse counter can be located in an office if required.

If you prefer to save on feed costs by home mixing, a tip control unit for up to 5 conveyors can be utilised; the control is programmed with a quantity of tips for each individual conveyor. Once started, the control works through each conveyor stopping after the last.

Whatever method of feeding you prefer the tip batch weigher ensures you will always know what has been fed.



Libra Electronic Weigher

The Libra electronic feed weighing system is an automated feed measuring and conveying system that allows pre-set amounts of feed to be sent to specific feeders.

Feed is conveyed from a bulk silo into an accurate weighing hopper that is fitted with a load cell and motorised discharge valve.

The hopper batch weighs feed into a receiving hopper then an output conveyor delivers the feed to its destination.

The weighing hopper measures feed in batches of typically 20kg followed by a final partial drop to achieve the precise set amount and offers excellent stability and accuracy down to 0.1kg.

The Libra electronic automated feed weighing system offers accurate weight based control allowing you to simply monitor the quantity of feed going through the feeding system or if you are mixing your own ration the Libra system allows you to mix the feed in a pre-set adjustable ratio.

Whatever method of feeding you choose the Libra system ensures you will always be in control of what has been fed.



Load Cells

A silo load cell weighing system forms an integral part of any feed management system.

This system allows you to accurately monitor the quantity of feed delivered, feed usage, batch weighing, data collection to recipe formulation, inventory management and traceability.

The Collinson strain gauge load cell system is integrated into a special load cell mounting frame which is designed to replace the structural elements lost from connection to the concrete base and to provide a stable base for the load cell system ensuring the highest load cell accuracy is achieved.

For optimum accuracy load cells are positioned under each leg of the silo, this minimises the effects of wind, uneven loading/unloading and temperature variations. When a load is applied to the silo each load cell sends its signal to be surmised in a junction box, this in turn is sent to the amplifier which converts the signal to a weight. A silo weighing system fitted with 4 cells and a controller will give an overall accuracy of circa 0.25%.

The amplifier is a mains powered digital display which is available in two models. The basic digital weight indicator can be utilised as stand alone display or can be integrated into the main control panel for your house to enable more complex functions.

The process controller is a more intelligent independent system which can perform a variety of complex tasks such as batching or electronic feed consumption.

The load cell system can be integrated into County, TriStor and DayStor storage facilities.



COUNTY SILO S1 RANGE

Centre Discharge



The 60° cone and smooth walls provide excellent mass feed flow for free flowing pelleted products and wholegrains to fill a conveyor system, bags or a barrow.

Special Features

- Volumes from 6.7m³ to 54.3m³
- Galvanised or Plasteel™ (Plastic coated galvanised steel) construction
- Smooth internal walls
- Pressure relief valve
- AutoVent
- FloView™ SafetyClean panel
- External, lockable filler pipe
- Heavy duty top filler bend (5mm wall thickness)
- Independent exhaust pipe
- Level indicators
- Crane lifting points
- Galvanised support structure designed to Eurocode 1, Part 1-4
- Clearance under cone plate:
 - 800mm for conveyor discharge
 - 1300mm for gate valve slide unit
- Discharge aperture: 400mm diameter

Range of 6 Plasteel™ Finishes

Juniper Green
BS 12B29

Olive Green
BS 12B27

Moorland Green
BS 12B21

Merlin Grey
BS 18B25

Slate Blue
BS 18B29

Vandyke Brown
BS 08B29

Colour samples available on request



Model Number	Overall Height	Barrels	Dia. (m)	Capacity (m ³)	Meal @ 577 kg/m ³	Pellets @ 650 kg/m ³	Grain @ 693 kg/m ³	Base Size (m)
<i>S1A07</i>	<i>4.12m</i>	1.0	<i>2.06m</i>	<i>6.70m³</i>	<i>3.87t</i>	<i>4.36t</i>	<i>4.64t</i>	<i>2.7 x 2.7 x 0.15m</i>
<i>S1A09</i>	<i>4.70m</i>	1.5	<i>2.06m</i>	<i>8.70m³</i>	<i>5.02t</i>	<i>5.66t</i>	<i>6.03t</i>	<i>2.7 x 2.7 x 0.15m</i>
<i>S1A11</i>	<i>5.33m</i>	2.0	<i>2.06m</i>	<i>10.70m³</i>	<i>6.17t</i>	<i>6.96t</i>	<i>7.42t</i>	<i>2.7 x 2.7 x 0.15m</i>
S1B12	4.71m	1.0	2.57m	11.50m ³	6.64t	7.48t	7.97t	3.2 x 3.2 x 0.15m
<i>S1A13</i>	<i>5.91m</i>	2.5	<i>2.06m</i>	<i>12.80m³</i>	<i>7.39t</i>	<i>8.32t</i>	<i>8.87t</i>	<i>2.7 x 2.7 x 0.20m</i>
S1B15	5.29m	1.5	2.57m	14.60m ³	8.42t	9.49t	10.12t	3.2 x 3.2 x 0.20m
<i>S1A15</i>	<i>6.54m</i>	3.0	<i>2.06m</i>	<i>14.80m³</i>	<i>8.54t</i>	<i>9.62t</i>	<i>10.26t</i>	<i>2.7 x 2.7 x 0.25m</i>
S1C15	5.04m	1.0	2.87m	15.10m ³	8.71t	9.82t	10.46t	3.5 x 3.5 x 0.20m
S1B18	5.92m	2.0	2.57m	17.70m ³	10.21t	11.51t	12.27t	3.2 x 3.2 x 0.20m
S1C19	5.62m	1.5	2.87m	19.00m ³	10.96t	12.35t	13.17t	3.5 x 3.5 x 0.20m
S1B21	6.50m	2.5	2.57m	20.80m ³	12.00t	13.52t	14.41t	3.2 x 3.2 x 0.20m
S1D22	5.59m	1.0	3.35m	22.30m ³	12.87t	14.50t	15.45t	4.0 x 4.0 x 0.25m
S1C23	6.25m	2.0	2.87m	22.90m ³	13.21t	14.89t	15.87t	3.5 x 3.5 x 0.25m
S1B24	7.13m	3.0	2.57m	24.00m ³	13.85t	15.60t	16.63t	3.2 x 3.2 x 0.25m
S1C27	6.83m	2.5	2.87m	26.80m ³	15.46t	17.42t	18.57t	3.5 x 3.5 x 0.25m
S1D28	6.24m	1.5	3.35m	27.60m ³	15.93t	17.94t	19.13t	4.0 x 4.0 x 0.25m
S1C31	7.46m	3.0	2.87m	30.80m ³	17.77t	20.02t	21.34t	3.5 x 3.5 x 0.30m
S1D33	6.80m	2.0	3.35m	32.90m ³	18.98t	21.39t	22.80t	4.0 x 4.0 x 0.30m
S1D38	7.38m	2.5	3.35m	38.30m ³	22.10t	24.90t	26.54t	4.0 x 4.0 x 0.30m
S1D44	8.01m	3.0	3.35m	43.20m ³	24.93t	28.08t	29.94t	4.0 x 4.0 x 0.35m
S1D49	8.59m	3.5	3.35m	49.00m ³	28.27t	31.85t	33.96t	4.0 x 4.0 x 0.35m
S1D54	9.22m	4.0	3.35m	54.30m ³	31.33t	35.30t	37.63t	4.0 x 4.0 x 0.40m

Important Notes

* O/A Silo height is based on the 800mm clearance under the cone, for silos with the 1300mm clearance, add 500mm to the overall silo height.

** Silo capacity indicated is the true volume of the entire shell of the silo. Please allow extra capacity in the silo you chose to allow for;

a) variations in product density due to aeration of product during pneumatic silo filling.

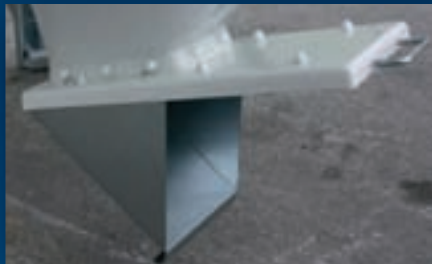
b) variable density of the product due to manufacturing specification.

c) extra spare capacity. As a general rule we recommend you chose a silo with a minimum additional capacity of 20% over and above the size of loads you are planning to have delivered.

The models in italics are only available with 1300mm clearance under the cone to accommodate a gate valve slide unit

Gate Valve Slide Unit

15° Inclined Gate Valve, 450mm Dia.
The photo shows an optional fixed short chute to assist with bagging off.



SafetyClean Plus

Extra discharge from the cone of the silo is ideal when a conveyor is connected. Clearance under chute for bagging off is 950mm



Cyclone Dust Collection Unit

Connection Kits:
Single silo c/w PRV
Double silo c/w PRV



Getting the Silo Ready to Use

- 1) It is **your responsibility** as the customer to provide a suitable ready mix concrete with grade C30 base, dimensions as per recommendation to suit selected silo size.
- 2) Collinson County Range Silos are delivered and erected by vehicles fitted with hydraulic tipping gear which erects the Silo onto the concrete base.
- 3) The driver/fitter will drill the concrete base and bolt the silo into position using expansion type anchor bolts.
- 4) If fitted with a slide unit the silo is now ready to use alternatively if a conveyor discharge is being connected, fitting can now take place.

COUNTY SILO S3 RANGE

Centre Discharge



The 67° cone and smooth walls provide excellent mass feed flow for storing free flowing pelleted products and wholegrains, the steeper angled cone also makes this silo ideal to store blends and meals to fill a conveyor system, bags or a barrow.

Special Features

- Volumes from 7.5m³ to 47m³
- Galvanised or Plasteel™ (Plastic coated galvanised steel) construction
- Smooth internal walls
- Pressure relief valve
- AutoVent
- FloView™ SafetyClean panel
- External, lockable filler pipe
- Heavy duty top filler bend (5mm wall thickness)
- Independent exhaust pipe
- Level indicators
- Crane lifting points
- Galvanised support structure designed to Eurocode 1, Part 1-4
- Clearance under cone plate:
 - 800mm for conveyor discharge
 - 1300mm for gate valve slide unit
- Discharge aperture: 400mm diameter

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S3A08	4.66m	1.00	2.06m	7.50m ³	4.33t	4.88t	5.20t	2.7 x 2.7 x 0.15m
S3A10	5.24m	1.50	2.06m	9.50m ³	5.48t	6.18t	6.58t	2.7 x 2.7 x 0.15m
S3A12	5.87m	2.00	2.06m	11.50m ³	6.64t	7.48t	7.97t	2.7 x 2.7 x 0.20m
S3B13	5.48m	1.00	2.57m	13.00m ³	7.50t	8.45t	9.01t	3.2 x 3.2 x 0.20m
S3A14	6.45m	2.50	2.06m	13.50m ³	7.79t	8.78t	9.36t	2.7 x 2.7 x 0.20m
S3A16	7.08m	3.00	2.06m	15.50m ³	8.94t	10.08t	10.74t	2.7 x 2.7 x 0.25m
S3B16	6.06m	1.50	2.57m	16.10m ³	9.29t	10.47t	11.16t	3.2 x 3.2 x 0.20m
S3C17	5.84m	1.00	2.87m	17.20m ³	9.92t	11.18t	11.92t	3.5 x 3.5 x 0.20m
S3B19	6.69m	2.00	2.57m	19.20m ³	11.08t	12.48t	13.31t	3.2 x 3.2 x 0.20m
S3C21	6.42m	1.50	2.87m	21.10m ³	12.17t	13.72t	14.62t	3.5 x 3.5 x 0.25m
S3B22	7.27m	2.50	2.57m	22.40m ³	12.92t	14.56t	15.52t	3.2 x 3.2 x 0.25m
S3C25	7.05m	2.00	2.87m	25.00m ³	14.43t	16.25t	17.33t	3.5 x 3.5 x 0.25m
S3B26	7.90m	3.00	2.57m	25.50m ³	14.71t	16.58t	17.67t	3.2 x 3.2 x 0.25m
S3D26	6.59m	1.00	3.35m	25.60m ³	14.77t	16.64t	17.74t	4.0 x 4.0 x 0.25m
S3C29	7.63m	2.50	2.87m	29.00m ³	16.73t	18.85t	20.10t	3.5 x 3.5 x 0.25m
S3D31	7.16m	1.50	3.35m	31.00m ³	17.89t	20.15t	21.48t	4.0 x 4.0 x 0.25m
S3D36	7.80m	2.00	3.35m	36.30m ³	20.95t	23.60t	25.16t	4.0 x 4.0 x 0.30m
S3D42	8.37m	2.50	3.35m	41.60m ³	24.00t	27.04t	28.83t	4.0 x 4.0 x 0.35m
S3D47	9.01m	3.00	3.35m	47.00m ³	27.12t	30.55t	32.57t	4.0 x 4.0 x 0.35m

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