



## **Type SP95 Loss in Weight Feeder**

static weighing better than 0.1%

simple installation, calibration and commissioning

50 different materials

proportioning accuracy better than 0.3%

separate data storage for each material characteristic

fast response, continuous control

The SP95 loss in weight system is a dust-proof weighing and control system for continuous proportioning of bulk materials. The system gives consistent feeding and high accuracy, even with difficult materials.

The compact design offers high reliability and simple maintenance.

Lower capacity units are shown on the SP90 data sheet.

## **OPERATION**

The weighing controller adjusts the speed of the output feeder to proportion the quantity according to the set value. The speed of the output feeder is calculated according to the volumetric proportioning characteristics of the feeder and the weigh hopper contents level.

The hopper is slowly emptied (normally 3 to 30 minutes between refills) and the loss of weight per time intervals is used by the controller to update the volumetric information and to compensate for changes in material flow and head pressure as the hopper is emptied and refilled. This profiling of the feed characteristic ensures that the output feeder can be adjusted even during the refill cycle.

The weigh controller has advanced software providing the following:

- Fast response. The system quickly adjusts to changes of setpoint, without process delays or overshoots.
- Continuous control. Changes of setpoint can be made even during the refill cycle, and is ideal for proportional and cascade control systems.
- Batch weighing. The system will compensate for material in-flight and give the correct batch size, even if the batch target is reached during the refill cycle.
- Material Logistics. The system can cater for up to 50 different materials through a single feeder with separate data storage areas for each material characteristic.

The Weighing controller is equipped for comprehensive communication with both operator and peripheral plant equipment.

- Menu controlled text display for simple, user friendly operator interface
- Setpoint from keyboard entry or externally using controller serial or analogue interface.
- Sturdy and reliable construction

- Full system calibration from the instrument keyboard with password access to restricted parameters.
- System outputs for serial communication and for external quantity counter.
- Large LED display for process values.



## Examples of materials handled by this system:

- Soot and fines with bridging characteristics
- Coarse and find dressed ore, ore and rock materials
- Cement, bentonite, lime and plaster
- Polymers, fero chloride, lignosulphonates and powders.
- Abrasive materials like fine and coarse anthracite.
- Dust from electro bag filters in the cement, aluminium and metals industries.
- Dusty and hazardous chemicals in process plants.

## **OUTLINE DIMENSIONS**

Two models are available. Each can be equipped with large or small weigh hopper according to the bulk density and capacity of the material to be handled.

The construction is fabricated from steel or acid proof stainless steel. The general configuration provides a simple and compact unit which demands little extra space compared to the capacity.

- The base frame is delivered with mounted load cell, weigh hopper and connection flexibles. This ensures exact installation and high weighing accuracy.
- Venting of the weigh hopper through filter bag, or by return to storage hopper or plant dust extraction system.
- The output feeder is easily accessed via an inspection hatch.
- The arch breaker / material activator in the weigh hopper is driven by the same motor as the cell feeder and gives sufficient activation at high capacity throughputs, without over activation at low rates of feed.
- The motor drive is effected utilising a proprietry motor gearbox assembly.



DIMENSIONS	SP95-51	SP95-52	SP95-53	SP95-54	SP95-55
H1	230	230	230	230	230
H2, Small hopper	910	1038	1258	1682	2176
H2, Large hopper	1360	1638	1985	2582	3176
H3, Single feeder	300	330	415	503	626
H3, Dual feeder	375	415	520	645	811
H4	358	403	410	422	464
L1	231	260	335	380	453
D1	1000	1240	1560	1930	2510

Extenso's policy is one of continuous product enhancement. We therefore reserve the right to incorporate technical modifications without prior notification.

SPECIFICATION	SP95-51	SP95-52	SP95-53	SP95-54	SP95-55
Maximum capcity	3.5	7.1	13	28	57
m³/h					
Volume	0.5	0.9	1.6	3.35	7.1
small hopper m <sup>3</sup>					
Volume	0.85	1.6	3	6	12
Large hopper m <sup>3</sup>					
Weight kg	280	410	715	1185	1985
With small hopper					
Weight kg	315	470	825	1400	2300
With large hopper					

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