

Flour Milling

ZG Tanker Loading Bellows



35



Description ▼

ZG Loading Bellows are used for efficient, dust-controlled loading of dry, dusty bulk solids into tankers. The spouts are provided with inner tapered cones to contain the flow of material and an outer double bellows to provide for dust removal. At the lower end of the Loading Bellows, a polymer-coated SINT® cone with special sealing properties is provided for connection to the tanker.

Function ▼

ZG Telescopic Loading Bellows are suitable for continuous loading with a maximum flow rate of 250 m³/h (147 cfm) of bulk material. The outlet can be equipped with an anti-spillage device which acts as a dustproof stopper as the Loading Bellows is being raised. The equipment features a manual or an electric winch. A spigot on the header can be connected on site to an external de-dusting filter. First the Loading Bellows is lowered from its stand-by position towards the inlet spout of the tanker. As soon as the bellows outlet cone has settled on the inlet spout of the tanker, the slack cable switch mounted outside the transmission box stops lowering of the bellows. The limit switch inside the transmission box stops both full extension and retraction of the bellows. Material loading is started by opening the silo outlet valve. During the filling of the tanker, the polymer SINT® coating of the outlet cone acts as a perfect dust seal. The slack cable switch activates further extension of the bellows as the tanker lowers under the increasing weight of the material. A level control device installed in the centre of the outlet cone signals maximum material level in the tanker compartment and orders immediate closing of the silo outlet valve. Contraction of the bellows back to stand-by position starts after a delay of approximately ten seconds in order to allow the external filter to evacuate the remaining dust. Once the bellows is fully retracted, the cable limit switch inside the transmission box stops operation.



Application ▼

ZG Telescopic Loading Bellows are suitable for continuous loading of both finished products (flour) and by products shipped in bulk.

Benefits ▼

- ✓ **No product contamination thanks to:**
 - Double bellows which keep the falling material separate from the dust
 - 304/316 stainless steel contact parts
 - White colour food-grade polyester internal/external chutes
- ✓ **ATEX zone 22 certification;**
- ✓ **Flexible chute in Neoprene covered by Hypalon® makes bellows weather-proof, highly abrasion and temperature-resistant and durable;**
- ✓ **Reverse cone with inside level indicator indicates when tanker is full, raises loading bellows gradually, thus improving material distribution inside the tanker;**
- ✓ **Outlet can be equipped with an anti-spillage device which acts as a dustproof stopper as the loading bellows is being raised and prevents that insects or birds enter inside the outlet;**
- ✓ **2 lifting cables outside the material flow raise and lower the loading bellows without any cable wear due to material friction and obstruction to material flow.**

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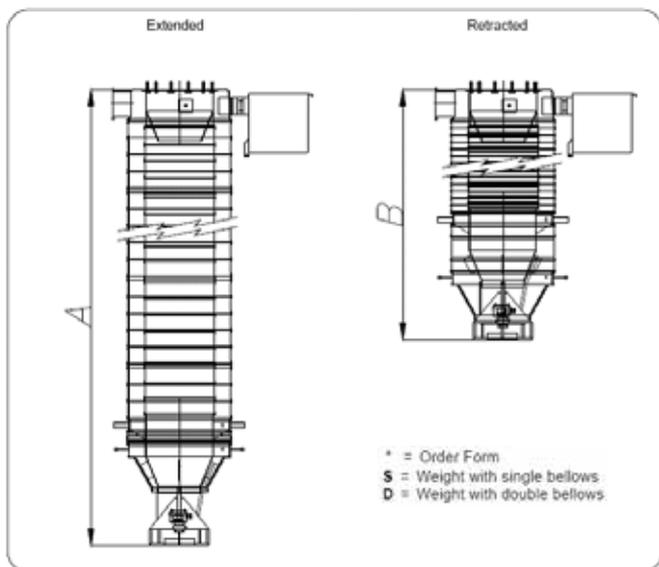
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Technical Features / Performance ▼

- ▶ Inlet diameter: 300mm (12 in)
- ▶ Maximum flow rate: 250 m³/h (147 cfm)
- ▶ Working Temperature: - 20 °C up to 120 °C (- 4° F to 248° F)
- ▶ Hoisting system equipped with an 0.55 kW electric motor and gear reducer with belt transmission
- ▶ Upper/lower limit switch
- ▶ Slack cable limit switch
- ▶ Fabricated parts in carbon steel or 304/316 stainless steel
- ▶ Bellows manufactured from Neoprene/Hypalon® or white colour food-grade polyester
- ▶ Double bellows with optional internal steel cones for granules
- ▶ Rubber bottom outlet cone to ensure a perfect sealing of the tanker hatch
- ▶ Control panel with remote control for fully automatic operation
- ▶ Available with rotary level indicator or vibrating level indicator
- ▶ Anti-spillage device on outlet
- ▶ 2 external hoisting cables

Overall Dimensions ▼



*	A _{max} [mm]	B _{min} [mm]	S [kg]	D [kg]
05	1,610	1,100	183	205
07	1,890	1,140	184	207
10	2,190	1,170	185	210
12	2,370	1,200	186	211
15	2,670	1,230	188	213
17	2,950	1,270	189	215
20	3,150	1,290	190	217
22	3,430	1,330	191	219
25	3,730	1,370	192	221
27	4,010	1,400	193	224
30	4,290	1,440	195	226
32	4,590	1,470	196	228
35	4,870	1,510	197	230
37	5,170	1,540	198	223
40	5,710	1,740	205	231
42	5,990	1,770	206	233
45	6,290	1,800	207	235
47	6,590	1,840	208	237
50	6,870	1,880	209	239
52	7,150	1,910	210	241
55	7,340	1,940	211	243
57	7,710	1,980	212	245
60	8,010	2,020	213	247

This datasheet might not show the complete range but only the models most suitable for the application.