

PRODUCT CONFIGURATIONS



M-0708

Weigh Batching/Blending System with Bag Dump Station, Bulk Bag Unloaders and Flexible Screw Conveyors



USA

FLEXICON CORPORATION
2400 Emrick Boulevard
Bethlehem, PA 18020-8006
USA
Tel: 1 888 FLEXICON
(1 888 353 9426)
Tel: 1 610 814 2400
Fax: 1 610 814 0600
E-mail: sales@flexicon.com
Web: www.flexicon.com

UK

FLEXICON (EUROPE) LTD
182 John Wilson
Business Park
Harvey Drive
Whitstable, Kent CT5 3RB
United Kingdom
Tel: +44 (0)1227 374710
Fax: +44 (0)1227 365821
E-mail: sales@flexicon.co.uk
Web: www.flexicon.co.uk

SPAIN

FLEXICON (EUROPE) LTD
Sicilia 253, 4º, 1ª
08025 Barcelona
Spain
Tel: +34 647 670 302
E-mail: ventas@flexicon.es
Web: www.flexicon.es

SOUTH AFRICA

FLEXICON AFRICA (PTY) LTD
P.O. Box 10450
Linton Grange
Port Elizabeth 6015
South Africa
Tel: +27 41 453 1871
Fax: +27 41 453 1670
E-mail: sales@flexicon.co.za
Web: www.flexicon.co.za

CHILE

FLEXICON CHILE LTD
Avenida Andres Bello #1051
Oficina #1602
Providencia
Santiago
Chile
Tel: +56 2 2415 1286
Fax: +56 2 2415 1393
E-mail: ventas@flexicon.com
Web: www.flexicon.com

AUSTRALIA (SYDNEY)

FLEXICON CORPORATION
(AUSTRALIA) PTY LTD
Suite 5, Level 3
45-47 Hunter St.
Hornsby, NSW 2077
Australia
Tel: +61 (0)7 3879 4180
Fax: +61 (0)2 9477 5548
E-mail: sales@flexicon.com.au
Web: www.flexicon.com.au

AUSTRALIA (BRISBANE)

FLEXICON CORPORATION
(AUSTRALIA) PTY LTD
78 Westgate Street
Wacol, QLD 4076
Australia
Tel: +61 (0)7 3879 4180
Fax: +61 (0)7 3879 4183
E-mail: sales@flexicon.com.au
Web: www.flexicon.com.au

SINGAPORE

FLEXICON SINGAPORE PTE
LTD
27 West Coast Highway
#02-22
Singapore 117867
Tel: +65 6778 9225
Fax: +65 6690 8850
E-mail: sales@flexicon.com.sg

flexicon®

Weigh Batching/Blending System with Bag Dump Station, Bulk Bag Unloaders and Flexible Screw Conveyors

Conveys bulk ingredients from manual and automatic unloading equipment, weigh-batches and blends the material, and delivers it for automated weigh-filling in bulk bags

This automated, gain-in-weight batching and blending system from Flexicon conveys bulk ingredients from manual and automatic unloading equipment, weigh-batches and blends the material, and delivers it for automated weigh-filling in bulk bags.

Systems such as this can interface with a variety of existing bulk handling and process equipment. Material sources can range from manually filled hoppers and drum dumpers to rail cars and roof-mounted silos. Virtually any new or existing plant equipment in any interior or exterior plant location can be integrated into a fully automated weigh batching system.

The system pictured is comprised of a manual dumping station and two bulk bag unloaders, one that employs a cantilevered hoist and trolley for loading bulk bags, the other a forklift. These units feed ingredients to a central weigh hopper by means of Flexicon flexible screw conveyors (also known as a helix conveyors, screw conveyors, spiral conveyors or auger conveyors) that are linked to the hopper's load cells via a central programmable controller.

The controller starts and stops each conveyor to weigh batch each ingredient in sequence, opens a hopper discharge valve to unload the batch into a blender, then closes the valve, facilitating concurrent weighing of a subsequent batch and blending of the discharged batch. At the completion of each cycle, the blender discharge valve is opened to fill a surge hopper, then closed to accept another weighed batch for blending.

A separate programmable controller for the bulk bag filling portion of the system actuates a fourth conveyor to elevate material and feed a bulk bag filling machine at maximum rate. Filling machine load cells transmit gain-in-weight information to the controller which, as the bag nears its target weight, reduces the feed rate to dribble, stopping the conveyor once the accurate bag weight is reached.

The conveyors employed in the system elevate and feed a full range of free- and non-free-flowing materials—from products that pack, cake, bridge, smear, or fluidize to those that separate—with the consistency and capacity needed for rapid bag filling, as well as the steady dribble-feed rates required for accurate weighments.

Flexicon bulk bag unloaders are equipped with FLOW-FLEXER® bag activators to promote consistent and complete discharge of both free-flowing and non-free-flowing materials from the bag.

The bulk bag filler is equipped as standard with: manual fill head height adjustment to accommodate all popular bag sizes; pneumatically retractable bag hooks; inflatable connector to seal the bag inlet spout; and feed chute outlet port for dust-free air displacement during filling. Performance can be enhanced by adding: powered fill head height adjustment; inflator to expand the bag prior to filling; automated vibratory densification/deaeration system to stabilize the bag; and powered or gravity roller conveyor.



Automated system can interface with a variety of existing bulk handling and process equipment

Weigh batching and blending systems are offered in carbon steel with durable industrial finish, or stainless steel designed, constructed and finished to industrial, food, dairy or pharmaceutical standards.