tna
packaging
and processing
solutions

roflo®

simplicity
flexibility
performance

gateless design takes product distribution to a different level

The unique gateless design of roflo®, when combined with tna's intelligent technology, ensures your food product is treated with the utmost care while being moved around your factory.

roflo® has many unique features to make it the ideal solution for product handling and distribution in any food production environment.

rethink the conventional

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roflo®

roflo 29.10.06

roflo® minimises product loss, maximises production control

Gateless design

roflo® does not use traditional gates, resulting in less product breakage and flavour loss. The total motion control provided by roflo® enables it to be used as either a distribution or an accumulation system

Gentle low force operation – less product breakage and flavour loss

The use of servo motors as the drive system enables just sufficient force to achieve the required actions. When compared with vibrating feeder systems that typically operate at accelerations of 5 to 5.5g, the benefits of roflo® are clear:

- Only 15% of force of vibrating feeders
- Low force (< 0.8 g) operation
- Low force transmission to product = less product breakage
- Much less structural fatigue

Closed loop servo drive

Traditional horizontal motion conveyors rely on mechanical drives, linkages, and/or counterweights to achieve conveying motion. However the slow forward/quick return is not a natural motion that is easily achieved mechanically

By using rare-earth magnet servo motors roflo® conveyors can instantaneously stop, start, and reverse. roflo® conveyors can be programmed for control of forward velocity, return velocity, acceleration, deceleration, and variable length of stroke up to 200mm (8 inches) to provide optimum flow of product

- No complex linkages and counterweights
- No mechanical shocks
- Instantaneous stop, start and reversing

No product agitation

Linear motion and low transmission forces ensure food products are conveyed as a single entity, enabling minimal loss of flavours or coatings and no product damage through impact with the pan

Total controllability

Servo motors give precise control, so your food product can be handled with total controllability

The movement speed and direction of the product can be varied at will on line and at high frequency. Speeds can be controlled with almost instantaneous response to control signals.

You can slow down and store product, roflo® includes product level sensors that control mass flow

Reliability and low maintenance

Fewer parts to wear out or break results in high reliability and long life

Long pan lengths

Pan lengths of over 100m in one piece are possible with a master drive and any number of slave drives. This reduces problems with reliability and maintenance and reduces breakage and waste by eliminating unnecessary transfer points

Easy cleaning

All product is "swept" along the pan leaving little residue for cleaning

roflo®		Small	Large	Cross Feeders
Pan Section Size				
Width x Depth (mm)		450x220	720x300	350/500x150
Transfer Rate (kg/h)				
	Density=55g/l	2283	4988	295
	Density=100g/l	4160	9070	536
	Density=200g/l	8320	18140	1072
Capacity (cu m/hour)		41.6	90.7	5.36
Noise Level (dB(A) at 1m)		70	70	70
Transfer Speed Max m/min		15	15	4
Power Consumption (kW)		**	**	0.4
Floor Loading				
Drive & Base unit Dead load (kg)		321	321	110
Drive & Base unit Live load (kg)		**	**	**
Pan Mass (kg/m)		23	34	13.5

* The above specifications are subject to change and may differ according to product. Please confirm when placing your order.
**Varies depending on application load.

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