

RO SERIES Levelling robot



METALMONT

HANDLING INNOVATION

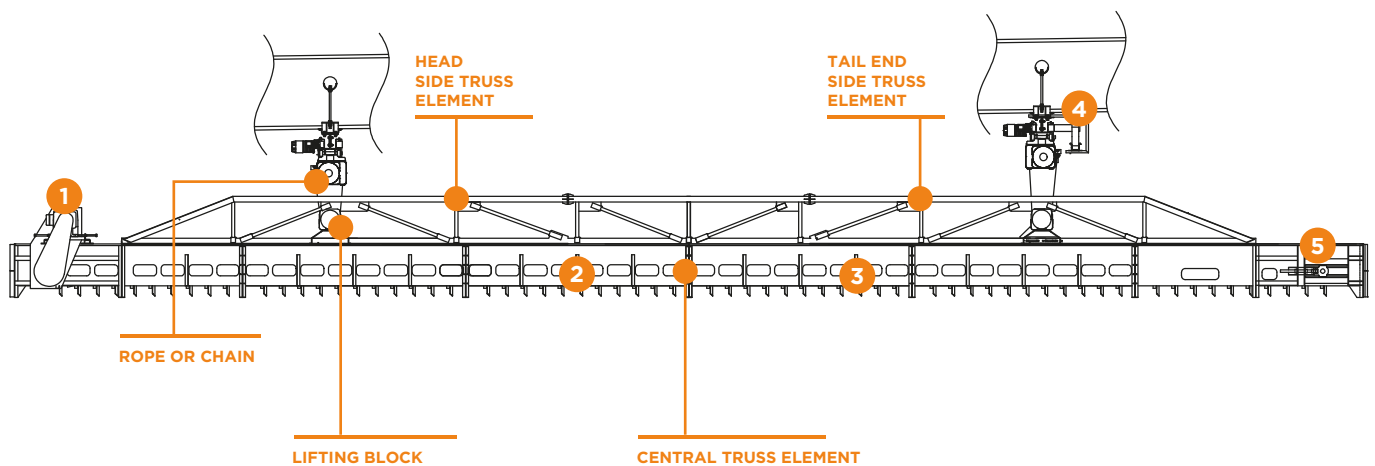
RO SERIES LEVELLING ROBOT

Reliable performance, construction quality,
easy assembly: the perfect solution

The levelling robot is one of the most technological systems for handling cereals, oilseeds and legumes in flat-bottom storages, allowing for their maximum filling (the entire geometric volume), as well as total and automatic emptying at very high flow rates.

The Metalmont RO series levelling robots are designed and built to ensure the best performance even in the most difficult working conditions, minimise maintenance costs and total operating costs.

RANGE from 60 to 200 t/h - higher flow rates available on request



1 TOWING ELEMENT (HEAD)

- Two toothed towing wheels
- High resistance steel towing shaft
- Supports with self-aligning ball bearings
- Hollow shaft orthogonal gearmotor with direct coupling to the towing shaft
- Anti-clogging sensor
- High density polyethylene chain sliding block

3 DRAG CHAIN

- Drag chain with forged steel elements
- Steel drag blades

5 IDLER ELEMENT (TAIL END)

- Two idler wheels
- Double screw chain tensioner
- High resistance steel idler shaft
- Tensioning slide with self-aligning ball bearings
- High density polyethylene chain sliding block

2 INTERMEDIATE ELEMENTS

- Case formed by bolted elements, carefully designed for quick and easy assembly
- Galvanised sheet steel chain intermediate support
- High density polyethylene chain sliding block (lower and upper)

4 HOISTS

- 2 motorised hoists mounted on carriages movable horizontally on the runways fixed to the ceiling
- Chain or rope hoist

DATA SHEET

MODEL	U.M.	RO-060	RO-100	RO-200
Flow rate*	t/h	60	100	200
Range approx. chain speed	m/s	0,54	0,54	0,4 - 0,54
Approx. towing element length mm (Head)	mm	3.000	3.000	3.000
Approx. idler element length (Tail end)	mm	3.000	3.000	3.000
Approx. case internal width.	mm	530	630	900
Intermediate element length	mm	500 / 1.000 / 1.500 / 2.000 / 2.500 / 3.000		
Chain sliding block material	mm	polyethylene		
Hoist		with rope or chain		
- shift motor power		according to the storage dimensions		
- lifting motor power		according to the total weight of the robot		

*Values referred to wheat p.s. 0.78 t/m³; RH 15%; impurities: 2%. Theoretical work capacity.

In order to improve the product and for regulatory compliance, the technical specifications, appearance and equipment described in this document may be subject to change without prior notice.

ACCESSORIES AND DEVICES

MODEL	RO-060	RO-100	RO-200
Porthole for visual inspection on the head	●	●	●
Anti-clogging sensor on head and tail end	●	●	●
Product presence external sensor	●	●	●
Product presence internal sensor	●	●	●
Carriage shift limit switch	●	●	●
Carriage synchronisation system	●	●	●
Carriage position detection device	●	●	●
SRopes/chains loosening sensor	●	●	●
Speed control sensor on tail end	●	●	●
Support temperature sensor on head and tail end	○	○	○
Hot-dip galvanising of the intermediate elements	○ ¹	○ ¹	○ ¹
Hot-dip galvanising of head and tail end	●	●	●
Suitable for use in ATEX 22, according to the customer classification	○	○	○
Hot-dip galvanised truss	○ ²	○ ²	○ ²

● - *Standard*

○ - *Optional*

○¹ - Standard surface finish: pre-galvanised sheet steel Z275

○² - Standard surface finish on truss: painted



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