



## CASE HISTORY: Mixed conveyor manual and Power & free two-rail XD37/45-06



The XD37/45 two-rail overhead conveyor is at the service of a painting system of radiators for domestic use, and leads the transport units with the items to be treated through the cooking oven. The movement of the racks outside the oven is manual. The operation is of the continuous type, with the possibility of regulating the speed by means of an inverter; the transmission of the motion takes place through a caterpillar towing unit equipped with a mechanical safety pin, which protects the motorization from overloads, and a sensor that signals the breakage. All the controls relating to the conveyor and its drives are located on the general electrical panel.

The carrying unit is supported by two trolleys equipped with a pair of "slippers" necessary for dragging the hanger by means of a pusher tooth fixed to the biplanar chain present in the upper track.

Along the way there are some pneumatic stations, which, if inserted, lower the slippers of the trolleys, thus allowing to release the trolley itself from the pusher tooth and to stop the hanger in the station, while the conveyor chain continues to move. When a hanger is stationary, the hanger that is arriving is automatically accumulated through the contact between the trolleys.

For each accumulation zone, limit switches are provided which intervene when the accumulation stations are full of racks.

In addition, the track is equipped with anti-return stops, in order to prevent the carriages, abandoned by the chain, from sliding backwards. To accumulate the racks at close range, the front and rear carriages are inserted in two parallel rails thus making the transport unit move orthogonally.

This occurs through mechanically controlled exchanges. At the exit from the accumulation areas, the transport units are straightened by directing the trolleys to a single track by means of free command exchanges.

In the manually operated area, pneumatically controlled exchanges are provided to allow the transport units to be directed to the different areas of the system.

## POWER & FREE CONVEYORS

*The two-rail conveyor features flexibility of use and is modulated according to the different needs of a complex production cycle.*

*The two-rail conveyor can be of two types: overhead or floor.*

*In the two-rail lines (aerial), the items are placed on one or more trolleys that slide in the lower rail and are moved by means of the bi-planar chain placed in the upper rail; the connection between this and the trolleys is temporary, meaning there is the possibility to vary the hanging pitch and the speed between different parts of the line, based on the specific work goals.*

**Overhead conveyor for painting line of radiators for domestic use.**



**Automatic handling with stop stations serving the polymerization oven.**



**Manual handling of loading / unloading area and application.**



## TECHNICAL DETAILS

Development bi-planar chain X37 pitch 200 mm	mt	32.800
Pitch between pusher teeth	mm	800
Quantity of pusher teeth	n°	41
Pitch between carrying units in accumulation	mm	350
Quantity of carrying units	n°	15
Maximum load for carrying unit	daN	200
Working speed conveyor (at 51,2 Hz.)	mt/1'	5,78
Speed variation range (from 25 to 75 Hz)	m/1'	from 2,9 to 8,5
Motor Power	kW	1,5
Working		in continuous



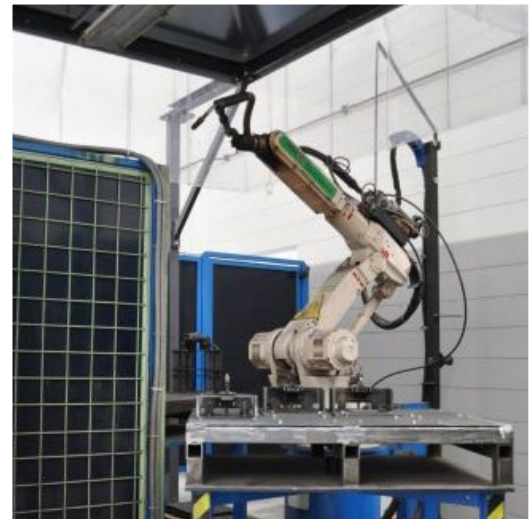
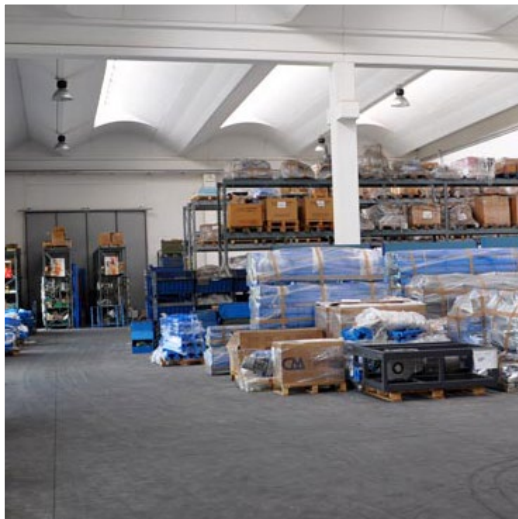
## OUR COMPANY

CM Automation has been an active player in the field of industrial movement and handling since 1999 and has now become a tried and true leader in Italy.

We design, manufacture and install lines for interior movement and handling, overhead and floor conveyors, offering monorail, two-rail and manual conveyors. The flexibility that defines our company allows to meet and satisfy any and every variation or request, including the integration and supply of spare parts for our lines or even those installed by other companies.

Since 2011, following the acquisition of FA Ganci in Modena, we have been able to complete our offer by providing every type of hook, transport unit and specific accessories for painting systems and lines.

The production headquarters and facilities of CM Automation are located in Giussano, in the province of Monza Brianza just a few kilometres from Milan and Como. In the large 2,000 square meter factory, we carry out all the activities of design, production, testing and quality control of our systems and hooks.



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