



## CASE HISTORY: Overhead monorail conveyor X37-05



The X37-05 overhead conveyor has been designed to be at the service of a painting system for cast iron parts.

The items to be treated, hanging from the attacks on the chain with revolving hooks in multiple 90 ° increments, are transported along all the processing phases up to the unloading area.

The conveyor works in continuous, with the possibility to adjust the speed of the chain by means of an inverter.

Power transmission occurs through two caterpillar drive units appropriately positioned along path of the line.

To protect the mechanical parts from possible overloads, each drive unit is equipped with a safety pin and a warning sensor of the slipping.

All the controls relating to the conveyor and its drives are located on the general electrical panel of the line.

## MONORAIL CONVEYORS

*In the monorail conveyors, the function of bi-planar chain is twofold: traction and load-bearing.*

*The movement of the materials on the monorail conveyors is ensured by this, formed by a load-bearing and directional mesh, which runs through a closed circuit inside the relative rail or sliding track with the ability to twist along both horizontal and vertical planes.*

*The items, loaded on attachments – also defined hooks (fixed or revolving) placed on a fixed pitch – follow all stages of production in order to reach the unloading area.*

## TECHNICAL DETAILS

Development bi-planar chain X37 pitch 200 mm	mt	264
Maximum operating temperature	°C	220
Pitch between hooks	mm	600
Quantity of hooks for supporting mesh chain	n°	220
Quantity of hooks for directional mesh chain	n°	220
Maximum load for carrying unit	daN	25
Maximum load on conveyor	daN	12.000
Working speed conveyor (at 50 Hz.)	m/1'	1,8
Working speed chain	m/1'	1,75 a 48,61 Hz
Motor Power	kW	0,55 x 2
Maximum dimensions of the pieces	mm	500x50xh=800
Working		in continuous



**Overhead  
conveyor for  
painting line  
of cast iron  
pieces.**



**Rotating  
hooks with  
multiple 90°  
step, 600 mm  
itches.**



**Rotation  
in painting  
booth.**





## Devices and components transport line X37-05

2 **Caterpillar drive units** equipped with a *safety pin*, which holds the triple crown together with the hub of the drive shaft of the chain, and a *hydrodynamic joint*, which transmits motion from the engine to the gearbox.

The **bi-planar chain** is supplied with cruciform joint and bearings lubricated with a mixture of grease and oil for high temperatures.

The **automatic lubricator** has the function, when activated, to lubricate the bearings of the biplanar chain. Is composed of two separate and independent lubrication circuits, one lubricates the load bearings and the other, the directional bearings.







## 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.*

