

---

# easy conveyor



1. Introduction	3
2. Product overview	4
3. Classification: Product types	5
4. Power&Free Conveyor	6
4.1. Technical specifications	7
4.2. General dimensions	8
4.1. Application gallery	9
5. Monorail Conveyor	11
5.1. Technical specifications	12
5.2. General dimensions	13
5.1. Application gallery	14



# 1 INTRODUCTION

ESYCONVEYOR is a modular overhead conveyor system that can work as Power&Free and as monorail, among others. The pulling of the load is done by a rope, with no need of lubrication; the adaptability to customer's layout requirements with horizontal curves, vertical curves or elevators, and the optimization of the workspace are some of the capabilities and advantages of the system.

Conceived and produced in Aluminum profile, it has all necessary elements for controlling the flow of the trolleys (stop stations, elevators, rail switches, load transfer systems), it has also accurate blocking and positioning stations and hooks for manual or robot operated unloading.

Sustainability is considered in the design and production of ESYCONVEYOR, using completely recyclable materials (recyclable plastics and Aluminum), and also through the re-use of existing elements for new applications in the future.





## 2 PRODUCT OVERVIEW

- Modular system, integrated and adaptable to customer's requirements
- Suitable for FIFO transport and accumulation of parts with optimal space utilization
- Lean overhead system. Aluminum profile rails
- Pulling system by means of a rope. Low noise level, no lubrication is required, low maintenance
- High adaptability to the available space
- Wide range of accessories such as stop stations and rail switches for trolley flow control
- Loading and unloading of the hooks can be done manually or automatically using a robot or manipulator
- Custom made hooks adapted to on the part to be conveyed
- Integrated support structure. Structure can be anchored to the building structure or to the floor
- Level changes and space saving using vertical curves and elevators
- Easy to adapt to any production line configuration
- Allows in line and parallel flows, using rail switches, transfer systems or lateral buffers
- Allows the operator or robot to work directly on the hooked part





## 3 CLASIFICACION: PRODUCT TYPES

- POWER & FREE  
Conveyor system with accumulation buffer, allows independent loading and unloading, it can manage different part references at the same time. Work stations in line or in parallel can be integrated so that conveying and productive processes can be combined.
- MONORAIL  
Continuous transport system, the load is conveyed by the towing system (rope) with no accumulation possibility; stopping the system stops all conveyed elements. Ideal for manual loading and unloading even with the conveyor working, can also be used with automatic loading/unloading systems.
- SORTER  
Even though in this case the transport function is less important compared to the sorting function, the system still performs; ESYCONVEYOR can classify and identify part numbers and put them in production sequence synchronized with the production line.
- OVERHEAD WAREHOUSE  
When storage is the main function required, ESYCONVEYOR allows smart warehouse systems (random or pre-assigned) to be made with integrated management and tailored to the customer needs, including control functions of traceability, product rotation, product obsolescence, FIFO, or productive process control, among others.





4

POWER&FREE





## 4.1. POWER & FREE

### Technical specifications

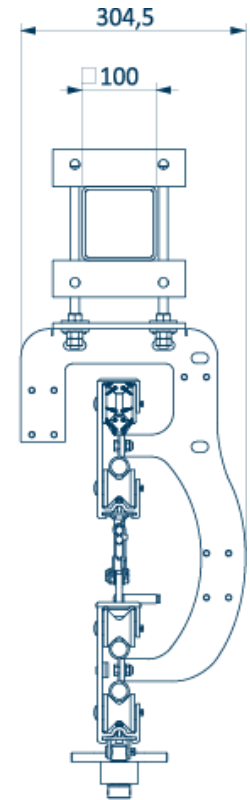
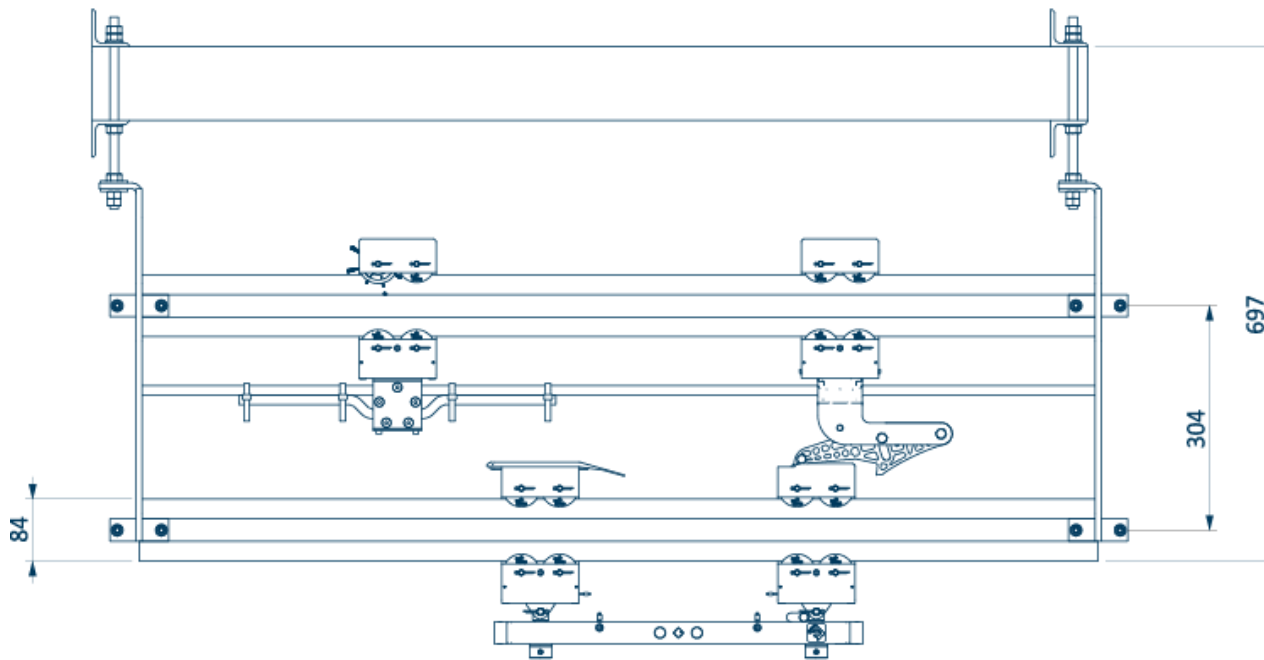
■ Maximum speed _____	14 m/min
■ Maximum rope pull force _____	50 daN
■ Maximum load per single trolley (including hook and part) _____	50 Kg
■ Maximum load per double trolley (including hook and part) _____	100 Kg
■ Minimum distance between parts in accumulation _____	250 mm
■ Maximum distance between parts in accumulation with single trolley _____	750 mm
* Possibility of higher distance with train-type configuration	
■ Maximum slope angle for unloaded branch _____	45°
■ Maximum slope angle for loaded branch _____	30°
■ Horizontal curves angle _____	0 – 180°
■ Horizontal curves radius _____	500 mm
■ Vertical curves radius _____	1042 mm
■ Single circuit maximum length (one motor) _____	250 m
* more than one circuit can be linked by trolley transfer systems	





## 4.2. POWER & FREE

### General dimensions





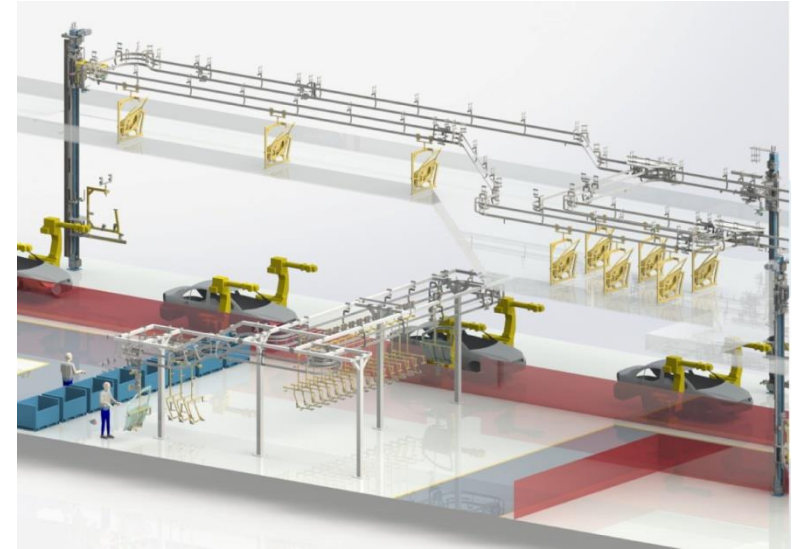
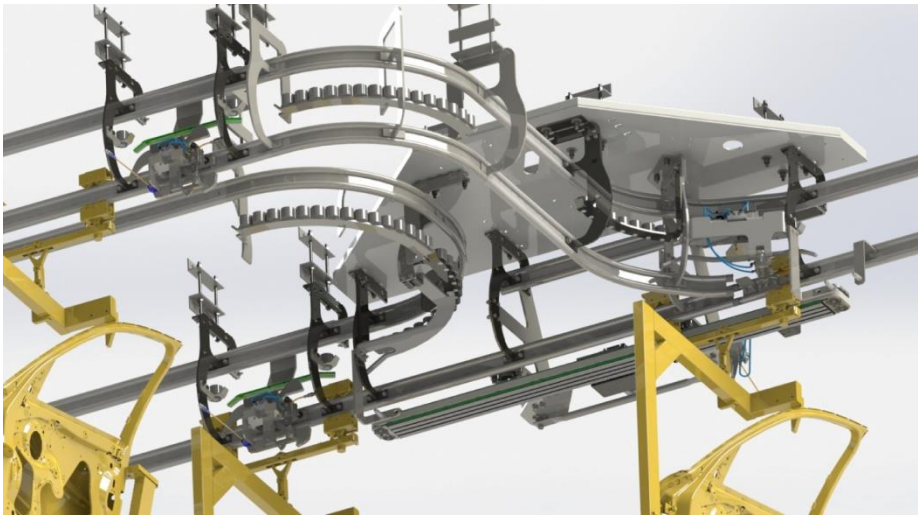


## 4.3. POWER & FREE

### Application gallery

Most common POWER&FREE applications:

- Buffer between operations
- Parts transport with or without accumulation
- Sorting and distribution for picking
- In line or in parallel work stations
- Storage
- Handling



Puestos de trabajo en paralelo



Puestos de trabajo manual





## 4.3. POWER & FREE

Application gallery

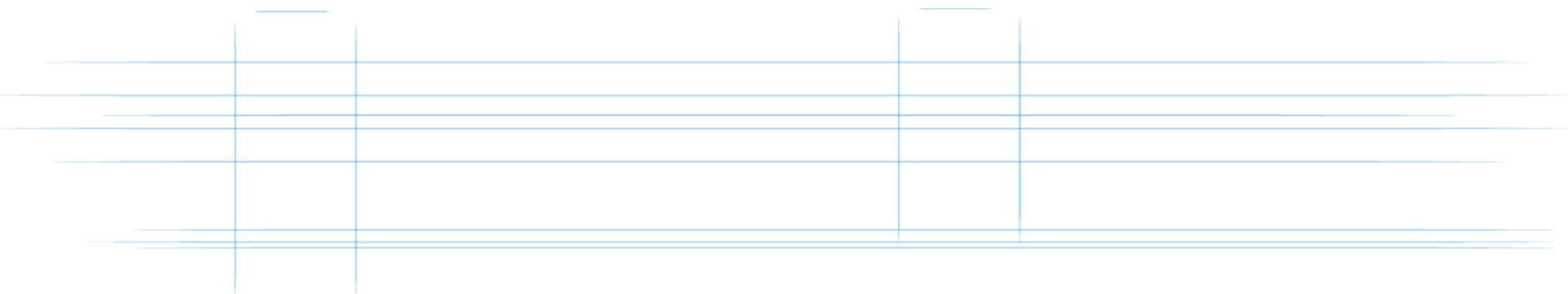


Automatic robot load onto elevator

Transport and accumulation

Unloading with manipulator - on-vehicle manipulation





5

MONORAIL





## 5.1. MONORAIL

### Technical specifications

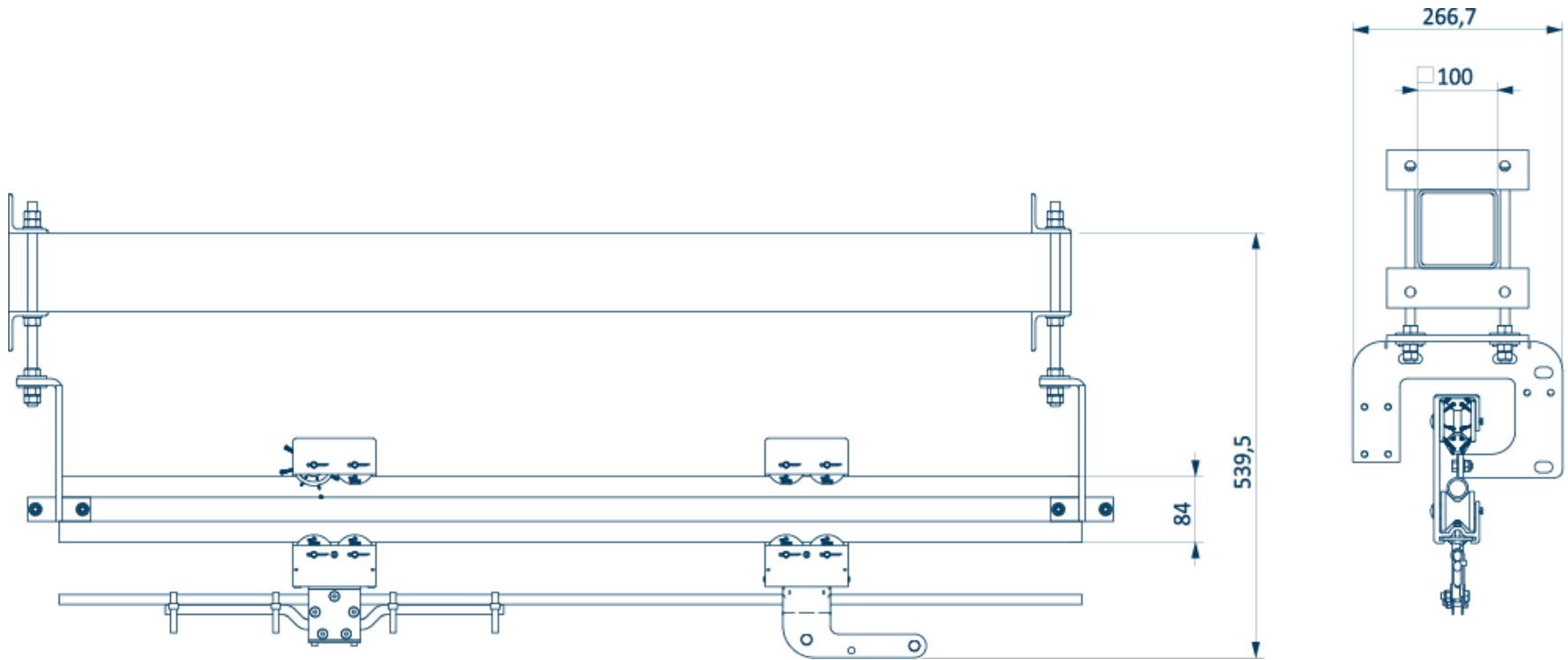
Adjustable speed with frequency converter _____	0 - 40 m/min
Maximum rope pull force _____	50 daN
Maximum load per hook (including hook and part) _____	25 Kg
Minimum distance between parts _____	400 mm
* unlimited maximum distance between parts	
Maximum slope angle in unloaded branch _____	45°
Maximum slope angle in loaded branch _____	30°
Horizontal curves angle _____	0 – 180°
Horizontal curve radius _____	500 mm
Vertical curves radius _____	1042 mm
Maximum circuit length (single motor) _____	350 m





## 5.2. MONORAIL

General dimensions

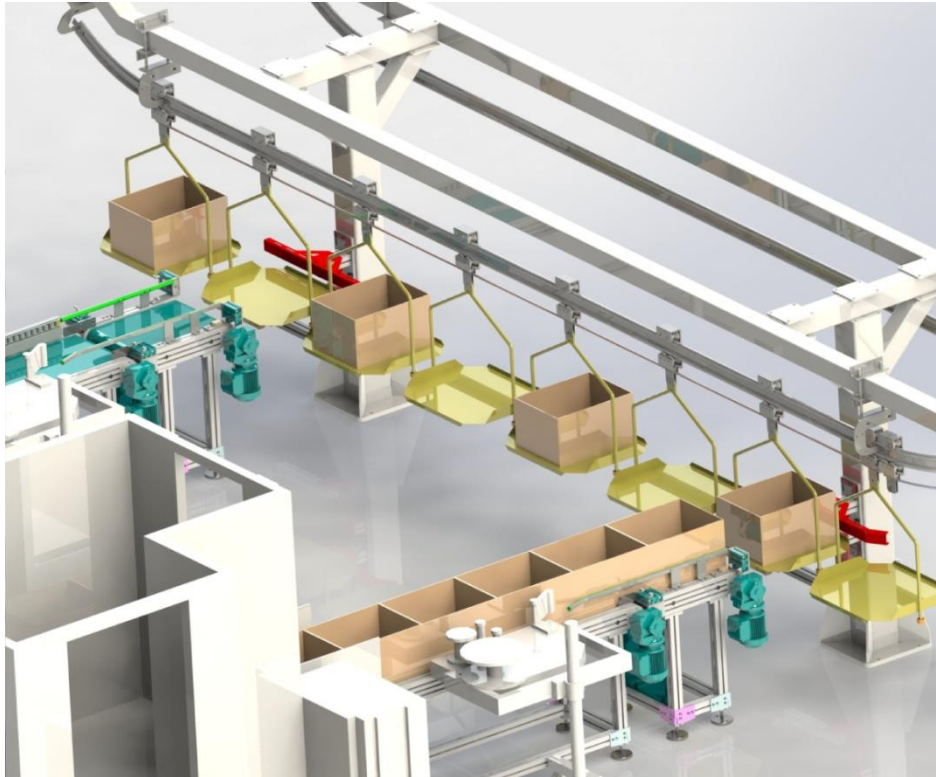




## 5.3.

## MONORAIL

### Application gallery



Most common uses of MONORAIL:

- Automatic or manual load with moving conveyor
- Continuous part transport
- Automatic or manual unload with moving conveyor



## 5.3. MONORAIL

Application gallery



# esyconveyor

---

Simple is better  
**esypro** 

[www.esypro.com](http://www.esypro.com)

## Esypro in Spain

P.I. A Pasaxe, 41. Vincios | 36316

Gondomar | Pontevedra | Spain

Tel.: +34 986 467 006

[comercial@esypro.com](mailto:comercial@esypro.com)

## Esypro in Mexico

Av. México-Japón #412

Parque Industrial Novo Park Nave 59

CP 38010 | CD Industrial

Celaya | Guanajuato | Mexico

Tel.: +52 (461) 161-4005

[mxcomercial@esypro.com](mailto:mxcomercial@esypro.com)