

# GD – 840

## Gantry robot for high throughputs

Palletizing applications  
Loads handling and conveying  
Order picking systems



### Big performer in demanding applications

The GD - 840 gantry robot makes a very sound investment when your application or workspace has special requirements. It gives you the advantages of robot automation even in applications beyond the range or manoeuvrability of floor standing robots. One gantry robot can do work that would need two conventional floor-standing robots, conveyors or track motions.

The GD - 840 robots are ideal where objects need to be transported over relatively long distances, where the work path varies in response to changing needs, when the robot has to work from above or floor space is at a premium. They provide high accessibility and flexibility in cell layout and floor planning, with nothing to impede other equipment such as forklift trucks. A gantry robot can also be shared between several workstations requiring occasional assistance from the robot. The optional telescopic design of the 3rd axis makes the GD - 840 suitable for use even where ceiling clearances is low.

The GD - 840 robot is consequence of the exceptional relationship between the companies GD Convey and ABB Robotics, which has established a manufacturing collaboration agreement. The design is based on decades of IRB – 840 ABB Robotic experience. There have been installed over a thousand of them all over the world in a wide range of applications. All components are quality controlled to give the highest dependability. Moving parts such as cables, motors and gears have proven performance based on years of extensive testing and service. This is your assurance of maximum reliability and the highest levels of user safety.

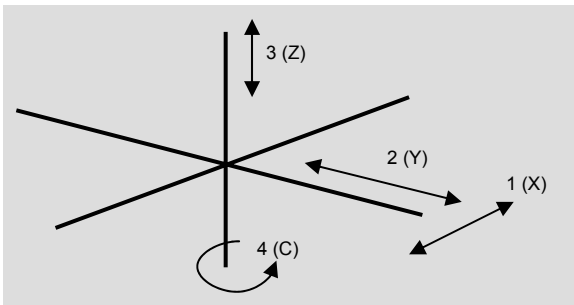
The GD – 840 integrates the original control of the system ABB C4S+, which communicates with the supervision and automatic palletising management software Hyper-Pal, developed by GD Convey. The current version, is the result of years of development and experience, accumulated in complex installation carried out worldwide. Hyper-Pal allows to modify easily the initial parameters by the user, in a visual way and without needing programming knowledge, as well as the products and mosaics programming among the other utilities, being a differentiating tool in front of any other software system.

# GD – 840

## Gantry robot for high throughputs

Technical Data

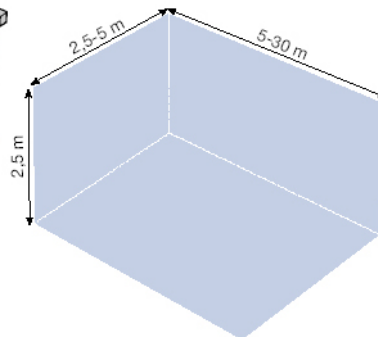
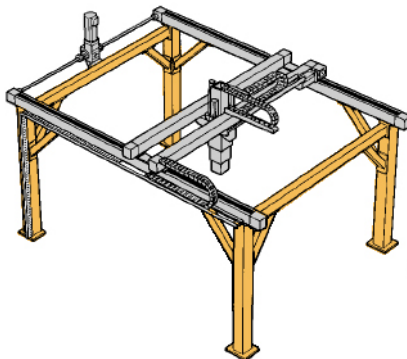
### Axis Definition



### Specifications

Robot versions	Handling capacity	Max. working range of axes
		1(X) 2(Y) 3(Z)
GD-840	150 Kg.	30m. 5m. 2,5m.
Axis 4(C) option	150 Kg.	Unlimited rotation
Max. 50 Kg. Load when telescope unit on 3(Z)-axis.		
Number of axes		
Robot manipulator		3-4
External axes		6
Integrated signal supply		23 poles 50V DC 250 mA 10 poles 250 V AC 2 A
Integrated air supply (option)		Max. 10 bar

### Working range



### Performance

Positional repeatability	0.2 mm
Max. speed of axis X, Y	2.7 m / s
Max. speed of axis Z tele	2.0 m / s
Max. speed of axis Z stiff	1.7 m / s
Max. speed of all axes	4 m / s <sup>2</sup>

### Electrical connections

Supply voltage	200-600 V, 50/60 Hz
----------------	---------------------

### Environment

Ambient temperature	
Robot	5-45° C
Robot controller	5-52° C
Relative humidity	Max. 80%
Degree of protection	IP54
Noise level	Max. 70 dB (A) (leq 60s)
Robot controller	Max. 72 dB (A) (leq 60s)
Safety	Double circuits with supervision emergency stops and safety functions, 3-position enable device
Emission	EMC/EMI-shielded

Dates and dimensions may be changed without notice.

# GD - 840

## Gantry robot for high throughputs

Selection of applications



### Application for containers palletising

**Company- Sector:** Fnac- Distributions of books, cd's, dvd and others.  
**Product to be palletized:** Containers, 2 types.  
**Gantry robot working range :** 25.5(x) x 4.5(y) x 2.5(z) m.  
**Robot's number:** 1.  
**Picking positions:** 6.  
**Palletising positions:** 56.  
**Throughput:** 200 containers / hour.



### Application for boxes palletising

**Company – Sector:** Delta Cafés – Production coffee and sugar.  
**Product to be palletized:** Boxes, 15 types.  
**Gantry robot working range :** 13(x) x 2(y) x 2(z) m.  
**Robot's number:** 2.  
**Picking position:** 8.  
**Palletising positions:** 8+8.  
**Throughput:** 2.500 boxes / hour.



### Application for boxes palletising

**Company - Sector:** Altadis – Cigarettes distribution.  
**Product to be palletized:** Boxes, 24 types.  
**Gantry robot working range :** 13,5(x) x 4,5(y) x 2,5(z) m.  
**Robot's number:** 1.  
**Picking position:** 1.  
**Palletising positions:** 12 enlargeable to 18.  
**Throughput:** 370 boxes / hour.

Edition V2 - 20102004



**Headquarters: GD CONVEY S.A.**  
Pol. Ind. Las Monjas - C/ Verano, 9  
E-28850 Torrejón de Ardoz (Madrid)  
Tel.: +34 91 675 72 77  
Fax: +34 91 676 36 61  
marketing@gdconvey.com

[www.gdconvey.com](http://www.gdconvey.com)  
**CONVEY**  
INTEGRATED HANDLING SYSTEMS