

IPS 200i / 400i:

Camera-based fine positioning

For stacker cranes and automated guided vehicles with only one sensor



With the IPS 200i / 400i product family, Leuze offers the smallest camera-based sensor on the market for the fine positioning of stacker cranes and automated guided vehicles. By means of an additional quality score, it helps to reduce downtimes, thereby satisfying the call for condition monitoring. Tedious mounting, alignment, and readjustment during operation is no longer required, saving the customer valuable time.

Advantages for you at a glance

- **Flexible use** on stacker cranes and automated guided vehicles (AGVs) thanks to compact size
- **Eliminates** the need for multiple diffuse sensors through the use of a single IPS 200i / 400i
- **Reduces downtimes** through an innovative quality score
- **Fast commissioning** via the integrated web server or directly at the sensor via configuration codes
- **Can be used in various temperature ranges**

	IPS 200i	IPS 400i
Description	Camera-based positioning sensor for round markings	Camera-based positioning sensor for round markings
Area of application	Single compartment depth	Double compartment depth
Reading distance	100 ... 600 mm, marker dependent	250 ... 2,400 mm, marker dependent
Integrated interfaces	Ethernet TCP/IP, UDP; PROFINET IO/RT; EtherNet/IP	Ethernet TCP/IP, UDP; PROFINET IO/RT; EtherNet/IP
Ambient temperature (operation):	0 ... +50 °C (with heating: –30 ... +50 °C)	0 ... +50 °C (with heating: –30 ... +50 °C)
Dimensions (W × H × L)	43 × 61 × 44 mm	43 × 61 × 44 mm

Compartment fine positioning of stacker cranes on columns in container warehouse

In an automated small-parts warehouse, containers, for example, are stored and retrieved at high throughput rates. Constrained spaces and short distances call for innovative solutions. The IPS 200i reliably solves positioning tasks at distances of 100 mm to 600 mm on round markings in columns. Furthermore, it impresses with its large field of view and its various integrated industrial interfaces.



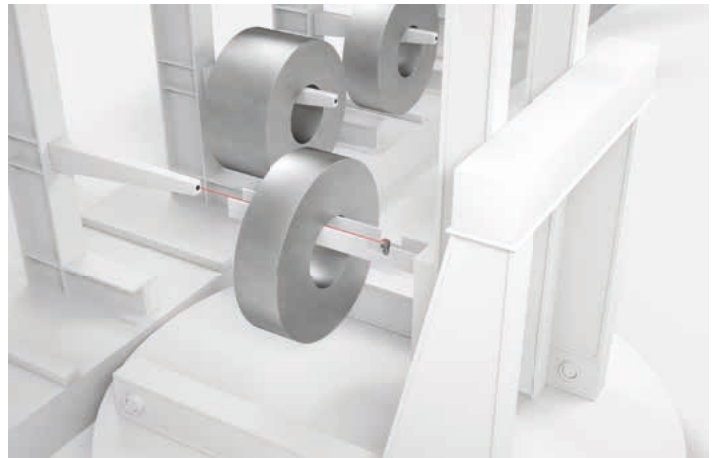
Compartment fine positioning of stacker cranes on bars in double-depth pallet warehouse

In a high-bay warehouse, after performing rough positioning and subsequent fine positioning of a stacker crane, the pallets are stored and retrieved. Due to thermal and dynamic influences, fine positioning is required on the X and Y axes. The IPS 400i reliably solves positioning tasks for single- and double-depth pallet warehouses with just one sensor. It scores with its compact design, its operating range of up to 2.4 m, and its powerful algorithm for round markings in bars.



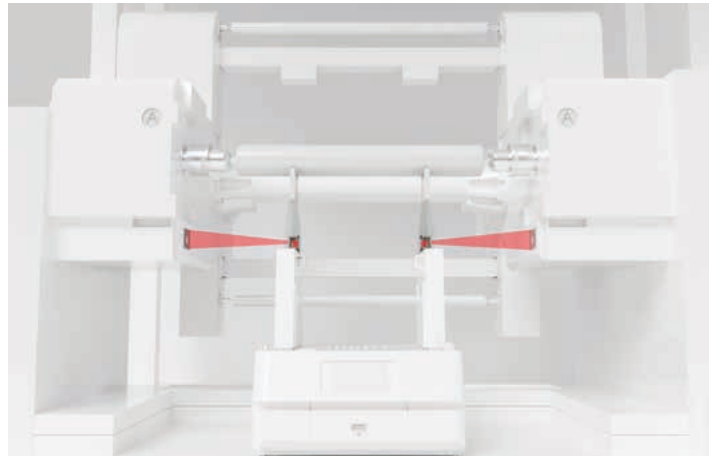
Fine positioning of stacker cranes in warehouse with cantilever racking

In a warehouse with cantilever racking, coils or rolls are stored and retrieved. Due to the heavy weights sometimes involved, fine positioning of the automated stacker crane is necessary. The IPS 400i offers an operating range of up to 2.4 m and a powerful algorithm for round markings in cantilevers. Thus, this positioning task can be reliably solved with just one sensor.



Fine positioning of automated guided vehicles (AGVs)

Automated guided vehicles (AGVs) must be precisely positioned at various stations in order to transfer load carriers (boxes and workpiece holders). The position of the AGV can be determined by means of an optical system that ascertains the X/Y position between vehicle and transfer station. The IPS 200i reliably solves positioning tasks, and its compact design and reproducibility of 0.1 mm make it ideally suited for this application.



Leuze electronic GmbH + Co. KG

In der Braike 1, 73277 Owen · T +49 7021 573-0 · F +49 7021 573-199 · info@leuze.com · www.leuze.com
en 01-2023/08 1365 · Subject to modifications and errors