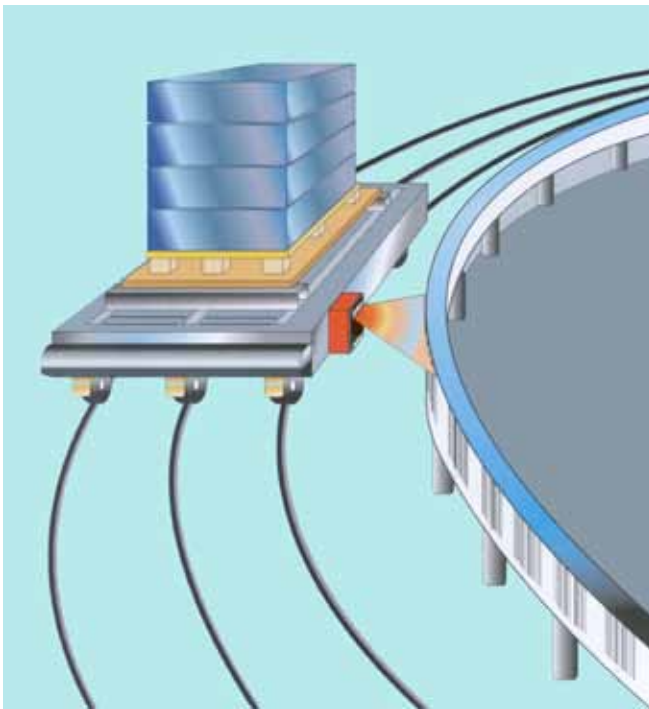


Flexible with energy!

Positioning: Greater flexibility, greater tolerance



The application

Any situation involving automatic movement of systems will involve a need to unequivocally determine their position. A number of different measurement techniques are used for this purpose. Alongside mechanical measured value sensors, optical techniques are particularly suitable for position determination, as they work without wear or slip.

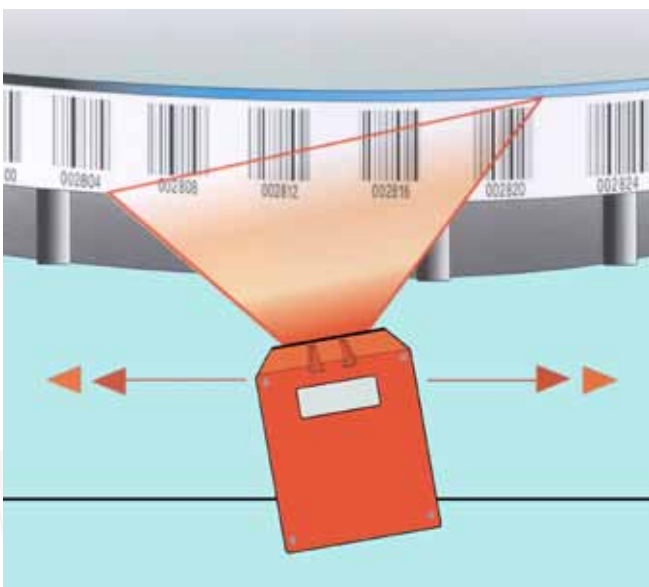
In contrast to known optical measurement techniques, the bar code positioning system BPS is not bound to linear movements, but can be flexibly applied also for systems involving curved motion.

Wherever the hard-wearing barcode tape can be applied, the BPS is capable of determining the position within an accuracy of millimetres.

The admissible distance between tape and reader and the large scanning depth eliminate problems due to guidance tolerances in the system.

Typical applications for the system include position detection and positioning of

- Rack handling systems and lifting mechanisms
- Crane systems
- Shunting trucks
- Transfer machines
- Electrical overhead conveyors



The benefits:

- Simple installation and commissioning
- Positioning of systems with non-linear movements
- No referencing required after a power failure
- The large scanning depth permits compensation of mechanical tolerances
- Positioning up to 10,000 m possible

Flexible with energy!

BPS 34/37: Functional characteristics

The BPS is an optical measurement system operating with a visible red light laser which determines the position of the BPS relative to a barcode tape.



Specifications:

BPS 34/37

Integration time:	16 (8) msec.
Reproducibility:	± 1 (2) mm
Measurement value output:	1000 values / sec.
Resolution:	from 1/100 mm
Operating temperature:	0°C / +40°C
with lens heating:	-30°C / +40°C
Protection class:	IP65
Interfaces:	SSI (Profibus under construction)
Scanning distance:	60 -140 mm
Supply voltage:	10-30 V DC
Laser protection class:	2 (IEC 825-1)

BCB

Max. length:	10,000 m
Temperature range:	-40°C / +120°C
Printing technique:	Phototype method
Adhesive:	Acrylic adhesive
Environmental conditions:	Scratch and wipe-proof as well as UV light, moisture and chemical resistant

