CENTROR

DeCoSystem
PRINTINSPECTIONMACHINES

PRE-POSITIONING FOR CYLINDRICAL OBJECTS

CENTROR checks the angular and transversal position of cylindrical objects and carries out a perfect positioning before printing.
CENTROR ensures a great register precision when sequential printing processes are executed.

BENEFITS

Thanks to CENTROR it is possible to make the pieces registration without any mechanical device.
This solution ensures the increasing of the machine productivity and the accuracy of the printing register.

CENTROR/L

CENTROR/L analyzes the sidewall surface of an object in rotation to perform a real time orientation.
Plastic tubes, jars and bottles are the typical objects that require this special solution. Thanks to a dedicated lighting source the system can be integrated in the glass printing machines (CENTROR/G).
The reference mark could be the following ones:
○ relief
○ seem of glass or plastic
○ screw thread
○ previously printed decoration

CENTROR/M

CENTROR/M analyzes the top or bottom surface of the object to perform a real time orientation. The system ensures a perfect register on plastic and glass bottles, mascaras, coins, CDs and many other products.
CENTROR/M-Tube is dedicated to the registration of plastic tubes. The system analyzes a part of an already roughly oriented object in order to obtain the angular and longitudinal positioning with centesimal accuracy.

TECHNICAL FEATURES

- ○ **APPLICATION FIELDS**
  glass industry and plastic industry
- ○ **MULTIPLE CAMERA CONFIGURATIONS**
  up to two
- ○ **POSSIBILITY TO INTEGRATE THE CENTROR**
  in the Spectro print inspection system
- ○ **LED LIGHTING SYSTEM**
- ○ **MULTIPLE ILLUMINATOR**
  back light, direct light, dark field
- ○ **MULTIPLE MACHINE COMMUNICATION MODULES**
  Rs232, Ethernet, Profibus and Modbus
- ○ **TOUCH SCREEN INTERFACE**
- ○ **EASY TO LEARN AND EASY TO USE GUI INTERFACE**
- ○ **FAST AND AUTOMATIC SET UP**
  new job can be started in a minute
- ○ **MEASUREMENT WITH SUB-PIXEL ACCURACY**
- ○ **DIFFERENT LOGIN LEVELS**
- ○ **OPERATING IN MS-WINDOWS OS**

TECHNICAL DATA

	CENTROR/L	CENTROR/G	CENTROR/M	Centror/M-Tube
Object	Plastic bottles, mascara, jars	Glass bottles, glasses, jars, perfume bottles	Plastic bottles, mascara, jars, glass bottles	Tubes
Camera	Linear-Graylevel 1024 pixel	Linear-Graylevel 1024 pixel	Matrix-Graylevel 1280x1024 pixel	Matrix-Colour 1280x1024 pixel
Field of view	100 mm	100 mm	100x100 mm	40x30 mm
Correction	Angular, longitudinal	Angular, longitudinal	Angular	Angular, longitudinal
Range of correction	360 degrees +/-5 mm	360 degrees +/-5 mm	360 degrees	+/-3 degrees +/-3 mm
Object diameter	13-90 mm	30-90 mm	13-90 mm	19-60 mm
Angular resolution	0,1 degrees	0,1 degrees	ND	0,04 mm
Longitudinal resolution	0,1 mm	0,1 mm	0,1 mm	0,04 mm
Angular accuracy	+/- 0,03 degrees	+/- 0,03 degrees	+/- 1 degrees	+/- 0,01 degrees
Longitudinal accuracy	+/- 0,03 mm	+/- 0,03 mm	ND	+/- 0,01 mm
Max Acquisition time	200 ms	200 ms	20 ms	20 ms
Max Elaboration time	100 ms	100 ms	400 ms	100 ms

Technical data and system specifications refer to the state at the time of printing. We reserve the right to modify them in the interest of a continuous program of further development.