

# ROTATING HEADS ROTOETSCAN

THE ROTATING HEAD ROTOETSCAN ALLOWS DETECTION OF LONGITUDINAL SURFACE OR SUB SURFACE DEFECTS AT HIGH SPEED AND ON REVOLUTION PARTS.

The rotating head is often installed directly on the production line. It is generally dedicated to the control of long products such as tubes, bars and wires, made of ferrous or non-ferrous material. It can also be used for inspection of small cylindrical or for revolution parts (billets type).



## MAIN ADVANTAGES

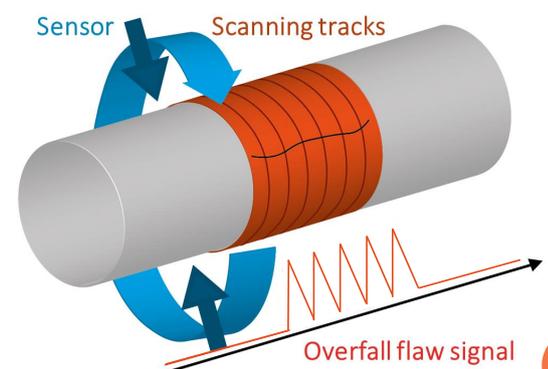
- High inspection : up to 6 m/s
- Transmission of the signal, contactless
- Electronic offset (GAP)
- Quick and easy change of probes (without special tool)
- Very short adjusting time
- Solid monobloc construction
- Minimum depth of detected defects: from 30µm
- No contact with the product
- Bearing temperature sensors
- Available with 2 or 4 channels

## RANGE OF PRODUCTS

	Special TR VC	TR20	TR35	TR65	TR130	TR160	TR220
Reference	5100VC	5100SP	5100	5200	5300	5350	5400
Product diameter (mm)	0.8 to 10	4 to 25	5 to 35	6 to 65	14 to 130	20 to 160	40 to 220
Rotating speed standard version (rpm)	9000 Option : up to 18000	7300 Option : up to 18000	4200 Option : 9000	3000	2800	2500	2000
Rotating speed centrifugal closure plate (rpm)		4000				1600	1000

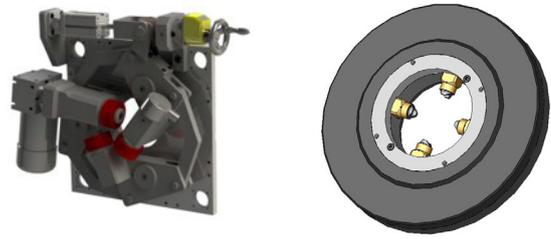
## OPERATING PRINCIPLE

The product, in translation, passes through the rotating head. Two or four EC probes inside the head are revolving around the product. The inspection is carried out with a helicoidal step. The results are displayed on the instrument screen in a time-base and/or a lissajou.



## STANDARD EQUIPMENT

- Adjustable plate in diameter, 4 probes
- Input and output centering devices



## OTHER CONFIGURATIONS AVAILABLE

- Adjustable plate with 2 probes only
- Cassette for fixed diameter (economical solution)
- Plate with centrifugal closure (automatic closure on the product by centrifugal force)
- Digital display of the working diameter by laser measurement

## ASSOCIATED SYSTEM

### ZET@MASTER

Zet@Master is available in different versions : standard with touchscreen or rackable.



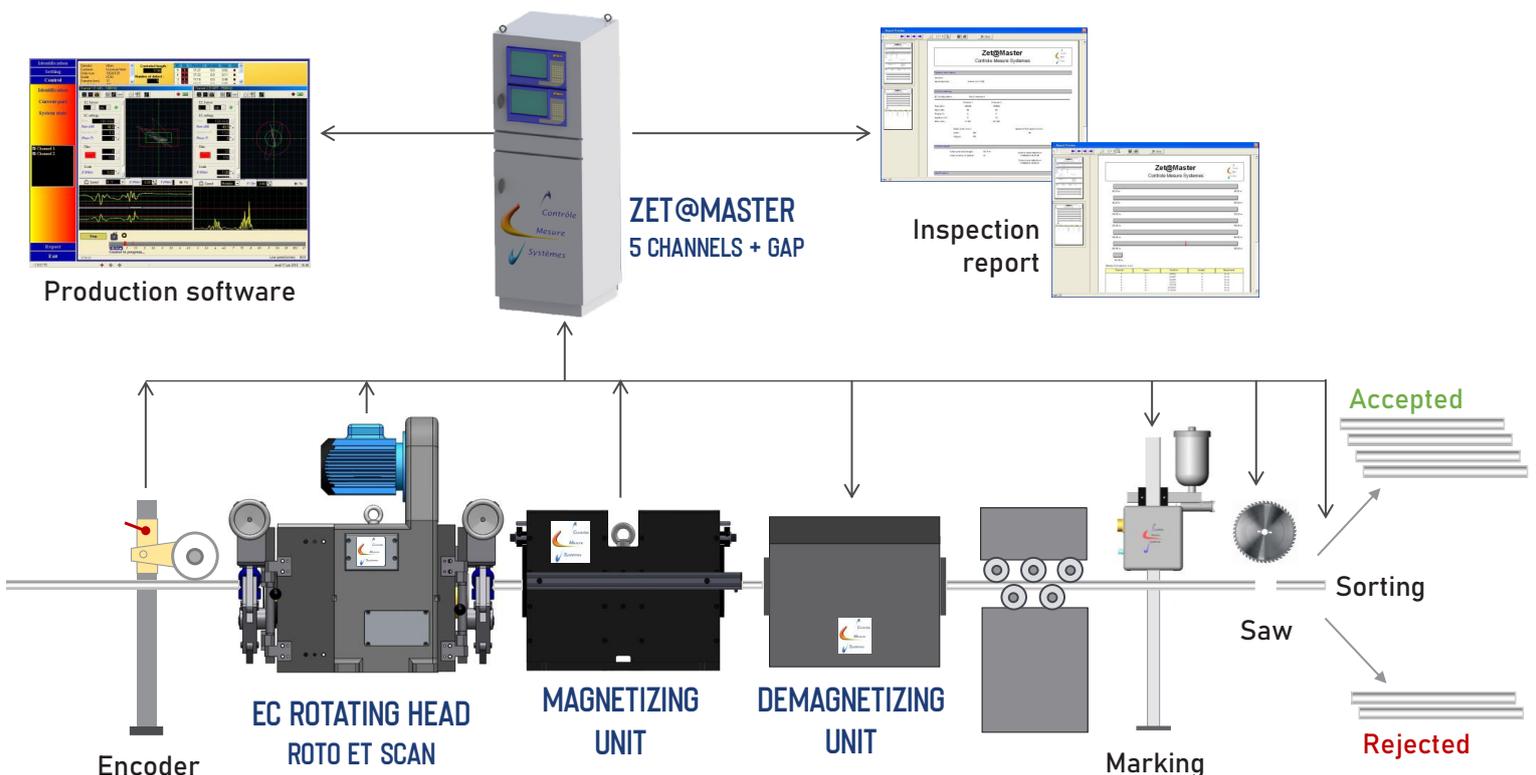
Standard



Rackable

## CONFIGURATION EXAMPLE

Detection of longitudinal and transversal defects on cool drawing line



# ROTATING SYSTEMS

SYSTEMS DESIGNED TO PUT IN ROTATION EC PROBES TO DETECT INTERNAL AND / OR EXTERNAL DEFECTS.

The probes connected to this kind of system are specifically adapted to the inspected product.

## MAIN ADVANTAGES

- Robust, modular and evolutive systems
- High speeds rotation
- Transmission of the EC signal, contactless
- Possible integration for on-line inspection (systems 5800 and 5810)



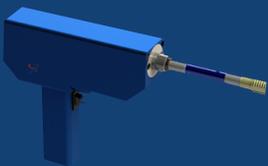
## RANGE OF PRODUCTS

	Rotating gun	Rotating system	Rotating system ST
Reference	5500	5800	5810
Applications	Inspection on bore, thread and tube	Inspection on piston, bar, tube, rail	Inspection on cylindrical part, rail

### 5500

Rotating gun for small part inspection : checking of bore or thread.

Available in manual or industrial version.



### 5800

Rotating system 4 or 8 channels, manage by EC Equipment, Zet@Master or Zet@Premium regarding the number of required channels.

It is dedicated especially to internal tube control, piston inspection (bore and combustion chamber). It can be coupled to rotating discs for surface inspection on tubes and rectangular bars.



### 5810

Rotating system dedicated to internal and/or external cylindrical parts or rails.



## OPERATING PRINCIPLE

The rotating system carries in rotation the EC probes on the surface or inside the product inspected.

The systems provide power and retrieval contactless probes inspection.

It assure the excitation of the sensors and allows the transmission, contactless, with the signals between Rotor and Stator.

# STANDARD EQUIPMENT

- **System 5500**

Connection to special EC probes, designed to the geometry of the part  
Manual (with handle) or industrial version  
Axial encoder (optional)

- **System 5800**

4 or 8 channels  
Connection to special EC probes, designed to the geometry of the part  
Possibility to adapt rotating disks  
Possibility to integrate the system on production line

- **System 5810**

Connection to special EC probes, designed to the geometry of the part  
Assembled on a trolley for rail inspection or for cylindrical parts.

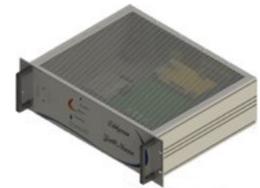
## ASSOCIATED SYSTEMS

### ZET@MASTER, ZET@PREMIUM

Our instruments are available in different versions :  
standard with a touch screen or rackable.



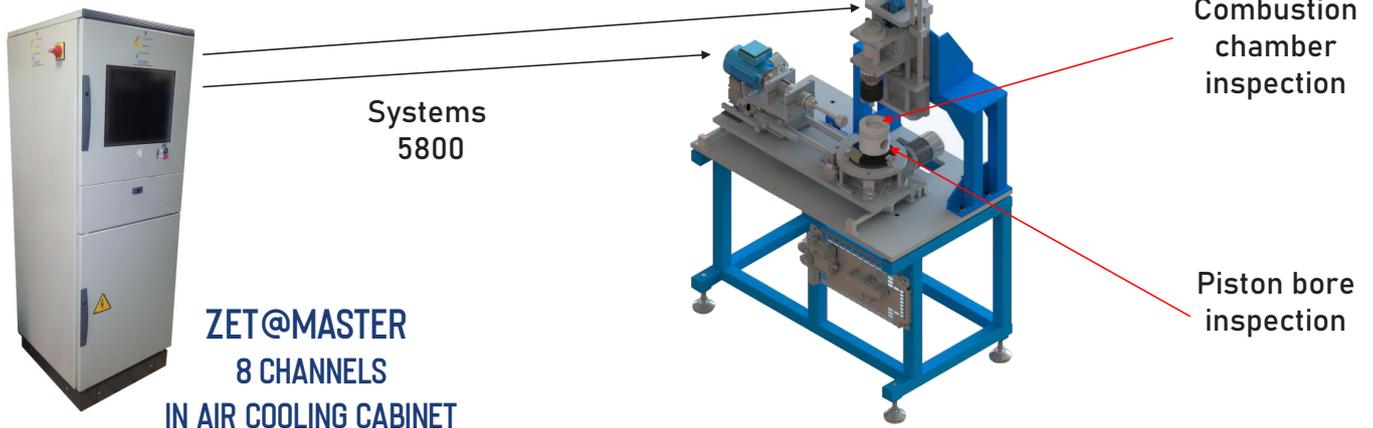
Standard



Rackable

## CONFIGURATION EXAMPLES

Control bench for piston inspection : checking of  
bore and combustion chamber



Internal and/or external inspection of cylindrical

