

## SENSORS FOR METAL CASTING MACHINERY



On metal casting machinery, encoders are the key component in the control system for speed measurement and position monitoring. POSITAL encoders have the features of high precision, high protection level and robust designing, which can meet the strict requirements of metal casting machinery. Additionally, the programmable PPR of POSITAL incremental encoder will make the configuration of encoder more flexible.

**High Precise Absolute & Incremental Encoders**

IXARC rotary encoders include magnetic encoders and optical encoders. The accuracy of absolute encoders can reach  $0.02^\circ$  and the resolution can reach 16bit. The PPR of incremental encoders can reach 16384.

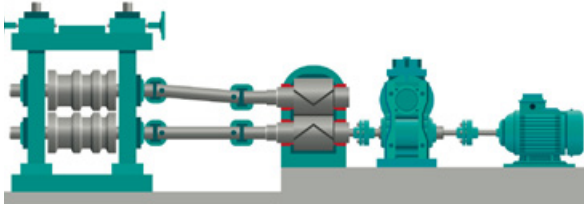
- > **Encoders with 16bit Resolution**
- > **Up to 16384 PPR**
- > **Wide Range of Electrical Interfaces:**  
Parallel, Serial, Analog, Ethernet,  
Profibus, Profinet, CANopen

**Tough Sensors for Tough Jobs**

IXARC rotary encoders can provide up to IP69K protection class. The design of stainless-steel housing and flange is available, which can protect encoder against the corrosion from gas and dust. The heavy-duty version encoders can withstand shaft loads of up to 300N and offer a shock resistance of up to 300g.

- > **High Protection up to IP69K**
- > **Up to 300N Load and up to 300g Shock**
- >  **$-40^\circ\text{C}$  to  $+85^\circ\text{C}$  Temperature Range**

## SENSORS FOR METAL CASTING MACHINERY



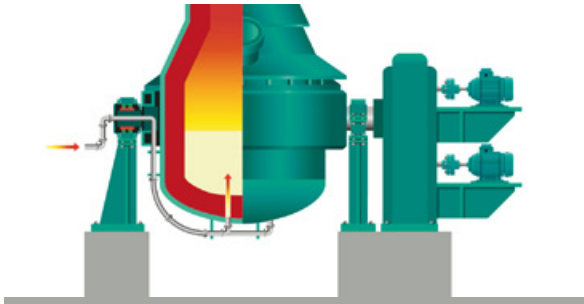
### Rolling Mill

- > Incremental encoders are used to measure roller speed
- > Absolute encoders are used to measure the position of loop device
- > High operation temperature



### IXARC Incremental Encoder for Speed Measurement

- > PPR programmable from 1-16384
- > Configurable output signal: HTL, TTL
- > Compact design
- > -40°C to +85°C Temperature Range



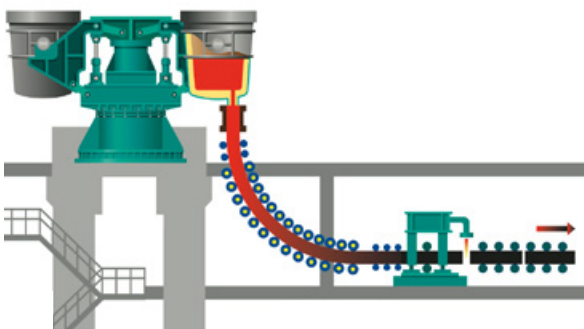
### Oxygen Furnace

- > Absolute encoders are used to measure the insert depth of the oxygen gun.
- > Absolute encoders are used to measure the tilting angle of the furnace.



### IXARC Absolute Encoder for Position Measurement

- > Up to 0.02° accuracy
- > High protection up to IP69K
- > -40°C to +85°C Temperature Range



### Metal Casting

- > Absolute encoders are used to measure the rotation angle of the turret.
- > Incremental encoders are used to measure the speed of the table roller.
- > High operation temperature



### IXARC Encoder for Metal Casting

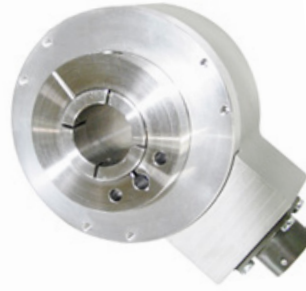
- > Available for Ethernet/IP, EtherCAT, DeviceNet, Profinet, Profibus DP etc.
- > Flexible mechanical dimension and installation
- > Up to 16 bit resolution, 0.02° Accuracy, Fast Response

## SENSORS FOR METAL CASTING MACHINERY



### Overhead Crane

- > Incremental encoders are used to measure translation speed
- > Absolute encoders are used to measure the trolley position
- > Environment with high temperature smoke and dust



### IXARC Incremental Encoder for Speed Measurement

- > PPR programmable from 1-16384
- > Configurable output signal: HTL, TTL
- > Compact design
- > -40°C to +85°C Temperature Range



### Unwinder

- > Incremental encoders are used to measure roller speed
- > Absolute encoders are used to measure the position of loop device.
- > Environment with high temperature smoke and dust



### IXARC Absolute Encoder for Position Measurement

- > Available for Ethernet/IP, EtherCAT, DeviceNet, Profinet, Profibus DP etc.
- > Flexible mechanical dimension and installation
- > Up to 16 bit resolution, 0.02° Accuracy, Fast Response



### Metal Forging

- > Absolute encoders are used to measure the angle of rise and fall of the hammer.
- > Incremental encoders are used to measure the speed of the steel input.
- > Environment with high temperature smoke and dust



### LINARIX Encoder for Metal Forging

- > Available for Ethernet/IP, EtherCAT, DeviceNet, Profinet, Profibus DP, Devicenet and Ethernet/IP etc.
- > Flexible mechanical dimension and installation
- > Measuring range up to 15 meters, accuracy 0.02°, fast response.



## WHY POSITAL?



POSITAL is a manufacturer of position and motion sensors which are used in a wide range of settings, from manufacturing to mining, from motors and drives to IoT devices. POSITAL has a global reach with subsidiaries in Europe, North America and Asia – and a growing network of sales and distribution partners around the world. All products are manufactured in advanced production facilities in Poland and Malaysia. The computer-guided, semi-automated production system tracks each device from order, through assembly and testing, to final delivery.

POSITAL is a member of the international FRABA Group which dates back to 1918. In 1973, FRABA introduced one of the first non-contact, absolute multiturn encoders. Since then, the company has played a trend-setting role in the development of rotary encoders and other sensor products.

- > **Absolute Multiturn Measurement**

> **No Battery, No Maintenance**

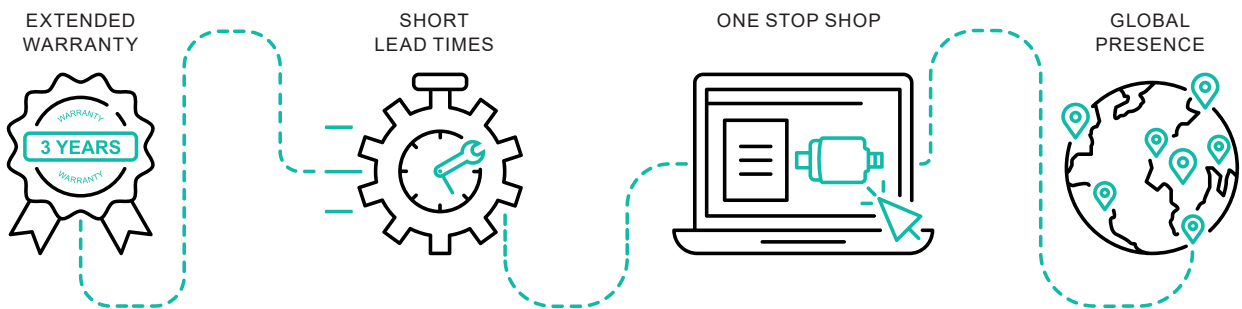
> **Self-Powered Sensing**

> **Robust & Durable Designs**
- > **Large Product Portfolio – Mass Customization**

> **Leaders in Innovation Technology**

> **Over 60 Years' Experience**

> **36 Month Warranty**



### Join Our Network!



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