

# Automated Machinery

## Micro Encoder Applications

Pick'n Place machines, Medical, Packaging, Beverage, Conveyors, Food Processing and Paper Machines



# We have the expertise

The history of Scancon

SCANCON has been manufacturing encoders since 1972, and is well known for its high quality encoders and special solutions. SCANCON exports encoders to more than 78 countries worldwide from our factory and head office near Copenhagen.

## Robotic Applications

Robotics is the frontier proving ground for the next generation of automated machinery. As an established industry partner, Scancon understands the need for the right positioning component - translating mechanical movement into electrical signals with high resolution. Our made-to-order incremental and absolute encoders include models made specifically for both Harsh and potentially Explosive environments. Encoder sizes range from a very small  $\varnothing$  9 mm to a rugged  $\varnothing$  115 mm option. Our encoder housings, cable glands and covers are selected from non-corrosive material which allows us to offer environmental ratings as high as IP 69K.

High repeatability – Scancon Encoders enables high repeatability/stability in your feedback loop.

Low inertia – Low inertia is important in high accelerating machinery therefore Scancon delivers a wide range of encoders with low drag and inertia ideal for machine automation.

Ultra high performance – Scancon provides industry-leading high resolutions (true lines on disk) in small form factor encoders. This combination offers customers unparalleled opportunities for high performance position feedback in small spaces.

### Incremental types:

SCH16F, SCA16, SCA24, SCH32B, SCA50-SR, SCH50IF-SR, 2Q, SCA18.

### Absolute types:

SCA24AN, SCM-SSI, SCM-CANOPEN.

# Micro encoders

Pick'n Place Machines, Testing, Medical

## When Size Matters

Scancon has manufactured industrial encoders for over 25 years for applications in the Food and Beverage, Machining, Packaging, Elevator, Crane, and Semiconductor industries as well as many others. Modern industrial designs demand smaller package sizes as well as high performance. Scancon specializes in offering our customers a range of ultra-small encoders that provide the industry's highest disk resolution.



### SCH09

#### Micro Hollow Shaft

- Diameter: 9 mm
- Resolution: up to 1,000 ppr
- Hollow Shaft:  $\varnothing$  2 mm to  $\varnothing$  4 mm
- Temperature: -20° C to 70° C (operating)
- Applications: Packaging, Medical, Beverage, Pick'n place Machines



### SCH16F

#### Micro Hollow Shaft Encoder

- Diameter: 16 mm
- Resolution: up to 5,000 ppr
- Hollow Shaft:  $\varnothing$  1,5 mm to  $\varnothing$  3,175 (1/8 inch)
- Temperature: -20° C to 70° C (operating)
- Applications: Pick'n place Machines, Packaging, Beverage Medical



### SCA16

#### Micro Shaft Encoder

- Diameter: 16 mm
- Resolution: up to 5,000 ppr
- Shaft:  $\varnothing$  1.5 mm to  $\varnothing$  4 mm
- Temperature: -20° C to 70° C (operating)
- Applications: Pick'n place Machines, Packaging, Beverage Medical

# Mini encoders

Encoders for packaging & pick'n place machines



- SCA24**  
Shaft Encoder
- Diameter: 24 mm
  - Resolution: up to 7,500 ppr
  - Shaft: Ø 1,5 mm to Ø 6,35 mm (1/4 inch)
  - Temperature: -40° C to 85° C (operating)
  - Applications: Pick'n place Machines, Packaging, Beverage



- SCH24**  
Hollow Shaft Encoder
- Diameter: 24 mm
  - Resolution: up to 7,500 ppr
  - Hollow Shaft: Ø 2 mm to Ø 4 mm
  - Temperature: -40° C to 85° C (operating)
  - Applications: Pick'n place Machines, Packaging, Beverage



- SCH32B**  
Hollow Shaft Encoder
- Diameter: 32 mm
  - Resolution: up to 5,000 ppr
  - Hollow Shaft: Ø 6 mm to Ø 9,525 mm (3/8 inch)
  - Temperature: -40° C to 85° C (operating)
  - Applications: Pick'n place Machines, Packaging, Beverage

# Industrial encoders

Food and beverage



- SCA58**  
Shaft Encoder
- Diameter: 58 mm
  - Resolution: up to 12,500 ppr
  - Shaft: Ø 6,35 mm to Ø 10 mm (1/4 inch)
  - Temperature: -40° C to 85° C (operating)
  - Applications: Food, Beverage, Brewery, Slaughterhouse, Dairy, Automated Machinery



- 2RK**  
Shaft Encoder
- Diameter: 58 mm
  - Resolution: up to 12,500 ppr
  - Shaft: Ø 6,35 mm to Ø 10 mm (1/4 inch)
  - Temperature: -40° C to 85° C (operating)
  - Applications: Food, Beverage, Brewery, Slaughterhouse, Dairy, Automated Machinery



- 2Q**  
Square Mount Shaft Encoder
- Diameter: 63,5 mm (2.5 inch square)
  - Resolution: up to 12,500 ppr
  - Shaft: Ø 6,35 mm to Ø 10 mm (1/4 inch)
  - Temperature: -40° C to 85° C (operating)
  - Applications: Food, Beverage, Brewery, Automated Machinery



- SCH50F**  
Hollow Shaft Encoder
- Diameter: 50 mm
  - Resolution: up to 12,500 ppr
  - Hollow Shaft: Ø 6 mm and Ø 8 mm
  - Temperature: -40° C to 85° C (operating)
  - Applications: Food, Beverage, Brewery, Automated Machinery

# Packaging and Automated Machinery

Food, Beverage, Medical and Clinical



Scancon Stainless Steel encoders are designed for use in a variety of harsh environments. Manufactured with SAE 51200 chrome steel industrial ball bearings, AISI 316 Stainless Steel housing and cap, and an IP 67 environmental rating, these encoders provide customers with rugged and reliable solutions for applications ranging from offshore Oil & Gas equipment to Food Processing and Material Handling systems.



Solid shaft and hollow shaft models are available and can be used in applications where the encoder is exposed to saltwater, high pressure liquids, solvents and other caustic chemicals. Many models are also certified for Explosion Proof applications.

Stainless Steel



#### SCH50-IF-SR

Stainless Steel Hollow Shaft Encoder

- Diameter: 50 mm (303 stainless steel)
- Resolution: up to 12,500 ppr
- Shaft: Ø 8 mm to Ø 16 mm
- Temperature: -40° C to 85° C (operating)
- Applications: Packaging, Conveyors, Food, Beverage, Medical, Automated Machinery

Stainless Steel



#### SCA50-SR

Stainless Steel Shaft Encoder

- Diameter: 50 mm (303 stainless steel)
- Resolution: up to 12,500 ppr
- Shaft: Ø 6 mm to Ø 16 mm
- Temperature: -40° C to 85° C (operating)
- Applications: Packaging, Conveyors, Food, Beverage, Medical, Automated Machinery

# World's smallest Ex-proof encoders

Rig Controls and Commercial Painting Enclosures



Panels on rig control house



Knob mounted directly on SCA24EX



#### SCA24EX

Ex-Proof Shaft Encoder

- The smallest EX-Proof encoder on the market
- ATEX & IECEx Zone 1 Certified
- Ø 24 mm
- IP 67 "Water-Proof" Protection
- 22 micron Anodization "Seawater-proof"
- Applications: Control panels, Car painting, Rig controls
- North American & Canadian Certification: Class I and Class II Certified



#### SCH24EX

Ex-Proof Hollow-Shaft Encoder

- The smallest EX-Proof encoder on the market
- ATEX & IECEx Zone 1 Certified
- Ø 24 mm
- IP 67 "Water-Proof" Protection
- 22 micron Anodization "Seawater-proof"
- Applications: Control panels, Car painting, Rig controls
- North American & Canadian Certification: Class I and Class II Certified

SCA24EX and SCH24EX encoders are mainly used on different types of panels in rig control houses and painting cabins. They are also used directly as non-contact potentiometers with the turn-knob mounted directly on the shaft.

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