



**Excellent**performance in harsh
environmental
conditions.



**OCR SERIES** 

# Al Based Optical Character Recognition System



## OCR SERIES AI BASED OPTICAL CHARACTER RECOGNITION SYSTEM

OCR Series is a product identification (ID) recognition system by Spechtlab designed to increase production efficiency and close data gaps in highly automated production processes. Leveraging our extensive experience in image processing, we use various camera technologies and advanced processing algorithms to read product IDs.

The OCR System was developed to read product identities regardless of product type, marking technology and environmental conditions. It utilizes various industrial imaging technologies such as CCD and CMOS to provide stable imaging to achieve the highest identification rates. This system uses the power of artificial intelligence to read the identities of the materials quickly and with high accuracy. Also, allows instantly following every step in the production line.

#### Advantages of OCR System:

<u>Error Reduction and Cost Saving:</u> Provides cost savings by reducing waste in production by preventing errors such as product number confusion and charge mixing problems.

<u>Real-Time Tracking:</u> By tracking every material, it allows instantly monitor and control every step in the production line.

<u>Increase Efficiency:</u> Significantly increases overall production efficiency by streamlining production processes and reducing bottlenecks.

<u>Artificial Intelligence Power:</u> Provides the highest reliability by providing 98% character and 99% system-wide accuracy rate with advanced artificial intelligence algorithms

#### **Applicable to Various Surfaces and Marking Methods:**

Can be used on different material surfaces and marking methods.

#### **Applicable to Moving Lines:**

Can also be applied to fast and variable lines.

#### **Tracking with Production Date:**

Provides the opportunity to track materials according to their production dates.

#### Tracking by Product ID:

Provides tracking according to product IDs.

#### **DataPool Integration:**

Has a modular structure that can be expanded integrated with SpechtLab products.

#### **Customizable Operator Tracking Screen:**

Offers easy use with its user-friendly interface.

#### **Communication with PLC System:**

Can communicate with all PLC, SAP and Level 2 systems in production line.

#### 2 Year Retroactive Data Record:

Provides data storage and analysis for up to 2 years

#### Ease of Assembly and Maintenance:

Offers easy installation and maintenance.

46 SPECHTLAB.COM INFO@SPECHTLAB.COM 47

#### SpechtLab

Product Types: Slab, coil, plate, pipe

Marking Methods: stamped, needle punched, hot spraying, metal

powder, paint/ink, labels, laser

Marking Data: 1codes, characters, numbers, special characters,

Control Type: Artificial intelligence

Hardware Triggering: 24VDC

Camera Resolution: 1920 x 1200 px Connection: Ethernet TCP/IP

Signal I/O

Analog Output: 2 analog output: 4-20 mA
Analog Input: 2 Analog Input: 4-20 mA
Digital Output: 4 Digital Output 0-24 VDC
Digital Input: 2 Digital Input: 24 VDC

Operating Voltage: 230 VAC Protection Class: IP65

Operating Temp: 0 °C - 50 °C (Without water cooling) 120 °C and

above (With water cooling: 10 liters / minute 25 °C

water, 20 liters / minute 35 °C water)

Air Cooling: :Keeps optical glasses dry and clean

Operation System: Linux, Windows 10 and later

#### SpechtLab Lighting System

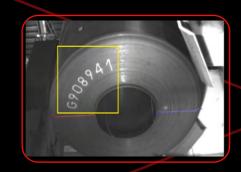
Operating voltage: 24 VDC Protection Class: IP 65

Operation time: 10000 hour

Type: lens with IR Cut Filter



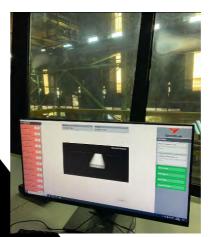


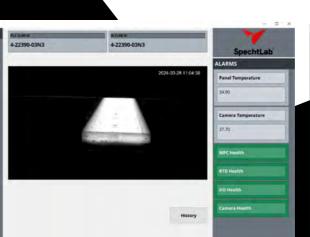


### FOR DETAILED INFORMATION:

<u>info@spechtlab.com</u> +90 506 884 01 56









SpechtLab





#### **RELIABLE**

99% accuracy rate throughout the system



#### STURDY

Resistance to
Harsh
Environmental
Conditions



#### **FLEXIBLE**

Various surfaces and markings