

# Machine Vision for Wire & Cable

- REAL-TIME INSPECTION FOR WIRE & CABLE
- AI MEASUREMENT FOR ARMORED PRODUCTION
- DETECT DEFECTS BEFORE SCRAP IS CREATED
- TRACK OD, PITCH, AND LENGTH LIVE

## Real-Time Control

CORPEX Machine Vision for Wire & Cable monitors key dimensions at production speed, measuring in real time and alerting operators instantly when values drift out of tolerance.

- |                              |                              |
|------------------------------|------------------------------|
| ✓ Real-time OD measurement   | ✓ Instant out-of-spec alarms |
| ✓ Convolution pitch tracking | ✓ Quality data logging       |
| ✓ Optional monitoring        | ✓ Production traceability    |



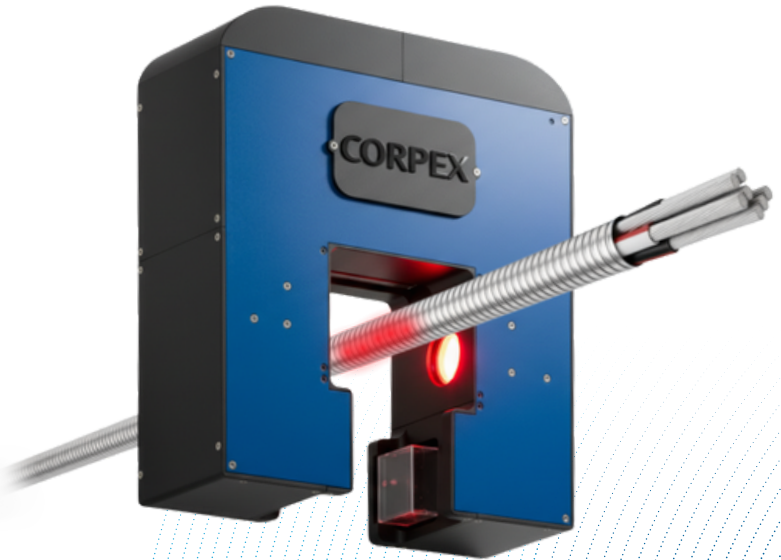
### Production Insights & Reporting

Trends and reports reduce variation, improve first-pass yield, and prevent repeat defects. Data is stored for audits and troubleshooting.



### Integration & Automation

Connect directly to PLC, SCADA, MES, and OPC environments for automated alarms, reporting, and process monitoring.



## Built for Armoring Lines

Designed for armored and convoluted cable manufacturing, CORPEX combines high-speed imaging with AI-based analytics to deliver precise measurement at line speed. The system continuously measures outside diameter, convolution pitch, and product length while maintaining exceptional accuracy and consistency. Logged measurement data supports traceability, trend analysis, and continuous improvement.



### Operator-Friendly Interface

The touchscreen HMI shows live alarms and trends so operators respond fast and maintain quality without slowing production.



### Advanced Vision & AI Detection

High-resolution sensors and AI detect dimensional variation early, reducing scrap and improving consistency for demanding specifications.



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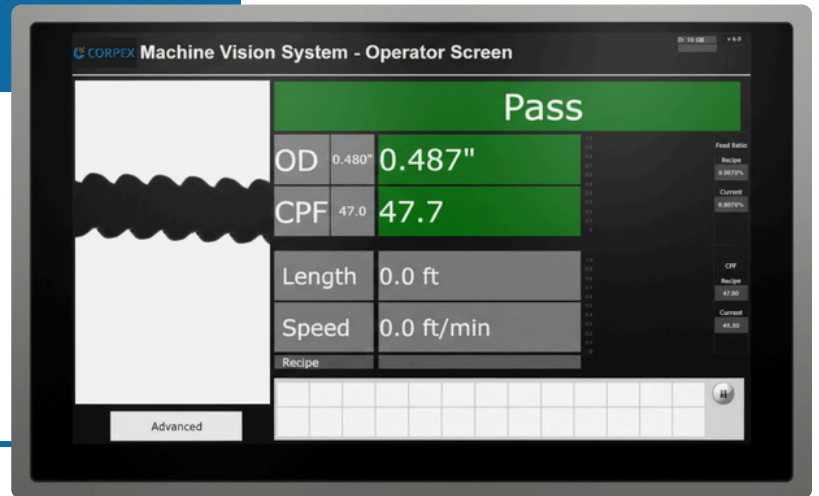


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# Machine Vision System CMVS-100

- User-friendly HMI screen displaying live measurements:
- OD, CPF, length, and speed
- Real-time monitoring for operators to quickly assess product quality
- Advanced engineer screens for parameter adjustments and setup
- Supports tolerance and recipe changes to match different products

DP/HDMI



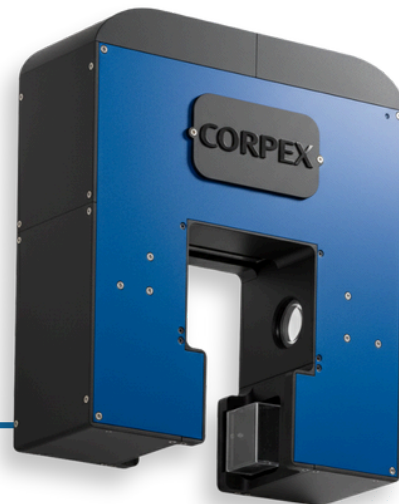
- Industrial machine vision computer running all vision and logic processing
- LAN and PoE connectivity for cameras and network integration
- Display and USB ports for screens, setup, and data access
- 24 VDC powered and running the machine vision and AI software stack



LAN

PLC

COMM



- Machine vision sensor head for armored cables up to 100mm (4in) OD
- High accuracy:  $\pm 0.002$  in ( $\pm 0.05$  mm) measurements
- Supports quality specs while reducing waste and inspection time
- 24 VDC powered



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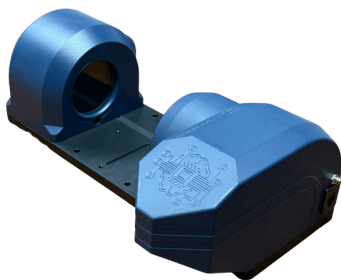


## CMVS 100

Industrial solution for  
**OD up to 100 mm (4")**  
built for high-volume production  
with stable measurement and reporting.

| Specification          | Description                                                   |                     |
|------------------------|---------------------------------------------------------------|---------------------|
| Dimensions (H x W x D) | 22.1 x 19.9 x 7.1 inches                                      | 561 x 505 x 108 mm  |
| Input Power            | 24V DC – EVC811 4 pin Connector Female                        |                     |
| Operating Temperature  | 32°F to 122°F                                                 | 0°C to 50°C         |
| Communication          | 4x Ethernet                                                   |                     |
| Operation              | Integrated HMI                                                |                     |
| Measurements           | Operator and supervisor screen measurements given in imperial |                     |
| Target OD range        | 0.25–4 inches                                                 | 6 – 100 mm          |
| Accuracy               | ±0.002 in @ 80 ft/min                                         | ±0.05 mm @ 25 m/min |
| Max pitch              | 0.75 in (16 CPF)                                              | 19 mm (52 CPM)      |
| Smart light            | Optional                                                      |                     |

## Product Range



### CMVS 35

Compact system for  
**OD up to 35 mm (1.35")**  
with real-time pitch measurement  
on armored and convoluted cable lines.



### CMVS 55

Expanded range for  
**OD up to 55 mm (2.2")**  
high-speed monitoring for demanding  
armoring and convolution production.



### CMVS 125

Heavy-duty system for  
**OD up to 125 mm (5")**  
for larger cable sizes with continuous  
operation and full traceability.

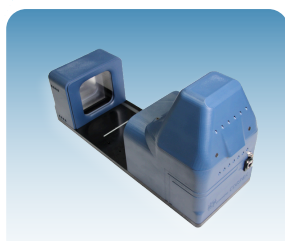
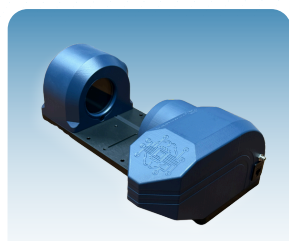


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## Sensor Head Specifications



| Specification          | CMVS 35                                                       |                          | CMVS 55                                                       |                        | CMVS 100                                                      |                        | CMVS 125                                                      |                        |
|------------------------|---------------------------------------------------------------|--------------------------|---------------------------------------------------------------|------------------------|---------------------------------------------------------------|------------------------|---------------------------------------------------------------|------------------------|
| Dimensions (H x W x D) | 5.16 x 9.45 x 15.75 inches                                    | 131 x 240 x 400 mm       | 10.75 x 7.48 x 21.26 inches                                   | 273 x 190 x 540 mm     | 22.1 x 19.9 x 7.1 inches                                      | 561 x 505 x 108 mm     | 22.1 x 19.9 x 7.1 inches                                      | 561 x 505 x 108 mm     |
| Input Power            | 24V DC – M8<br>3 pin Connector Female                         |                          | 24V DC – M8<br>3 pin Connector Female                         |                        | 24V DC – EVC811<br>4 pin Connector Female                     |                        | 24V DC – EVC811<br>4 pin Connector Female                     |                        |
| Operating Temperature  | 32°F to 122°F                                                 | 0°C to 50°C              | 32°F to 122°F                                                 | 0°C to 50°C            | 32°F to 122°F                                                 | 0°C to 50°C            | 32°F to 122°F                                                 | 0°C to 50°C            |
| Communication          | 1x Ethernet                                                   |                          | 1x Ethernet                                                   |                        | 4x Ethernet                                                   |                        | 4x Ethernet                                                   |                        |
| Operation              | Integrated HMI                                                |                          | Integrated HMI                                                |                        | Integrated HMI                                                |                        | Integrated HMI                                                |                        |
| Measurements           | Operator and supervisor screen measurements given in imperial |                          | Operator and supervisor screen measurements given in imperial |                        | Operator and supervisor screen measurements given in imperial |                        | Operator and supervisor screen measurements given in imperial |                        |
| Target OD range        | 0.15–1.35 inches                                              | 4 – 35 mm                | 0.25–2.2 inches                                               | 6–55 mm                | 0.25–4 inches                                                 | 6 – 100 mm             | 0.25–5 inches                                                 | 6 – 125 mm             |
| Accuracy               | ±0.001 in<br>@ 80 ft/min                                      | ±0.0254 mm<br>@ 25 m/min | ±0.002 in<br>@ 80 ft/min                                      | ±0.05 mm<br>@ 25 m/min | ±0.002 in<br>@ 80 ft/min                                      | ±0.05 mm<br>@ 25 m/min | ±0.002 in<br>@ 80 ft/min                                      | ±0.05 mm<br>@ 25 m/min |
| Max pitch              | 0.65 in<br>(18 CPF)                                           | 16.5 mm<br>(59 CPM)      | 0.75 in<br>(16 CPF)                                           | 19 mm<br>(52 CPM)      | 0.75 in<br>(16 CPF)                                           | 19 mm<br>(52 CPM)      | 0.75 in<br>(16 CPF)                                           | 19 mm<br>(52 CPM)      |
| Smart light            | Flexible mounting                                             |                          | Flexible mounting                                             |                        | Optional                                                      |                        | Optional                                                      |                        |



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