

# HV-20V VISION SYSTEM

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Product Brochure

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# HV-20V VISION SYSTEM

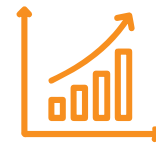
TE Connectivity's (TE) robust, compact, high force benchtop machines capable of terminating cables in harness applications equipped with the new HV-20 vision system analyze the die set, terminal, and cable conditions even before started the crimp process. The HV-20V vision system contains a vision computer mounted on the HV-20 benchtop machine, an additional new monitor on the front of the machine, three cameras and a LED strip mounted inside the machine. The cameras capture images from multiple angles of the die set, terminal, and cable. The computer determines a pre-crimp of whether the components are in an acceptable condition for successful crimping. The images captured on the new display, allows the user to customize success criteria, and indicates the current pass/fail state of the different tests. The vision system includes five discrete tests to ensure quality before the crimp is performed. The vision system can be used for all types of terminals.



**Less Scrap**



**Quality Management**



**Consistent and Effective Results**

Key Benefits	Advantages
Less Scrap	<ul style="list-style-type: none"> <li>The die vision system checks multiple points before the crimp to prevent incorrect or poorly positioned tooling, terminals, and cables</li> <li>Minimizes dependence of operator's skill</li> <li>Drastically reduce risk of scrap, thus creates cost saving</li> </ul>
Quality Management	<ul style="list-style-type: none"> <li>The crimp quality monitor (CQM) detects errors during crimping</li> <li>Can be integrated in customer's manufacturing execution systems (MES) for data exchange</li> </ul>
Consistent and Effective Results	<ul style="list-style-type: none"> <li>Visual inspection allows the user to define tight windows of variability</li> <li>Anything detected to be outside of these acceptable windows will inhibit crimping</li> <li>The crimps that are allowed by the die vision system will have consistent diameter, cable position, and terminal position</li> </ul>

## Industries

- Automotive
- Industrial & Commercial Transportation
- Aerospace Defense & Marine

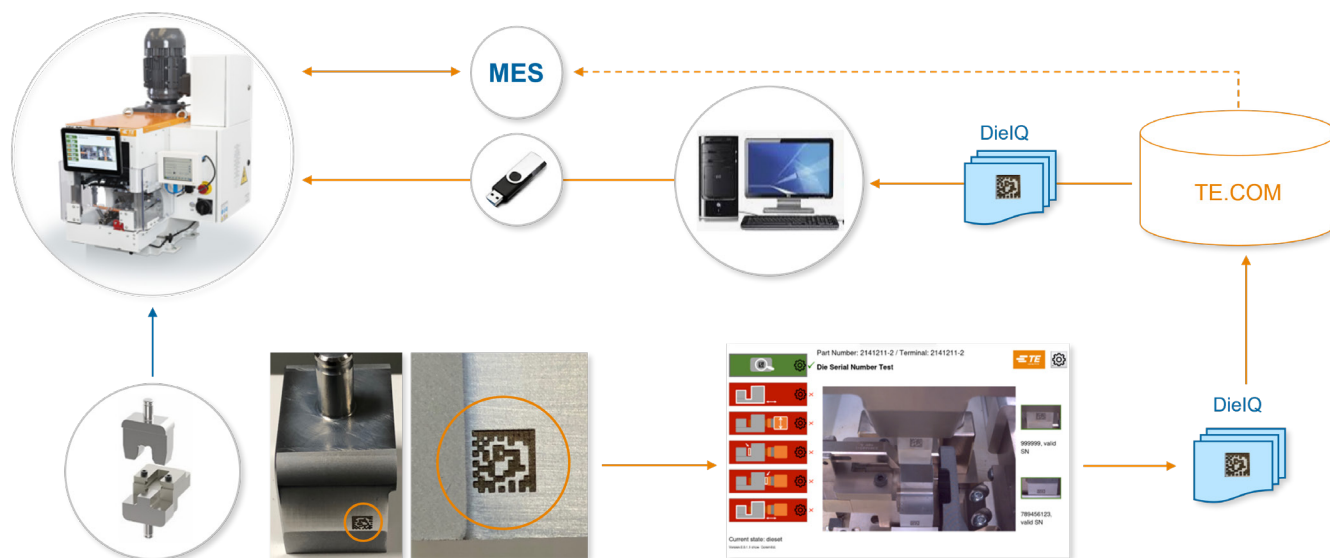
## Applications

- E-Mobility
  - High Voltage Harness
  - High Voltage Product Assembly

## Technical Details

Technical Specifications	
Force	178kN (20T)
Max Wire	120mm <sup>2</sup>
Variable Stroke (Sec) Speed (RPM)	1.3 - 8.3 Sec 288 - 1800 RPM
Power	3kW
Supply	200V & 400V
Stroke / Shut Height	44mm / 158.4mm
Weight	390kg
Network/MES	RJ-45 / MQTT
Particle Vacuum	Yes
Guard Auto Lift	Yes
Crimp Quality Monitor	Yes

## Total Crimp Quality Monitoring Data Model



**Manufacturing Execution System (MES)**

For data collection and traceability

**DieIQ**

Die sets suitable to vision system

## Ordering Information

Specifications	
PN 2399816-1	HV-20V TERMINATOR, 400V
PN 2399816-2	HV-20V TERMINATOR, 200V

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## Connect With Us

Our tooling is supported by an established, experienced and responsive field service organization. TE Connectivity field engineers are located worldwide and are available to assist with on-site and remote service; selection and installation of new equipment; training; and technical support. Service agreements are available to provide protection and support for all your application tooling equipment.

### Contact Us

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Field Service: [te.com/fieldservice](https://te.com/fieldservice)

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