SmartDetect
Option for Quality Control

QUALITY ASSURANCE

SmartDetect

Description

SmartDetect is a highly innovative quality monitoring option for Schleuniger CrimpCenters. The sensor-controlled system monitors the complete stripping process in real time and detects any contact between the stripping blade and the conductor. This allows for improved production quality without sacrificing performance. Individually adjustable system parameters allow the user to set the perfect combination for optimal detection and minimal scrap. Tolerance settings are simple to understand because they refer to percentages and physical units such as millimeters or inches, making the system very easy to use. Full integration into the CrimpCenter user interface, EASY, makes the data management of wire-specific parameters clear and easy to understand.

SmartDetect is used during both production and setup. It supports the operator during setup, by visualizing if the blade parameters will cause the blades to touch the conductor while cutting the insulation or pulling off the slug. Furthermore, the machine will be released for production only if the blade setup meets quality requirements with regard to the amount of touch between the stripping blades and wire core.

The proven principle of the quick-change cutter blocks for the changeover of the stripping blades is fully retained when using SmartDetect. The electronic components of the system are completely embedded, so they are visible from the outside only by the experienced eye. This simplifies blade changes since there are no exposed connection cables around the blade blocks that might get damaged if improperly handled.

During production, SmartDetect improves the quality of the machine's output while maintaining optimal production rates. During setup, it gives the operator direct feedback that the stripping parameters are properly set. Handling of the blades and blocks is the same as with the standard machine, so standard blades and procedures can be used. All connection cables are hidden and fully protected eliminating the chance of damage during normal operation. Finally, the software uses simple units so programming is easy to understand. For customers who demand the highest level of quality assurance, SmartDetect is an excellent addition to your CrimpCenter machine.

Ability

The following errors can be detected at an early stage:

	Picture	Description	Detection Rate
1		Cut-off strands	
2		Cut strands	
3		Scratched strands	
4		Coated strands	
5		Splayed strands	

Function

During the stripping process, contact between the stripping blade and the conductor material is detected preventing possible nicks or scratches on the conductor material.

The monitoring is carried out in three zones corresponding to the normal stripping process:

Zone 1: Contact during cutting the insolation is reported
Zone 2: Contact during stripping movement is reported
Zone 3: Contact after removing insolation residue from the wire is reported (Recut-Function deactivated)

The system determines in which zone the contact occurred. These results are compared with the set parameters. Processed wires that do not meet the set quality requirements are treated and rejected as with other Schleuniger quality monitoring systems.

EASY Screenshot

To Be Precise.