Cut, Strip & Terminate, Crimp & Quality Assurance
since 1975
To Be Precise.
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Schleuniger’s fully automatic CrimpCenter series machines are the ideal solution for high-speed wire processing. With a full range of processing stations and optional accessories, these machines maximize productivity for a broad spectrum of applications. For all other crimping needs, Schleuniger offers a wide range of products, from universal crimp applicators and pneumatic crimping machines to programmable cutting, stripping and crimping machines and crimp quality assurance equipment.

Schleuniger CoaxCenters are the first fully automatic machines for processing micro-coaxial and coaxial cables as well as single conductor wires with unbeatable precision.
# Application Overview CST

## Processing Capabilities

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CrimpCenter 36 S
Fully Automatic Crimping Machine

Equipped with reliable high precision technology, the CrimpCenter 36 S features a compact, modular design offering space for up to six processing stations with the precision and quality one can expect from Schleuniger. Various configuration possibilities allow for a variety of applications to be processed with cross sections from 0.13 to 6 mm² (26 – 10 AWG). An optimal combination of proven state-of-the-art components results in outstanding production rates.

Technical Data

Number of stations
6

Wire Feed Rate
8 m/s (26.3 ft/s)

Wire Size Range*
0.13 – 6 mm² (26 – 10 AWG)

Wire Length
45 mm – 65 m (1.77” – 213 ft)
Optional from 35 mm (1.38”)

Stripping Length Side 1
0.1 – 18 mm (0.04 – 0.71”)

Stripping Length Side 2
0.1 – 18 mm (0.04 – 0.71”)

*Highly flexible wires, wires with hard insulations or those that are tightly bonded might not be able to be processed even if they are within the application range stated above. For cross sections smaller than 0.22 mm² (24 AWG) and larger than 4 mm² (12 AWG), sample processing is required.

High Production Output

- Crimp to Crimp
- Seal to Crimp
- Seal to Seal

Wire Size: 0.75 mm² FLRY
Press Stations: UniCrimp 221
Seal Stations: SL 3100
CFM 20: Active
SealCheck: Active

*Production rates may vary based on the machine, application and machine setup.
Your Benefits

- Compact modular design
- Great flexibility with up to six processing stations
- High-end components for highest precision
- Simple operation with touchscreen and icon-based EASY software
- Simple network integration with standard TCP/IP protocol
The CrimpCenter 64 is a fully automatic swivel arm crimping machine with up to four processing stations. At a maximum feed rate of 12 m/s (39.4 ft/s), the CrimpCenter 64 processes high crimping, sealing, twisting and tinning of wires from 0.13 to 6 mm² (26 - 10 AWG) at maximum productivity.

**Technical Data**

**Number of stations**

4

**Wire Feed Rate**

12 m/s (39.4 ft/s)

**Wire Cross Section**

0.13 – 6 mm² (26 – 10 AWG)
Optional from 0.05 mm² (30 AWG)

**Wire Length**

60 mm – 65 m (1.77” – 213 ft)
Optional from 35 mm (1.38”)

**Stripping Length Side 1**

0.1 – 18 mm (0.04 - 0.71”)
Optional up to 26 mm (1.02”)

**Stripping Length Side 2**

0.1 – 18 mm (0.04 – 0.71”)

*Highly flexible wires, wires with hard insulations or those that are tightly bonded might not be able to be processed even if they are within the application range stated above. For cross sections smaller than 0.22 mm² (24 AWG), sample processing is required.

*Production rates may vary based on the machine, application and machine setup.
Your Benefits

- High performance and short set-up times
- Simple operation with state-of-the-art software and touchscreen
- Simple network integration with standard TCP/IP protocol
- Wide range of options and accessories available
CrimpCenter 67
Fully Automatic Crimping Machine

The CrimpCenter 67 accommodates up to seven stations (maximum four crimp stations) and is ideal for customers with a large variety of applications such as crimping, doubling, sealing, tinning, twisting and welding. A multitude of applications can be processed with minimal set-up times.

Technical Data

Number of stations
7

Wire Feed Rate
12 m/s (39.4 ft/s)

Wire Cross Section*
0.13 – 6 mm² (26 – 10 AWG)
Optional from 0.05 mm² (30 AWG)

Wire Length
60 mm – 65 m (1.77” – 213 ft)
Optional from 35 mm (1.38”)

Stripping Length Side 1
0.1 – 18 mm (0.004 – 0.71”)
Optional up to 26 mm (1.02”)

Stripping length Side 2
0.1 – 18 mm (0.004 – 0.71”)

*Highly flexible wires, wires with hard insulations or those that are tightly bonded might not be able to be processed even if they are within the application range stated above. For cross sections smaller than 0.22 mm² (24 AWG), sample processing is required.

High Production Output

Crimp to Crimp
Seal to Crimp
Seal to Seal

Wire Size: 0.75 mm² FLRY
Press Stations: UniCrimp 221
Seal Stations: SL 3100
CFM 20: Active
SealCheck: Active

*Production rates may vary based on the machine, application and machine setup.
Your Benefits

- Maximum flexibility and high performance
- Simple operation with state-of-the-art software and touchscreen
- Simple network integration with standard TCP/IP protocol
- Wide range of options and accessories available
CrimpCenter 67 HD16
Fully Automatic Crimping Machine

Your Benefits
- Production of larger cables up to 16 mm² (6 AWG)
- High performance and short set-up times
- Simple operation with state-of-the-art software and touchscreen
- Simple network integration with standard TCP/IP protocol

The CrimpCenter 67 HD16 is a fully automatic swivel arm crimping machine with up to four processing stations. It is ideally suited for medium to large cable applications from 6 to 16 mm² (10 - 6 AWG). At a maximum feed rate of up to 12 m/s (39.4 ft/s), this versatile, fully automatic crimping machine allows high quality crimping and sealing of wires at maximum productivity.

Technical Data
Number of stations
4

Wire Feed Rate
12 m/s (39.4 ft/s)

Wire Cross Section
6 – 16 mm² (10 – 6 AWG)
Optional 0.13 – 6 mm² (26 – 10 AWG)
or 6 – 25 mm² (10 – 4 AWG)

Wire Length
60 mm – 65 m (1.77” – 213 ft)

Stripping Length Side 1
0.1 – 18 mm (0.04 – 0.71”)
Optional up to 26 mm (1.02”)

Stripping Length Side 2
0.1 – 18 mm (0.04 – 0.71”)

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CrimpCenter ACS
Coil-Binding System for CrimpCenter 6-Series

Your Benefits
- High performance with minimal space requirements
- Excellent length accuracy due to servo motor and encoder combination
- Handles single wire applications with or without seals or terminals on either end
- Simple operation and set up via the CrimpCenter EASY software and touchscreen interface

The CrimpCenter ACS (AutoCoiling System) is built on the 6-series platform. The auto-coiling function eliminates the need for extension conveyors and significantly reduces the floor space required for long-wire applications. The system will automatically coil, bind and batch long wires during production. Binding is accomplished with tape that can be easily removed for downstream production steps.

Technical Data
Number of stations
4

Wire Feed Rate
9 m/s (26.3 ft/s)

Wire Cross Section
0.35 – 2.5 mm² (22 – 13 AWG)

Wire Length
4 m – 30 m (13.1 – 98.4 ft.)
Depending on wire outer diameter (cross section)

Stripping Length Side 1
0.1 – 18 mm (0.04 – 0.71”)
Optional up to 26 mm (1.02”)

Stripping Length Side 2
0.1 – 18 mm (0.04 – 0.71”)
UniCrimp 222 | 221
Crimping Station for CrimpCenter Series

Your Benefits

- Suited for precise high speed crimping
- Integrated crimp force monitoring
- Suitable for all standard crimp applicators
- UniCrimp 222: Automatic crimp height adjustment

The UniCrimp 221 and UniCrimp 222 are crimping stations designed for high speed production on CrimpCenter series machines. The stations include integrated crimp force monitoring with the Schleuniger CFM 20 as well as a height adjustable base frame. They accept most side- or rear-feed mini-style crimping applicators with either mechanical or pneumatic feed. The UniCrimp 222 also includes electronic crimp height adjustment to minimize set-up times.

Technical Data

Crimping Force
20 kN (2 tons)

Wire Cross Section
Up to 6 mm² (10 AWG)

Stroke
40 mm (1.58”) or 30 mm (1.18”)
(mechanical adjustable)

Shut Height
From 135.78 mm (5.346”) to 190.00 mm (7.480”)

Options
Various applicator adaptors and fixations / shut heights available

Crimp Height Adjustment
UniCrimp 221: Manual ± 0.8 mm (0.03”)
UniCrimp 222: Electronically adjusted via EASY software ± 0.5 mm (0.02”)
**UniCrimp 500 A**
Crimping Station for CrimpCenter Series

**Your Benefits**
- Ideal for processing large cable cross sections up to 16 mm² (6 AWG)
- Compatible with rear- and sidefeed banded terminals
- Short cycle times
- Quick-change applicator base plate
- Optional crimp force monitoring

The UniCrimp 500 A is a crimping station with five tons of crimping force. It processes both rear- and side-feed banded terminals (open or closed barrel type) for cable cross sections up to 16 mm² (6 AWG).

**Technical Data**

**Crimping Force**
49 kN (5 tons)

**Wire Cross Section**
Up to 16 mm² (6 AWG)

**Stroke**
40 mm (1.58“)

**Shut Height**
Standard 158.38 mm (6.235“)
Optional 135.78 mm (5.346“)

**Crimp Force Monitoring**
Optional

**Crimp Height Adjustment**
Manual
SealLoad 3100
Seal Loading Station for CrimpCenter

The seal loading station for CrimpCenter series machines conveys and orientates loose seals and positions them on previously stripped wires. Station is suitable for all types of seals, including mini and hard-shell seals. Seal monitoring options are available. The station also accepts seal kits for the Schleuniger SLU 3000 and some competitor models as well.

Technical Data

Process Time
160 ms (without options)

Cycle Time
750 ms

Maximum Seal Dimensions
17 mm diameter (0.67”)
19 mm length (0.78”)

Seal Kit Compatibility
SLU + SL Sealkits / Adapter kits for competitive seal kits.
Your Benefits

- Improved performance over the SLU 3000
- Fast cycle times optimizes performance of CST machines
- Tool-less kit changeover
- Low energy consumption
- Fully integrated with EASY software
SLD 4100
Double Gripper Module for CrimpCenter

The SLD 4100 double gripper module can be used with all models of the CrimpCenter series for processing doubling crimp applications on wires from 1 – 4 mm (0.039 – 0.157”) in outer diameter. The unit gathers two single wires in the proper orientation allowing the swivel arm gripper to collect them. The wires are then moved to a separate station for termination into a double crimp. Each wire can have a different length and depending on the terminal design, wire orientation can be either vertical or horizontal. Wire orientation is fully programmable in the CrimpCenter EASY operating software and no tools are needed for changes.

Technical Data

**Cable Outer Diameter**
1 – 4 mm (0.039 – 0.157”)

**Wire Alignment**
Horizontal and vertical
Your Benefits

- Compact, fully pneumatic module
- Doubled wires can have different lengths and strip lengths
- Horizontal or vertical doubling
- All parameters are fully programmable (no mechanical adjustments)
- Simple programming directly in CrimpCenter EASY software
The STS 1100 tinning station is designed specifically to resist the corrosive properties of lead-free solder. The station includes an integrated flux unit for tinning cross sections up to 2.5 mm² (14 AWG) and tinning lengths up to 5 mm (0.2”). Cross sections up to 4 mm² (12 AWG) and tinning lengths up to 10 mm (0.39”) may be possible but testing should be done.

**Technical Data**

**Wire Cross Section**
Up to 2.5 mm² (14 AWG); possibly 4 mm² (12 AWG) depending on wire

**Tinning Length**
Up to 5 mm (0.2”); possibly 10 mm (0.39”) depending on wire

**Operating Temperature**
Maximum 400°, adjustable

**Fluxing**
Integrated

### Your Benefits
- Short cycle times
- Full control via CrimpCenter EASY operating software
- Designed for use with lead-free solder
- Consistently tinned diameters
- Wire cross sections up to 2.5 mm² (14 AWG), optional up to 4 mm² (12 AWG)
STW 1100
Twisting Station for CrimpCenter

Your Benefits

- Programmable twist rates and wire pull-out speeds
- All production parameters programmed and stored through the machine interface
- Short cycle times and fast changeover times
- Can be mounted inside the press to minimize station requirements
- Can be mounted outside the press on its own pedestal for optimum flexibility

The STW 1100 twisting station is specifically designed for twisting conductor end strands on CrimpCenter series, fully automatic cut, strip and terminate machines. It easily handles wire sizes up to 2.5 mm² (14 AWG) and twists conductor end strands of stripped wires up to 18 mm (0.71”) stripping length. It is typically used in conjunction with the STS 1100 tinning station.

Technical Data

**Wire Cross Section**
Up to 2.5 mm² (14 AWG); possibly 4 mm² (12 AWG) depending on wire

**Maximum Wire Outside Diameter**
4.5 mm (0.17”)

**Twisting Length End 1**
4 – 18 mm (0.15 – 0.71”)
Optional up to 23 mm (0.90”), depending on wire

**Twisting Length End 2**
4 – 18 mm (0.15 – 0.71”)
UniCrimp LPC A
Crimping Station for Loose Piece Terminals

Your Benefits
- High precision 4/8-indent crimps of machined contacts
- Short cycle times
- Fast changeover times
- Simple operation with PILOT handheld
- Microadjustment dial for crimp depth

The UniCrimp LPC A crimping station processes turned loose piece terminals (closed barrel) with a cross section range from 0.14 – 4 mm² (26 – 12 AWG). With low space requirements and less than 1.5 seconds cycle time, the station has been specifically designed for use in automatic systems such as the Schleuniger CrimpCenter series of fully automatic crimping machines.

Technical Data

Wire Cross Section
0.14 – 4 mm² (26 – 12 AWG)

Cable Outer Diameter
7 mm (0.27”)

Cycle Time
< 1.5 s (terminal positioning and crimping)

Crimp Type
4-indent – 8-point crimp

Terminal Diameter
6 mm (0.23”) outer diameter
Your Benefits
- Reliable compacting process
- Very short cycle times
- Easy adjustment for various wire cross sections
- Quality assurance with automatic data storage (optional PC controller)

The Strunk KM-CFK welding station will compact (compress, form, and bond) stripped wire ends from 0.5 up to 6 mm² (20 AWG – 10 AWG) on the CrimpCenter 6-series machines through a resistance welding process. Depending on the CrimpCenter model, one or both wire ends can be compacted or the process can be combined with other processing steps. The system includes the KM-CFK station, a separate control unit and a separate (optional) cooling unit.

Technical Data
**Wire Size Range**
0.5 – 6 mm² (20 AWG – 10 AWG)

**Maximum Electrode Force**
1800 N

**Maximum Welding Power**
104 kVA
The ToolingShuttle 30 combines the crimp applicator (tooling), terminal reel and paper winder into one mobile quick-change unit for CrimpCenter 3-series fully automatic crimping machines. The ToolingShuttle 30 allows the operator to exchange all three elements simultaneously which significantly reduces changeover time.

**Technical Data**

**Dimensions**
660 x 140 x 1107 mm (26.0 x 5.5 x 43.5”)

**Weight**
7 kg (15.4 lbs.)
ToolingShuttle 61
Mobile Quick-Change Unit for CrimpCenter 6-Series

Your Benefits
- Changeover in less than 30 seconds
- For most standard crimp applicators (tooling)
- Retrofittable for all CrimpCenter 6-series models
- Simple and quick handling without additional tools
- Modular concept: expand system according to your requirements

The ToolingShuttle 61 combines the crimp applicator (tooling), terminal reel and paper winder into one mobile quick-change unit for CrimpCenter 6-series fully automatic crimping machines. The ToolingShuttle 61 allows the operator to exchange all three elements simultaneously which significantly reduces changeover time.

Technical Data
Dimensions
545 x 230 x 1195 mm (21.4 x 9.0 x 47.0“)

Weight
7.5 kg (16.5 lbs.)
The CenterStrip 1000 is designed to precisely strip insulation windows from wires and multi-layer cables ranging from 0.5 – 10 mm² (20 – 8 AWG). Short cycle times, simple operation, and easy integration make the CenterStrip 1000 an ideal add-on to automatic wire processing systems such as fully automatic crimping machines or cut & strip machines.

**Your Benefits**
- New controller with touch screen and multilingual navigation
- Simplified operation and communication
- Safety circuit interface to base machine
- Optimised machine cycle with status monitoring
- Increased flexibility regarding customer requirements

**Technical Data**

**Wire Size Range**
0.5 – 10 mm² (20 – 8 AWG)
Bigger cross sections on request

**Cable Outer Diameter**
9 mm (0.35”)

**Cycle Time**
Maximum 550 ms
SealCleaner 20
Cleaning Station for Seals

Your Benefits
- Air input for best cleaning results
- Timer operated
- Automatic motor shut off after the pre-set has elapsed
- Automatic input voltage regulator
- Removable seal container, easy to fill and empty

The SealCleaner 20 is an accessory used in loose piece sealing. It easily cleans and dries oily seals by tumbling in combination with special towels.

Technical Data
Dimensions
400 x 300 x 450 mm (12” x 16” x 18”)

Weight
11 kg (24 lbs.)
CoaxCenter 6000
Unbeatable Quality in Micro-Coaxial and Coaxial Cable Processing

Schleuniger’s CoaxCenter 6000 systematically integrates and automates all of the individual steps needed for the processing of micro-coaxial and coaxial cables on a highly flexible machine platform. Our award-winning machine provides unbeatable precision, flexibility and speed.

Technical Data

Maximum Cable Outer Diameter
5.5 mm (0.21“)

Minimum Cable Size
0.005 mm² (AWG 40)

Maximum Cable Length
1000 mm (39.4“), longer cable length with active wire stacker possible

Maximum Strip Length Side 1
26 mm (1.02“), 45 mm (1.77“) possible with new software version

Maximum Strip Length Side 2
26 mm (1.02“)
Your Benefits

- Unbeatable stripping accuracy
- Automatic quality monitoring of the stripping results
- Traceability through recording of the production data
- High degree of processing flexibility
- High production output
## Application Overview Crimp

### Applications

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<th>StripCrimp LPC</th>
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<td>6 mm (0.24&quot;)</td>
<td>6 mm (0.24&quot;)</td>
<td>6 mm (0.24&quot;)</td>
<td>5.5 mm (0.22&quot;)</td>
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- Discrete wire stripping
- Multi-conductor cable stripping
- Discrete wire crimping
- Multi-conductor cable crimping
- Discrete wire stripping & crimping
- Multi-conductor cable stripping & crimping
- Discrete wire stripping, crimping & sealing
- Multi-conductor cable stripping, crimping & sealing
UniCrimp 200
Crimping Machine

Meet the most powerful crimping machine in its class! The UniCrimp 200 benchtop crimping machine is designed for crimping open or closed barrel terminals with up to 3.4 tons (33 kN) of crimp force. The machine easily handles wire sizes up to 6 mm² (10 AWG) and accepts most standard mini-style applicators (mechanical or pneumatic) for crimping side- and rear-feed terminals. The UniCrimp 200 ensures fast cycle speed as well as extremely quiet and safe operation.

Technical Data

<table>
<thead>
<tr>
<th>Crimping Force</th>
<th>33 kN (3.4 tons)</th>
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<tr>
<td>Maximum Cable Diameter</td>
<td>6 mm (0.24&quot;)</td>
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<tr>
<td>Maximum Cable Cross Section</td>
<td>6 mm² (10 AWG)</td>
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<tr>
<td>Minimum Cable Cross Section</td>
<td>0.05 mm² (30 AWG)</td>
</tr>
</tbody>
</table>
Your Benefits

- Economical & user-friendly
- Quick-release applicator base for easy changeover
- Adjustable crimp speed
- Standard tool-less, incremental crimp height adjustment (micro-adjust)
- Split cycle capability for closed barrel contacts
StripCrimp 200
Stripping and Crimping Machine

The fully programmable StripCrimp 200 is one of the most flexible stripper crimper machines on the market! It's most suitable for high precision stripping and crimping of side- or rear-feed terminals for wires between 30 – 12 AWG (0.05 – 4.00 mm²). The StripCrimp 200 captivates with great flexibility and user-friendly operation. The machine is highly suitable as a semi-automatic stripper crimper or within fully automatic transfer systems and runs quickly, quietly and safely.

Technical Data

Crimping Force
33 kN (3.4 tons)

Maximum Cable Diameter
6 mm (0.24”)

Maximum Cable Cross Section
4 mm² (12 AWG)

Minimum Cable Cross Section
0.05 mm² (30 AWG)

Maximum Stripping Length
15 mm (0.59“)
Your Benefits

- Fully programmable stripping unit with wayback and recut function
- Economical & user-friendly
- Quick-release applicator base plate for easy changeover
- Job memory for all cable parameters and functions
- Split cycle capability for closed barrel contacts
StripCrimp LPC
Stripping and Crimping Machine for Loose Piece Terminals

The StripCrimp LPC is a semi-automatic benchtop machine for processing turned loose piece terminals (closed barrel) with a cross section range from 0.14 – 2.5 mm² (26 – 14 AWG). The key component is a highly flexible feeding module that first sorts and separates terminals with an integrated drum / track system and subsequently brings them into the correct crimping position.

Technical Data
Maximum Cable Diameter
5.5 mm (0.22“)

Maximum Cable Cross Section
2.5 mm² (14 AWG)

Minimum Cable Cross Section
0.14 mm² (26 AWG)

Maximum Stripping Length
10 mm (0.39“)

Minimum Jacket Stripping Length
15 mm (0.59“)
Your Benefits

- High precision 4/8-indent crimps of machines terminals
- Fast changeover times
- Simple operation with PILOT handheld
- Programmable sequence: zero cut, strip, crimp
- Microadjustment dial for crimp depth
SealCrimp 210 B
Stripping Sealing and Crimping Machine

The SealCrimp 210 B is a highly flexible benchtop machine for stripping, sealing, and crimping a great variety of different wire sizes up to 2.5 mm² (14 AWG). The machine can process a great variety of crimp terminals and seal types, including mini seals and hard-shell seals. Due to its modular design it can also be used as a stripper, stripper-crimper, or a crimping machine.

Technical Data

Crimping Force
20 kN (2 tons)

Maximum Cable Diameter
6 mm (0.24“)

Maximum Cable Cross Section
2.5 mm² (14 AWG)

Minimum Cable Cross Section
0.2 mm² (24 AWG)

Maximum Stripping Length
8 mm (0.31“)
Your Benefits

- High output
- Flexible use: selectable operating modes
- Short changeover times
- Precision & repeatability
- Simple operation
Uni-S Applicators
Universal Crimp Applicators

Your Benefits

- Economically priced applicators to handle practically all terminal and feed types
- Rugged construction and simple set up to ensure long life and high quality results
- Includes convenient micro-adjust dials, a 6-digit counter and one additional set of tooling
- For use on automatic terminating machines as well as benchtop crimping presses
The Uni-S family of applicators are designed for use with side and end feed, banded terminals with either open or closed barrel construction. The robust designs ensure precise tooling alignment for high quality results and easy setup. Schleuniger applicators are suitable for use on automatic wire processing systems as well as on bench-top presses for terminals with either metal, plastic or Mylar tape carrier strips.

**Technical Data**

**Feed Type**
Mechanical or pneumatic

**Press Stroke**
40 or 30 mm (1.57” or 1.18”) (other strokes available on request)

**Cross Section Range**
0.08 – 6 mm² (28 – 10 AWG)
## Processing Specifications

### Crimping Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Insulation Crimp</th>
<th>Wire Crimp</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Good</strong></td>
<td><img src="image1" alt="Good Insulation Crimp" /> <img src="image2" alt="Good Wire Crimp" /></td>
<td><img src="image3" alt="Good Wire Crimp" /> <img src="image4" alt="Good Wire Crimp" /></td>
</tr>
<tr>
<td><strong>Conditional Approval</strong></td>
<td><img src="image5" alt="Conditional Approval Insulation Crimp" /> <img src="image6" alt="Conditional Approval Wire Crimp" /></td>
<td>Width of flash max. 1/2 of material thickness</td>
</tr>
<tr>
<td><strong>Bad</strong></td>
<td><img src="image7" alt="Bad Insulation Crimp" /> <img src="image8" alt="Bad Wire Crimp" /></td>
<td><img src="image9" alt="Bad Wire Crimp" /> <img src="image10" alt="Bad Wire Crimp" /></td>
</tr>
<tr>
<td></td>
<td><img src="image11" alt="Bad Wire Crimp" /> <img src="image12" alt="Bad Wire Crimp" /></td>
<td>Flange distance to base min. 1/2 of material thickness</td>
</tr>
<tr>
<td></td>
<td><img src="image13" alt="Bad Wire Crimp" /> <img src="image14" alt="Bad Wire Crimp" /></td>
<td>Terminal material broken</td>
</tr>
</tbody>
</table>
Insulation

A. Wire crimp width
B. Wire crimp height
C. Flash
D. Insulation crimp width
E. Insulation crimp height
F. Rear bellmouth height
G. Front bellmouth height
H. Rear bellmouth length
J. Front bellmouth length
K. End of insulation
L. Wire brush
M. Insulation barrel length
N. Cut-off-tab (front and back)
O. Strip length
P. Insulation diameter
R. Terminal bent left/right
S. Terminal bent upward/downward

Wire

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ACO 07
Crimp Force Monitoring

The ACO 07 features numerous new functions and capabilities, such as faster processing times and a VGA monitor interface, making the ACO 07 very powerful and convenient.

Technical Data

**Measurement Range**
0 – 15kN (optional up to 100kN)

**LCD-Display**
Single channel: 2 x 16 characters

**Analysis**
Software for multi-channel monitoring with optional statistical analysis

**Network Compatibility**
Via RS 232 or Ethernet (TCP/IP) via WinCrimp LAN or WLAN
Your Benefits

- High process reliability with 100% inspection
- Network capability for efficient data collection and control
- Simple display and user interface for ease of learning and use
SawInspect System 6
Crimp Micrograph Analysis

The Schleuniger SIS 6 is an extremely compact device for crimp cross section analysis. Within a few quick steps, users can create cross sectioned samples.

All parameters of cross sectioned contacts can be measured and analyzed with the CrimpLab 2 analysis software. Measurements are performed manually when using the CrimpLab 2 Standard software. The optional CrimpLab 2 Automatic software includes fully automatic contour recognition and measurement of B-crimps. All measurement parameters can be captured in seconds with just a few clicks. The high quality, carbide saw blade eliminates the need for polishing so significant processing time is saved.

Technical Data

Cross Section Range
0.03 – 6 mm² (32 – 10 AWG)

Maximum Contact Height
9 mm (0.35“)

Blade
VHM / 40 x 0.4 mm

Camera / Resolution
USB 2.0 / 1.3 Megapixel
Your Benefits

- Complete cross section analysis and job management with CrimpLab 2 software
- User-friendly measurement software with optional automatic contour recognition
- Compact design with minimized processing movements and steps for fastest results
SawPolish Unit
Crimp Micrograph Analysis

The SawPolish product family offers three models to cover a wide range of applications. Each model has its own specifications to meet varying budgets and production needs. All units feature carbide cutting blade that provide a high quality cut. In many cases, polishing is not needed saving valuable processing time.

Technical Data

Maximum Terminal Height
SawPolish Unit 6 Comfort: 9 mm (0.35“)
SawPolish Unit 6: 9 mm (0.35“)
SawPolish Unit 60: 20 mm (0.79“)

Standard Saw Blade
SawPolish Unit 6 Comfort: Carbide (VHM) 40 x 10 x 0.4 mm (1.57 x 0.39 x 0.02“)
SawPolish Unit 6: Carbide (VHM) 40 x 10 x 0.4 mm (1.57 x 0.39 x 0.02“)
SawPolish Unit 60: Carbide 100 x 22 x 1.0 mm (3.94 x 0.87 x 0.04“)
Suitable for copper, aluminum, steel, alloy steel, stainless steel, titanium, bronze, brass, cast iron, gold, silver, inconel, nimonic, hastelloy, magnesium alloys, plastic

Polishing Disc Diameter
SawPolish Unit Comfort, SawPolish Unit 6, SawPolish Unit 60: 100 mm (3.93“)
Your Benefits

- Three models for sawing and polishing a wide range of crimp connections
- Polishing disc is in line with the saw blade for fast and simple processing
- Compatible with ElectrolyteStaining Unit and MacroZoom Unit 1.3 for a complete crimp cross section analysis
- Numerous sample holders are available for a variety of applications such as welding, potting and connector inspection
MacroZoom Unit 1.3
Sample Inspection System for Crimp Cross Section Analysis

Your Benefits
- Nine fixed zoom positions for calibration accuracy
- Simple connection and installation with standard PC
- Clear illumination with LED ring light
- Analysis according to international standards

Technical Data
Field of View MZU for SPU 6 | SPU 6 C
1.0 x 0.8 mm up to 6.8 x 5.1 mm
(0.04 x 0.03” up to 0.26 x 0.2”)

Field of View MZU for SPU 60
2.6 x 2.0 mm up to 17.1 x 12.8 mm
(0.10 x 0.08” up to 0.67 x 0.50”)

Resolution
1.3 Megapixel

Lens and Zoom
MacroZoom lens with nine incremental zoom steps

The MacroZoom Unit 1.3 is a component of the MicroGraph System for the creation of high quality cross sectional images of crimp connections and other applications. The MacroZoom Unit 1.3 includes the microscope unit plus the analysis Software CrimpLab 2.
ElectrolyteStaining Unit 6
Sample Staining Unit for Crimp Cross Section Analysis

Your Benefits
- No special purchasing due to hazardous chemicals
- No special hazardous chemical safety equipment required
- Environmentally-friendly

Technical Data
Cleaning Process
Electrolytic-Staining process (electro-chemical process)
Staining Pen Tip Material
Felt tips

The ElectrolyteStaining Unit 6 utilizes a staining solution with Ph level of 7, which is equal to water. Therefore, the staining process is simple and fast yet much safer than conventional systems that utilize acid solutions to etch the face of the sample.

MicroGraph System
Modular System for Crimp Cross Section Analysis

Crimp cross sectional analysis has quickly become an integral part of the crimp quality process. With the MicroGraph System (MGS), crimp cross sectional images can be created in a fraction of the time compared to conventional methods.
CHM
Crimp Height Meter

Precision crimp height measurement device for verification of non-insulated crimp terminals. The CHM can be used as a stand-alone device or integrated into CrimpCenter machines for quality verification. The spring-loaded measuring pin ensures a consistent force is applied for best consistency between operators.

Technical Data

**Measuring Gauge**
Standard: Mitutoyo Digimatic, Optional: Sylvac

**Resolution**
Standard: 0.01 mm (0.0004”)  
Optional: 0.001 mm (0.00004”)

**Power Supply**
110/220 VAC

**Dimensions**
155 x 125 x 233 mm (6.1 x 4.9 x 9.2”)
Your Benefits

- Pin & blade measuring points
- Easier terminal positioning
- Consistent measuring force
- Improved reliability and repeatability
Schleuniger’s PullTester 20 is a motorized, benchtop unit designed to measure pull-test forces for a variety of applications. The most common applications are wire crimp and ultrasonic metal welding connections, but the design makes it possible to create custom fixtures for many other applications.

PullTester 25
Pull Testing Machine

Your Benefits
- Two selectable pulling rates
- Speed controlled motor for consistent pull rates
- Standard RS 232 interface for curve analysis with optional WinCrimp PC software

Technical Data
Measuring Range
Standard: 0 – 500 N and 0 – 1000 N (0 – 110 lbs. and 0 – 220 lbs.), other variations possible

Applied Force Accuracy
0.2% of full scale
Schleuniger’s PullTester 26 is a dual-range, motorized, benchtop unit designed to measure pull-test forces of crimp and ultrasonic weld connections. This versatile machine has two measuring ranges, which are individually calibrated enabling use of its 500 N (110 lbs.) scale for small wires, while easily switching to its 1000 N (220 lbs.) scale for larger wires.

**Technical Data**

**Measuring Range**
Standard: 0 – 500 N and 0 – 1000 N  
(0 – 110 lbs. and 0 – 220 lbs.), other variations possible

**Applied Force Accuracy**
0.2% of full scale

**Device Data Memory**
Up to 48 jobs with 50 measurements (2,400 values)

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**Your Benefits**

- Dual-range for improved accuracy over a wider range of wires
- Four pulling modes for destructive & non-destructive tests
- Four selectable pulling rates
- Job memory for up to 48 jobs with 50 measurements
PullTester 27
Pull Testing Machine

Your Benefits
- Dual-range for improved accuracy over a wider range of wires
- Two selectable pulling rates
- Speed controlled motor for consistent pull rates
- Standard RS 232 interface for curve analysis with optional WinCrimp PC software

Schleuniger’s PullTester 27 is a dual-range, motorized, benchtop unit designed to measure pull-test forces of crimp and ultrasonic weld connections on a wider range of wires. This dual-range capability ensures the highest accuracy for the widest range of applications.

Technical Data

Measuring Range
Standard: 2.000 / 5.000 N (440 / 1100 lbs.),
Special: 5.000 / 10.000 N (1100 / 2200 lbs.)
(other combinations possible)

Applied Force Accuracy:
0.2% of full scale
Schleuniger’s PullTester 28 is a dual-range, motorized benchtop device designed to measure pull forces of wire crimp connections as well as ultrasonic metal welding connections on a wider range of wire than single-range pull test devices. The PullTester 28 is specially suited for quality assurance in a production environment.

**Technical Data**

**Measuring Range**
- Standard: 2.000 / 5.000 N (440 / 1100 lbs.)
- Special: 5.000 / 10.000 N (1100 / 2200 lbs.)
- Other combinations possible.

**Applied Force Accuracy**
0.2% of full scale

**Device Data Memory**
Up to 48 jobs with 50 measurements (2,400 values)
PullTester 320
Pull Force Testing

Schleuniger’s PullTester 320 is a motorized device for use with Schleuniger CrimpCenter automatic crimping machines to measure pull-test forces of wire terminations. This versatile machine has three measuring ranges, which are individually calibrated. Multiple pulling ranges offer a higher accuracy over the entire device range than single-range devices. The standard measuring ranges are 100 N, 200 N and 1000 N (22.5 lb, 45 lb, and 220 lb). The PullTester 320 with its triple-range capability ensures the highest accuracy over the widest range of applications.

Technical Data

**Measuring Range**
0 – 100 N / 0 – 22 lbf / 0 – 10 Kp  
0 – 200 N / 0 – 44 lbf / 0 – 20 Kp  
0 – 1000 N / 0 – 220 lbf / 0 – 100 Kp

**Applied Force Accuracy**
±0.2 % of measurement range
Your Benefits

- Triple range for the best accuracy over the widest range of wires
- Four selectable pulling rates to comply with common test requirements
- Speed-controlled motor for consistent pull rates throughout the measuring range
- Fully integrated into CrimpCenter EASY software to save time
PullTester 325
Pull Testing Machine

Your Benefits
- Three selectable force ranges for improved accuracy over a wider range of wires
- Two selectable pulling rates
- Speed controlled motor for consistent pull rates
- Standard RS 232 interface for curve analysis with optional WinCrimp PC software

The PullTester 325 is a triple-range, motorized benchtop device for measuring pull forces of crimp connections, welded connections or many other possibilities. The triple-range capability gives the PullTester 325 incredible application flexibility to handle a wide variety of testing applications.

Technical Data

Measuring Range
0 – 200 N / 0 – 45 lbf / 0 – 20 Kp
0 – 1000 N / 0 – 220 lbf / 0 – 100 Kp
0 – 2000 N / 0 – 450 lbf / 0 – 200 Kp
other variations available by special order

Applied Force Accuracy
0.5% of measurement range
The PullTester 326 is a motorized benchtop device to measure pull-test forces of wire terminations. The Schleuniger PullTester 326 offers four selectable pulling rates consistent with the most common specifications. It is equipped with a speed-controlled motor, ensuring consistent pull rates throughout the complete measurement cycle resulting in repeatable and accurate data.

**Technical Data**

**Measuring Range**
- 0 – 200 N / 0 – 45 lbf / 0 – 20 Kp
- 0 – 1000 N / 0 – 220 lbf / 0 – 100 Kp
- 0 – 2000 N / 0 – 450 lbf / 0 – 200 Kp

Other variations available by special order

**Applied Force Accuracy**
0.5% of measurement range

**Device Data Memory**
Up to 48 jobs with 50 measurements (2,400 values)
Easy Production Server (Easy PS) – Production Management Software

With the Easy PS Software wire processing can be optimized on an unlimited number of networked CrimpCenters. Production planning, managing of production orders and real-time production monitoring can be controlled from one central computer workstation.

Easy Production Server

CrimpCenter 36 S  CrimpCenter 64  CrimpCenter 67
Schleuniger Software Options

WinCrimp – Quality Assurance Software

WinCrimp software enables quick and accurate collection of pull test and crimp force data and will significantly add to the traceability of your quality assurance data. The additional “Statistics” version uses SPC analysis to graph and print the captured results ensuring a high level of quality.
Leading Software Solutions for the Wiring Harness Industry

DiIT AG is the world’s leading provider of integrated software solutions for engineering, manufacturing execution (MES), customized wire harness production and logistics.

DiIT’s competencies are bundled in the “4Wire Solutions” software suite, which is primarily used for the production of wire harnesses and wiring systems in the automotive industry and other industrial sectors. By digitalizing the value chains, the company’s innovative software optimizes and controls complex development, manufacturing and logistics processes and supports quality assurance and traceability.

The company offers a comprehensive services package to both large and small customers, which covers consulting, project management and customized implementation and training.

Testimonials

“CAO is state-of-the-art technology and enables us, on a worldwide basis, to control and optimize production in this field with a standardized, integrated solution.”

Ralf Maus, Managing Director, Executive Vice President & COO, LEONI Bordnetz-Systeme GmbH
4Wire Software Solutions

4Wire PPG – Production Plan Generation

4Wire PPG generates the production documents and production data automatically from the drawing.

4Wire CAO – Cutting and Assembly Optimization

4Wire CAO generates, optimizes and distributes cutting orders directly to machines and provides quality equivalent to the OEM requirements.

4Wire PLS – Production & Logistics Suite

Produce and deliver customer specific wire harnesses (KSK) just-in time or just-in sequence. 4Wire PLS receives customer specific order and JIT/JIS-calls and manages the production and delivery.
To Be Precise.