

Application Tooling (continued)

Flexible Harness Maker – FHM

The FHM is a fully-automatic machine featuring modular set up. It is built to manufacture harnesses by processing both IDC connectors and crimp terminals.

The basic machine includes a 12 wire selector, a station that cuts the wires to length, a stripping station, a double-crimp unit, two crimping presses and wire end ejector for doubling and daisy chains.

A gripper unit takes the wire from the base machine and transfers it to the attached IDC station. Sequential processing allows the manufacturing of cross-overs and bridges as well as double-crimps, depending on the type of IDC connector used.

The IDC workstations are easily reconfigured for processing our different IDC connector systems. They include all the necessary processing operations for IDC termination with minimum change-over and set up times.

Quality checks integrated in the manufacturing process ensure the highest quality harness for every production run.

Technical Features

- Manufacturing of harnesses with 2.5 mm pitch IDC connectors and/or 5.0 mm pitch IDC connectors and/or with crimp terminals.
- IDC Workstations are available for the following connector systems:
 - AMP DUOPLUG 2.5
 - AMP DUOPLUG 2.5 Mark II
 - AMP DUOPLUG Power
 - AMP multifitting Mark II
 - AMP MONO-SHAPE Mark II
- The IDC Workstations can also be used as separate semi-automatic machines with manual wire transfer.
- The specific key coding of the IDC connector is done on the IDC Workstation.
- Integrated test equipment checks the coding and the insertion depth of the wire, and performs a continuity test. A spark testing unit is also available as an option.
- Wire printing and single housing insertion possible.
- Operator PC interface displays machine status and production data; different languages available.
- Low maintenance costs and the capability of off-site troubleshooting via modem.
- Ergonomic and easy to operate through a Touch Screen Display.

Technical Data

- Power Supply:**
400 V AC, 50 Hz
- Air Pressure:**
6 bar
- Wire Size Range:**
0.22 mm² up to 1.5 mm²
- Wire Length:**
220 mm up to 2,500 mm
- Insulation Diameter Range:**
1.2 mm up to 3.0 mm
- Wire Type:**
Stranded conductors