



EASY WIRING

software for harness
assembly

komax

EASY WIRING

EasyWiring is the ideal solution for production and prototyping of electrical harnesses.

This software replaces paper-based drawings with a dynamic display of electrical harness assembly instructions.

EasyWiring guides the operator step by step throughout the entire production process.

Komax France can offer a complete equipment solution including a display device, CAM software and removable accessories in various shapes suitable for all types of harness.

Higher productivity

- Quick set-up of harness on the board
- Faster prototyping
- Fast operator training due to clear instructions
- Reduce rework and testing time
- Quick access to necessary information

Optimum quality

- Repeatable assembly methods due to predefined steps
- Reduction of human errors thanks to assistance and visual aids
- Optimal traceability
- Validation and control of the complete assembly process

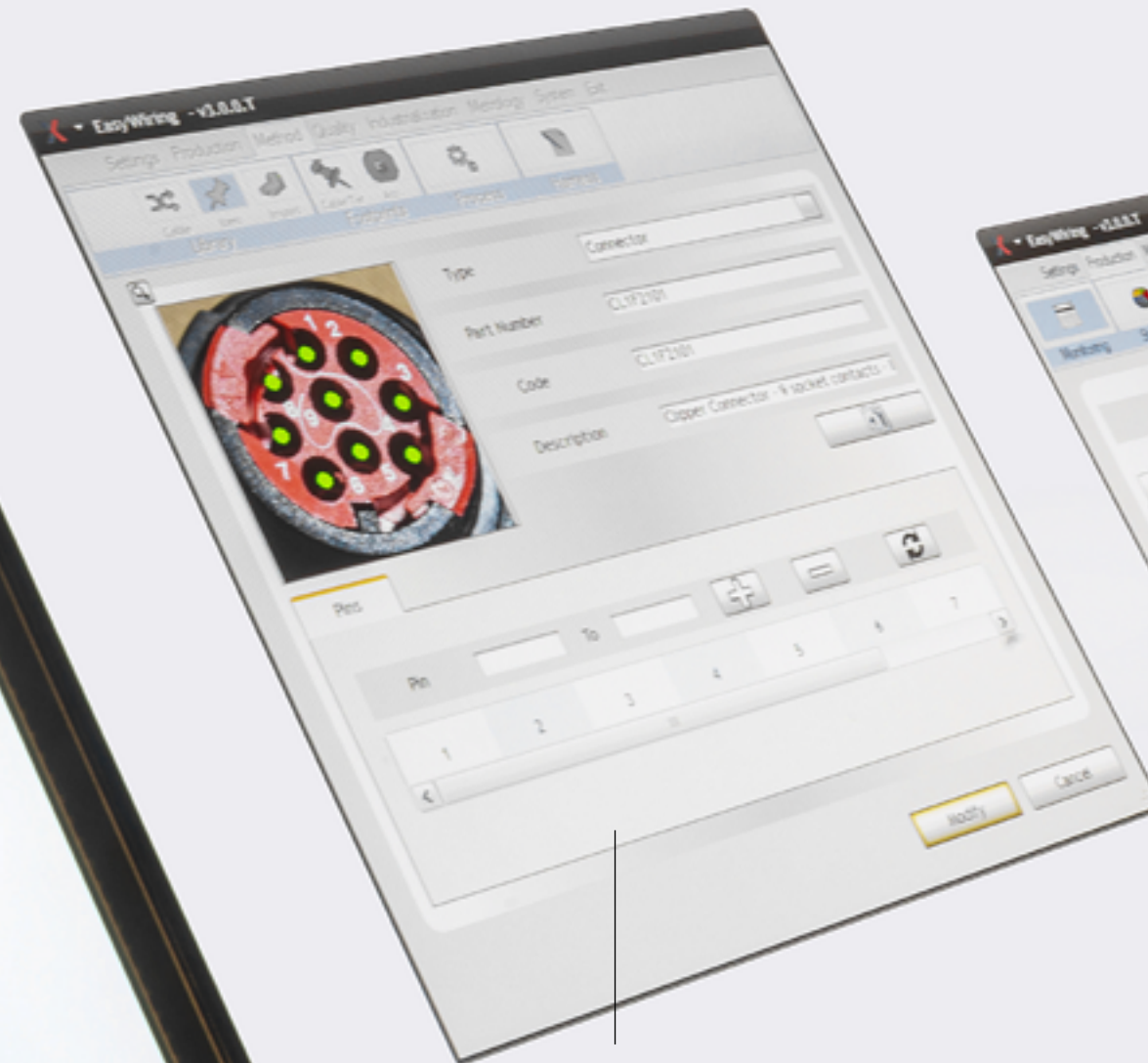
Flexibility

- Accessories be easily repositioned for any harness
- Scalable and modular system

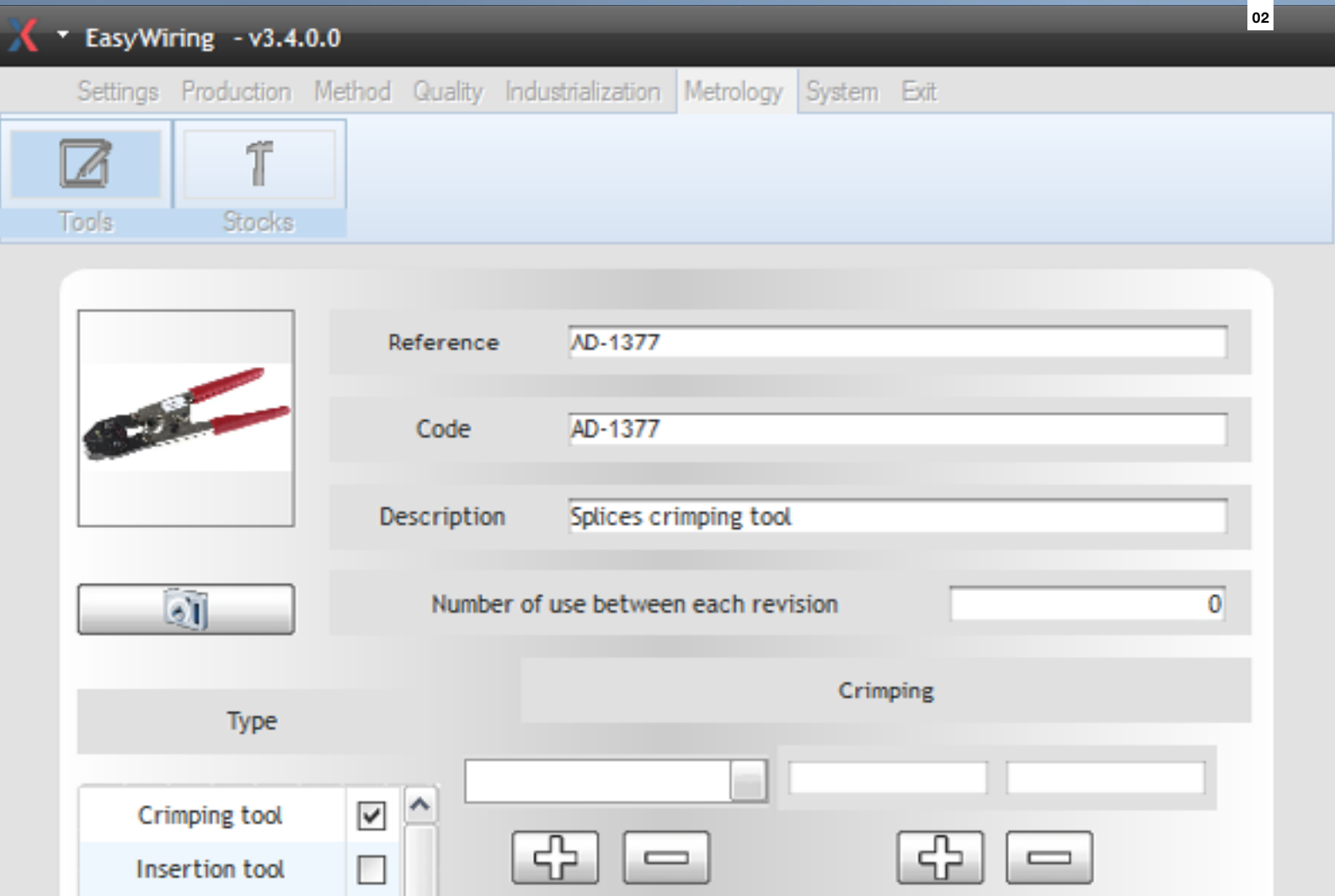
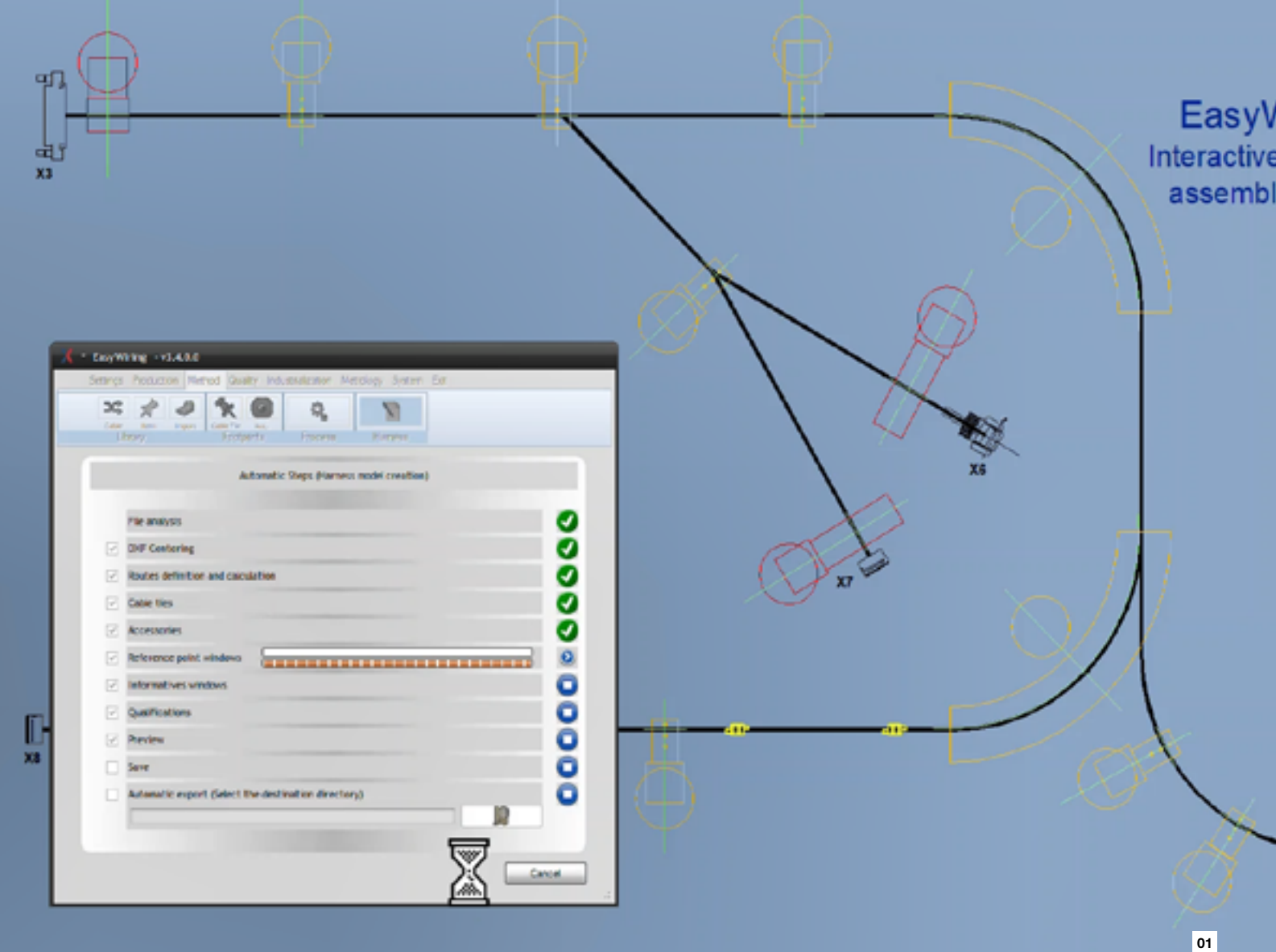
Optimization of the workshop area

- Capability of assembling hundreds of different harnesses on one system
- No more wooden boards to manufacture and store

komax



ENHANCE DIGITALIZATION
FROM CAD SOFTWARE TO THE PRODUCTION BOARD



PROCESS OVERVIEW

01 Data Import

Regardless of software version, the harness DXF file remains the primary data source. DXF (Drawing Exchange Format) is a standardized CAD file format that enables seamless layout exchange between different design software and manufacturing systems.

For the Premium Software, the required data package is completed by the following electrical elements such as cables, contacts, cable ties, sleeves, terminators / connectors, as well as tools, pictures and videos.

In option, the Smart Data Import enables seamless integration with direct data readability from major CAD softwares.

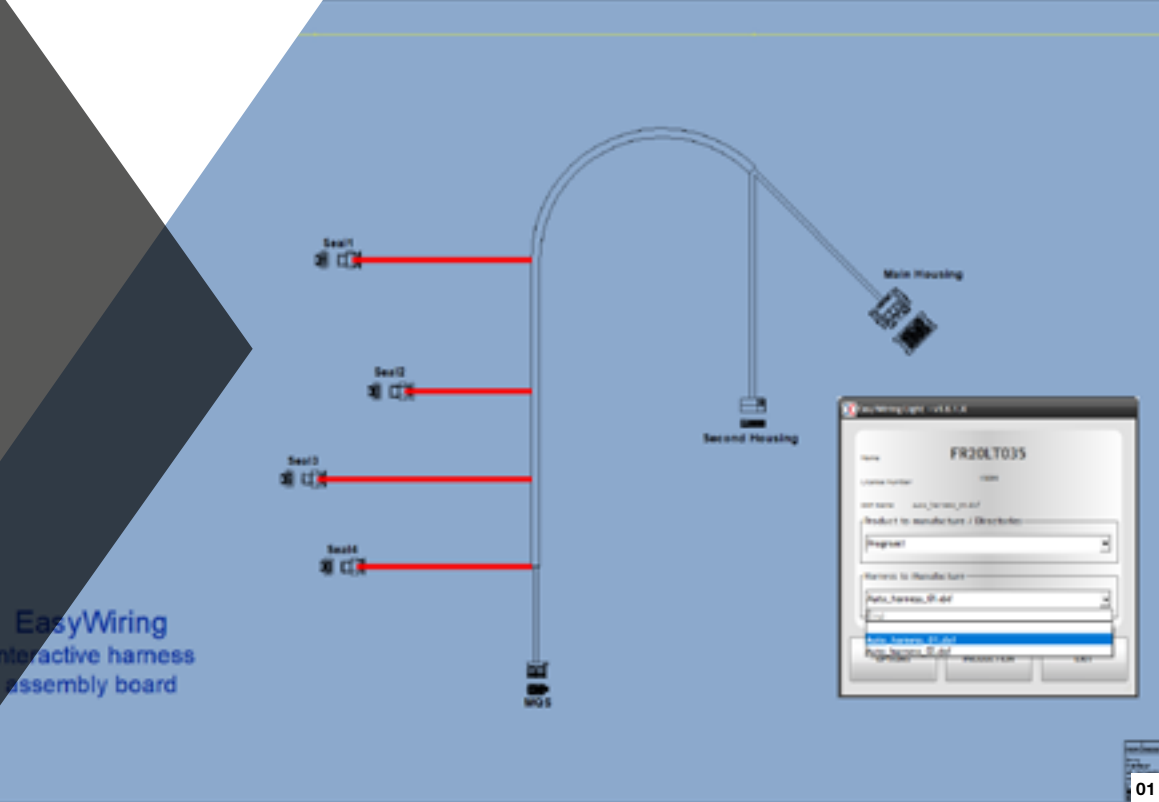
02 Preparation

Once the data is imported, we define, in Supervision module, the following:

- Work steps (routing, sleeves placing, stripping and crimping, pinning)
- Metrology and tooling management
- Jobs (customizable generic task)
- Task ordering and production scheduling

03 Harness assembly

Final stage is the harness assembly on the manufacturing module. Operators can view the DXF drawing on the screen on which they install the necessary accessories and proceed with the assigned production tasks. Step-by-step information is provided to guide them through the process. Recurring validations ensure accuracy. Additionally, operators can report free-text notes as needed.



01

LIGHT LICENSE

DISPLAYING A 1:1 SCALE HARNESS
DRAWING ON THE BOARD

EasyWiring Light is a manufacturing software that displays harness drawings in a digital format (DXF).

The operator simply selects the harness to produce from a list, and it will be displayed on the screen at a 1:1 scale.

This version is tailored for customers who may not have all their electrical data fully digitalized yet.

Easy to implement, EasyWiring Light software is the first step towards the digitalization of harness boards.

ANNUAL LICENSE THE BENEFITS

All our licenses are yearly renewable. It ensures you stay ahead with continuous innovation and dedicated support. Receive automatic software updates that deliver cutting-edge features, enhanced functionality, and performance improvements throughout the year. Our expert customer support team provides prompt assistance whenever you need it, maximizing your productivity and ensuring seamless operation of EasyWiring software.

PREMIUM LICENSE

ENHANCE HARNESS MANUFACTURING
WITH THE MOST ADVANCED LEVEL OF
DIGITALIZATION

EasyWiring Premium software transforms the assembly board into an interactive workspace, guiding operators through each step of electrical harness production with precision and traceability. It displays essential manufacturing documentation, layers, and DXF files, and provides easy access to multimedia resources like PDFs, photos, and videos, ensuring a seamless and efficient workflow.

EasyWiring Premium offers a dual advantage: a supervision module for seamless software programming and an interactive manufacturing license that provides operators with real-time guidance.

SUPERVISION MODULE

Supervision allows the software to be programmed before the electrical harness is produced. It is connected to a server which centralises all information flows from supervision stations, cabling wiring boards or cabling stations.

The supervision module allows Methods and Engineering departments to access the following menus:

- Data library: contains features of the tools used in production, electrical elements and accessories
- Harness preparation process:
 - Management of layout in DXF format
 - Electrical data import
 - Adding information on the DXF
 - Adding instructions
 - Definition of production process sequencing
- Metrology and tool management
- Management of operators/skills
- Production planning

The local supervision module contains supervision module features directly on the table such as:

- Configuration of the harness assembly board: managing the dimensions of the drawing and the borders of the module
- Display verification and scaling to ensure a ratio of 1 : 1
- Choice of background and foreground colours
- Production plan menu

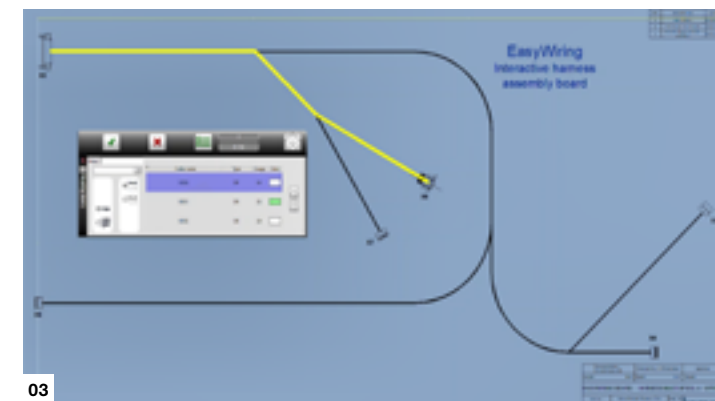
Options

- Smart Data Import

MANUFACTURING MODULE

Intended for operators to assemble the harness on an interactive board or on a workbench for certain steps, the manufacturing module covers all stages of electrical harness production defined by Methods and Engineering departments:

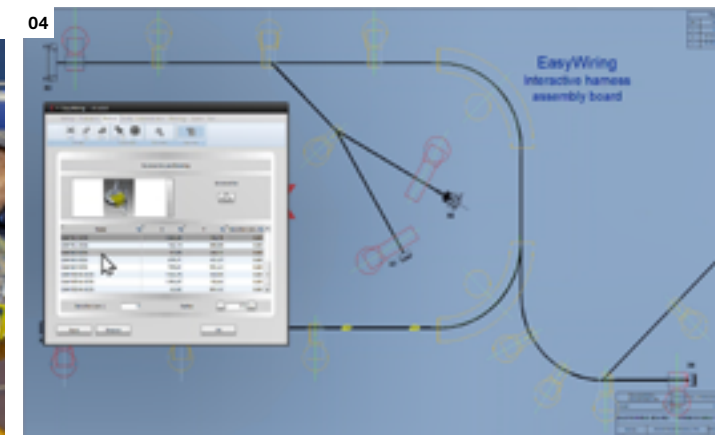
- Accessory (suction cups) positioning
- Cable routing
- Installation of special accessories (frets, cable ties, labels, etc.)
- Quality control
- Connector assembly:
 - wire stripping,
 - crimping contacts / end ring terminals
 - contact insertion,
 - shielding connection
 - splicing
 - dummy pins and filling plugs



03



02



04

- 01** Select easily your DXF on the EasyWiring Light Software.
- 02** EasyWiring Premium guides the operator and reduce pinning errors.
- 03** Intuitive wire routing.
- 04** Adding information on the layout (accessory positioning).

LICENSE
COMPARISON

License version	Input data	Features
LIGHT	DXF harness drawing	Display the DXF (scale 1:1 on the board)
PREMIUM	DXF harness drawing (including layers) Manufacturing documentation Harness wires list and electrical parts description	Display the DXF (scale 1:1 on the board) Display routing path Display / Hide DXF layers Display pinning cavities Pop-up assembly documents
BENCHTOP	Manufacturing documentation Harness wires list and electrical parts description	Display pinning cavities Pop-up assembly documents

Features	EasyWiring Light	EasyWiring Premium	EasyWiring Benchtop
Display the DXF Drawing scale 1:1	Yes	Yes	-
Manufacturing guidance (manufacturing steps/validation))	-	Yes	-
Automatic change of the DXF	-	Yes	-
Manufacturing instructions documents display	-	Yes	Yes
DXF layer display	-	Yes	-
Cable routing	-	Yes	-
Accessory (suction cups) positioning	-	Yes	-
Cable ties positioning	-	Yes	-
Manufacturing guidance for connectors and extremities	-	Yes	Yes
Automatic validation by Timer	-	Yes	-
Job sharing with	-	Benchtop	Premium

SMART DATA IMPORT
THE BENEFITS

The Smart Data Import enables seamless integration with direct data readability in the EasyWiring software, significantly reducing the design-to-production time.

Operators can be confident that the imported data is consistent and validated. Additionally, the data is standardized and easy to share with harness suppliers.

BENCHTOP
LICENSE

The EasyWiring Benchtop offers guidance for manufacturing harness extremities. Operator can access various technical documents, including PDFs, videos and pictures. It is fully comptabile with the EasyWiring ecosystem (data server and digital harness assembly boards). There is no need to generate new data, as the existing data from the EasyWiring assembly boards can be used. Additionally, the EasyWiring Benchtop software is designed to operate Windows® computers, laptops, and tablets.

The Bench Top can be used alone, without an EasyWiring Premium and an EasyWiring assembly board (DXF layout is not needed):

FOR PRE-ASSEMBLY: OUT OF THE HARNESS ASSEMBLY BOARDS

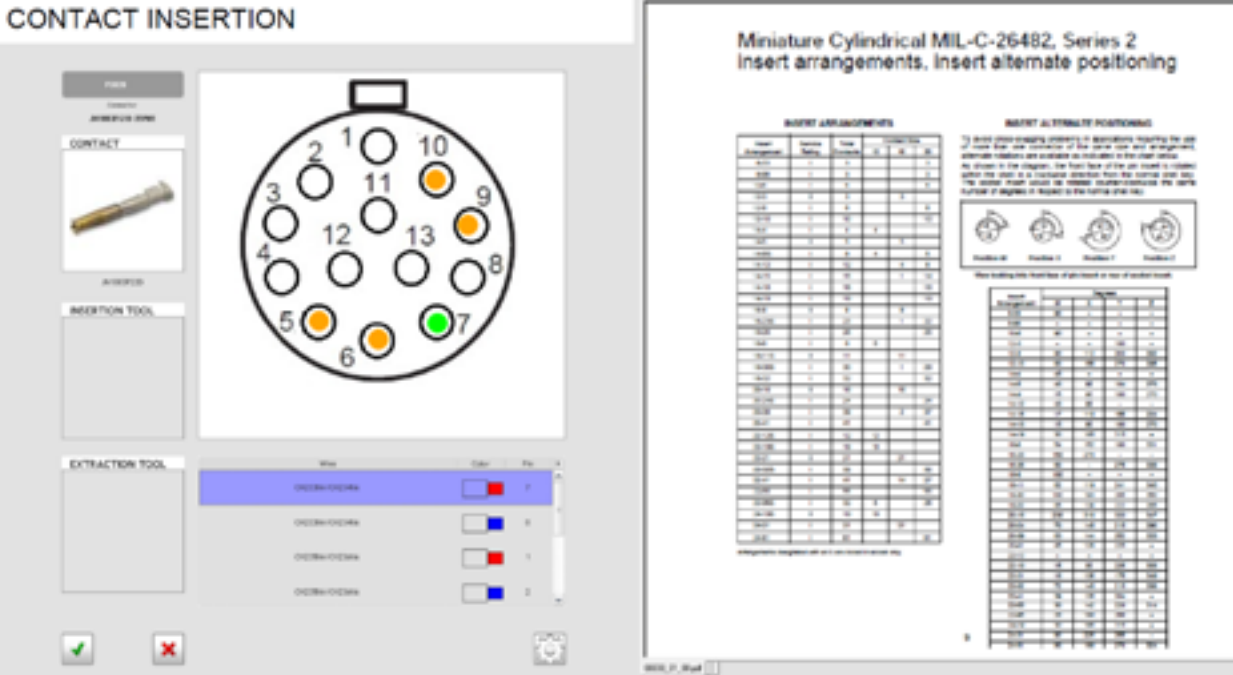
The harness data are uploaded on a Windows® desktop computer for production. The EasyWiring Benchtop Manufacturing Software is used in the manufacturing process as a visual aid for connector pinning to prepare harness pre-assemblies. Later, the sub-assemblies will be brought to the harness assembly boards to complete production.

ON THE EXISTING NAIL BOARDS

The harness data are uploaded on the Windows® tablet for production. The EasyWiring Benchtop manufacturing software is used as a visual aid for the connectors pinning in front of the nail boards.



01
02



01
EasyWiring Bench Top displays pinning information on a tablet.
02
Customer technical documentation and interactive instructions.

FLEXIBLE

POSSIBILITY TO ADJUST THE ANGLE OF INCLINATION ON MOTORIZED STAND MODULE

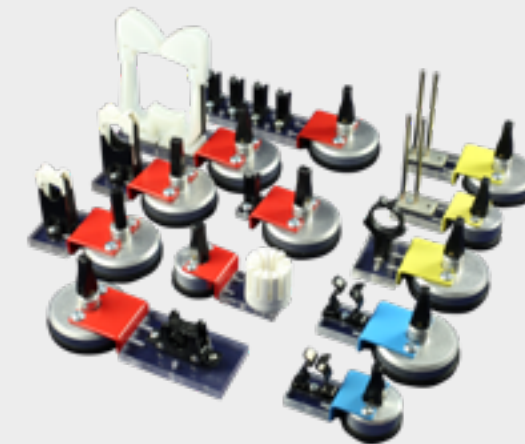
TEMPERED GLASS OR POLYCARBONATE

PROTECTS DISPLAY MONITOR FROM DAMAGE

ACCESSORIES

A WIDE RANGE

MOBILE



COMPREHENSIVE EQUIPEMENT PACKAGE

EasyWiring is a software-driven solution for harness assembly. For those who need a complete equipement, Komax France offers a package consisting of a

display device, CAM software, and removable accessories in various shapes suitable for all type of harnesses.

Display unit

The display screen is protected by a safety-tempered glass or a polycarbonate layer on which wire support accessories can be attached. It comes in two different formats: 75" and 86".

Digital board configuration

- Board can be split and assembled
- Each module can easily move (lockable wheels)

DIFFERENT CONFIGURATIONS

Standard stand module

The EasyWiring standard modules are made in a solid welded steel structure. Display angle and height are fixed. The displays are perfectly aligned.

Motorized stand module

The Easywiring modules can be provided with a motorized frame that allows the positioning of display units to be adjusted:

- The board can be moved up or down
- The board can be rotated from vertical to horizontal

A sliding tray is also available for the standard and motorized stand module.

Fast reconfiguration
(with accessories)

CONNECTING SEVERAL MODULES

Several modules can be connected together to create a larger system. Up to 6 screens can be connected for boards up to 10 meters in length for 75" screens and 11 meters for 86" screens.

Display unit properties

Modules	75" PRO display	86" PRO display
1 module	L = 1650 mm H = 928 mm	L = 1892 mm H = 1060 mm
2 modules	L = 3333mm H = 928 mm	L = 3820 mm H = 1060 mm
3 modules	L = 5016 mm H = 928 mm	L = 5748 mm H = 1060 mm
4 modules	L = 6699 mm H = 928 mm	L = 7676 mm H = 1060 mm
5 modules	L = 8382 mm H = 928 mm	L = 9604mm H = 1060 mm
6 modules	L = 10065 mm H = 928 mm	L = 11532mm H = 1060 mm

TESTING UNIT CIRRIS 8100

Integrated into EasyWiring board delivers powerful wire harness testing in a compact, expandable design. With up to 2048 test points per board module, precise component testing, and intuitive operator

guidance, the Cirris 8100 maximizes accuracy while minimizing setup time and floor space—making it the ideal solution for efficient, scalable production testing.



01

ACCESSORIES

Komax France offers a variety of accessories for supporting wires and cables on the assembly board.

A lever-controlled suction cup guarantees a firm hold, fast implementation and high configuration flexibility.

The suction cups can support a vertical breakout force of:

- 3 to 4 kg for a suction pad 36 mm in diameter
- 8 kg for a suction pad 55 mm in diameter

BARCODE READER

By connecting the barcode reader to the system, barcodes printed on the cable can be validated. The barcode accessory helps reduce production errors, control the assembly process and provides optimal traceability.

EASYCONTROL

EasyControl enhances EasyWiring software usability. Operators can command the assembly board directly from their Bluetooth wristband—no need to approach the workstation for traditional input devices.

CIRRIS COMPATIBILITY

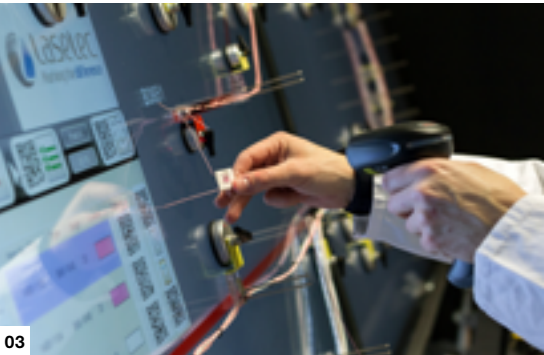
The EasyWiring software can control a standard 8100 Cirris low voltage testing unit. The Cirris unit enables automatic wire identification. In “Cirris Probe mode”, the operator simply touches the wire extremity to the probe accessory, which identifies the wire and displays routing and pinning information directly on the EasyWiring system.

In “Cirris test mode”, low-voltage tests—including continuity and passive component testing (resistors, diodes, capacitors)—can be performed at any stage of the production process.

- 01 8100 Cirris low voltage testing unit
- 02 EasyControl wristband unit
- 03 Optimal traceability with barcode reader



02



03

Komax – leading the field now and in the future

As a pioneer and market leader in the field of automated wire processing, Komax provides its customers with innovative and sustainable solutions for any situation that calls for precise contact connections. Komax manufactures series and customer-specific machinery for various industries, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent networking solutions complete the portfolio, and ensure safe and efficient production. Komax is a globally active Swiss company with development and production facilities on several continents. Komax uses its extensive distribution and service network, which includes local companies and their employees, to support customers across the world on site, thus ensuring the availability and value of their investments after equipment commissioning through standardized service processes.

Komax France SAS
33 rue Ecopole
31270 Villeneuve-Tolosane, France
Phone +33 (0) 582 950 555
info.tou@komaxgroup.com

komax
komaxgroup.com