

# Fully deployed and operative Industrial Production System

#### i-Workbench

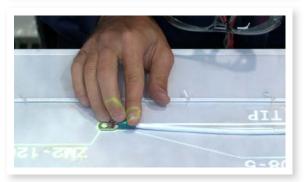
+

### Lean electrical harness manufacturing system

**i-Workbench** simplifies, enhances and speeds up cable manufacture providing direct access to the workstation's information system through digital interactive production orders.









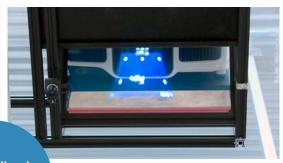
- → Fully digitalised process and 100% industry 4.0 compliant
- Interactive equipment
  - Overhead optical projectors
  - ¬ Operator tablets
  - Barcode reader and Bidi
- Smart interactive software for full deployment in the manufacturing process:
  - Dynamic illumination
  - Projection of supporting data: standards, models, database info and diagrams/drawings
  - Quality record storage and analysis
  - ¬ Production control activity in real time
  - Dynamic software with incident display system

# Highly-experienced engineers with thorough knowledge about methods, processess and tools

- Easy and immediate introduction of design changes to enable an extremely low time-to-market with little or no scrap material
- Designed for the operator:
  - System developed in teamwork with the shop floor operators
  - Low visual fatigue: images are reflected directly on the board from the overhead optical projectors with ultraviolet filtres, avoiding radiation effects on the eyes
  - Automatic calibration though photoelectric optics and sensors
  - Progressive and interactive data display enable low training/experience requirements

## enefits

- ¬ i-Workbench is a smart factory industrial mean
- Extraordinary cost savings: reduced preparation and touch times; fully synchronised data set; right-first-time
- Time saving during development: easy incorporation of changes
- Robust hardware



Ruggedised board for tools





- Projection of drawings on a 1:1 scale
- Image format 5x1 m scalable up to 20 m
- Non-interpolated actual resolution (1 mm)
- 7.
- Interactivity with user



i-Workbench by AERTEC Solutions

An optimum solution for efficient cable manufacturing improving cost, quality and speed





Aerospace & Aviation

EUROPE LATAM MIDDLE EAST UNITED STATES

www.aertecsolutions.com







T. +34 95 10 10 200 info@aertecsolutions.com

#### **EUROPE**

#### SPAIN

#### Malaga

Avda. Juan López de Peñalver, 17 Parque Tecnológico de Andalucía (29590) Málaga

#### Seville

C/ Hispano Aviación, 11 Parque Tecnológico Aeroespacial Aerópolis (41300) La Rinconada Sevilla

#### Madrid

Parque Empresarial La Carpetania Edificio Charmex C/ Miguel Faraday, 20 (28906) Getafe - Madrid

#### Barcelona

Aeropuerto de Barcelona-El Prat Bloque Técnico, 1º Planta Of. 65 (08820) El Prat del Llobregat Barcelona

#### UNITED KINGDOM

#### Chester

Rossmore Business Village 10 Inward Way, Unit 4 Ellesmere Port / Chester CH653EY

#### **GERMANY**

#### Hamburg

Hein-Saß-Weg 24 21129 Hamburg

#### LATAM

#### COLOMBIA

#### Bogota

C/ 93B, numero 19-35 Oficina 201 (110221) Bogotá D.C.

#### **NORTH AMERICA**

#### **UNITED STATES**

#### Denver

2733 S Franklin St Denver, Colorado 80210

