

# Kabelassistent

Digitization of the assembly board



# What are the benefits of Kabelassistent?

Global relocatability of production sites at the click of a mouse

Pilot series and small batches with lower entry costs

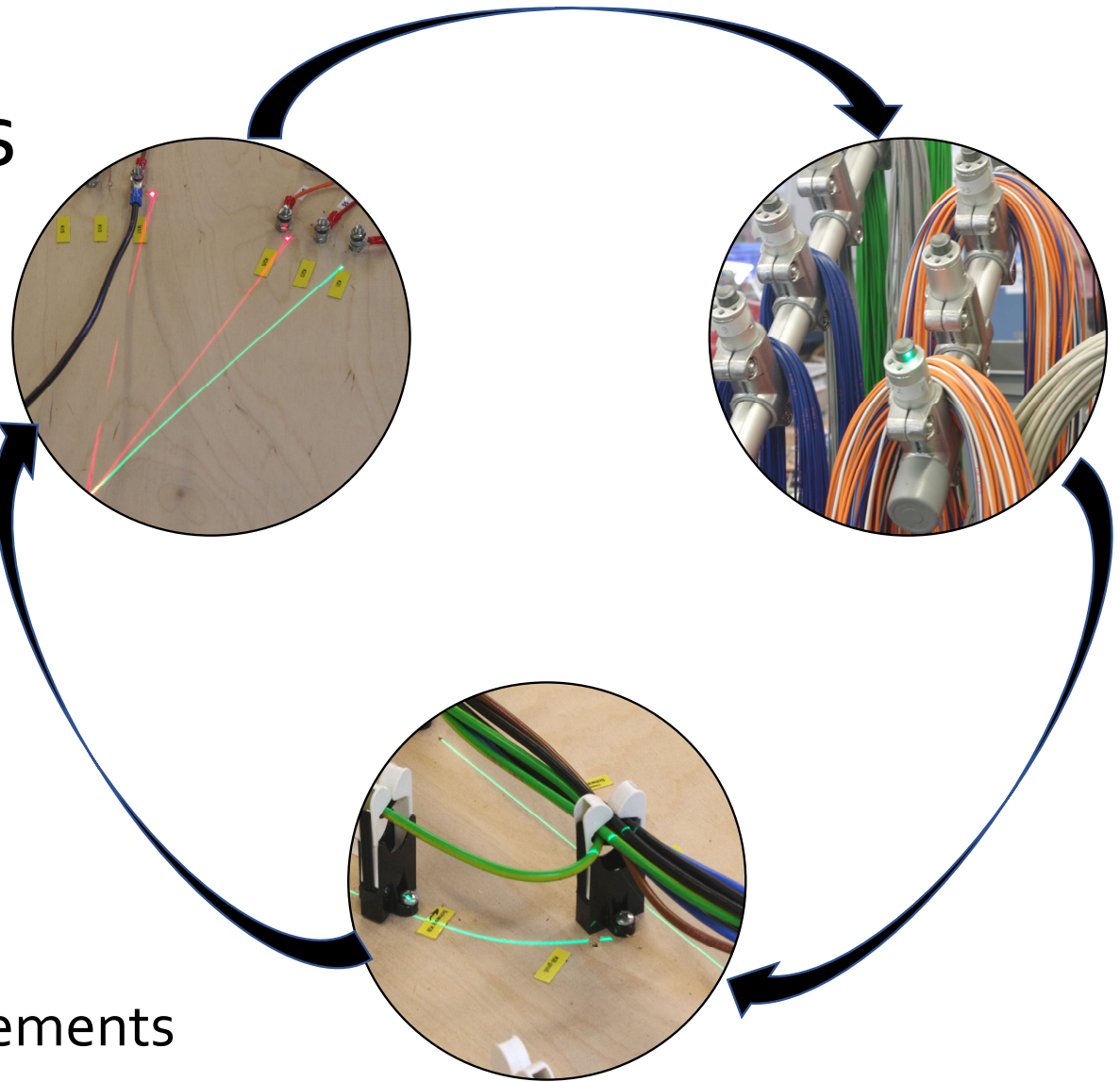
Maximum flexibility in adapting the production quantity

- Minimum time to pilot series or small series
- Minimum time to set up assembly boards for series production
- Flexible capacity expansions
- Re-use of all parts of the assembly board
- Shortest training times for employees
- 100% tested wire harnesses
- All processes can be tracked in the network

# Assembly process

Pick-By-Light  
+ Install-By-Light  
+ Connect-By-Light  
= Harness-By-Light

No laying lists  
Fewer instructions  
Faster learning curve  
Lower qualification requirements

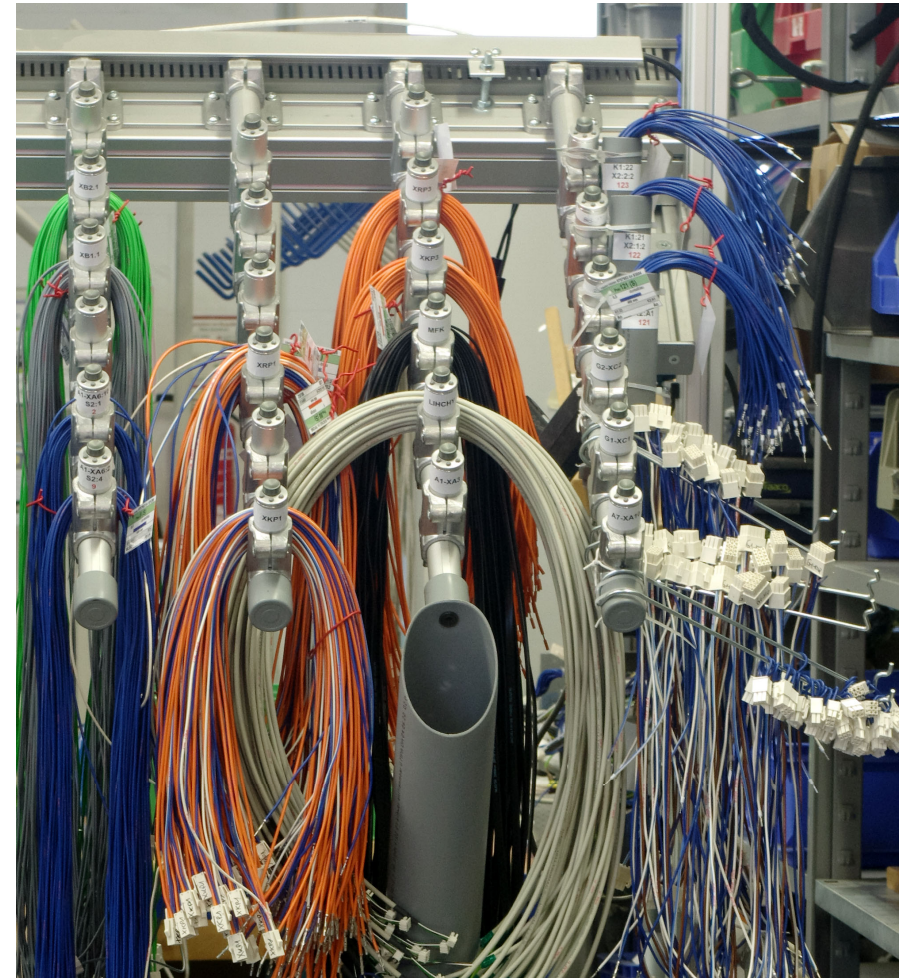


# Strand Vario Trolley with Pick-By-Light



# Vario Trolley adapts to the production process

- Height of the support arms
- Angle of the support arms
- Number of support arms
- Number of hooks
- Available in different widths
- Load capacity 250 kg
- Tipping safety due to ballast
  
- Power supply 2 USB plugs
- Tool battery ( Makita, Bosch, Metabo )
- WLAN

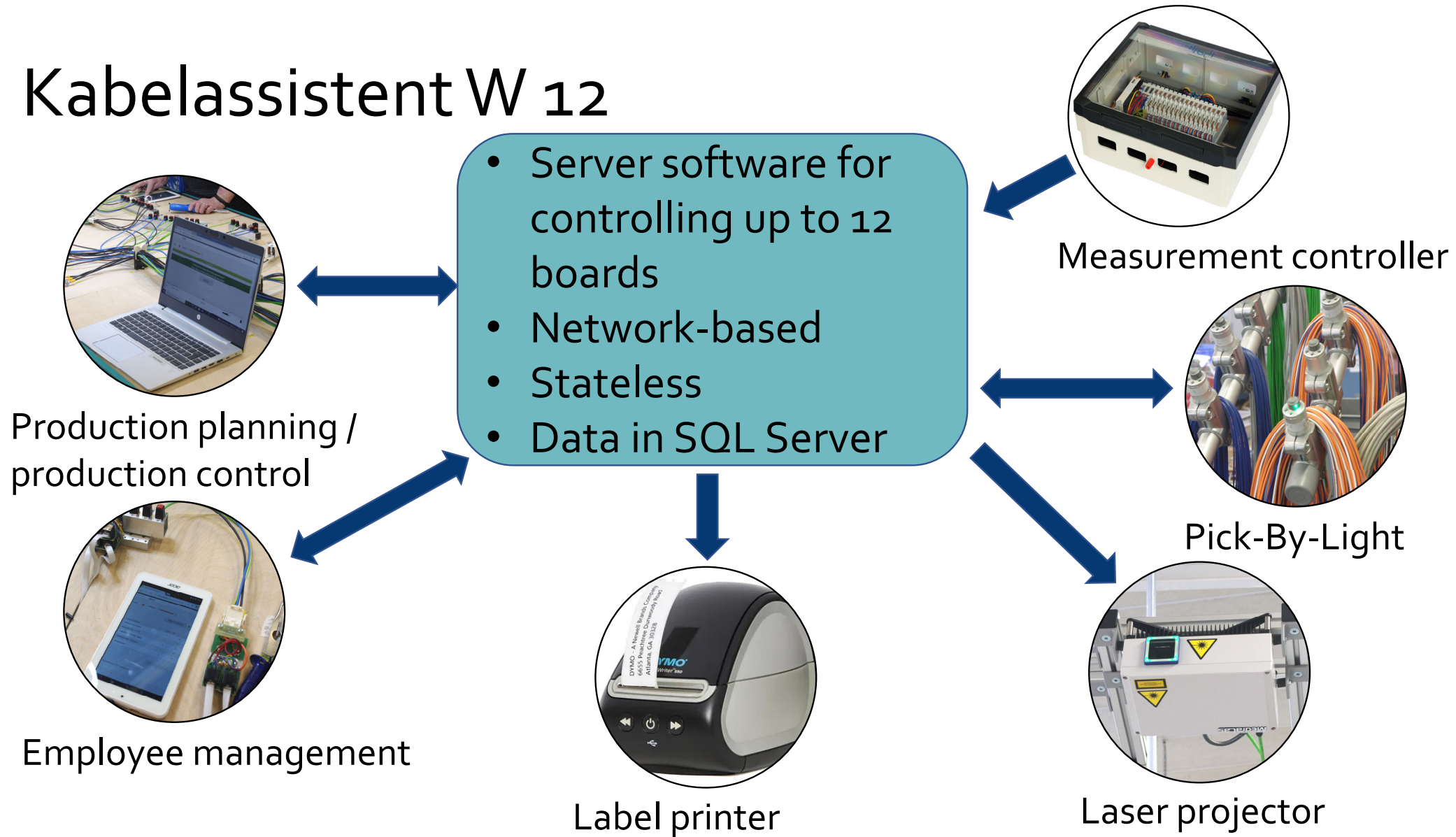


# Kabelporter Table with laser projector

- Electric height adjustment
- Working height 780 - 1180 mm
- Support for assembly boards in 3 x 3 foot grid = 915 x 915 mm
- Lengths from 3 feet to 27 feet = 915 to 8,235 mm
- Can be arranged in rows
- Support legs and transport legs
- Cover for transom and measurement cabling
- Optics traverse for laser projector

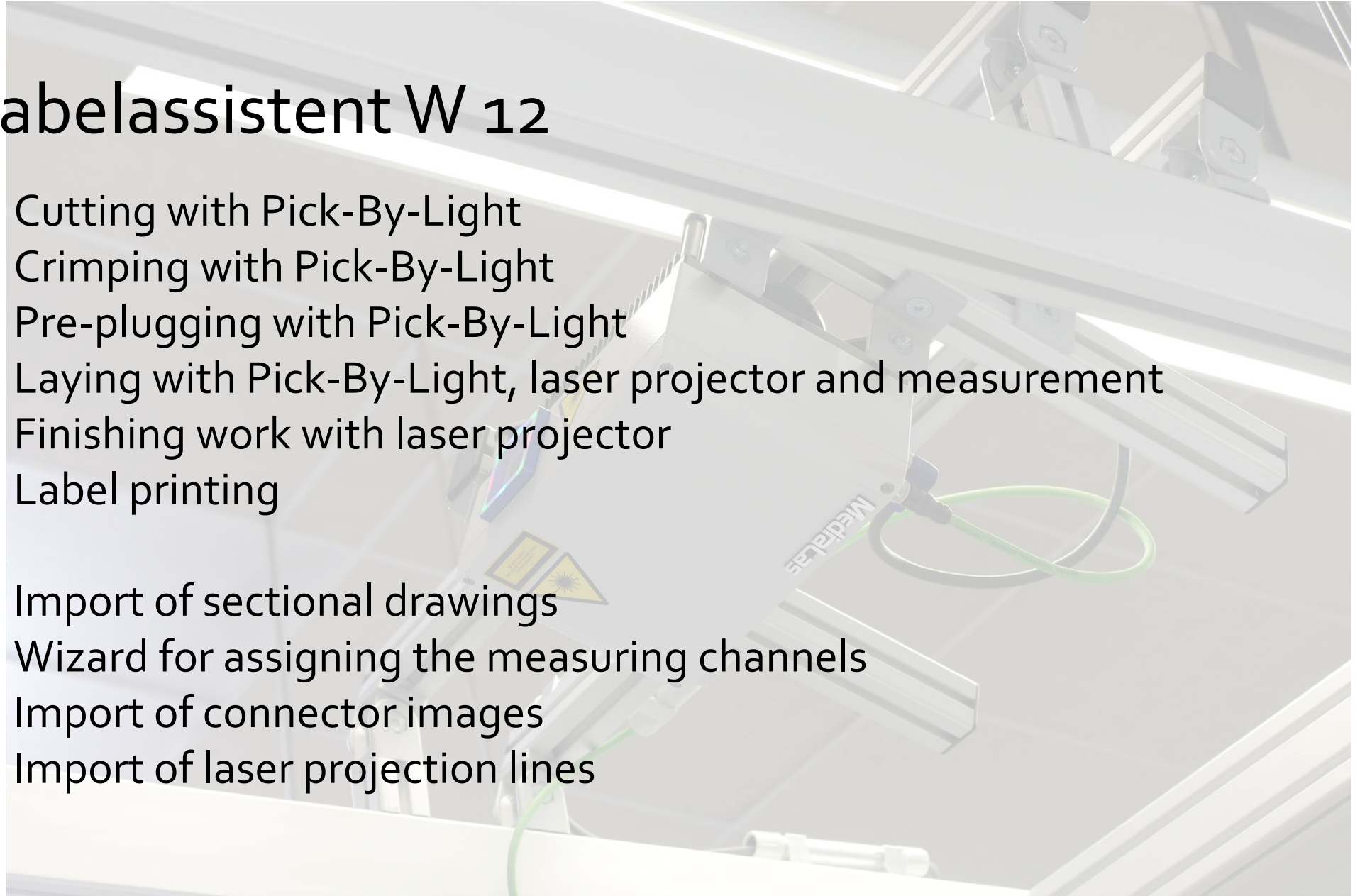


# Kabelassistent W 12



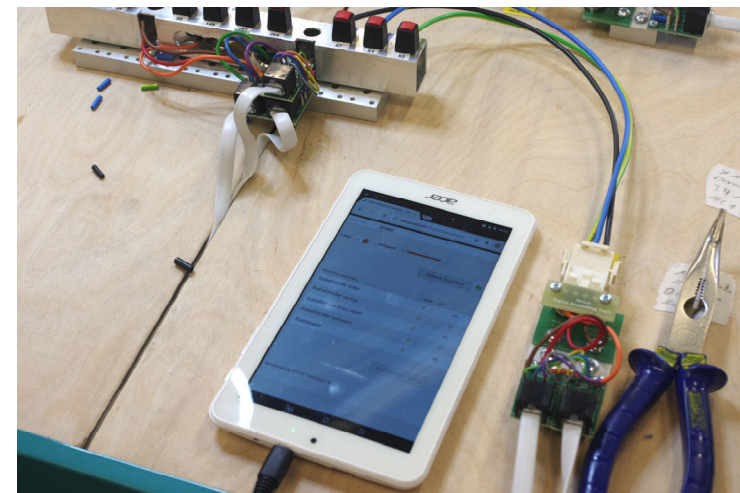
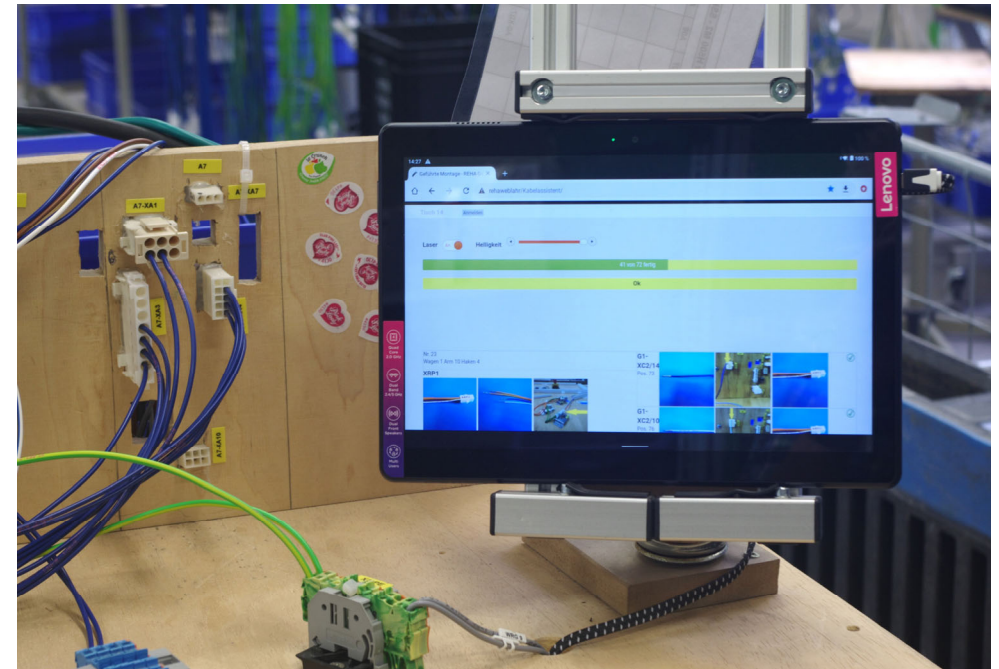
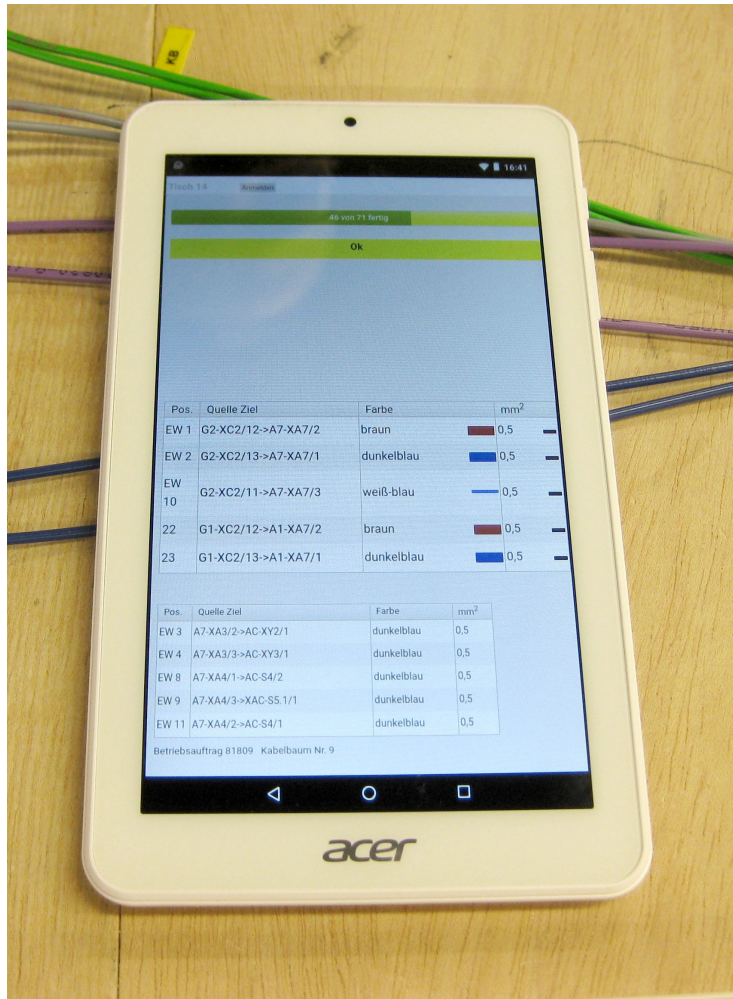
# Kabelassistent W 12

- Cutting with Pick-By-Light
- Crimping with Pick-By-Light
- Pre-plugging with Pick-By-Light
- Laying with Pick-By-Light, laser projector and measurement
- Finishing work with laser projector
- Label printing
  
- Import of sectional drawings
- Wizard for assigning the measuring channels
- Import of connector images
- Import of laser projection lines

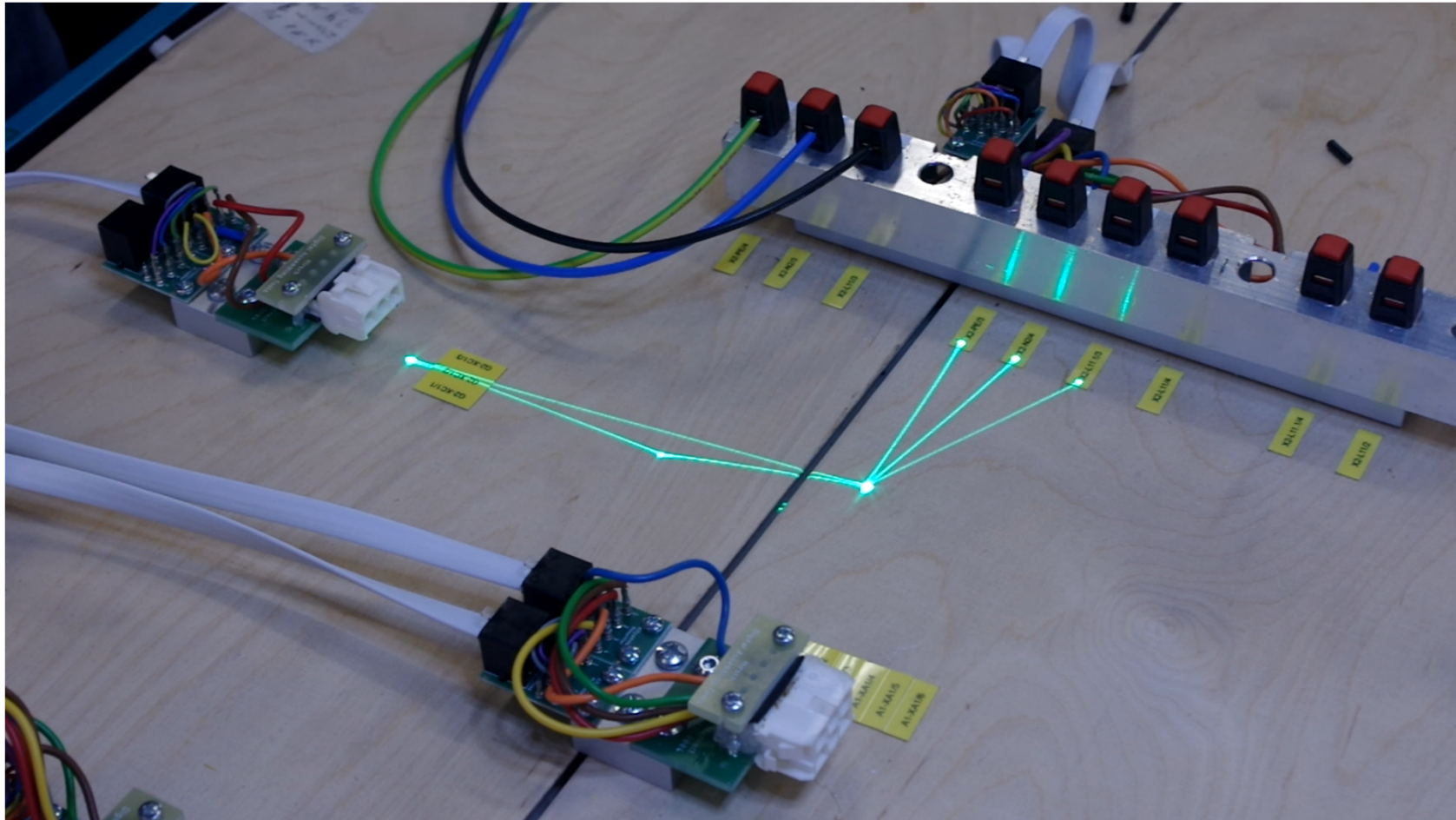




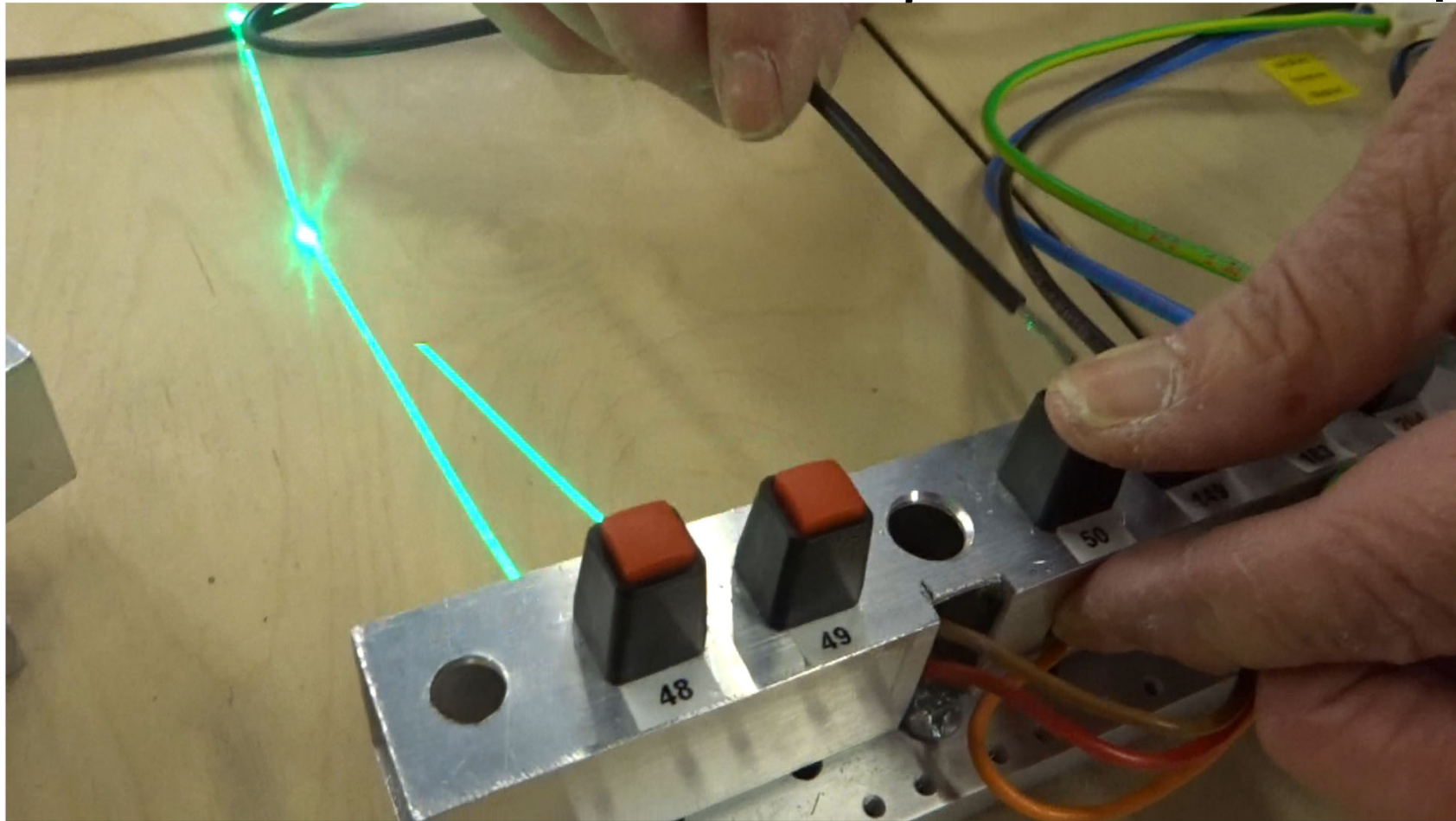
# Kabelassistent W 12



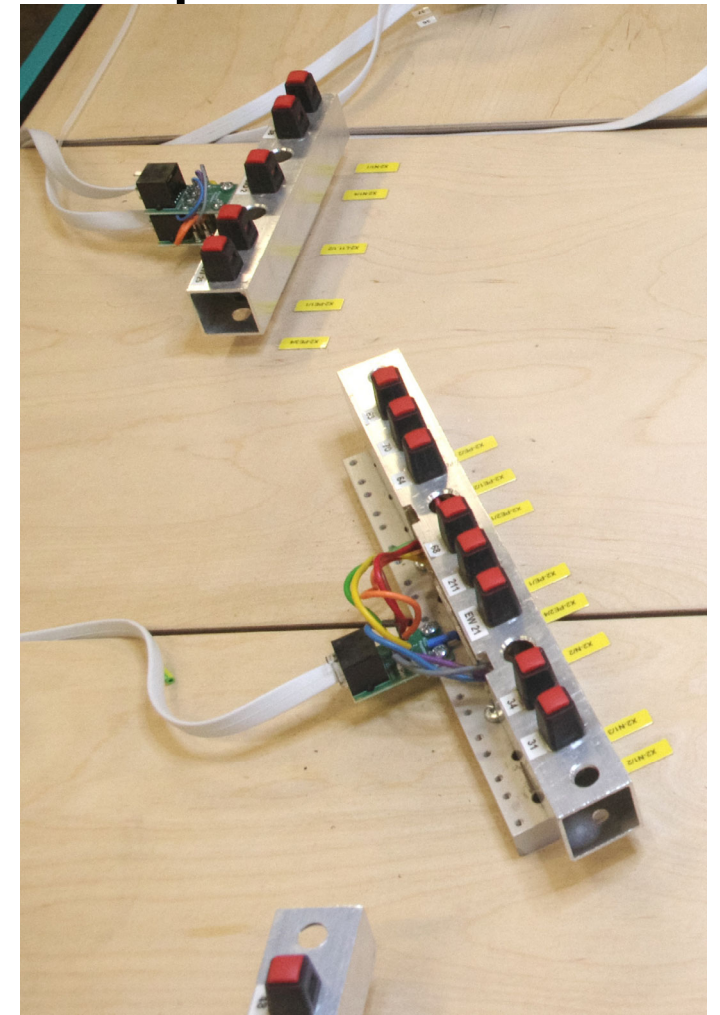
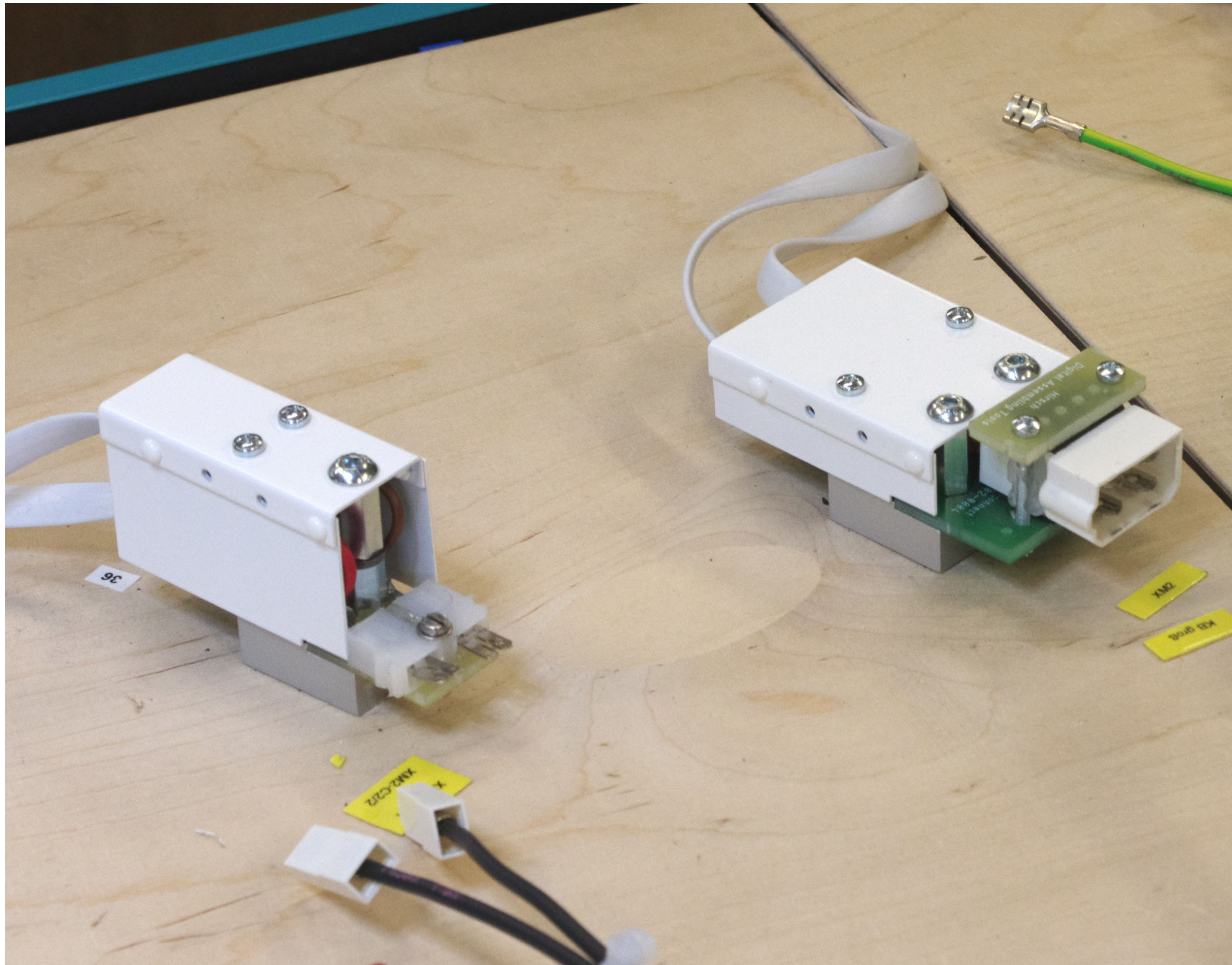
# Kabelassistent W 12 Connect-By-Light



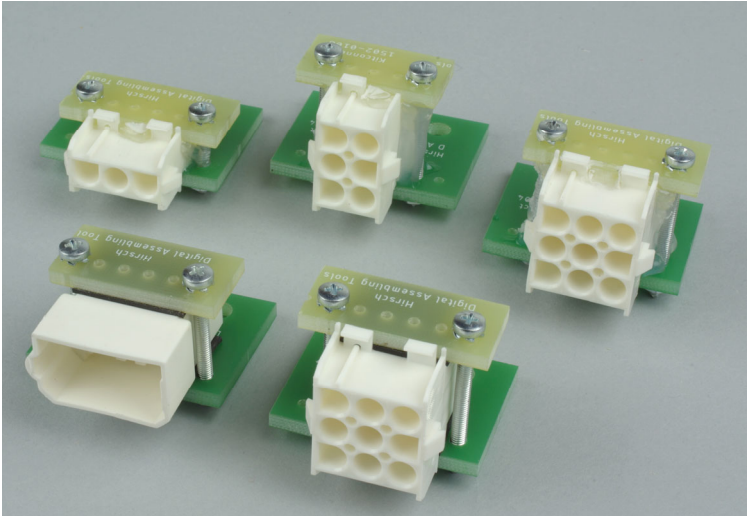
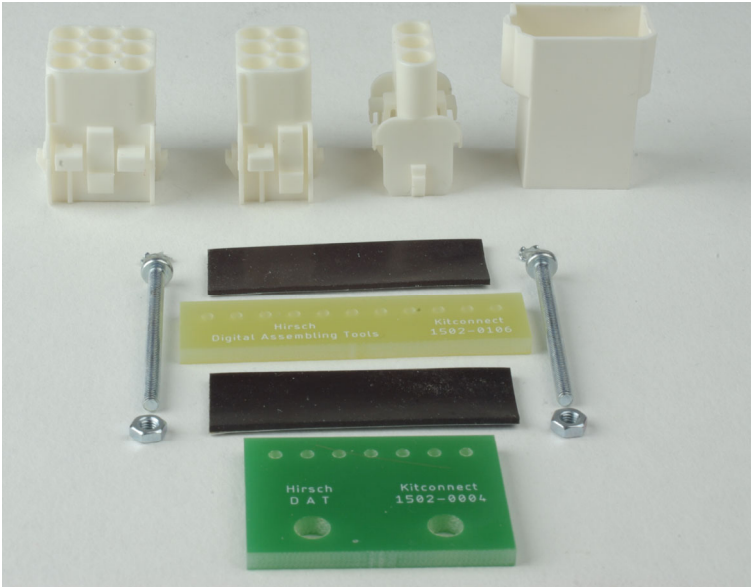
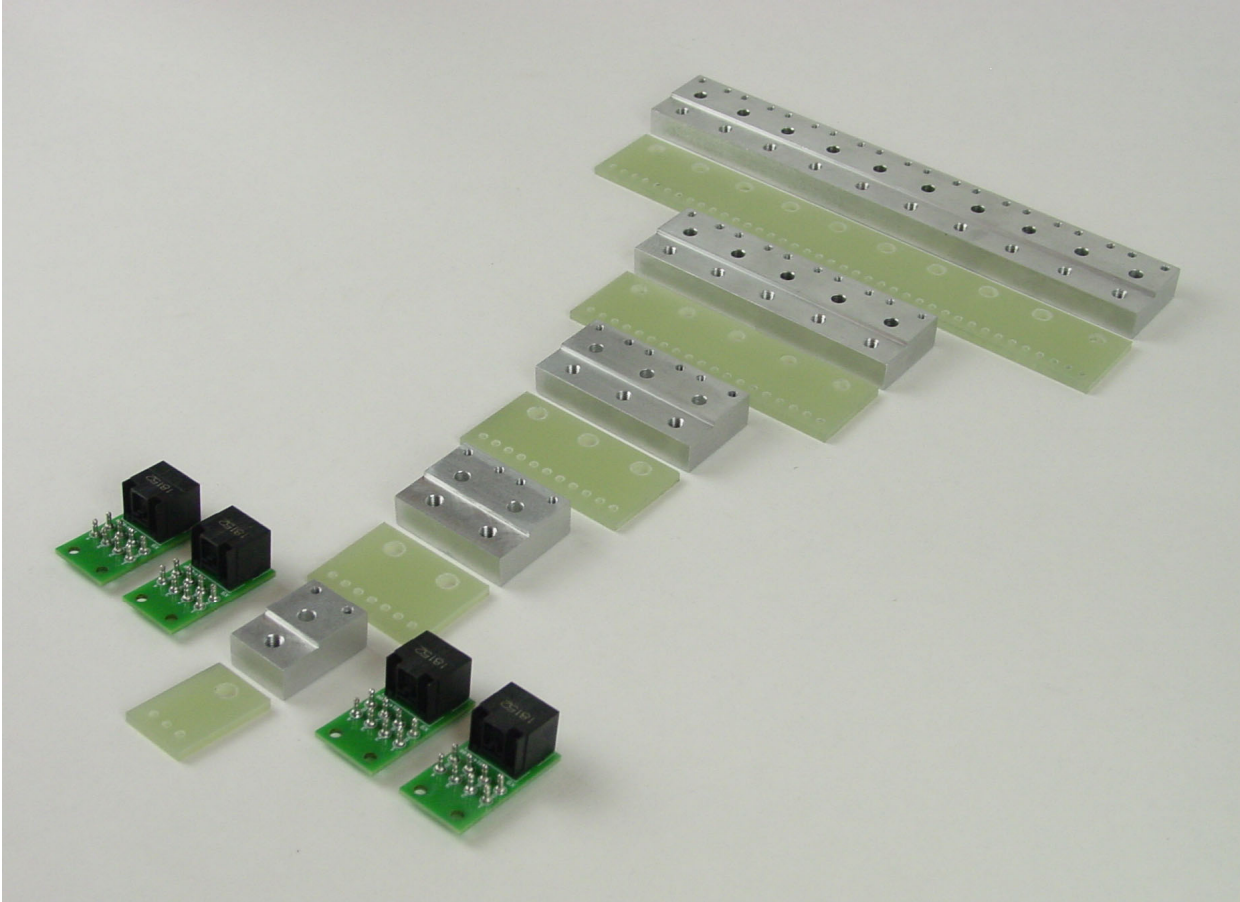
# Kabelassistent W 12 Development state 04/2022



# Kitconnect - Mating connector adapter



# Kitconnect – the construction kit



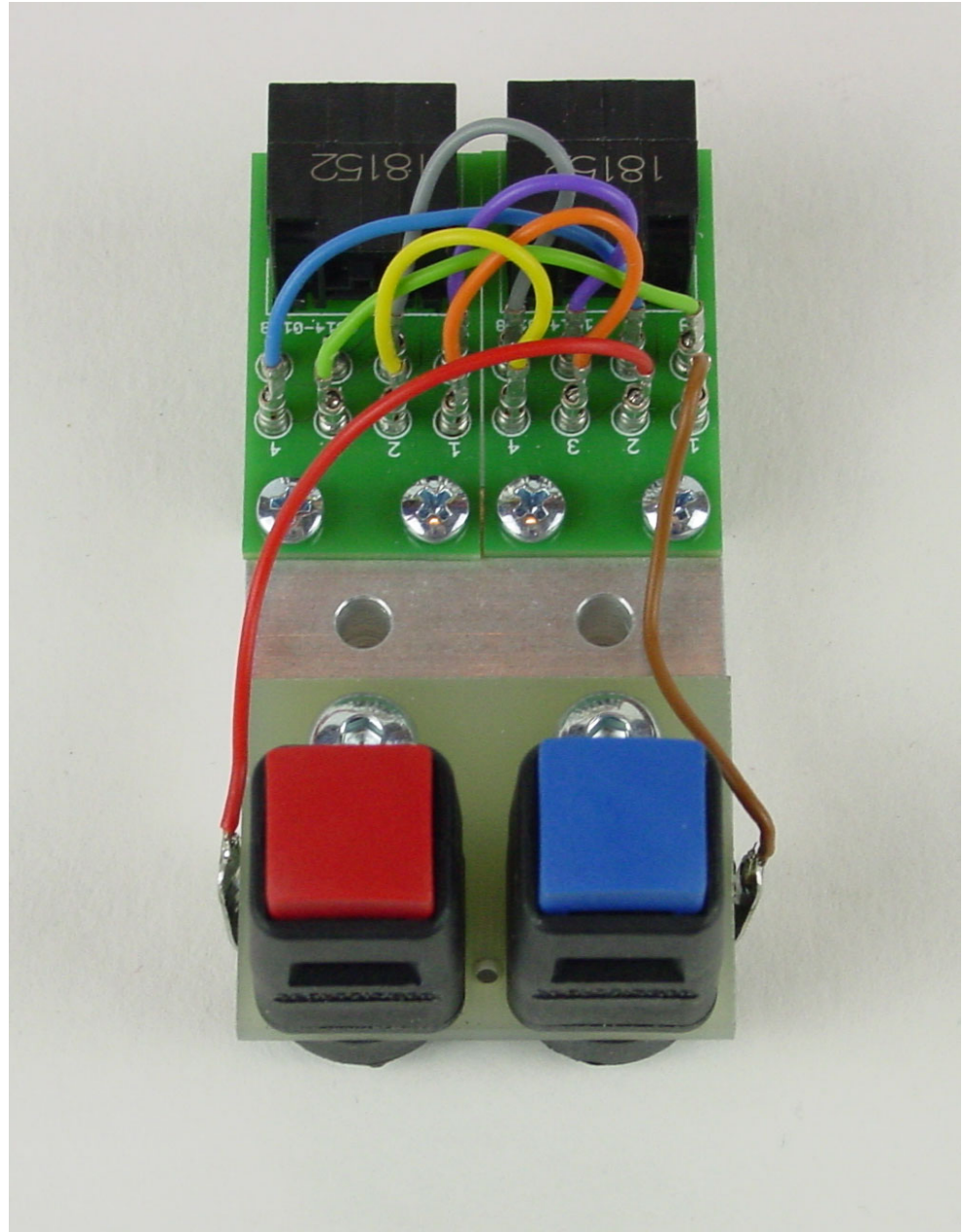
# Kitconnect

Prefabricated parts:

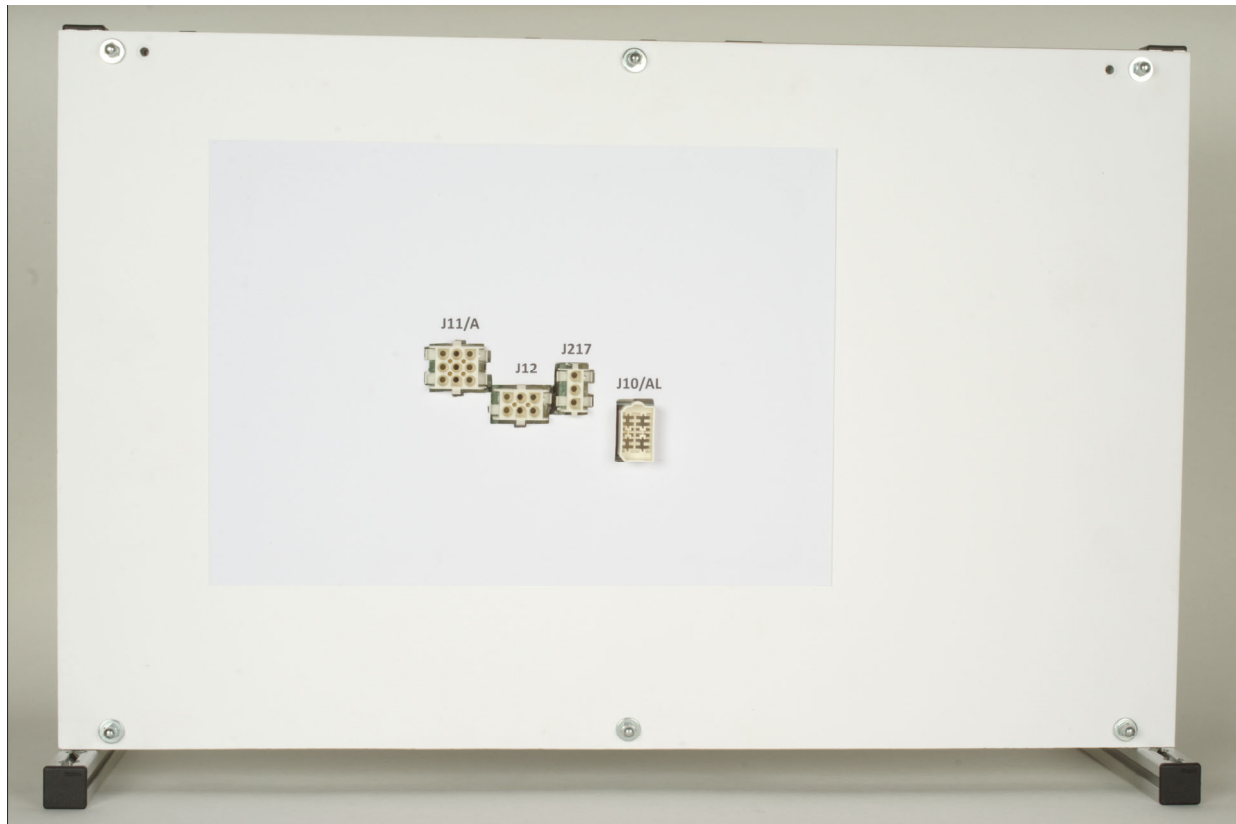
- Base rail
- Mounting plate
- Universal mounting kit
- Pin splitter
- Pigtails
- Shunting connector
- Cover

Fast cabling with 8-pin flat cable  
and RJ45 connectors

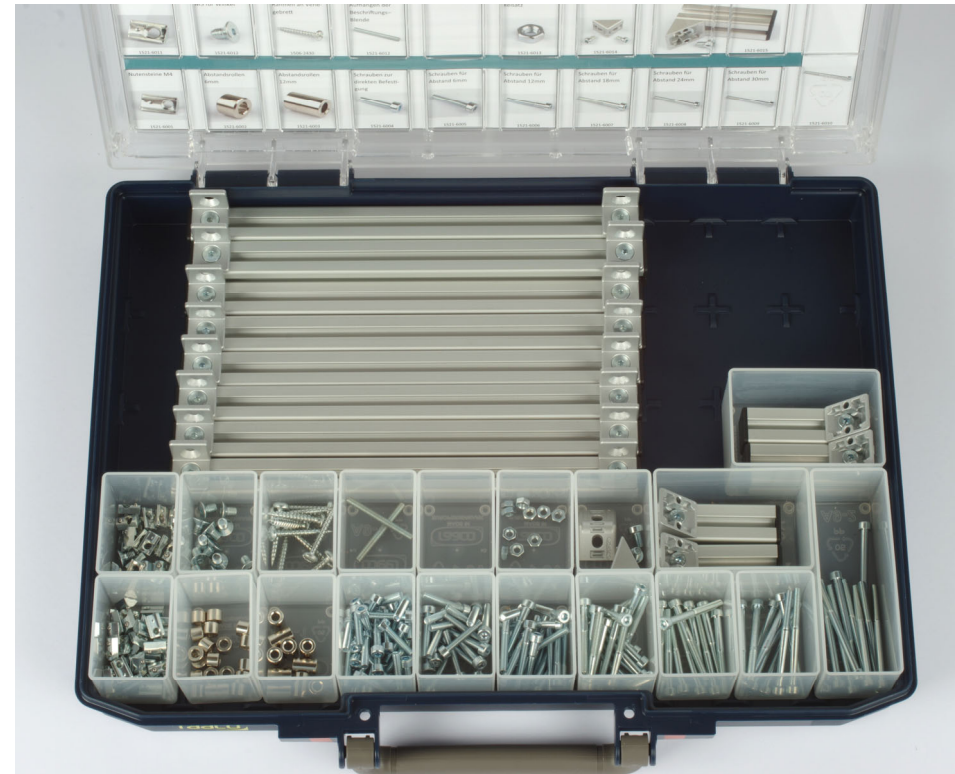
Utilization of all measuring  
channels



# 3D frame



# 3D frame





# 3D frame

For central connection points such as appliance back panels or control boards

- High adapter density
- Can be moved horizontally and vertically
- Quick assembly with standard elements
- Easy subsequent modifications
- All parts can be reordered

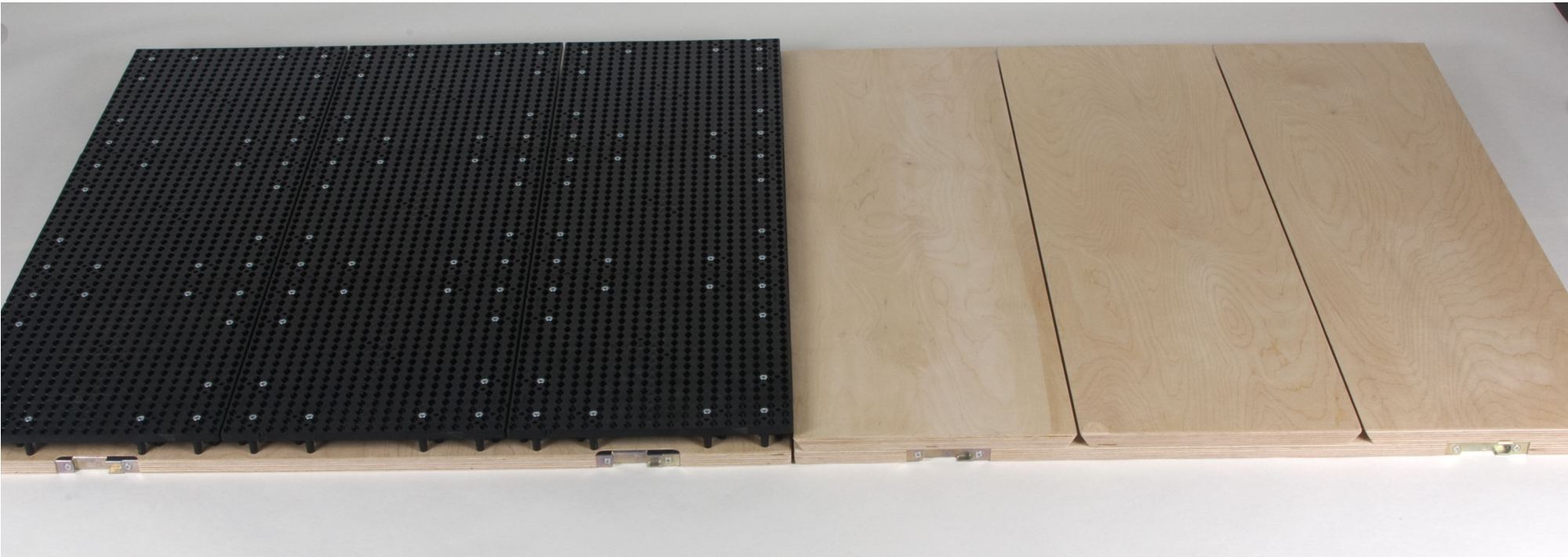


# Tablet stork

- The tablet is always positioned at the optimum viewing angle.
- Power supply via sliding battery from Makita, Bosch or Metabo.
- Even on full assembly boards with bare contacts thanks to long insulated legs.



# Assembly boards



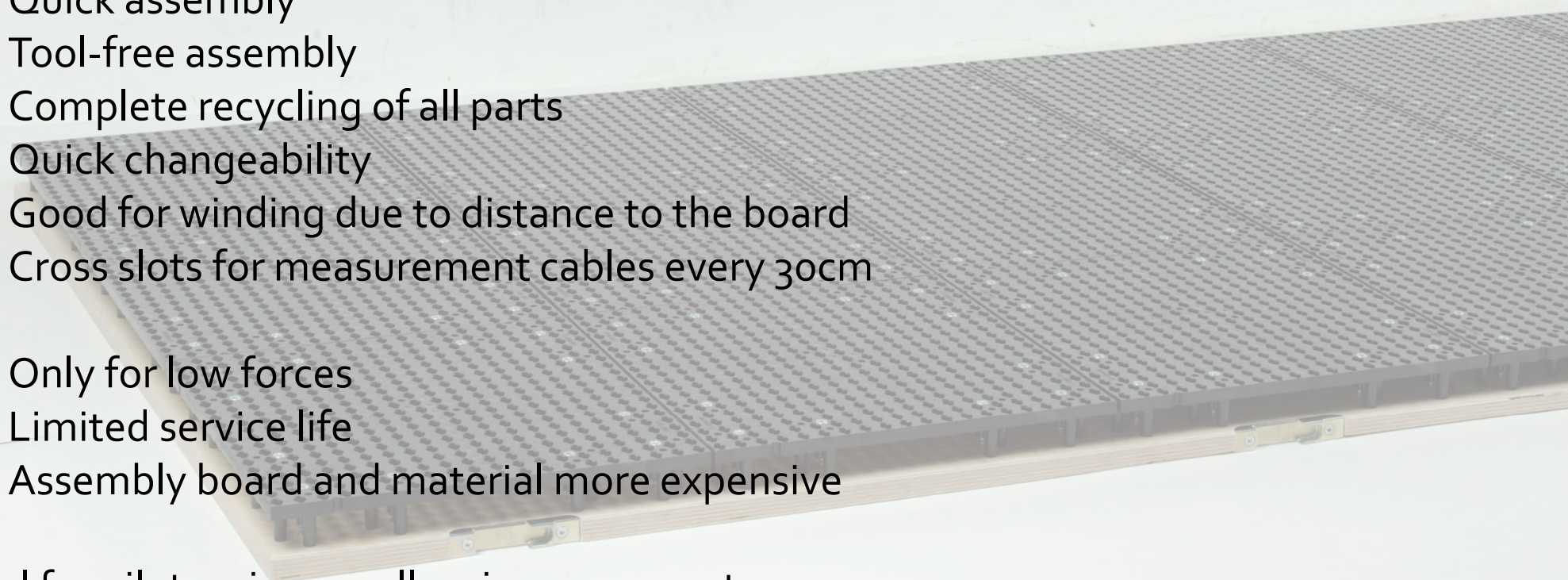
Devboard

Prodboard

# Devboard

- Fitted with modified Panduit Quick Build grid plates
- ✓ Quick assembly
- ✓ Tool-free assembly
- ✓ Complete recycling of all parts
- ✓ Quick changeability
- ✓ Good for winding due to distance to the board
- ✓ Cross slots for measurement cables every 30cm
- Only for low forces
- Limited service life
- Assembly board and material more expensive

Ideal for pilot series, small series, spare parts

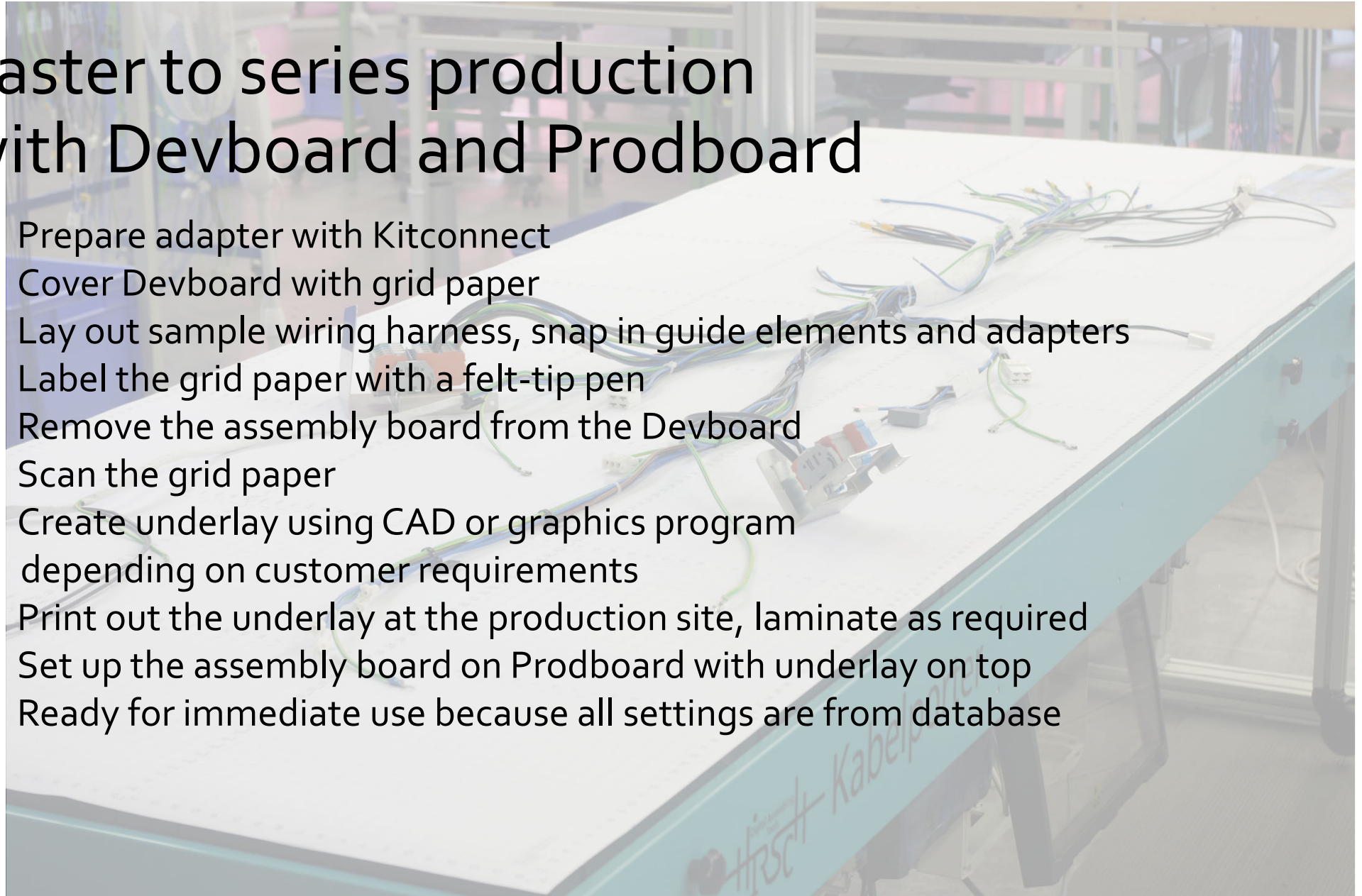


# Prodboard

- Covered with 18 mm birch plywood
  - ✓ Stability even for stiff mating connectors
  - ✓ Secure assembly even over 6 qmm
  - ✓ Very long service life
  - ✓ Upper plate layer replaceable
  - ✓ Assembly board and parts cheaper
  - ✓ Cross slots for measurement technology cables every 30cm
  - More time required for assembly and recycling
  - Labeling surface cannot be changed
- Ideal for series production, rough handling, heavy wire harnesses

# Faster to series production with Devboard and Prodboard

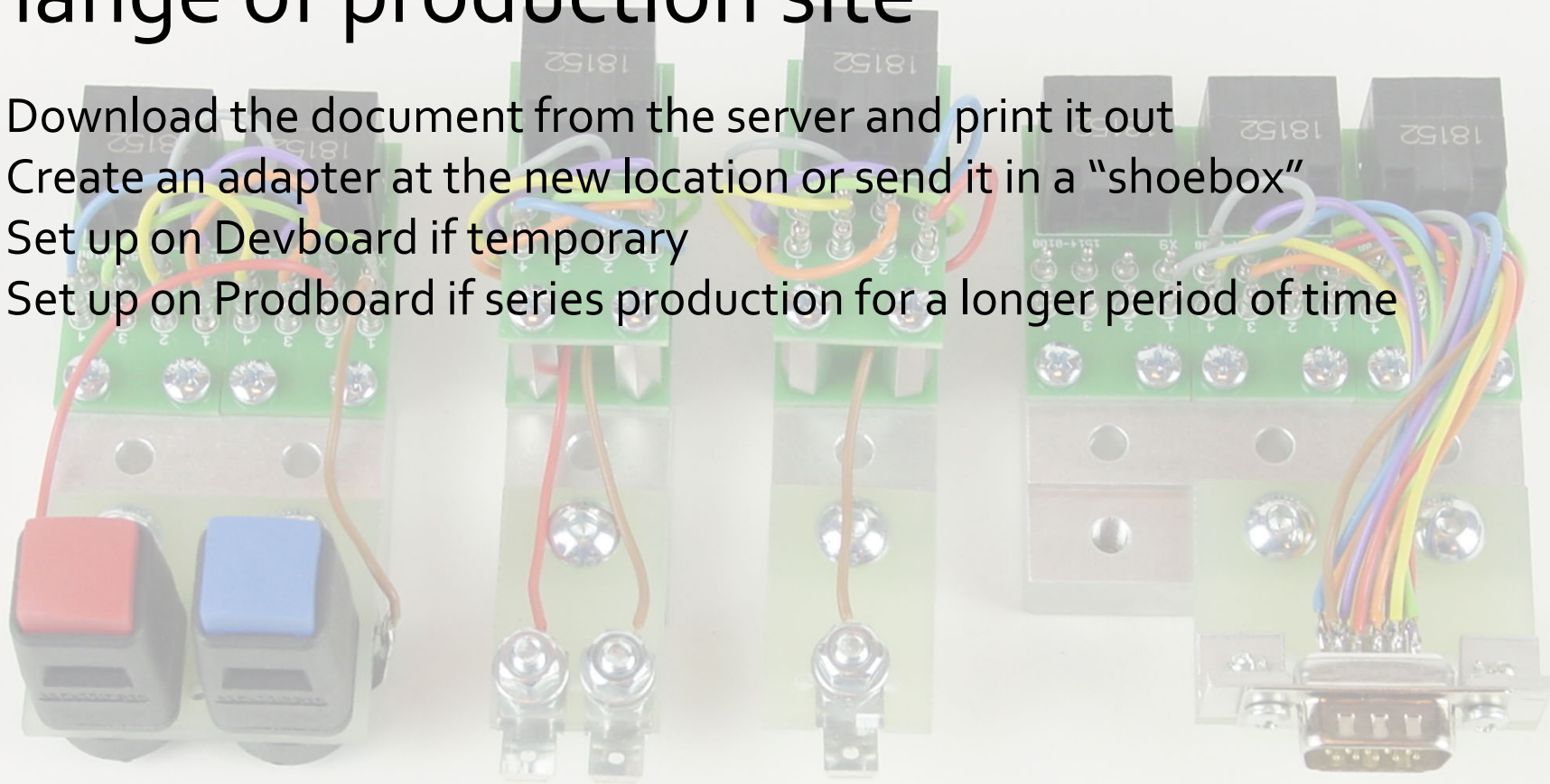
- Prepare adapter with Kitconnect
- Cover Devboard with grid paper
- Lay out sample wiring harness, snap in guide elements and adapters
- Label the grid paper with a felt-tip pen
- Remove the assembly board from the Devboard
- Scan the grid paper
- Create underlay using CAD or graphics program depending on customer requirements
- Print out the underlay at the production site, laminate as required
- Set up the assembly board on Prodboard with underlay on top
- Ready for immediate use because all settings are from database





# Change of production site

- Download the document from the server and print it out
- Create an adapter at the new location or send it in a “shoebox”
- Set up on Devboard if temporary
- Set up on Prodboard if series production for a longer period of time







# Our questions

- Is Kabelassistent interesting?
- How can you use it to optimize your production?