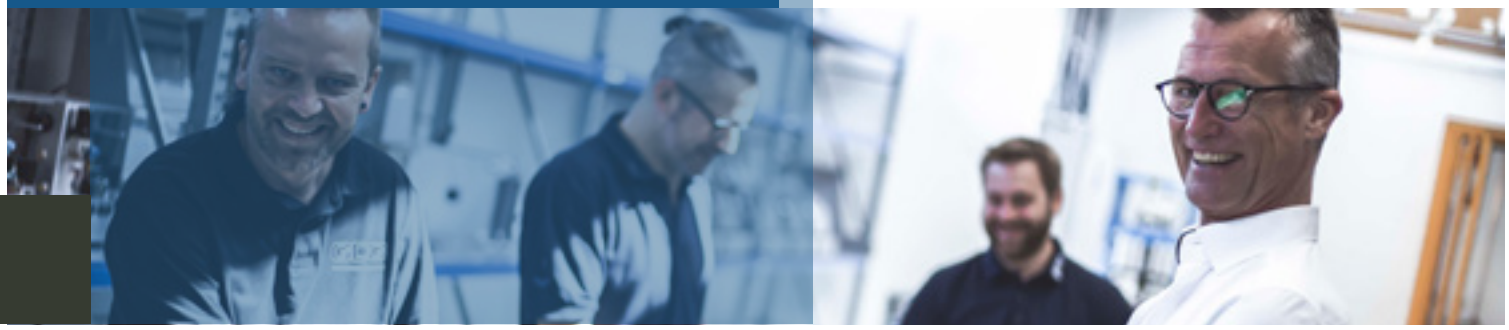
INTEGRATION OF THE

MEASUREMENT UNIT OF TYPE MEG

INTO A FULLY AUTOMIZED PRODUCTION LINE

GDG testsystems

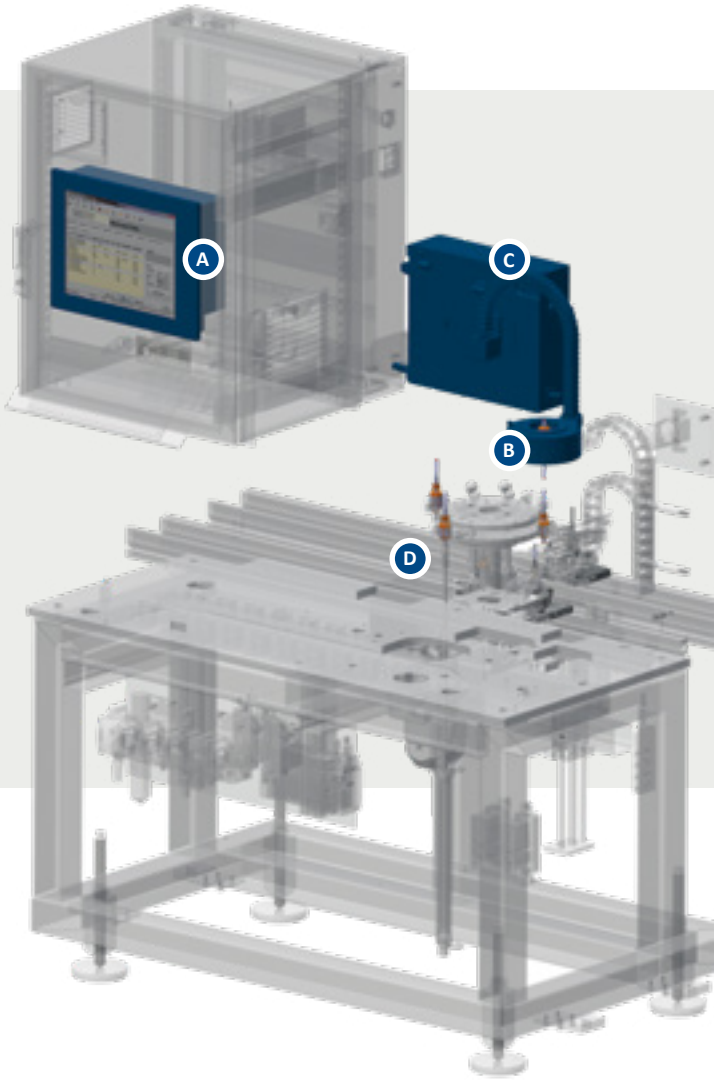


The idea of the MEG unit is to combine the expertise of the two fields electrical measurement and automization. We supply the MEG unit and the automization company is in charge of the integration into the fully automatized handling system.

The measurement unit is shipped with an **Industrial PC** (A) and a **test probe** (B). The actual heart of the system however is the **MEG electronics** (C) itself.

The drawing on the right illustrates the **GDG components highlighted in blue**, integrated into a sample layout of an automation company or production line manufacturer.

The sample shows a handling system equipped with **linear drives** (D). Alternatively a robot can be used which offers more flexibility to execute the movements.



YOUR ADVANTAGES:

› The areas of responsibility are strictly separated:

Automation company:	**GDG:**
Handling and movement of product to be tested	Electrical measurement

› Since the area of responsibility is clearly defined at any point in time it is obvious **who is in charge**. Extremely important when it comes to a standstill or an error occurs.

› On top of that the automation company does not need to have any **prior knowledge** in terms of measurement of electrical features.

› The integration itself is a **straightforward** process to be implemented with existing staff.

The 6 sketches illustrate the various mounting options of the MEG unit.

The objective is always to mount the MEG unit in a way so that the movements of the parts (rotor or stator) to be tested are reduced to a minimum.

- ✓ **optimized motion sequence**
- ✓ **cost-effective, economical setup**
- ✓ **improved cycle time**

The rotors or stators are moved using a work piece carrier (WPC) towards the test stand.

› **Rotors** can be aligned vertically or horizontally on the WPC.
› **Stators** usually feature a vertical orientation on the WPC.

HORIZONTAL WPC

– Armature moves horizontally into the test stand.
– Test probe is embedded in the MEG unit.
– Armature is moved horizontally inside the test probe for electrical contacting.

VERTICAL WPC

– Armature moves vertically into the test stand.
– Test probe is embedded in the MEG unit (upside down).
– Armature is moved vertically from bottom to top inside the test probe for electrical contacting.

VERTICAL ENERGY CHAIN

– Armature/Stator moves vertically into test cell.
– Armature/Stator moves up, out of WPC.
– Test probe moves down for electrical contacting.

Identical principle as above however MEG unit is mounted upside down.

HORIZONTAL ENERGY CHAIN

– Armature moves horizontally into the test cell.
– Armature moves up, out of WPC.
– Test probe moves horizontally for electrical contacting.

Identical principle as above however the test probe does not move away from the MEG unit but turned by 90° towards the armature.
Application: In one case the MEG unit is aligned with the conveyor belt direction whereas in the other case the MEG unit is mounted at a right angle to it.

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