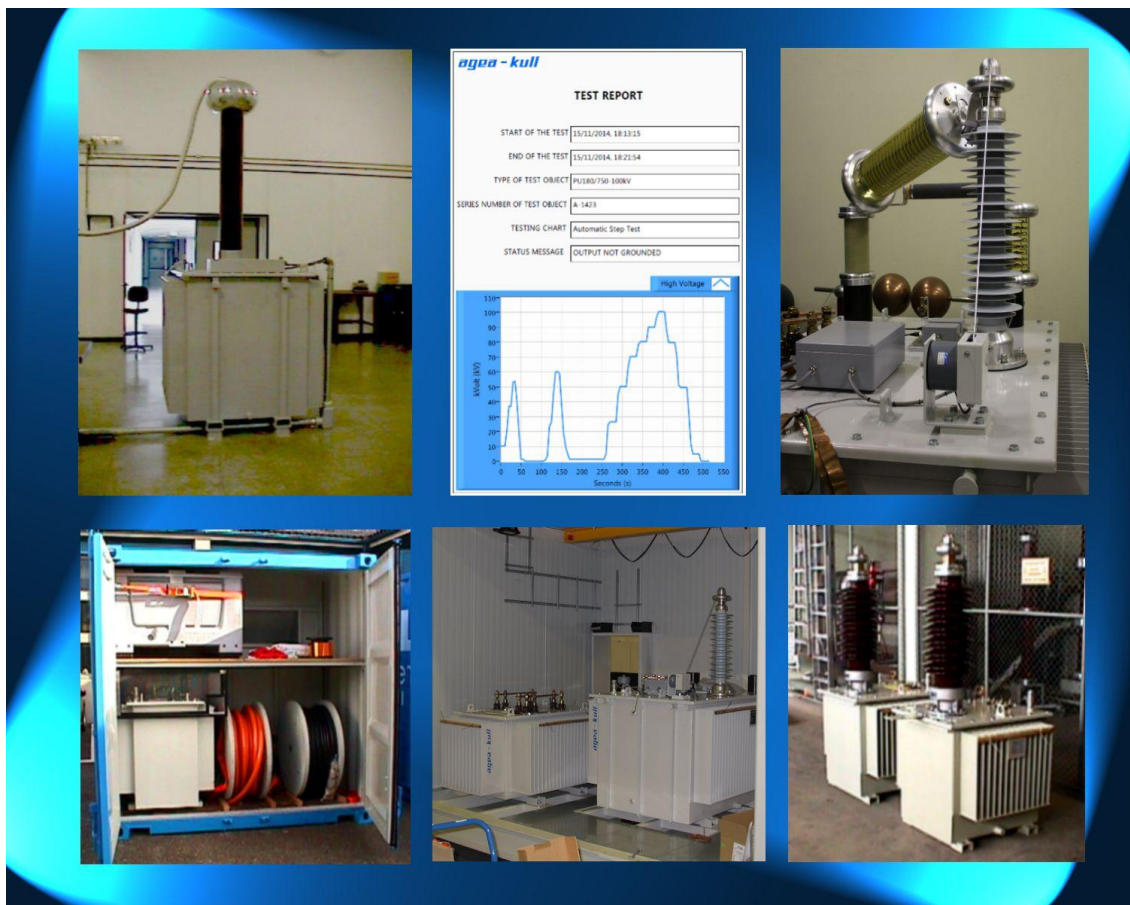


Tank Type Test Transformer Systems



**THE ADVANCED SOLUTION FOR
HIGH VOLTAGE AC TESTING**

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Tank Type Test Transformer Systems

Application

Tank type test transformer systems are used as high voltage source for dielectric testing of medium and high voltage components as

- Distribution and Instrument Transformers
- Cables, Terminations and Joints
- HVDC Components
- Motors and Generators
- Insulators, Capacitors and Bushings

as well as for wet and pollution tests or long duration applications.

On-Site Testing

The dead tank transformers can be fixed mounted in a container or on a trailer. No handling on site is required and either bushings or cable sockets with connecting cables can be installed to contact the test object.

Laboratory Use

A special surface treatment and the hermetical sealing make the transformers insensitive against water, dirt and dust during wet and pollution tests or outdoor applications. The high ONAN cooling performance, allows testing over a longer time without forced cooling systems.

Partial Discharge Measurements

Different kinds of partial discharge measurements like conventional method, non-conventional methods or UHF can be applied. With a suitable mains and high voltage filtering, pd- levels of less than 2pC can be achieved.

Breakdown, Wet and Pollution Tests

A suitable selection of the short circuit impedance limits the failure current and external damping elements protect the transformer against transient overvoltages. Special designed transformers for the requirements of wet and pollution tests can be delivered on demand.

Tailor-made Solutions

agea-kull designs and builds transformers and if requested tank type cascades tailor made to your requirements. The following list represents therefore only an excerpt of our manufacturing range.

Design of Components

High Voltage Transformers

agea-kull developed different types of tank type transformers. Depending of application, power and voltage, single coil transformers or units with two windings in parallel can be delivered. They are mounted in steel tanks and at voltages over 50kV they are hermitically closed to prevent contamination of the oil. The low voltage end of the high voltage winding is isolated lead out to enable C-tan σ measurements on grounded test objects and the capacitive measuring tap of the high voltage bushing can be used to measure the high voltage.

Advantages:

- Shock-proof and short circuit resistant
- High ONAN cooling performance because of corrugated steel tank
- Automatic grounding of the output (optional)
- Suitable for outdoor operation (optional)
- DC circuit on top of the transformer for performing DC testes (optional)

Compensation Reactors

Primary compensation reactors reduce the required input current. High voltage reactors can be used to extend the load range or to adapt it to the actual test object.

Regulating Transformers

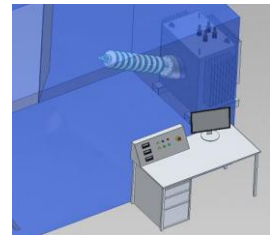
An oil or air insulated column type regulating transformer of the *agea-kull* ST70-series with special collector design is used to adjust the test voltage.

Control Units

Either robust relay based control units or modern computer controls can be delivered.

The latter provide the possibility of

- Automatic sequence testing
- Data storage and test protocol generation
- Setting of high voltage trips
- Adjustable flash detection



Typical Tank Type Test Sets

Type	Voltage kV	max. Current A	Duty On/Off min	Mains Power kVA	Compensation Power kVA	Total Weight kg
PU25-12	12	2.1	15/60	25	-	630
PU80-15	15	5.3	cont.	80	-	1600
PU220-40	40	5.5	cont.	50	170	3000
PU20-100	100	0.2	cont.	20	-	900
PU750-100	100	7.5	15/60	180	900	7200
PU50-250	250	0.2	cont.	50	-	1600

Other voltages, currents and duties on request!