

SYSTEMS AND COMPONENTS FOR CABLE TESTING

- Routine tests
- Type and sample tests
- PQ tests
- On-site tests

TEST SYSTEMS FOR CABLE TESTING

HIGHVOLT OFFERS ALL NECESSARY TEST SYSTEMS AND COMPONENTS FOR MV, HV AND EHV CABLE TESTING



ROUTINE TESTING

Test systems		Land cables				Submarine cables		Accessories			
		MV* AC	HV AC	EHV AC	DC	AC	DC	Shielded room	Tan-delta measuring	PD-measuring	Water termination CETS
AC	WR/WRU	++	++		+	+	+	●	●	●	●
	WRM		++	++	+	+	+	●	●	●	●
	WRV T HV		+	+	+	++	+	●	●	●	●
	WRV T MV	+						●	●	●	●
DC	GP/FGP				++		++	●		●	●
	GPM				++		++	●		●	●



TYPE AND SAMPLE TESTING

AC	WP	++	++	++	+	++	+	●	●	●	●
	WR/WRU	++	++		+	++	+	●	●	●	●
	WRM		++	++	+	++	+	●	●	●	●
DC	GP/FGP				++		++	●		●	●
	GPM				++		++	●		●	●
High current	HCTS	++	++	++	++	++	++	●			●
Impulse voltage	IP	++	++	++	++	++	++	●			●



PQ TESTING

AC	WP	+	++	++		++				○	
	WR/WRU	+	++		+	++	+			○	
	WRM		++	++		++				○	
	WRV T HV		++	++		++				○	
DC	GP/FGP				++		++			○	
	GPM				++		++			○	
High current	HCTS	++	++	++	++	++	++				
Impulse voltage	IP		++	++	++	++	++				



ON-SITE TESTING

AC	WRV T HV	+	++	++		++			○	○	
	WRV T MV	++							○	○	
	WRV M		+	+					○	○	
DC	GPM				++		++				

HIGHVOLT test systems enable cable testing according to all relevant standards: IEC, Cigre, GOST, IEEE etc.

* Cables with rated voltage up to 36 kV

++ Ideal

+ Suitable

● Suitable and necessary according to IEC standards

○ Suitable but not required according to IEC standards

AC HV TEST SYSTEMS

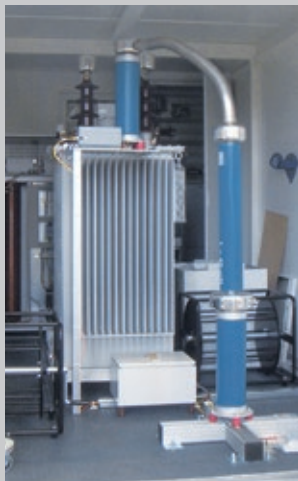


AC TEST SYSTEM

TRANSFORMER BASED

- Type: WP
- Voltage range: 60 to 1800 kV
- Frequency range: 50/60 Hz

BEST FOR PREQUALIFICATION
TESTING OF MV, HV
AND EHV CABLE SAMPLES



AC RESONANT TEST SYSTEM WITH VARIABLE INDUCTANCE

TANK TYPE

- Type: WR/WRU
- Voltage range: 20 to 350 kV
- Frequency range: 50/60 Hz

BEST FOR ROUTINE TESTING OF MV
AND HV CABLE DELIVERY LENGTHS



AC RESONANT TEST SYSTEM WITH VARIABLE INDUCTANCE

MODULAR TYPE

- Type: WRM
- Voltage range: 250 to 1200 kV
- Frequency range: 50/60 Hz

BEST FOR ROUTINE TESTING OF HV
AND EHV CABLE DELIVERY LENGTHS



AC RESONANT TEST SYSTEM WITH VARIABLE FREQUENCY

MODULAR TYPE

- Type: WRV M
- Voltage range: 160 to 800 kV
- Frequency range: 20 to 300 Hz

BEST FOR ON-SITE TESTING
OF SHORT CABLE SYSTEMS



AC RESONANT TEST SYSTEM WITH VARIABLE FREQUENCY

TANK TYPE

- Type: WRV T HV/WRV T off shore
- Voltage range: 50 to 520 kV
- Frequency range: 20 to 300 Hz

BEST FOR ON-SITE TESTING
OF LONG CABLE SYSTEMS



AC RESONANT TEST SYSTEM WITH VARIABLE FREQUENCY

MODULAR TYPE

- Type: WRV T MV
- Voltage range: 6 to 50 kV
- Frequency range: 20 to 300 Hz

BEST FOR ON-SITE TESTING
OF MV CABLE SYSTEMS

DC HV TEST SYSTEMS



INDOOR DC TEST SYSTEM

COLUMN TYPE

- Type: GP
- Voltage range: 300 to 2000 kV
- Current range: 50 to 10 mA

BEST FOR ROUTINE TESTING OF HV
AND EHV CABLE DELIVERY LENGTHS



OUTDOOR DC TEST SYSTEM

COLUMN TYPE

- Type: FGP
- Voltage range: 300 to 2000 kV
- Current range: 50 to 10 mA

BEST FOR RESEARCH AND
DEVELOPMENT, TYPE
TESTING OF CABLE SAMPLES



DC TEST SYSTEM & DISCHARGING UNIT

MODULAR TYPE

- Type: GPM
- Stationary or mobile use
- Voltage measuring integrated into the modules
- Voltage range: 400 to 1600 kV
- Current range: 40 to 10 mA

BEST FOR ROUTINE TESTING OF
DELIVERY LENGTHS AND ON-SITE
TESTING OF CABLE SYSTEMS

IMPULSE VOLTAGE AND AC HIGH CURRENT TEST SYSTEMS



IMPULSE VOLTAGE TEST SYSTEM

MEDIUM SIZE

- Type: IP M
- Voltage range: 500 to 2400 kV

BEST FOR TYPE TESTING
OF MV AND HV CABLE SAMPLES



IMPULSE VOLTAGE TEST SYSTEM

LARGE SIZE

- Type: IP G
- Voltage range: 1000 to 6000 kV

BEST FOR TYPE AND PQ TESTING
OF HV AND EHV CABLE SAMPLES



HIGH CURRENT TEST SYSTEM

FOR HEAT CYCLE TESTS

- Type: HCTS
- Current range: 2000 to 7000 A

BEST FOR TYPE AND PQ TESTING
OF MV, HV AND EHV CABLE SAMPLES

ACCESSORIES AND SERVICES

SHIELDED ROOM

- Available in all sizes
- Also available as wall mounted shielding in existing building



WATER TERMINATION SYSTEM

- Type: CETS
- For cable testing in the factory
- AC voltage range: up to 800 kV
- Lightning impulse voltage range: up to 1900 kV



MEASURING SYSTEM

- Tan-delta measuring device
Standard capacitors
- PD measuring system
Coupling capacitor
- HiRES Locator - Breakdown localization device



HIGHVOLT – YOUR PROVIDER OF COMPLETE SOLUTIONS

- CONSULTANCY FOR TEST BAY LAYOUT
- TEST SYSTEMS AND ACCESSORIES
- TUTORIALS AND TRAININGS
- DAKKS CALIBRATION SERVICE
- UPGRADES OF EXISTING TEST SYSTEMS

For further information please contact:

HIGHVOLT Prüftechnik Dresden GmbH

Marie-Curie-Straße 10
01139 Dresden
Germany

Phone +49 351 8425-700
E-mail sales@highvolt.com
Web www.highvolt.com