

### RUAG CALIBRATION LABORATORY

# **Calibration Services**



↗ Your test equipment is our core competence. We calibrate, adjust and repair your testing and measuring equipment. Trust our expertise in monitoring and managing your equipment and make room for your core business. We offer years of experience as a certified and accredited Swiss calibration laboratory.

### Our services

As a specialist, we advise you in all aspects of measurement technology. Our service portfolio includes calibration, adjustment, repair, subcontracting and logistics services. We also provide services in the field of test equipment management, as well as the organization of test equipment call-offs and administration of test data.



Various mechanical measured variables



Various electronic measured variables

## ↗ Your benefits

Experience and further development have made RUAG's calibration unit the leading supplier of calibration technology in Switzerland. The qualified service team has been calibrating electrical and mechanical measured variables for over 50 years. In addition to ISO certification, the calibration laboratory is also accredited under accreditation number SCS 0085. We are your independent calibration service provider.

The offering includes the following services in particular:

#### Verified quality

With accreditation SCS 0085, we are an internationally recognized calibration laboratory. Our high quality is regularly verified by the Swiss Accreditation Service SAS.

#### In-depth knowledge

We have more than 50 years experience as a certified and accredited calibration laboratory. This means that we are always there to support our customers - in all areas of measurement technology.

#### Long-term partnerships

We are an internationally recognized calibration laboratory and work closely with manufacturers of measuring instruments. In addition, we have maintained close partnerships with the armed forces, air force, industry and government agencies for many years.

## ↗ Our range of services

We carry out manufacturer-independent calibration of more than 7,000 device types from over 1,000 manufacturers. Well-known companies from industry and military are among our customers.

We want you to be able to focus on your core business. High quality standards, short lead times and long-term partnerships are important to us.

The calibration laboratory has the latest technology. The team of experienced and highly qualified technicians receive regular training so that they are able to test the newest equipment at all times.

#### ↗ QUALITY ASSURANCE

- Services to improve quality in testing and measuring equipment
- Monitoring and calibration of your testing and measuring equipment in line with ISO 9001 / EN 9100 / ISO IEC 17025

#### ↗ TESTING SERVICES

- Retrieval of your testing equipment for regular testing
- Calibration of electrical and mechanical variables
- Testing and reporting results

#### ↗ MEASURING AND TESTING EQUIPMENT MANAGEMENT

 Recording and describing all testing and measuring equipment in our database

#### ↗ PREPARATION AND STORAGE OF CERTIFICATES

- Drafting of related, traceable certificates including test data and storage for over ten years
- On request, we offer access to our online portal, with digital access to your calibration documentation.

#### ↗ LOGISTICS

 Takeover of logistics and administration for subcontractors and replacement procurement

#### ↗ SUPPORT

 User support with measuring tasks, when setting up new testing and/or measuring equipment and audits



# ↗ Service portfolio

### THE CALIBRATION LABORATORY OFFERS FOLLOWING MEASURING RANGES FOR CALIBRATION:

MECHANICAL GAGES	MEASURING RANGE	↗ MECHANICAL GAGES	↗ MEASURING RANGE
Force and torque gages		Caliper gages	0 mm to 1,000 mm
- Torque wrench	0.05 Nm to 1,000 Nm	Depth gages	0 mm to 100 mm
- Torque tester	50 Nm to 1,000 Nm		
- Spring balance	0.001 kg to 100 kg	Bevel edge squares	
- Tensiometer	-	Goniometers	0 °C to 360 °C
		Electronic inclinometers	0 °C to 90 °C
lemperature	-50 °C to +250 °C		
		Adjusting rings	up to 220 mm
Cable crimping tool	Various manufacturers	Plug gages	up to 250 mm
		Testing pins	up to 15 mm
Dimension metrology			
- Outside micrometer	0 mm to 500 mm	Dial gage	0 mm to 100 mm
<ul> <li>Inside micrometer</li> </ul>	3 mm to 240 mm		
– Depth micrometer	0 mm to 500 mm		
ELECTRONIC MEASURING EQUIPMENT	↗ MEASURING RANGE	↗ ELECTRONIC MEASURING EQUIPMENT	↗ MEASURING RANGE
Time		Voltage	DC 0 to +/- 1100 V
<ul> <li>Digital and analog clocks</li> </ul>			AC 22 µV to 1100 V
- Rise and fall times	> 15 ps		- p
- Pulse, markers		High voltage	DC 1 kV to 25 kV
		0 0 -	AC 1 kV to 10 kV
Speed			
- Mechanical	1 to 25,000 rpm	Power	DC 0 to +/- 350 A
- Optical	5 to 100,000 rpm		AC 9 uA to 120 A
RF Services	-120 dBm to 20 dBm [18 GHz] max. 7 W 500 kHz to 1 GHz max. 200 W 10 kHz to 200 MHz	Resistance	0 0hm to > 200 G0hm
		Power	DC 20 kW
			AC 20 kW
RF Modulation	AM, FM, phase	Conceitu	200 p E to 110 m E
Network analysis	9 kHz to 20 GHz (50 GHz)	Capacity	220 pF to 110 mF
		Inductance	10 nH to 10 H
		Frequency	1 uHz to 40 GHz

This is a selection of the most frequently used parameters. The ranges listed may be supplemented or reduced by additional parameters. In any case, other non-listed variables are possible.

#### Accreditations and Certifications

- Accredited calibration laboratory in accordance with ISO/IEC 17025
- Accreditation number SCS 0085
- Certified according to ISO 9001 and EN 9100

