



Calibration and Service

Calibration of Test and Measuring Equipment for

- **Avionics**
- **Electricity**
- **Force**
- **Length**
- **Pressure**
- **Temperature /Humidity**
- **Time**

As a **NACI** accredited calibration laboratory we fulfill the standard ISO/IEC 17025 and the regulation of:

- CAO.IRI
- EASA

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1. Terms and Conditions

1.1 General

Applicable law and jurisdiction	the governing law of the contract is the law of IRI.
Shipment	at customer's risk and expenses
Turnaround time	15 working day
Payment	30 days strictly net
Claims	within 10 days upon receipt of invoice
Prices	<p>The price includes cleaning as required to perform the calibration, verification, calibration sticker, shop finding report, protocol and certificate. Not included: Adjustment, excessive cleaning, servicing. For this extra work, will be charged.</p> <p>If the calibration / repair costs exceed an economical limit, an analysis fee will be charged.</p>
Express Calibration Service	Measuring instruments, which will be used very fast again, we offer an express calibration service. Such measuring instruments will be handled with first priority. For such a calibration, we will add an extra charge of 25% of the normal calibration price.
Certificate	The certificate contains all necessary traceability information. All results are traceable to a national or international standard.
Technical manuals	Aircraft maintenance related customers are required to send their maintenance manual with the instrument.

1.2 Other Services

Interval control	We can notify you when calibration is due.
Not listed	If your tool is not listed here, do not hesitate to call. There is much more we can do.
tools	

1.3 Definitions

Metrology

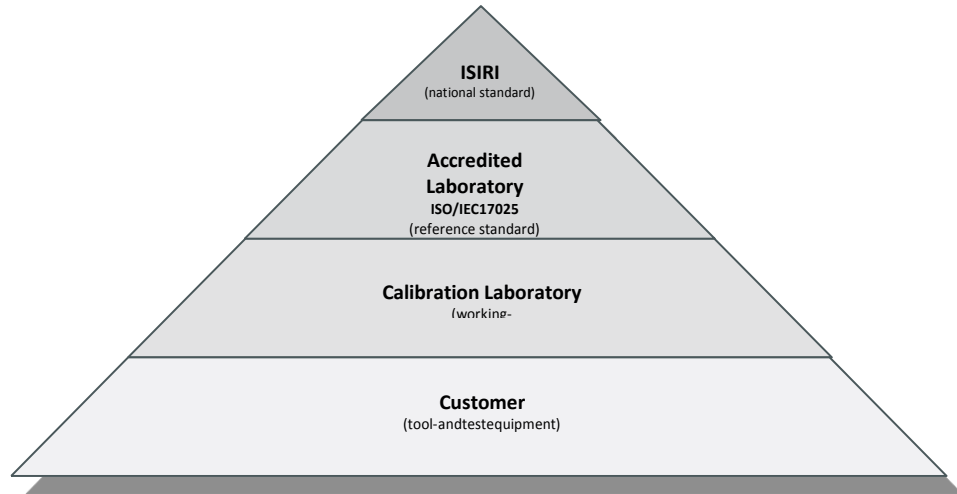
Metrology is defined as “the science of measurement, embracing both experimental and theoretical determinations at any level of uncertainty in any field of science and technology”. The theoretical metrology deals mainly with the units, the dimension system and their theoretical connections.

The measuring means and aids, the normal devices and the measuring rooms are counted to the technical metrology. The legal metrology encloses the officially regular and supervised measuring being.

Traceability

A process is traceable if the result of a measurement can be compared to an approved standard for the concerning measuring size.

The property of a result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons. With each of these comparative measurements a calibration was so carried out that the measurement was determined by a more significant standard. There is a calibration hierarchy.



Calibration

Calibration is the set of operations that establish, under specified conditions, the relationship between the values of quantities indicated by a measuring instrument and the corresponding values realized by standards.

Adjustment

Adjustment means, a measuring instrument to put or balance that the measuring divergences become very small or that the amounts of the measuring divergences do not cross the margins of error. Adjusting requires an intervention which changes the measuring instrument or the dimension embodiment mostly remaining.

For measuring tools in all chapters, on request it could be created SKE certificates based on NACI / ISO / IEC17025 standard.



2. Air Data- / Pitot Static Tester

Item	Model	Description	*Calibration price
Barfield**	101-00164(1811D)	Pitot StaticTester	
	101-00165(1811G/H)	Pitot StaticTester	
	101-00168(1811G/H)	Pitot StaticTester	
	101-00169(1811G/H)	Pitot StaticTester	
	101-00185(1811GA)	Pitot StaticTester	
	101-00184(1811HA)	Pitot StaticTester	
	101-01170 (DPS350)	Pitot StaticTester	
	DPS450	Pitot StaticTester	
	DPS500	Pitot StaticTester	
DMC	MPS27C	Pitot StaticTester	
	MPS31C	Pitot StaticTester	
	MPS34C	Pitot StaticTester	
	MPS35C	Pitot StaticTester	
	MPS35C	Pitot Static Tester (inkl.AOA)	
	MPS38B	Pitot StaticTester	
	MPS39C	Pitot StaticTester	
	MPS39C	Pitot Static Tester (inkl.AOA)	
	MPS43	Pitot StaticTester	
	PAMB11	PressureIndicators	
Druck	ADTS 2xx Serie	Air Data Tester	
	ADTS405F	Air Data LineTester	
	ADTS405	LaborVersion	
	ADTS505	Air Data LineTester	
	ADTS530	Air Data LineTester	
JCAir	80B-6	Pitot Static LeakTester	
Viasala	PTB220	Pressure Transmitter	



*Adjustments will be calculated based on effort

**No adjustments, only calibration possible

3. Pneumatics and Hydraulics Test Equipment

3.1 Analogue and Digital Pressure Gauges

Manufacturer		Description	Calibration price
Various	Various	Digital PressureGauge	
Various	accordingDIN to 8000 PSI / 550bar	Analogue Pressure Gauge ≥KI.1	
		Analogue Pressure Gauge <KI.1	
		Skydrolsurcharge	
Keller	Various	Pressure Transmitter	
Druck	DPI 501	Digital PressureReference	
Fluke	PV350	Pressure / Vacuum module	
	717Serie	PressureCalibrator	
	718Serie		



4. Force- and Torque Tools and Test Equipment

Description	Remarks	Calibration price
Torque Wrench(cw) (tolerance & measuring points acc. DIN ENISO 6789)	0 - 1500 Nm	
Torque Wrench(cw/ccw) (tolerance & measuring points acc. DIN ENISO 6789)	0 - 1500 Nm	
Torque Wrench (fixed releasement)	Actual release moment will be notedon Certificate	
TorqueWrenchTester(cw))up to 2000Nm	Acratork	
	Norbar	
	Stahlwille	
Torque WrenchTester(ccw)up to 2000Nm	Acratork	
	Norbar	
	Stahlwille	
Spring ScaleCorrex	left/right 2000gmax.	
Spring ScalePesola	0 - 100kg	
Spring Scale SafeFlight	left/right 2000gmax.	
Load Cells (push and/orpull)	1 direction(≤ 1000kg /10kN) 2 directions (≤ 1000kg /10kN) (Accuracy ≥0.5%)	
Load Cell (Airplane weighing system)	0 - 50'000kg (price per load cell)	
Table Scales*	0 - 36kg	
Weighing platforms for transport vehicles*	up to50'000kg	
Tensiometer	Calibration incl. 1 Cable additional	



*Please note that we only calibrate platforms / table scales which are not amenable the legal control.

5. Electrical Measuring Equipment

5.1 Multimeters

Manufacturer	Model	Description	Calibration price
ABBBBC	17	Milliohm meter	
BBCMetrawatt	MA3E	Multimeter	
	M2032 /M2035	Multimeter	
APPA	76	Component RC Tester	
	91 / 93N /97	Multimeter	
Beckman	3020	Multimeter	
Benning	MM7 / MM8 / MM9 / MM10	Multimeter	
Boonton	92B / 92EA	RF Millivoltmeter	
ChauvinArnoux	C.A5001	Multimeter	
DataPrecision	3500 / 3600	Multimeter	
Düwi	07980	Multimeter	
Facom	710 / 711	Multimeter	
Fluke	10 / 11 / 12 /16	Multimeter	
	21 / 23 / 25 / 26 / 27/ 29	Multimeter Serie II bisIII	
	45	Multimeter	
	70 / 71 / 73 / 75 / 76/ 77 / 78 /79	Multimeter Serie I bisII	
	70 / 73 / 75 / 77 /79	Multimeter Serie III bisIV	
	80 / 81 / 82 / 83 / 85/ 87 /89	Multimeter Serie I bisIII	
	87 / 88 /89	Multimeter Serie IV bisV	
	110 / 111 / 112 / 115/ 117	Multimeter	
	123	Scope meter	
	1630	Earth Ground Clamp	
	175 / 177 /179	Multimeter	
	183 / 185 / 187 /189	Multimeter	
	190 / 192 /196	Scope meter	
	287 / 289	Multimeter	
	845	Null Detector	
	893	Differential-Voltmeter	
	8020 / 8021 / 8022 / 8025 / 8030 / 8060 / 8062	Multimeter	
	8500A	Voltmeter (only DC Volt) + each option DCA, Ohm,...	
	8506	Voltmeter (only DC Volt) + each option DCA, Ohm,...	
	8840	Multimeter	
8845A /8846A	Precision Multimeter		
GossenMetrawatt	16I	Multimeter	
	27I /27M	Multimeter	
	30M	Multimeter	
	ISO Aero	Multimeter	
	MetraHit 2A	Multimeter	
	MetraHit 2+	Multimeter	



Manufacturer	Model	Description	Calibration price
Hewlett Packard/ Agilent	34401A	Multimeter	
	3456 / 3458	Multimeter	
	3464 / 3465	Multimeter	
	3478A	Multimeter	
	400 / 403	Multimeter	
	427A	Multimeter	
Hioki	3253	Multimeter	
Keithley	130A	Multimeter	
	173 / 175 /179	Multimeter	
	191	Multimeter	
	194A	Multimeter	
	196 / 199	Multimeter	
	2000 / 2001	Multimeter	
Mastech	MY-64	Multimeter	
	MY-68	Multimeter	
Metex	M-3650	Multimeter	
	M-3660	Multimeter	
	M-4650B	Multimeter	
Metrix	MX20	Multimeter	
	MX111 /202	Multimeter	
	MX547	Multimeter	
PCE	PCE-UT81B	Scope meter	
Philips	2504 / 2505	Multimeter	
	2517 / 2518	Multimeter	
	2521 / 2525	Multimeter	
	2534	Multimeter	
	2718	Multimeter	
Protek	506	Multimeter	
RacalDana	4002A	Multimeter	
Simpson	260	Multimeter	
	464	Multimeter	
Solartron	7150	Multimeter	
Tektronix	TX3	Multimeter	
Unigor	D210	Multimeter	
Wavetek	DM25XL	Multimeter	
	HD100 /110	Multimeter	
Würth	Basic-DMM	Multimeter	



5.2 Current Clamp, Current Clamp Meter

Manufacturer	Model	Description	Calibration price
Elbro	DM 6015	Current Clamp Meter	
Fluke	1630	Earth Ground Clamp	
	i200	Current Clamp	
	322	Current Clamp	
	336	Current Clamp Meter	
	337	Current Clamp Meter	
	353	Current Clamp Meter	
	i410	AC/DC Current Clamp	
	T5-600	Current Clamp Meter	
	T5-1000	Current Clamp Meter	
Gossen Metrawatt	Z3510	Current Clamp	



Manufacturer	Model	Description	Calibration price
H.E.M.E.	LH 630	Current Clamp	
	100	Current Clamp	
	1000	Current Clamp	
Lutron	DM-6052	Current Clamp	
Metrix/ITT Instruments	MX1200S	Current Clamp	
Pan control	PAN 147	Current Clamp	
Yokogawa	CL-612	Current Clamp	



5.3 Resistance Measuring Instruments (1 Milliohm to 10Teraohm)

Manufacturer	Model	Description	Calibration price
AmptecResearch	620A-4	Igniter Circuit Tester	
Avtron	T477W	Bonding Meter	
Barfield	2471F(101-00220)	Megohmmeter	
BCDElectronics	M1	Milliohm Meter	
ChauvinArnoux	CA10	Milliohm meter	
Cropico	DO7010	Microammeter	
Extech	380580	Milliohm meter	
Fluke	1507	Isolation Meter	
	1587	Isolation Meter	
GeneralRadio	1864	Megohmmeter	
H&B	PontaviWh2	Wheatstone-Bridge	
	Isolavi 7 /12	Isolation Meter	
Hioki	3119	Isolation Meter	
Kikusui	TOS7100M	Isolation Meter	
Knick	H-12	Tera ohmmeter	
Megger	BM7	Isolation Meter	
	BM80	Isolation Meter	
	BM403	Isolation Meter	
	BT51	Milliohm meter	
	DLRO 10 /10x	Milliohm meter	
	MIT40X /MIT400 MIT410 /MIT420 MIT430 /MIT481	Isolation Meter	
	MJ4/2	Isolation Meter	
GossenMetrawatt	JK500V	Isolation Meter	
	MetraHit 17	Milliohm meter	
	Metraohm413	Milliohm meter	
	Metriso1000	Isolation Meter	
	MetrisoC	Isolation Meter	
Metrix	MX406	Megohmmeter	
	MX4120	Isolation Meter	
Norma	IMI11	Isolation Meter	
PeakTech	5010ITA	Isolation Meter	
Percival	DHP-884	Safety Ohmmeters	
QuadTech	1864	Megohmmeter	
Radiometer	IM-6	Megohmmeter	
Rhopoint	M210	Milliohm meter	
Siemens	M273	Wheatstone-Bridge	
Tettex	2102	Wheatstone-Bridge	



5.4 Counters

Manufacturer	Model	Description	Calibration price
Advantest	TR 5823	Counter	
B&K Precision	1855	Counter	
Fluke	6611	Counter	
Hewlett-Packard	537A	Counter	
	5300B/5335A	Counter	
	5315A/5326A	Counter	
	5334A/B	Counter	
Leader	LDC-823 A	Counter	
Racal	9915	Counter	
Philips	6667 /6668	Counter	
	6676 /6680	Counter	



5.5 Oscilloscopes

Scope of calibration according VDI/VDE/DGQ/DKD 2622 page4

Manufacturer	Description	Calibration price
Various	2-Channel-Scopes ≤ 60 MHz Bandwidth	
	2-Channel-Scopes ≤ 200 MHz Bandwidth	
	2-Channel-Scopes ≤ 500 MHz Bandwidth	
	Additional Channels/ with dual time base	
	special features	depending on complexity



5.6 Function and Signal Generators, Calibrators, Analyzers

Manufacturer	Model	Description	Calibration price
B&K Precision	3010/3026	Function Generator	
Boonton	8200	Modulations-Analyzer	
Gigatronics	6060B	Signal Generator	
GWInstek	AFG-2000 Series	Function Generator	
HewlettPackard / Agilent	331A /333A /334A	Distortion Analyzer	
	339A	Distortion Analyzer	
	652A	Oscillator	
	3310A/B	Function Generator	
	3314A/3325B	Function Generator	
	3561A	Dynamic Signal Analyzer	
	8656A/8656B	Signal Generator	
	8657A/8657B	Signal Generator	
	8903B	Audio Analyzer	
	33120A	Function Generator	
Leader	LFG-1310	Function Generator	
Marconi	TF-2304	FM/AM Mod. Meter	
Philips	PM5142/ PM 5132	Function Generator	



Manufacturer	Model	Description	Calibration price
Rohde & Schwarz	APN 04	Signal Generator	
	APN 06	Signal Generator	
	SMG /SMH	Signal Generator	
	SMX	Signal Generator	
Systron Donner	114A	Pulse Generator	
Tektronix	492	Spectrum Analyzer	
Wavetek	171	Function Generator	
	178	Function Generator	
	395	Function Generator	



5.7 Calibrators, Power Supplies, Simulators

Manufacturer	Model	Description	Calibration price
Delta Elektronik	E030-10	Power Supply	
Fluke	714	Thermocouple Calibrator	
	5100 A/B	Multifunction Calibrator	
Gossen Metrawatt	MetraHit28C	Calibrator, Multimeter, Milliohm meter	
Knick	JS 3010	DC-Calibrator	
Thurbly & Thandar	TSX3510	Power Supply	
Voltcraft	PS1440	Power Supply	
Yokogawa	CA12E HandyCal	Thermometer, Calibrator	
	7651	DC-Calibrator	



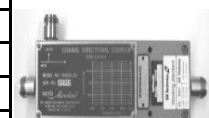
5.8 Tachometers, Stroboscopes

Manufacturer	Model	Description	Calibration price
Barberre	Tach III	Tachometer	
Elbro	DT 2236	Digital Tachometer	
General Radio	1531-AB	Strobotac	
Gates Corporation	507C	Sonic Tension Meter	
Jaquet	DHO-907	Tachometer	
	HO 100	Tachometer	
	HM 100	Tachometer	
Lutron	DT 2236	Digital Tachometer	
Monarch	PLT200	Digital Tachometer	
Prova	RM-1500	Digital Tachometer	
Rheintacho	A2-2000	Tachometer	



5.9 Various Test and Measuring Equipment

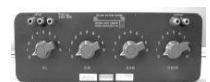
Manufacturer	Model	Description	Calibration price
3M	740 /746	Wrist Strap & Shoe Tester	
Generic	Attenuators	Basic, Fixed Attenuation	
	Attenuators	Step & Variable Attenuation	
	Coupler		
	Crystal Detector		
	R-Decades	to 1GOhm 2 Decades + each additional Decade	
	C-Decades		





Calibration & Measurement Services

Manufacturer	Model	Description	Calibration price
Agilent	U1732C	LCR Meter	
Bird	81B	Coaxial Resistor	
	611 / 612	Termaline High/LowRange	
	6154	Termaline High/LowRange	
	AT-100	AntennaAnalyzer	
	ThruLine Wattmeter43	Including 1 Plug /In + each additional Plug /In	
B&K Precision	830	Capacitance Meter	
	879B	LCR Meter	
Charleswater	99100	ESD Device Tester	
Christie	RF80-K	Charger/Analyzer	
Daiwa	CN-801H	SWR & Power Meter	
	NS-660PA	SWR & Power Meter	
	NS-663B	SWR & Power Meter	
D+C-Airparts	ASDP-100	Accu Service Printer	
	DC-C603ED	Charger	
	DC-F1-4	Trickle Charger	
	DC-TC50	Trickle Charger	
Dräger	3000/7410/7510	Breath- and Alcoholic Meter	
Dranetz	305-PA3010	Phasemeter	
Elcontrol	VIPMK3	Energy Analyzer	
Elme	157 (and others)	ESD-Mat	
Fluke	720	Voltage Divider	
GeneralRadio	1413/1422	C-Decade/ Variable Capacitor	
	1562A	Sound Level Calibrator	
	583-A	Output Power Meter	
	722-D	C-Variable	
	874-LK20L	Coaxial Airline	
Gill	TCT1000	Capacity Tester	
GossenMetrawatt	0701S	Safety Meter	
	AT3	Three Phase Adapter MSP-Konstanter	
HewlettPackard	432A / 435	HF Power Meter	
iET	CS-300	C-Decade	
	RS-200	R-Decade	
Krohn-Hite	6200	Phasemeter	
Leader	171	Distortion Analyzer	
Lutron	SL-4001	Sound Level Meter	
Megabras	CPR-10G	Resistor box 1Mohm -	
Motorola	S-1350C	Wattmeter	
North Atlantic	RatioTrafo	AC Ratio incl. 4Decades + each additional Decade	
PacificElectro Dynamics	Primex543-1	Random Noise Generator	
PCE	PCE-VT204	Vibration measuring instrument	
Procom	SWR3000	Wide Band SWR Analyzer	
Simpson	890-2	Sound Level Calibrator	
Statech	4014 / 4015	ESD Tester	





Calibration & Measurement Services

Manufacturer	Model	Description	Calibration price
Tektronix	1503C	Metallic TDR Cable Tester	
Teledyne	all	Delay Line	
Testo	0554.0452	Sound Level Calibrator	
WolfgangWarmbier	PGT120	ESDTester	

5-10 Electrical High Power Test & Measuring Equipment

Manufacturer	Model	Description	Calibration price
sebaKMT	PQA1000	Power Analyzer	
sebaKMT	TDS NT	Cable Tester	
sebaKMT	HV DAC-300	Test & Diagnosis System	
sebaKMT	PD LOC-SX	Partial Discharge Medium	
sebaKMT	MV DAC-30	Test & Diagnosis System	
OMICRON	CMC356	Protective Relay Test Set	
OMICRON	CPC100	Multifunction Primary Test System	
FLUKE	345	Power Quality & Energy Analyzer	
FLUKE	437-II	Power Analyzer 3phase	
YOKOGAWA	WT3001E	Precision Power Analyzer	
YOKOGAWA	WT3002E	Precision Power Analyzer	
YOKOGAWA	WT3004E	Precision Power Analyzer	
CHROMA	66201	Digital Power Meter	
CHROMA	19032	Electrical Safety Analyzer	
CHROMA	63200A	High Power DC Electronic Load	
CHROMA	23110A	LED Load Simulator	
CHROMA	63800 Series	AC Electronic Load	
AVO	-	Power Analyzer	
HIOKI	Pw 3198	Power Quality Analyzer	
YOKOGAWA		Power Quality Analyzer	
FLUKE		Power Quality Analyzer	
LUTRON	DW-6090A	Power Quality Analyzer	
AVO	SVERKER750	Single Phase Relay Tester	
AVO	SVERKER780	Single Phase Relay Tester	
AVO	OTS60PB/80PB	Automatic oil Test Set	
AVO	TDS NT60	Cable Test System	
AVO	DAC300	Cable Test System for High Voltage	
AVO	TDS40/60	VLF Test System	
AVO	BT500-IS-1	Cable Fault Converter	
AVO	TDR1000/3P	Single Channel LV Cable Fault	
AVO	PMM-1	3-Phase Power Measurement Meter	

6. Avionics Test Equipment

Manufacturer	Model	Description	Calibration price
AAR	RMI2105D	Radio Magnetic Indicator	
ARG	ARG5410	Beacon Test Set	
Aeroflex	PSD373-1	Interface Cable	
	PSD60-2R	Fuel Quantity Test Set (only version without frequency selection)	
	IFR4000	VOR / ILS	
	IFR6000	XPDR / TCAS / DME	
Aerospatiale	35M5M0-113-1000	Smoke Detector Test Set	
Analogic	AN6520	Thermocouple Instrument Calibrator	
ASI	190B	Track Selector	
	200-2B	Track Selector	
	A1301	Synchro-Resolver Bridge	
Astrosystems	A602-16-2P	Synchro to Digital Converter	
	A202S-5	Synchro Standard	
	A702-16-2P	Digital to Synchro Converter	
Atlantis	ARA-552	Radio Altimeter	
	DRA-707	Radio Altimeter	
Avtech	CTS-700	SELCAL/ATSCALL Ramp Test Set	
Barfield	101-01401	Digital Fuel Quantity Test Set AC2K	
	2312G	Turbine Temp. Ind. Test Set	
	2548H	Fuel Quantity Test Set	
Bendix	MN-40E	Compass Simulator	
BFGoodrich	1201	ADF Panel	
	1203	ADF Panel	
	NAV2000	VOR/ILS/COM/MKR Bench Test Set	
	PSD2000-1	Fuel Quantity Test Set	
	PSD60-2R	Fuel Quantity Test Set (only version without frequency selection)	
	SDX2000	ATC/DME Generator	
Boeing	22-MUL-1069	Linear Servo Actuator Test Set	
	22-MUL-1599	Firex Discharge Cartridge Test Set	
	26-MUL-1599	Firex Discharge Cartridge Test Set	
	28-MUL-1222	F/F System Line Tester	
	DZZ7703-1 / -501	Firex Discharge Cartridge Test Set	





Calibration & Measurement Services

Manufacturer	Model	Description	Calibration price
Collins	477L1	Compass Simulator	
	479S-6	NAV-Generator	
	479S-6A	NAV-Generator	
	479V-3	Universal Precision Track sel.400Hz und30Hz	
	970W-1	ADF Antennen Simulator	
	978F-2S	Synchro Simulator	
	980N-1	Radio Altimeter Test Set	
Crane	99-791	Anti-Skid Field Tester	
	99-791-521	Adapter Cable Tester	
	99-791-563	Adapter Cable Tester	
CSI	DRM-4	Digital Resolver Meter	
Dassault	TMY2049503	APUTester	
DDC	SR-103	Angle Position Indicator	
DME	TU-14	Escape Slide Test Set	
Douglas	22MUL-1069	Linear Servo Actuator TestSet	
	4751004-1	Cabin/Cockpit Temp.Contr. lineChecker	
	5744830-1	Windshield Heater SystemLoadbank	
	5744901-1	Windshield Temp.Controller	
	DZZ7703-1 / -501	Firex Discharge Cartridge TestSet	
Dowty	9090	Resolver TestBox	
	TS9064	Potentiometer	
	PN682003006	Ground Check Electrical UnitRAT	
	PN682003007	Ground Check Electrical UnitRAT	
PN682003008	Ground Check Electrical UnitRAT		
EATON	DSRB-5CDA	Synchro-Resolver Bridge	
GE	A-1978	Fuelflow TestSet	
Gull	GTF-1 /-2	Fuel Quantity TestSet	
Hewlett-Packard	624C	X-Band TestSet	
Howell	H394Series	TempCal Tester	
IFR	ATC-600A	XPDR/DME Ramp TestSet	
	ATC-601	XPDR/S-Mode Ramp TestSet	
	ATC-1200Y3	XPDR/DME Bench TestSet	
	ATC-1400A	XPDR/DME Bench TestSet	
	COMM-120A	Communication Bench TestSet	
	COMM-760	Communication Bench TestSet	
	FM/AM1200	Communication Bench TestSet	
	FM/AM1500	Communication Bench TestSet	
	NAV-401L	Navigation Ramp TestSet	
	NAV-402A/P	Navigation Ramp TestSet	
	NAV-750A/B	Navigation Bench TestSet	
	RD 300 /301	WXR Bench Test Set(campaign:Novemb	
	RDX7708	WXR Bench Test Set(campaign:	
	T1401	TACAN Accessory unit forATC-1400	
TCAS201	TCAS Ramp Test Set		
JCAir	01-0235-00	NAV Test Set	
Kearfott	C 272 1011H	Precision Angle Indicator	
	ID-91B/ARN6	Compass Indicator	
King	KTS156	Antenna Simulator Test Set	





Calibration & Measurement Services

Manufacturer	Model	Description	Calibration price
Kustom	1201	ADFPanels	
	1203	DME,XPDR	
	SquawkNaut	XPDR/DME Bench Test Set	
Michel	NC2210	NAV /COMM	
	3000	XPDR TestSet	
North Atlantic	202BR / 212 / 213	Phase Angle Voltmeter	
	225	PAVM (only 400Hz)	
	2250	Digital Analyzing Voltmeter	
	545 / 100	Angle Position Indicator	
	5300	Synchro / Resolver Standard	
	5310	Synchro / Resolver Simulator	
	5330A	Synchro / Resolver Simulator	
	540S-743	Resolver Synchro Bridge	
	800	Only one Range(e.g. 90	
	8025 / 8300 / 8310A 8500 / 8810	Angle Position Indicator	
Platthaus	GPU	GPU-Test Set	
Rohde &Schwarz	CMS57	Radiocommunication Service Monitor	
Rolls-Royce	UT593	Engine Temperature Test Set	
Sextant	CA10	Synchro Test Set	
Sinters	9240SI	Loop Controller	
Smith	3707LMT	Fuel Quantity Test Set	
	1TE	Desynn Master Potentiometer	
	3TE	Desynn Master Indicator	
Sundstrand	PN682003006	Ground Check Electrical Unit RAT	
	PN682003007	Ground Check Electrical Unit RAT	
	PN682003008	Ground Check Electrical Unit RAT	
Sterela	Syn.Zero.Box	A300,A310	
TechAid	TA-900	Angle Position Indicator	
Tempitest	SPG-DR / -TX	Synchro Indicator /Transmitter	
Textron	LTCT27680-01	Overspeed Control TestSet	
TIC	TR-210/211	Multifunction TestSet	
	TR-220	Multifunction TestSet	
	T30C /T30D	NAV Test Set	
	T33B / T33D / T48D	XPDR TestSet	
	T-49C / T-49CA	XPDR TestSet	
Tri-Phenix	PX219	Radar Target Simulation	
TRT	SIM530	R/A TestSet	



7. Thermometer /Hygrometer

7.1 Temperature Probe /Sensor

Description	Remarks	Calibration price
Analog temperature indicator -40°C to 150°C	Tolerance & measuring points acc. DIN EN13190	
Measuring sensor for electronically thermometer. Range: -40°C to+1200°C (Thermocouple, PT100, PT1000, K-type,)	Calibration of the measuring sensor at5 temperatures measuring points	
Additional measuring sensor		



7.2 Temperature Measuring Device

Manufacturer	Model	Description	Calibration price
Dostmann Electronic	P655	Thermometer (incl. measuring sensor)	
Fluke	51	Thermometer Serie I toll	
	52	Thermometer Serie I toll	
	54	Thermometer Serie I toll	
Metra Instruments	METRA202	Thermometer (incl. measuring sensor)	
Oregon Scientific	THM912	Thermometer (incl. measuring sensor)	
SifamInstruments	2029T	Thermometer (incl. measuring sensor)	
Sika	TT7100	Thermometer (incl. measuring sensor)	
Simpson	AT246TM	Thermometer (incl. measuring sensor)	
SKF	TMDT2	Thermometer (incl. measuring sensor)	
Technoterm	1500	Thermometer (incl. measuringsensor)	
	5500	Thermometer (incl. measuringsensor)	
	9500	Thermometer (incl. measuringsensor)	
TES	TES1300	Thermometer (incl. measuringsensor)	
Testo	108	Thermometer (incl. measuringsensor)	
	110	Thermometer (incl. measuringsensor)	
	720	Thermometer (incl. measuringsensor)	
	735-1	Thermometer (incl. measuringsensor)	
	900	Thermometer (incl. measuringsensor)	
	9000	Thermometer (incl. measuringsensor)	
	901	Thermometer (incl. measuringsensor)	
	915-1	Thermometer (incl. measuringsensor)	
	920	Thermometer (incl. measuringsensor)	
	922	Thermometer (incl. measuringsensor)	
	925	Thermometer (incl. measuringsensor)	
950	Thermometer (incl. measuringsensor)		
VWR	EU620-0919	Thermometer (incl. measuringsensor)	
YFE	YF-160	Thermometer (incl. measuringsensor)	
Yokogawa	2455-15	Thermometer Serie I toll	



7.3 Temperature & Humidity Measuring Device

Manufacturer	Model	Description	Calibration price
Delta Ohm	HD2301-0	Thermo-Hygrometer	
Europe Suppliers	WS-7052	Thermo-Hygrometer	
IROX	IR4.3913.22	Thermo-Hygrometer	
Oregon Scientific	BAR32IHGN-K	Thermo-Hygrometer	
	EMR812HGN	Thermo-Hygrometer	
	ETHG913R	Thermo-Hygrometer	
	THGR228N	Thermo-Hygrometer	
	RTGR328N	Thermo-Hygrometer	
Testo	610	Thermo-Hygrometer	
	622	Thermo-Hygrometer	
	625	Thermo-Hygrometer	
	645	Thermo-Hygrometer	
	6010	Thermo-Hygrometer	



7.4 Temperature- & Humidity Data logger

Remarks			
Calibration with 3 humidity and 1 temperature for each deviating measuring point we charge.			
Manufacturer	Model	Description	Calibration price
Dostmann Electronic	LOG110	Temperature/Humidity Datalogger	
TFADostmann	30.5005	Temperature/Humidity Datalogger	
	30.5010	Temperature/Humidity Datalogger	
Elpro	ECOLOG_TH1	Temperature/Humidity Datalogger	
	ECOLOG_TN2	Temperature Datalogger	
Lufft	OPUS 10THI	Temperature/Humidity Datalogger	
	OPUS 20THI	Temperature/Humidity Datalogger	
Measurement Computing	USB-502	Temperature Datalogger	
Rotronic	HL-20D	Temperature/Humidity Datalogger	
Saveris	H3D	Temperature/Humidity Datalogger	
	T1D	Temperature Datalogger	
	T3D	Temperature Datalogger	
Testo	175H1	Temperature/Humidity Datalogger	
	175-H2	Temperature/Humidity Datalogger	
	175T1	Temperature Datalogger	
	175-T2	Temperature Datalogger	
Vaisala	HMP155	Humidity and Temperature Probe	



After a former consultation, if the software and the hardware exists. For units without a display, an additional fee will be charged.

7.5 Dry-Block Temperature Calibrator

Description	Remarks	Calibration price
Various	up 1200°C	on request



8. Crimp Tool

8.1 Hand Crimp Tool

Manufacturer	Remarks AWG No: 10 -30 Ø 5.3mm ² -0.051mm ²	Calibration price
AMP	up to 3 terminal sizes each additional terminal size	
Buchanan		
Burndy		
ITTCannon		
DMC /Daniels		
Harting		
JST		
Kings		
Lobster		
Molex		
Raychem		
Thomas & Betts		
Trompeter Electronics		
Tyco		
Weidmüller		



Manufacturer	Remarks AWG No: 2 -8 Ø 33.6mm ² -8.4mm ²	Calibration price
AMP	by 1 terminal size each additional terminal size	
Buchanan		
Burndy		
ITTCannon		
DMC /Daniels		
Harting		
JST		
Kings		
Lobster		
Molex		
Raychem		
Thomas & Betts		
Trompeter Electronics		
Tyco		
Weidmüller		



8.2 Pneumatic - / Hydraulic Crimp Tool

Manufacturer	Remarks	Calibration price in CHF
AMP	up to 2 terminal size each additional terminal size	
Tyco		
Pico		



8.3 Safety cable tool

Hersteller	Modell	Bezeichnung	Calibration price
Bandit	Tie-DexII	BandingTool	
DMC	DBS-1100	BandingTool	
	SCT327	Safe-T-CableTool	



9. Length Measuring Equipment

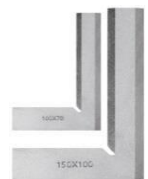
9.1 Calipers and Gauges

Description	Remarks	Calibration price
AlmenGage		
External Micrometer	0 -100	
External Micrometer (special design with interchangeable anvils)	100 - 200 200 - 500 500 - 1000	
Micrometer with Dial Indicator	0 -50	
Micrometer Head	0 -25 0 -50	
Dial Comparator		
Lever-Type Dial Indicator		
Height Gauge	0 -800	
Height Caliper	0 -500	
Internal Micrometer with 2-pointcontact each extension	Micrometer element 0 -900	
Internal Micrometer with 3-	0 -200	
Length Measuring InstrumentTesatronic		
Calipers	0 -150 0 -500 0 -1000	
Dial Gauge	0 -50 0 -100	
Coating Thickness Gauge	0 -5	
Caliper Gauge	0 -100	
Depth Caliper	0 -300	
Depth Micrometer	0 -100	
	0 -300	



9.2 Straight Edges, Squares and Protractors

Description	Remarks	Calibration price
Beveled Straightedge	< 500	
Beveled Edge Square	< 200	
Straightedge	< 1000	
Flat Square, Try Square	< 200	
Digital Angle Protractor		
Analog Angle Protractor		



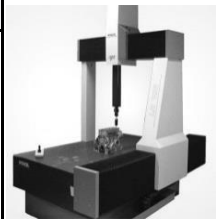
9.3 Length Standards

Description	Remarks	Calibration price in CHF
Setting Gauge for Micrometers	0 -200 200 - 500 500 - 1000	
Gauge Blocks (5-point Measurement)	0.5 - 100, 1st Gauge Block additional Block (K12)additional	
Setting Ring (limited accuracy)	2 -200	
Cylindrical plug gauge		
Gap gauge		
Feeler gauge		



9.4 Special Design (3D measuring machine)

Description	Remarks	Calibration price
Gauges Work pieces	N/A	N/A



10. Time

10.1 Stopwatches

Description	Remarks	Calibration price
Stoppers/ Stopwatches/ corn meter	analog	
Stoppers/ Stopwatches/ corn meter	digital	



10.2 Frequency Standard

Manufacturer	Model	Description	Calibration price
Frequency Electronics Inc.	FE-5650A	Frequency Standard	
Rohde & Schwarz	XSD2 /XSRM-Z	Quartz oscillator	
Efraton	FRK-H	Frequency Standard	





11-0 Calibration & avionics capabilities list

Reference Standards.	Pressure & Vacuum
<p>Multifunction Standard Calibrators. Meter Calibrators - (High Performance Standards). AC/ DC Thermal Transfer Reference Standard. Frequency Reference Standards. High Accuracy Standard DMM's. Phase Angle Reference Standards. Reference Standard Capacitors. Reference Standard Inductors. Reference Standard Resistors. DC Reference Standard cells. DC Reference Standards. AC Reference Standards. Precision Resistance Measuring Reference Standard.</p>	<p>Pressure/ Vacuum indicators. Pressure/ Vacuum calibrators Pressure Pumps, Vacuum Pumps. Manometers. Deadweight Testers. Pressure Switches. Pressure Transmitters / Transducers. Pressure & Vacuum Gauges. Air data test sets, Pneumatic Controllers. Pressure Recording & Control Systems. Oil pressure switch and sensor Pitot Static test sets. Pneumatic pressure testers. Tire gauges. Barometers. Differential Pressure Measuring Devices. Pressure Gauge Testers and Pressure Balances.</p>
Mechanical & Force	Dimensional & Angular
<p>Force Measurement (Tension or Compression). Force dynamometers. Force Gauges. Strain and Displacement Measurement. Torque Wrenches / Calibrators. Torque meters. Vibration Equipment. Vibration Meters. Vibration transducers Weight & Balance system. Load Cells With Indicators. Tensiometers. Testing Machines.</p>	<p>Dimensional Measuring Tools. Micrometers, Indicators. Calipers, Height Gages. Gage Blocks. Standard Rods. Thickness Gauges. Inclinometers. Protractors. Length Standards. Squares. Levels. Pin & Ring Gauges Straight Edges. Angle Plates. Rulers. Measuring Tapes. Length bars and accessories Engineers' comparators for external measurement. Precision linear scales. Fixtures. Dial gauges.</p>



Calibration & avionics capabilities list.

Electrical & Electromechanical	Temperature & Thermodynamics
<p>AC/DC Voltage Generators. AC/DC Current Generators. Analog/Digital Multi meters. Clamp meters. LCR Meters. LCR Simulation. Insulation Testers. Meggers, Dielectric Testers. Oil Breakdown Testers. High Potential Testers. High Voltage Measurements. Impulse Testers. Low Ohm Resistance Testers. Earth Ground Resistance Testers. Circuit Breaker Test Sets. Voltage and Current Meters / Recorders. Electric Power and Energy Meters. Varmeters. Power factor Meters. Phase Angle Meters/ Phase Indicators. Phase Angle Generators. Power Quality Analyzers. Power Supplies and UPS Systems. Galey Equipment. Relay Test Equipment. AC/DC Motors. Transformer Test Equipment. Ultrasonic / Eddy current Testers. Inductors and Transformers Capacitors. Electrical Control Devices. Load banks testing. <i>Panel Meters.</i> Watt, VAR Calibrators / Transducers. Cable Testing Equipment TDR's / length meters / fault locators. Electronic Controllers / Control Instrumentation. EMC Analyzers. Battery Testers. Ballast and light systems. Shunt and Conductors. Resistance Boxes and Potential Dividers. Voltage Standards and Current Standards Transfer Instruments (AC/DC) Calibrators for Instrumentation Indicating / Recording Instruments Bridges, Potentiometers and Test Sets</p>	<p>Temperature Indicators / Calibrators. Thermometers, Thermistors. Thermocouples Calibration / Verification. RTD Probe Calibration / Verification. RTD Calibrators. Resistance Simulators For PT-100 Indicators. Oven, Refrigerators and freezers. Temperature Environments. Dry Block Calibrators Water Baths, Sand Baths, Oil Baths. Incubators. Autoclaves. Furnaces. Humidity control/systems. Temperature Switches Calibration. EGT Testers. Engine Trim Kits Temperature Transmitters/ Transducers. Temperature Controllers/<i>Temperature Gauges.</i> Temperature Electrical Simulators. Temperature Electrical Measurement. Temperature <i>Recorders.</i> Data Loggers & Control Systems. Germanium thermometers Thermistors and semiconductor thermometers. Liquid-in-glass thermometers Vapour pressure thermometers Filled metal systems. Bimetallic systems.</p>



Calibration & avionics capabilities list.

Low Frequency & Time	Electronics
Frequency Counters/Timers Frequency meters Wave meters Counters Time interval meters Clocks and watches Stroboscopes Frequency standards	Frequency Devices. Frequency Counters. Multifunction Frequency generators. Process Instrumentation Calibrators. Aviation electronics Equipment. Oscillators., Function generators. Frequency calibrators. Oscilloscopes / Scope Meters. Oil/fuel quantity test set. Distortion Analyzers. ECG Simulators./Safety Analyzers Defibrillator Analyzers. Recorders / Data loggers / Tape reproducers. Avionics & Instrument Test Equipment. Alarm Systems. Synchro /resolvers. Instrument Test Equipment. Audio / Video Equipment. Audio / Video control panel. Electronic Controllers. Passenger Address System Selective Level Meters. Signal Conditioners. Tachometers. Seat Electronic Boxes Seat Controllers Speedometers. Tacho generators. Light Strobes Waveform Measurement Signal Sources Data acquisition systems. Digital quartz frequency units.
Acoustical	
Microphones and Headphones. megaphones Headsets. Sound Level Meters. Sound Level Calibrators. Sound survey meters and impulse level meters Sound spectrum analyzers and filters Acoustic calibrators. Sound level recording systems Standard sound sources Audiometers.	
RF Systems & PULSE Techniques.	
RF & Pulse Technique Equipment. HF/VHF/MMR Test Equipment. Spectrum Analyzers RF Signal Sources. RF Power Meters/ Attenuators. DME/ATC Test Equipment. Modulation Analyzers. Communications & Radio Test Sets. Transmission Test Sets. VOR/ILS Test Equipment. Beacon Test Set. Navigational Test Equipment. Frequency /Amplitude Modulation. Sweep characteristics. Communication Equipment.	