

# ACCREDITED CALIBRATION SERVICES

Accredited - laboratory calibrations and  
on-site calibrations approved by  
major pharmaceutical companies around the world



## CONDUCTIVITY CALIBRATION

- 🔗 WFI - Water For Injection
- 🔗 Purified Water
- 🔗 Steam Condensate Conductivity
- 🔗 CIP/SIP - Washer and other Utilities

The Insatech Calibration Laboratory is accredited by DANAK (Danish Accreditation and Metrology Fund) under accreditation CAL Reg. No. 484



To achieve this accreditation our laboratory Quality Assurance system, calibration methods and technical competences have been inspected and audited by the Danish authority DANAK, and meets all requirements of ISO17024:2005.

We know that our customers appreciate working with professional and competent partners. Having worked in the field of calibration for a long time, we have built up a large knowledge base and a lot of experience. To document the quality of the work being done, we decided to seek accreditation in the field of conductivity, to enable primarily our customers in the pharmaceutical industry to be able to get a well documented and traceable means of calibrating their conductivity equipment to the standards required by USP (United States Pharmacopeia) or EP (European Pharmacopoeia).

We are since may 2007, the first laboratory in the world to be able to offer accredited conductivity calibration of master meters that will enable users to calibrate their meters for use in the pure water areas, and actually conform to e.g. USP requirements.

The Insatech Calibration Laboratory will ensure you quick and competent handling of your conductivity calibrations with full documentation.

### **What criteria's should you consider selecting a supplier for your calibrations?**

- Professional and appropriate testing laboratory with the right equipment – calibrated and maintained?
- Adequate quality assurance and quality control procedures e.g. according to ISO 9001?
- Appropriate sampling practices/sound testing and inspection procedures?
- Accurate and safe recording and reporting of data?

These are the minimum demands that you should ensure are fulfilled, but even so you are not confident that you have selected a technically competent partner?



### **What is the difference between traceable calibration and accredited calibration?**

ISO9001 does not evaluate the technical competence of a laboratory, and does not assure you that the test, inspection and calibration data are accurate and reliable. Your decision is in this case based on the confidence that you have in the actual supplier and your experience with the other services/products you get from the supplier.

### **Why use an accredited calibration laboratory?**

The ISO17025 standard is used for evaluating laboratories, and this standard has the criteria's relevant to a laboratory to perform precise and accurate test and calibrations

- Technical competency of the personnel
- Validity and appropriateness of the procedures and methods
- Traceability of calibrations to national standards
- Appropriate application of measurement uncertainty
- Suitability, calibration and maintenance of reference equipment and the laboratory
- QA of inspection and calibration data
- Continued compliance are ensured by audit from the national authorities
- Suitability, calibration and maintenance of reference equipment, laboratory environment, Quality assurance of calibration data.

All this gives you the following benefits of using an accredited calibration laboratory:

### **Reduce costs and avoid expensive retesting:**

Documented knowledge – you save costs and time, minimising the cost of errors due to inaccurate or invalid measurements, misleading measurement results etc.

**Enhance Your Customers and authorities confidence:**

Confidence in your product is enhanced if your customers and authorities know that critical measuring instruments has been evaluated by an independent, competent calibration facility, that has been evaluated by a third party (DANAK)

We offer 2 types of conductivity calibration, and electrical calibration of transmitter. Our Conductivity calibration (cell constant) is done using traceable solutions from Danish Fundamental Metrology, and our Comparative conductivity calibrations are carried out according to accredited methods.

**Why calibrate conductivity?**

To be able to get a well documented and traceable means of calibrating your conductivity equipment to the standards required by USP (United States Pharmacopeia) or EP (European Pharmacopoeia). With an INSACAL™ master meter you get a very flexible calibration tool. You can calibrate by closed loop procedures or in an open beaker. This allows you to choose whether your cell is calibrated on-site in-situ or not. If customers use a "Master Meter" these need to be calibrated.

**Issues that need to be defined are:**

- Accuracy and definitions
- When to do electrical calibration
- When to do temperature calibration
- When to use comparative calibration
- When to use a standard solution to determine the cell constant
- Measuring ability

**Other services we can offer:**

- Let us help you manage your calibration intervals – make sure that your calibration equipment always is calibrated and up to date before the period of validity expires
- Training courses and education of your staff to ensure optimal efficiency
  - Consultation and advice in setting up and maintaining calibration facilities
  - Facilities management

**On-site Calibration**

- On-site calibration of conductivity measuring loops approved by major pharmaceutical industries.
- On-site and laboratory calibrations of flow, temperature, pressure, pH



CAL Reg. Nr. 484

**Contact us for a specific and detailed quotation based on your requirements**

Irish Power & Process, The Old School House, Stoneyford, Co. Kilkenny. Tel: 056 7700800  
[www.irishpowerandprocess.com](http://www.irishpowerandprocess.com) or [noel@irishpowerandprocess.com](mailto:noel@irishpowerandprocess.com)

Measurement	Measuring range	Measuring ability	Standard solution	Method	Comment
Temperature	0,01°C ... 90°C	± 0,041°C		Insatech KF5.5	
Conductivity (cellconstant)	100 µS/cm (10 mS/m)	0,34%	DFM100	Insatech KF5.6	At T-sol. 25°C ±1°C
Conductivity (cellconstant)	1 mS/cm (100 mS/m)	0,27%	DFM1000	Insatech KF5.6	At T-sol. 25°C ±1°C
Conductivity (cellconstant)	10 mS/cm (1 S/m)	0,26%	DFM10000	Insatech KF5.6	At T-sol. 25°C ±1°C
Conductivity (cellconstant)	100 mS/cm (10 S/m)	0,24%	DFM100000	Insatech KF5.6	At T-sol. 25°C ±1°C
Conductivity (comparison)	1,300 µS/cm ≤ Act. ≤ 99,9 µS/cm	0,96% Act.		Insatech KF5.7	
Conductivity (comparison)	100,0 µS/cm ≤ Act. ≤ 239 mS/cm	0,53% Act.		Insatech KF5.7	



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DANAK is a Service Company handling the administration of accreditation and metrology in Denmark based on a contract with The Danish Safety Technology Authority which is part of The Danish Ministry of Economics and Business Affairs and a member of ILAC.

ILAC - the International Laboratory Accreditation Cooperation - is an international cooperation of laboratory and inspection accreditation bodies formed more than 30 years ago to help remove technical barriers to trade.

Furthermore all our activities in Insatech A/S are certified according to ISO/IEC 9001:2008, and has been, since 1994.

Irish Power & Process is ISO 9001:2008 approved and a major supplier of advanced measurement and calibration solutions to high-end industries.

**You can find more information on the following websites:**

[www.insatech.com](http://www.insatech.com)  
[www.insacal.com](http://www.insacal.com)  
[www.danak.dk](http://www.danak.dk)

[www.ilac.org](http://www.ilac.org)  
[www.irishpowerandprocess.com](http://www.irishpowerandprocess.com)



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