

**Our product lines:**

Thermostats · Circulation chillers · Water baths  
Process cooling systems · Heat transfer systems · Secondary circuit systems  
Viscometers · Tensiometers

**LAUDA**

The right temperature worldwide

**LAUDA**



1-113-e-516.11 – Subject to technical changes.

Overall Brochure 2011/2012

Thermostats, Circulation chillers, Water baths



**LAUDA – the big one**

Thermostats, Circulation chillers, Water baths

Overall Brochure 2011/2012

**NEW**

LAUDA ECO with natural refrigerants

LAUDA Integral XT 550 and XT 550 W

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# Advantages



## Large selection

LAUDA has the right solution for almost any requirement. The water baths and the high-value LAUDA Alpha heating and cooling thermostats are the first choice for routine tasks. The ECO and Proline thermostats allow temperature control that is both professional and economical. High cooling capacities and rapid cooling rates are provided by the Proline Kryomats and the high-performance Integral T und Integral XT process thermostats ensure lightning-speed temperature changes with external temperature regulation.



## Convenient use

LAUDA equipment stands out for its excellent handling, optimum ergonomics and intuitive operation. As such, the removable Command remote control allows rapid changes of operation settings. The self-adaptation of the controller is new and already integrated into all LAUDA Proline cooling thermostats with a Command remote control as well as all LAUDA Integral XT process thermostats. It automatically calculates the optimum control parameters for different applications.



## Superior quality

For more than 50 years constant temperature equipment and measuring instruments of outstanding quality have been engineered, designed and fabricated by LAUDA. Since the very beginning the owners and the management of LAUDA have been committed to their customers and partners worldwide and concentrated all their efforts on providing the global laboratory community with the highest possible standards according to usability, safety, ease of handling and the proverbial LAUDA durability.



## Industry leading safety concepts

All products are compliant with the strictest safety requirements and constraints. Consideration is given to all the relevant DIN and international standards such as IEC, UL and CSA. Furthermore, intelligent technologies and sophisticated safety concepts provide a good feeling to any application. As such, the LAUDA Proline and ECO, for example, have “double safety circuit” technology with reciprocal checking  $\mu$ -controllers, which switch off the equipment in the event of a fault. The electronic low-level protection detection of the ECO allows operation only when the function is fault-free.



## First class support – internationally

“We are there”. The LAUDA team at our headquarters and in the international subsidiaries and agencies, the professionally and comprehensively trained sales representatives, and the staff of the specialist laboratory facilities provide friendly, fair and competent advice.



## Reliable service

LAUDA equipment is known for its robustness and durability. However, should you ever need support – usually after many years of installation – we are there for you: as a LAUDA customer, you have access to comprehensive services, ensuring greater flexibility and profitability. One thing is certain: LAUDA service will not let you down.

## Family Company with Tradition

- 1956** Dr. Rudolf Wobser founds the MESSGERÄTE-WERK LAUDA Dr. R. Wobser KG in Lauda in the region of Baden.
- 1964** Birth of the heating and cooling systems for industrial thermostating tasks. Three years later: development of the first tensimeters and film balances.
- 1977** After the death of the father, Dr. Rudolf Wobser, Dr. Gerhard Wobser and his brother Karlheinz Wobser take over the management as partner with unlimited liability.
- 1982** Launch of the world's first mass-produced thermostats using microprocessor technology. Proportional cooling and external control are further sensational inventions.
- 1989** As part of the expansion of the range of products, the MESSGERÄTE-WERK LAUDA is renamed LAUDA DR. R. WOBSEY GMBH & CO. KG.
- 1994** The first circulation chillers of the WK class put an economical end to the wasteful use of precious drinking water as a coolant. A new generation of compact thermostats is introduced. The high quality of all LAUDA products is confirmed upon certification according to DIN ISO 9001.
- 2003** Karlheinz Wobser retires. Dr. Gunther Wobser, part of the company since 1997, is appointed managing partner.
- 2005** On 1<sup>st</sup> January, the founding of LAUDA France heralds the start of a new age of internationalisation. This first company outside Germany supports the local agencies with customer advice and care.
- 2006** On 1<sup>st</sup> March, LAUDA celebrates the 50<sup>th</sup> anniversary of the company. Two months later, LAUDA founds subsidiary LAUDA Wostok in Russia – another milestone in the internationalisation of the company.
- 2008** LAUDA consistently continues the global expansion strategy with the founding of subsidiaries LAUDA America Latina C.A., LAUDA China Co., Ltd. and LAUDA-Brinkmann, LP. USA. With the new production hall plus office building and an investment volume of around 3 million Euro, the heating and cooling systems business unit gained space for additional growth.
- 2009** At ACHEMA, LAUDA presents an equipment showcase. All of the staff from the six foreign LAUDA subsidiaries meet for the first time at the LAUDA World Meeting
- 2010** In March, after more than 32 years, Dr. Gerhard Wobser retires from his function as Managing Director. His son Dr. Gunther Wobser assumes his responsibilities.
- 2011** By acquiring the chiller business from Donaldson Inc., LAUDA broadens the product range with industrial process circulation chillers of the brand "Ultracool". The company, located in Terassa (Barcelona) with roughly 40 employees will be run separately under the name of LAUDA Ultracool S.L.



Managing Director  
Dr. Gunther Wobser



Company founder  
Dr. Rudolf Wobser



Karlheinz Wobser



Dr. Gerhard Wobser

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With more than 350 employees, more than EUR 60 million in annual turnover and seven foreign subsidiaries, LAUDA is the global leader in the manufacture of innovative thermostatic equipment and systems for science, application technology and production, as well as for high-quality measuring devices. With more than 50 years of experience and a unique product portfolio ranging from compact laboratory thermostats to industrial circulation chillers to customised heating and cooling system projects with more than 400 kilowatts of cooling power, LAUDA is the only company that can guarantee optimized temperature throughout the entire value-added chain for its 10,000 plus customers worldwide.

Quality products from LAUDA keep temperatures constant to an impressive 5 thousandth °C or make targeted changes in an area spanning -150 to 400 °C. Through active cooling or warming, production processes are accelerated or, indeed, made possible in the first place. In such cases, LAUDA, for example, replaces the uneconomical mains-water cooling with environmentally friendly and cost-efficient devices or, alternatively, uses existing forms of primary energy such as thermal discharge. LAUDA measuring instruments determine the surface tension, tension limit and viscosity of liquids precisely.

As a highly specialised niche provider, LAUDA ranks either first or second in almost all future-oriented sectors. In the semi-conductor industry, all the renowned manufacturers and suppliers place their trust in LAUDA thermostats and heating and cooling systems. LAUDA quality products also enable both the research and mass production of vital medicines. In the growing medical technology market, circulation chillers made by LAUDA cool patients and guarantee safe open-heart surgery. LAUDA industrial circulation chillers provide reliable and cost effective cooling for printing machines, injection moulding plants and laser processing machines. Further principle applications include material inspection, biotechnology and the cooling of laboratory instruments and machines. LAUDA thermostats are, naturally, also used in measuring instruments manufactured by us. For example, in order to determine the viscosity of aviation fuel under real conditions at 10,000-meter altitude, the sample is cooled in the laboratory down to -45 °C.

Through numerous innovations and ongoing investment, LAUDA is sustainably improving its excellent market position and is growing both in the main European market as well as overseas.

**LAUDA – The right temperature worldwide**



## Against the greenhouse effect – natural refrigerants for LAUDA ECO cooling thermostats



ECO RE 1050 GN

Since beginning of 2011 the air-cooled and water-cooled ECO Silver and Gold cooling thermostats with natural refrigerants are available in the 230 V; 50 Hz voltage variant.

The all in all 24 cooling thermostats are available at only slight extra cost. There is no difference in the appearance of the thermostats from devices with conventional refrigerant. Also the performance data is identical. This means that users can make a significant contribution to reducing the direct greenhouse effect.

## Important additions to the LAUDA process thermostats – LAUDA Integral XT 280, XT 550 and Integral XT 550 W



Integral XT 280

The LAUDA Integral range of equipment is being expanded by three process thermostats – within the Integral device range the XT 280 is the first air-cooled device for especially high power requirements in the low temperature range down to  $-80\text{ }^{\circ}\text{C}$ . The process thermostat operates from  $-80$  to  $200\text{ }^{\circ}\text{C}$ . With a cooling output of  $1.5\text{ kW}$  at  $20\text{ }^{\circ}\text{C}$  and  $4\text{ kW}$  heating output, fast changes in temperature at external applications are possible.

With cooling outputs of up to  $5.4\text{ kW}$  the Integral XT 550 and XT 550 W complement the class of equipment for the temperature range between  $-50$  and  $200\text{ }^{\circ}\text{C}$ . Both devices supply pump performance capacities with a maximum of  $2.9\text{ bar}$  pump pressure and an output flow rate of up to  $45\text{ L/min}$ .

## Operation in Ex-zones – Command Ex i



Command Ex i

The Command remote control is available in an explosion-proof version. The intrinsically safe design of the control panel is authorised for explosion protection II 2G Ex ia IIC T4 Gb. In addition to the actual remote control, barrier boxes are also supplied, which are connected between the device and the control panel in order to ensure that the electrical currents are minimized. The barrier boxes connected to the thermostat are connected to the Command as well.

More and more customer applications require high temperatures around  $200\text{ }^{\circ}\text{C}$  or above. LAUDA responded to this market requirement by extending the working temperature range for a multitude of Integral XT process thermostats. The units are now provided with an extended maximum temperature of  $220\text{ }^{\circ}\text{C}$  as standard. The extension of the temperature range applies to the following thermostats: XT 150, XT 250 W, XT 350 W, XT 750, XT 950 W, XT 1850 W and XT 1850 WS. In the course of this extension, the temperature range of the heat transfer liquid Kryo 55 has been approved to  $220\text{ }^{\circ}\text{C}$ .

A typical application for the LAUDA Integral XT is the thermostatic control of exothermic and endothermic chemical reactions in pilot plants or mini-plants, which take place in glass, enamelled or stainless steel reactors. The LAUDA Integral XT process thermostats are also employed in materials testing at low temperatures and on test rigs in the automotive industry.



## LAUDA buys a Spanish manufacturer of industrial circulation chillers

By purchasing the chiller business from Donaldson Inc., a global leading manufacturer of filtration technologies, LAUDA integrates a completely new product line. The former Donaldson company, Ultrafilter S.L., located in Terassa, Spain, was founded in 1966 and manufactures industrial circulation chillers under the "Ultracool" brand with cooling outputs up to 265 kilowatts and a working temperature range from -5 up to 25 °C. With immediate effect, LAUDA supplies worldwide relevant manufacturers of digital printing machines, injection molding equipment, laser processing and sorting machines. The product line Ultracool broadens the LAUDA product range significantly and thus LAUDA becomes more and more interesting for manufacturers of industrial machinery which require thermostating. The sophisticated production site is located in Terassa, roughly 30 kilometers north of Barcelona and will be managed completely independently under the company name LAUDA Ultracool. A separate brochure for LAUDA Ultracool is available immediately.



Ask for more information about LAUDA Ultracool. These and additional information can be found in the download area at: [www.lauda.de](http://www.lauda.de)

## LAUDA – Much more than constant temperature equipment

The right temperature worldwide and the greatest precision – at LAUDA, these claims also extend to include extremely high performance Heating and Cooling systems and intelligent Measuring instruments.

### LAUDA Measuring Instruments

Viscometers and tensiometers from LAUDA are essential for the analysis of polymers, oils, greases and tensides. With the modular concept of the PVS process viscometer, measuring routines may be conducted effectively, quickly and safely and repeated as desired. The LAUDA iVisc capillary viscometer is new, space-saving, fully automatic and easy to operate. With LAUDA tensiometers, it is possible, for example, to determine the exact interfacial surface tension of transformer oils. Countless measuring instruments have long been used in the food and beverage industry, in petrochemistry, by tenside manufacturers and in pharmacy.



### LAUDA Heating and Cooling systems



In accordance with the principle of "modular engineering", LAUDA process cooling systems, heat transfer systems and secondary circuit systems are planned and built precisely according to customer's wishes: process-oriented, customized and with precision control, meeting the strictest safety standards. With a temperature range of -150 up to 400 °C, LAUDA systems heat and cool to an accuracy of one tenth of a degree Celsius. As the requirements for temperature regulation systems are constantly increasing, the modern LAUDA heating and cooling modules are flexibly extendable and modifiable. The combination of planning, production, our own test bay and a comprehensive service package makes LAUDA heating and cooling systems a valued partner around the world.

# Subsidiaries

- LAUDA headquarters in Germany
- Worldwide subsidiaries



# LAUDA. The right temperature worldwide. Our subsidiaries.

## LAUDA-Brinkmann, LP

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LAUDA cooperates with more than 100 representatives around the world. Thoroughly trained and highly qualified employees in sales and service of our representatives give friendly and competent advice to our customers worldwide. Please refer to **[www.lauda.de](http://www.lauda.de)** for detailed contact data of your local LAUDA representative (sector: Company → Worldwide).