

# Therminus

*The LAUDA info magazine*

Issue 1/2007



## The constant force – 50 years LAUDA

- Professional temperature control in pilot plants and in mini plants – Integral XT Process Thermostats
- Water baths – the new lab assistants
- New subsidiary in Moscow

### New heads at LAUDA



#### Matthias Sigmann

has been the Sales Manager for Asia since 1 September 2006. He has been with LAUDA since 1998. A year later he became the Manager of the LAUDA Service Centre and then the graduate engineer was appointed Sales Manager OEM. Since September 2004 he is also Associate Sales Manager.



The new Sales Manager OEM is **Dr. Jürgen Grebner**. During his studies and scientific work at the Frankfurt/Main University, he worked at the local physics laboratory. After graduation and almost four years as Product Manager for lab scales, he worked as Area Manager for a German specialist provider of analytical HPLC systems for almost nine years.



The designated Marketing Manager is **Werner Lange**. His predecessor, Dr. Carsten Persner, left the company for familiar reasons. Werner Lange worked for the laboratory device manufacturer Heraeus Instruments in Hanau as Product Manager for Heating and Biotechnology. The graduate biologist was also Director of Product Management at the headquarter of Eppendorf AG, Hamburg.



Since July, **Debora Schneider** has strengthened the Marketing division. She was a trainee at LAUDA and learned the skills of an industrial clerk.



Information on the new LAUDA Aqualine water baths are summarised in a brochure. Also new: Integral XT information on the new high-performance devices will be supplied together with our new brochure.



The completely revised LAUDA brochure for the line of thermostats, circulation chillers and water baths includes all the new products from 2006. Comprehensive information on the devices and technical data provide a quick overview. The new "The big LAUDA" brochure for 2006/2007 is now available in four languages (German, English, French and, starting from this edition, also in Spanish).

To order, simply use the coupon on the rear of this magazine.



### Dear LAUDA friends ...

Our company celebrated its 50<sup>th</sup> anniversary in the early summer. During the past five decades, LAUDA has evolved into a "Constant force" in temperature control technology, which was also the motto of our anniversary which caught much attention. In this edition of our customer magazine, you will be presented with a firework display of events and new devices.

We introduced the new unit ranges of the different divisions of our company at international specialist fairs. The Forum Labo in Paris was the prelude, followed by Analytica in Munich and finally ACHEMA in Frankfurt. The new LAUDA Aqualine water baths for all thermostating applications in the lab and the innovative LAUDA Integral XT Process Thermostats were met with enthusiasm. Furthermore, the new viscosity and surface tension measuring devices, as well as new extended versions of heating and cooling systems also attracted great attention.

In 2006, LAUDA continues with the extension of its international activities

and has established the LAUDA Wostok subsidiary in Moscow in May of this year. The investment in this market is a clear commitment to the positive success prospects for Russia and the CIS states and an important milestone in the corporate internationalisation strategy.

Our anniversary year is the most successful year in the history of the LAUDA Company. Record results of the last two years are again surpassed and we will exceed the, for LAUDA, striking turnover threshold of 30 million euro. We were only able to grow so successfully during the past years due to the trust we received from our customers. As a clear commitment to our location, we will construct new production halls during the coming years, so that we can supply you with our quality products reliably and quickly.

Enjoy browsing through this Anniversary Edition.

Dr. Heinrich Paul  
Technical Managing Director

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# Ready for any challenge

## LAUDA Aqualine water baths – the basis for all thermostating tasks

The new LAUDA Aqualine water bath series fascinated the specialist public for the first time at the ACHEMA 2006 trade fair. With

expected from LAUDA, the LAUDA Aqualine water baths captivate with sophisticated details. For instance, the digital LED display provides a particularly simple and fast commissioning. The recessed operating elements protect the electronics from dripping water and soiling. The integrated overtemperature protection permits safe continuous operation. And the innovative heating concept ensures optimal temperature distribution.

## For pilot plants and mini plants

The LAUDA Integral XT Process Thermostats also premiered at ACHEMA. XT 150 and XT 750 have been on the market since the beginning of the year, and five further additions extend the programme by water-cooled devices as well as a high-temperature version. With its



*LAUDA Integral XT 750*

Process Thermostats, LAUDA now covers the range from -50 to 300 °C with a refrigerating capacity of between 1.5 and 18.5 kW. Typical applications are thermostating of double-walled glass or metal reactors in the chemical or pharmaceutical industries, reaction blocks in combi-national chemistry and stirrer tanks and fermenters in biotechnology.



*Control unit*

their various bath sizes, the LAUDA Aqualine water baths offer an economical introduction into the world of thermostating and is orientated to the requirements of biological, medical and biochemical laboratories. Typical application areas are the preparation of cytobiological or medical samples for analysis or pre-thermostating of environmental samples for spectroscopic analysis. As not otherwise

Further information on the devices:

- [www.lauda.de](http://www.lauda.de)
- Fax coupon



*Process cooling unit SUK 600 L in explosion-proof version.*

### Specialist support for heating and cooling systems

Progressive products deserve progressive service. This particularly applies to the complex heating and cooling systems and makes professional support by experts essential. The LAUDA Team is able to revert back to the huge wealth of experience from many successful projects. Highly qualified service technicians and partners are available worldwide for rotational inspections. So that the system is always maintained in due form and remains verifiably safe. In special cases, the LAUDA Service Team is available 24/7.

The SUK 600 L Process Cooling System creates a refrigeration capacity of 170 kW at -37 °C. The system is air-cooled and supplies five secondary circuits which, as explosion proof versions, can be installed directly in the ex-area. In this way, in fine chemical syntheses the temperature can

be controlled within a range of -35 to 190 °C. The system is operated by a corporate client in the Rhine-Main area with a focus on specialty chemistry.

### LAUDA Viscometer DVS

The Viscometer DVS was reengineered and the sample volume reduced to approx. half a millilitre only. The sample is manually drawn from the disposable vessel into the measuring room. Following measuring, the sample returns along the same lines back into the original or another vessel. Measurements are of course conducted according to GLP Guidelines. The DVS will be available from March 2007.



*Viscometer DVS*

### The new rinsing module VRM 3 for the Viscometer PVS

More than ten years ago, LAUDA presented the world's first PC-controlled module for the automatic measurement of kinematic viscosity. Particular attention was given to the very compactly designed, micro-processor controlled pump/valve blocks VRM 1 and VRM 2 for viscometer cleaning. The completely new designed successor model VRM 3 contains intelligent developments ensuring that discharging media can no longer come into contact with critical components. Another step forward.



*Rinsing module VRM 3*

Further information on the devices:

- [www.lauda.de](http://www.lauda.de)
- Fax coupon

## The LAUDA success story

The history of LAUDA begins with a departure: on 26<sup>th</sup> and 27<sup>th</sup> of August 1955, Dr. Rudolf Wobser left the



German Democratic Republic in two stages together with his wife and three children Karlheinz, Gerhard and Christine.

In Burlafingen near Neu-Ulm, the family was taken in by Erich Widmann, a friend of the father. From there on, Dr. Rudolf Wobser, an excellent scientist and pioneer in the area of thermostating began to implement his vision step by step: the creation of his own company, specialising in laboratory and measurement technology.

The search for suitable locations first led him to Wertheim in the Tauberbischofsheim area. However, Dr. Wobser found the optimal conditions and readiness to establish a new com-

pany in Lauda. On the 29<sup>th</sup> of February 1956, it all became reality: Dr. Rudolf Wobser and his co-partners, Erich Widmann, as well as his friend, the factory owner Karl Hagspiel from Düsseldorf, signed the deed of partnership and the beginning of the company was dated as the 1<sup>st</sup> of March.

In the months that followed, the young company kept afloat with repair orders. At the same time, a completely new thermostatic programme was feverishly being developed and introduced during their first



exhibition atACHEMA in Frankfurt/Main in June 1958. The new Ultra thermostats in modular design, as well as the first refrigeration thermostats in the world paved the way for a successful debut. Turnover and number of employees developed erratically. More than 50 employees worked for the company at the end of

1959. International sales were subsequently developed, first in neighbouring European states and then worldwide. The successful company continued to develop during the 60s and 70s. After the death of the company founder, Dr. Rudolf Wobser, in July 1977 his two sons, Karlheinz Wobser and Dr. Gerhard Wobser, assumed the entire responsibility and succeeded Dr. Rudolf Wobser as personally liable partners, and led the company to new dimensions. After Karlheinz Wobser retired as partner after 46 years of activity at the end of 2002, Dr. Gerhard Wobser and his son, Dr. Gunther Wobser, assumed his partnership shares. Dr. Gunther Wobser was appointed a further managing director.

At the time of its 50<sup>th</sup> anniversary, LAUDA presented itself as a worldwide leading company in the thermostating and measurement technology sector – with over 220 motivated employees and a total turnover of approx. 30 million euro.

*This chronicle is also available online at [www.lauda50.de](http://www.lauda50.de)*



# A year focussed on 50

The company's 50<sup>th</sup> anniversary was duly appreciated with a true party, fair and event marathon.

History also received a prominent focus at the LAUDA stand during ACHEMA in the form of an original VW Beetle, almost identical to Dr. Rudolf Wobser's first company car from 1956. Further reminiscences of the past were the appearances of the Elvis impersonator Olaf Wischulke, as well as the "History Lounge" with, among others, photos representing 5 decades of LAUDA.

The next milestone: an illustrious group of guests from politics, the economy and society gathered at LAUDA for the ceremonial act with subsequent gala dinner on the 14<sup>th</sup> of June. Visibly moved, Dr. Gerhard Wobser and Karlheinz Wobser received the Staufer Medal of the State of Baden-Württemberg from the hands of Minister Professor Dr. Wolfgang Reinhart.

On the 16<sup>th</sup> of June, the employees celebrated a roaring party together with LAUDA seniors and the partners. And the absolute highlight: On the 18<sup>th</sup> of June, with brilliant sunshine, thousands of people followed



*Full house despite hot weather.*

the invitation to an Open Day, glean information from LAUDA and its versatile product range. A varied children's programme, a large anniversary exhibition, as well as an elaborate culinary, musical and artistic programme left nothing to be desired.

The crowning finale of the anniversary activities was LAUDA's 50,000 euro donation to non-profit associations and institutions in Lauda, an expression of the company's solidarity to the location and its committed citizens.



*Hot rhythms took care of the atmosphere during the employee party.*



*A colourful programme for the young and old.*



# Great anniversary art competition

## A successful symbiosis

Art and Sports – one unit for LAUDA. The family enterprise with its long tradition has been committed to and sponsored both fields for many years. Much would have been impossible without the numerous activities.

LAUDA not only understands itself as a modern enterprise but also as a factor with responsibility to the community.



*First Prize went to Doris Tuma.*

## 41 artists participated in the competition

LAUDA hands out an art prize on the occasion of the company's 50<sup>th</sup> anniversary. 41 artists took part in this top-class competition themed "How innovations help mankind". Prizes were endowed with 3,000, 2,000 and 1,000 euro. The prize winners were announced during the anniversary festivities. An audience prize was also awarded.

Doris Tuma from Lauda-Königshofen, Germany, was awarded 1<sup>st</sup> place. The artist calls her painting "The development of text and num-

ber as keys to innovation". In his work "Innovation" Wolfgang Blechschmidt from Frankenstein, Germany, (2<sup>nd</sup> prize) uses the magical figure nine as a code, which the observer was not immediately able to unravel. Three times three faces of a man impel to view, think and decode. Mario Urlass from Schönbach, Germany, (3<sup>rd</sup> prize) deals with the topic of innovation through his collage "Chromosome 1". The elements of his picture are chromosomes, carriers of hereditary dispositions, chromatides, shreds of scientific text or laboratory records.

Doris Rudolph from Wertheim-Kembach, Germany, received the

Audience Prize for her picture "Mankind and Innovation". The LAUDA Factory Gallery assumed ownership of the works of art at prize giving.

Dr. Gerhard Wobser established the LAUDA FactoryGallery in 1995. Since then, it has been the venue of more than 60 exhibitions of the works of various artists. For quite a few of them, this was an important stepping stone for their future career.

## "Jazz in the auditorium"

Lauda-Königshofen has been the venue for the renowned concert series



*Enthusiastic applause for the "Barrel House Jazz Band".*

"Jazz in the Auditorium" for the past 28 years. Many famous jazz ensembles and soloists have appeared here. The approximately six concerts per year see hundreds of visitors from near and far streaming into the Lauda grammar school. This concert series represents the musical figurehead for the City of Lauda-Königshofen and Lauda is rightly called the jazz stronghold of the Taubertal.

During tough economic times, cultural requirements lost a lot of ground and the concert series ran the risk of falling by the wayside. Further sponsors to support and therefore save this important series were raised by LAUDA activities. Time and again during the past years, Lauda-Königshofen has attracted many famous jazz players including the

"Golden Gate Quartett", the trumpet player Harry Sweets, Joe Newman from the Count Basie Big Band, members of the Duke Ellington Big Band, bands from Poland or France, as well as the best German jazz bands. The Barrel House Jazz Band is basically the "Jazz in the Auditorium's" "house band" and often brings along other guests.

## Sports

LAUDA has been the official sponsor of the Fencing Centre in Tauberbischofsheim since last year. The Messgeräte-Werk LAUDA Dr. R. Wobser KG company was founded in Lauda-Königshofen in 1956, as was the fencing sport division in the Tauberbischofsheim Gym and Sports Association. This was the beginning of a success story for both sides. LAUDA is counted as one of the

leading manufacturers of thermostating and measurement devices. As sponsoring organisation for the Olympia training centre, the Fencing Club Tauberbischofsheim e.V. is one of the best in the world. Both partners regard excellent precision, performance, innovation and regional commitment as indispensable. It is therefore self-evident that both found each other. LAUDA enriched this partnership with a sponsorship. Both parties benefit from the partnership and from mutual synergies.

## A race

As sponsor, LAUDA started its 50<sup>th</sup> anniversary with more than 65 employees at the Fair Race of the ETSV Lauda in September. LAUDA employees meet on a weekly basis to practise together. Various speed classes are run in good spirits.



## LAUDA: Reliable partner



*Our interview partner, Andreas Scharf, H. C. Starck, Goslar*

LAUDA maintains long-standing contacts with the H. C. Starck Group in Goslar. Andreas Scharf works for the company in the Application Technology Lab of the business division “Electronics and Optics Business Group”. He is responsible for the organisation of all analyses concerning not only the internal development of powders but also customer-specific queries. This includes viewing the required equipment and to install, as well as to optimise it in the lab. With the slogan “Empowering High Tech

Materials”, H. C. Starck formulates a promise of service for its customers. Tailored solutions are developed to achieve common added value. We spoke to Andreas Scharf.

*Therminus: What does the H. C. Starck slogan mean?*

**Andreas Scharf:** We produce special chemicals for various sectors in the high-tech industry. It is therefore imperative to use high-tech products during every step of the production and analysis of these products. This means that we are also dependent on tailored solutions for nearly each individual step.

*Therminus: For which applications are LAUDA thermostats used?*

**Andreas Scharf:** Various physical parameters are used to analyse our powders in our application technology lab. As these processes have to be performed in very constant conditions, the high standard of the LAUDA thermostats used is very important.

*Therminus: Which requirements must our thermostats generally fulfil?*

**Andreas Scharf:** As we are only able

to use standard accessories on very rare occasions, a constructive co-operation with our suppliers is top priority. Only this will ensure that we are able to continuously develop our products and implement new ideas as quickly as possible. The devices must also be reliable and relatively maintenance-free, so that we can also achieve continuous improvement in the quantitative area.

*Therminus: What distinguishes the co-operation with LAUDA?*

**Andreas Scharf:** The co-operation with LAUDA has existed for many years. The reason for working with you for so long is that our wishes and requirements are always very innovatively implemented in due course.

*Therminus: We manufacture special seals for H. C. Starck and use modified pumps to ensure the best possible temperature distribution for your applications. LAUDA meets individual customer requirements. Is this a guarantee for the co-operation?*

**Andreas Scharf:** This is one of the most important factors for fruitful co-operation. We too are continuously confronted with modifications wanted by our customers which in

turn require continuous adaptation of our processes. That is why we are also dependent on our suppliers, who help us implementing this with their innovative ideas concerning current problems.

*Therminus: We are proud of 50 years of LAUDA. Traditionally, quality and customer orientation are a big responsibility. How can we continue to improve with regard to quality, reliability and service?*

**Andreas Scharf:** The LAUDA thermostats we use already possess a high degree of quality and reliability. But one should not rest on one's laurels and continue to develop innovatively, so that we can jointly assert and improve ourselves in the high-tech sector.

*Therminus: Mr Scharf, thank you very much for talking to us.*

H. C. Starck is an international group of companies with more than 3,400 employees at 15 production sites worldwide. H. C. Starck produces an assortment of refractory metal powders that is unique in the world, including tungsten, molybdenum, tantalum, niobium, rhenium as well as their compounds (borides, carbides, nitrides, oxides, silicides, sulfides). A further production focus centers on thermal spray and advanced ceramic powders, non-ferrous metals, such as nickel and nickel salts, as well as boron and boron compounds. In addition to metal powders, semi-finished and finished molybdenum, tungsten, tantalum, ni-

bium, titanium, zirconium and nickel products and their alloys are manufactured. Further to the production of standard components, H. C. Starck is your partner for the manufacture of components according to customers' specifications. Our experts provide answers and solutions to your challenges and problems in all areas ranging from construction to alloying, especially for customized components. As a further service H. C. Starck offers the extrusion of molybdenum and TZM. H. C. Starck is also a leading supplier of specialty chemicals and products formulated for the electronics industry.

In the engineering ceramics sector H. C. Starck has a wide assortment of ceramic intermediates. Its subsidiary H. C. Starck Ceramics GmbH & Co. KG manufactures machine and engine components, anti-friction bearing components and foundry products made of silicon carbide, silicon nitride, aluminum titanate as well as zirconium and aluminum oxide according to customers' specifications.

H. C. Starck has been part of the international Bayer Group since 1986 and operates at all sites with certified Quality Management systems and, in most instances, Environmental Management systems.

In 2005, the turnover of the Group rose to approx. 920 million euro (2004: 703 million euro).



## Trade fair appearance in LAUDA's 50<sup>th</sup> year

LAUDA can look back onto a successful 2006 trade fair year. It started with the Forum Labo in the French capital of Paris at the end of March. Experts followed Analytica's invitation to Munich at the end of April. At the European trade fair for Chemical Analysis, Laboratory Technology, Biotechnology/Life Sciences, High-Tech Laboratory Automation as well as Data and Process Management, LAUDA documented its 50<sup>th</sup> company anniversary. The LAUDA history was presented to visitors from near and far in 50s style, including floral wall-paper.

Many of the 908 exhibiting companies from 32 countries were satisfied with the fair. LAUDA's expectations were also fulfilled and gave rise to the hope of good after-fair business.



*More than 26,000 visitors from 90 countries were counted in Munich. LAUDA used this opportunity to impressively present its creative innovation.*

### The next trade fairs and exhibitions

<u>Event</u>	<u>Venue</u>	<u>Time period</u>	<u>Further information</u>
Arablab	Dubai, United Arab Emirates	11–14 February 2007	<a href="http://www.arablab.com">www.arablab.com</a>
Informex	Las Vegas, USA	13–16 February 2007	<a href="http://www.informex.org">www.informex.org</a>
Pittcon	Orlando, USA	25 February–2 March 2007	<a href="http://www.pittcon.org">www.pittcon.org</a>
InCom	Düsseldorf, Germany	12–15 March 2007	<a href="http://www.incom-symposium.de">www.incom-symposium.de</a>
ACS Spring, Chicago	Chicago, USA	25–29 March 2007	<a href="http://www.acs.org">www.acs.org</a>
A-TESTex Analytika	Moscow, Russia	10–13 April 2007	<a href="http://www.analyticaexpo.ru/2007/eng">www.analyticaexpo.ru/2007/eng</a>
CONTROL	Sinsheim, Germany	8–11 May 2007	<a href="http://www.control-messe.de">www.control-messe.de</a>
Total Processing & Packaging	Birmingham, Great Britain	15–18 May 2007	<a href="http://www.totalexhibition.com">www.totalexhibition.com</a>
MIOGE	Moscow, Russia	19–22 June 2007	<a href="http://www.mioge.ru/eng">www.mioge.ru/eng</a>
Chemie	Moscow, Russia	3–7 September 2007	<a href="http://www.messe-duesseldorf.de">www.messe-duesseldorf.de</a>
ILMAC	Basle, Switzerland	25–28 September 2007	<a href="http://www.messe-basel.ch">www.messe-basel.ch</a>
Analytic LatinAmerica	Sao Paulo, Brazil	26–28 September 2007	<a href="http://www.analitanet.com.br/en">www.analitanet.com.br/en</a>
L·A·B	London, Great Britain	2–4 October 2007	<a href="http://www.lab-uk.co.uk">www.lab-uk.co.uk</a>
WTT-Expo	Karlsruhe, Germany	9–11 October 2007	<a href="http://www.wtt-expo.de">www.wtt-expo.de</a>
Biotechnica	Hanover, Germany	9–11 October 2007	<a href="http://www.biotechnica.de">www.biotechnica.de</a>
K-2007	Düsseldorf, Germany	24.–31. October 2007	<a href="http://www.k-online.de">www.k-online.de</a>

# LAUDA in Russia and France

## LAUDA Wostok

LAUDA continues its expansion. The new independent sales company in Russia joined the network in May this year. LAUDA Wostok, freely translated "LAUDA East", is headquartered in the south-western part of Moscow, in the so-called "German-Russian House", which understands itself to be a meeting place of German and Russian culture and which houses various technology companies apart from different organisations. The location is characterised by a very good infrastructure



*In front of the German-Russian House in Moscow (from left to right): Alexey Morozov, General Manager LAUDA Wostok, Dr. Gunther Wobser, Managing Partner LAUDA, Vincent Abert, Sales Manager Europe LAUDA.*

and the central location is ideal for our company.

Further tasks for LAUDA Wostok are representative training and a rapid and qualified marketing development. Apart from co-operation with our two Russian agencies ECROS and EPAC, the search for new agencies in the CIS states is one of the most urgent tasks in the responsibility of the Team and Company Manager Alexey Morozow. LAUDA Wostok will not only act as commercial agency for sales from Germany to Russia, but will also directly invoice smaller agencies in Russian roubles and supply them from Moscow.

"The investment in the Russian market is a clear commitment to Russia's very positive prospects and an important milestone in our internationalisation strategy", says Managing Partner Dr. Gunther Wobser.

## LAUDA France

LAUDA France was founded in March 2005 and has since grown rapidly. In France, LAUDA already possesses considerable brand-awareness in the sector. The company also has a very good and strong quality image.



*Smiling faces - the LAUDA fair team at the Forum Labo.*

This was realised through successful trade fair appearances, multiple customer visits and diverse contacts to sales distributors. During this time period, the turnover grew continuously. It is expected to grow by 30 percent in the current year alone. Significant increases can be expected for 2007. This is made possible by LAUDA's excellent product range and highly qualified employees on site.

LAUDA expects further positive turnover development from its own distributors in France and Russia. 40 percent of the entire European turnover from laboratory devices is already being achieved in France. The turnover development in Russia is no less dynamic. After a very successful year 2006, Russia will be the third strongest foreign market for thermostats and circulation chillers after the US and France.

## *Solution viscosity to PE and PP*

### *Convenient and fast*

LAUDA provides a low-cost special configuration of the processor viscosity measurement system PVS 1 which allows fully automatic and absolutely hazard-free viscosity measurement and automatic cleaning of the viscometer during measurement temperatures of up to 160 °C for polyethylene and polypropylene. This extended version of the PVS module system is particularly suited for applications with relatively low sample throughput. Up to six samples per working day can be processed with the 2-space version PVS 1/2 and double the amount with PVS 1/4. For a higher number of samples, we recommend configurations with sample transmitter, as this enables the use of work-free periods.



*Viscosity measurement with the LAUDA PVS in transparent thermostats*

The complete article is available under: → [www.lauda.de](http://www.lauda.de)  
→ Fax coupon

In contrast to the usual procedure, the plastics are dissolved in the viscometer. This requires the weighed granulate or powder samples to be inserted through a funnel and a lockable sample sluice directly into the Ubbelohde dilution viscometer. The PVS software then activates the addition of the exact amount of solvent from the buret via the cleaning module VRM 3 D into one of the two connected dilution viscometers. If required, the program considers the volumetric expansion of the solvent occurring between ambient temperature and measurement temperature. A magnetic stirrer installed in the thermostat accelerates the dissolution and temperature control of the polymer samples. After a time period stipulated by the user, the program starts the first measurement cycle. In the case of determination of limit viscosity (intrinsic viscosity) via a dilution series (linear serial regression), this is the measurement with the highest concentration.

After completed measurement, an external membrane pump pumps the samples via a separate valve unit, which is thermostated to 135 °C in the thermostat and controlled via the measurement program. The viscometer is then flushed from the VRM 3 D with the cleaning solution (generally the sample's solvent) and subsequently blow-dried. After the cleaning process, the viscometer is ready for the next measurement series.

Thermostats & Circulation chillers

Heating an Cooling systems

Measuring instrumentation

## LABORATORY

### L dictionary

#### LAUDA LiBus

The Proline and Integral XT device range have an interface concept, which also appears in the PC world in similar form. In the PC, this is the USB connection, to which the user connects printers, scanners or digital cameras, as required. In LAUDA thermostats, this is a multitude of accessories such as analogue interfaces, switching contacts, serial interface modules, locking valves and much more.

Depending on the version, the accessories are installed in the thermostat's plug-in units or simply connected to the LiBus via a cable. If the accessories were ordered together with the thermostat, they will of course have been previously installed or connected. However, this can also easily be done by the user at a later stage. Connecting a new accessory component to the thermostat does not require software installation. Since it automatically recognises the new module and displays appropriate configuration menus. Not only the power supply but also the data exchange between accessory modules and thermostats takes place via the LiBus. Line lengths of up to 50 m definitely turn the command console into a remote thermostat control.

The accessory suite will also grow with the wishes and requirements of our customers: a Profibus or a high-temperature cooler up to 300 °C are the latest features, with which you can retrofit or extend your Proline or Integral XT thermostats.

## Brilliant colours in giant format

During the 50<sup>th</sup> year of LAUDA, the Factory Gallery was also under a lucky star: the high-tension oil paintings by Jan Zwolicki attracted many interested people. The Polish artist was born in 1967 in Swiecie/Weichsel and attended the Fine Arts School in Bydgoszcz from 1982 to 1987. Since 1989, he has been living and working in Bzowo near the Polish city of Gdansk as a freelance artist. In 1992, the painter managed to develop contacts to the Miltenberg art scene, and made more intense during the following years through many exhibitions in the Miltenberg area. Zwolicki had already presented his works at LAUDA 1999. He creates his pictures in an almost explosive design with regard to colour and form. Thematically, the bandwidth ranges from loving irony via exposing satire to dynamic movement. The latest Zwolicki paintings exhibit an extraordinary mood. They are full of vibrant tension. Life in them is somewhat lascivious but also fierce. The depicted people are isolated, even if they appear in groups. Their colours glow but they hardly communicate with one another. The hues of red, orange, turquoise, yellow and blue shining through are flowingly placed. They dissolve the touching dissonances into movement and are lit up like spot lights, the individual stages himself before a diffused background. Time and again the artist seeks this dichotomy, the inexplicable in his motives.



Contact details of the artist: → [www.zwolicki.de](http://www.zwolicki.de)

# Win with LAUDA

## Our today's quiz question is:

“What does the letter “H” mean in the type designation of Integral XT Process Thermostats?”

- a) Heating
- b) High-temperature version
- c) High construction method

Entry deadline is 27<sup>th</sup> February 2007. We will raffle out five LAUDA anniversary packages among all entries.

The winner will be selected from a draw and notified in writing. Employees of LAUDA DR. R. WOBSEY GMBH & CO. KG and their relatives are excluded from participating. The judges' decision is final. Participation in the competition does not depend on requesting information. All information will be treated confidentially in accordance with the Data Protection Law.

The winners of the last competition of Therminus issue 2/2005 were:

Hans-Jürgen Bühl, Schorndorf

Dr. Thorsten Brandau, Karlstein

Hans Ramakers, Hilden

Joachim Kühner-Plotz,  
Grenzach-Wyhlen

Adalbert Ellbrunner, Burghausen

Congratulations!



## Fax +49 (0)9343 503-188

The solution of the prize competition is

Please use BLOCK CAPITALS. Thank you.

Title: \_\_\_\_\_

First name: \_\_\_\_\_

Surname: \_\_\_\_\_

Department: \_\_\_\_\_

Company, building: \_\_\_\_\_

Street: \_\_\_\_\_

Postcode, town: \_\_\_\_\_

Country: \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

### Please send me the following information:

- “The big LAUDA” overall brochure  
Thermostats/Circulation chillers/Water baths 2006/2007
- Aqualine Water baths brochure
- Integral XT Process Thermostats brochure
- Information on rinsing module VRM 3 D
- Information on Viscometer DVS
- Heating and cooling systems brochure
- Article on solution viscosity