

## Media Release

### Next Generation of High Vacuum Pump System

# Oerlikon Leybold Vacuum offers TURBOLAB - the all-new smart high vacuum system for researchers

February 08, 2016 – TURBOLAB are plug-and-play high vacuum pump systems based on well-proven components. This new TURBOLAB generation is built on one basic design platform with the opportunity to create several different variants. The systems are compact, fully assembled, and ready-to-operate. Different configurations cover the individual vacuum demands of a wide range of applications in the R&D and analytical market. Due to the unique oil-free hybrid bearing design of the new TURBOVAC i/iX turbo pumps featured in these systems, and by using different dry compressing backing pump combinations, hydrocarbon free pump system operation is guaranteed.

The TURBOLAB systems come completely preassembled with turbomolecular pump, dry compressing or oil-sealed backing pump and the innovative TPU display power unit. Both compact table top and mobile cart versions are available and offer the greatest flexibility and ease of operation. Relocation kits are also available to place the pumps away from the frame.

Each version can be customized to individual needs regarding a wide range of accessories, such as purge gas and/or venting valve, foreline safety valve, cooling units, heater band and more.

The system can be completed with THERMOVAC TTR fore vacuum pressure gauges and PENNINGVAC PTR high vacuum sensors. Connected sensors will be detected and pressure readings automatically shown on the display.

Data is critical for research, and data management can be challenging. Along with the TURBOLAB systems, new tools are available to make system configuration, operation, monitoring and control extremely easy. All critical parameters and conditions such as errors, warnings, frequency, temperature, etc. are logged to an internal memory automatically based on a default time interval, which can be adjusted on site.

A built-in **Webserver** allows remote controlling, monitoring and configuring your TURBOLAB from your mobile device or computer using your browser. The PC based software tool TURBOLAB Data Viewer analyzes the data log & event log files and monitors the status and the key parameters in real-time from multiple TURBOLAB's. Opening the trend view on a laptop or mobile device will display the events on top of your trended parameter. This allows you to quickly compare the data surrounding your system events. This new way of looking at the data related to the event helps to diagnose the conditions that affect your system. The software tool can be downloaded for free from the website.

## Highlights

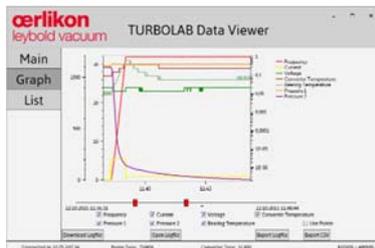
- Perfectly adjusted plug-and-play high vacuum system with enhanced pump performance
- Covering more applications with a full range of high vacuum and dry or wet fore vacuum pumps
- Small footprint and compact mobile design, easy to relocate pumps out and away from frame
- Prepared for worldwide voltage
- Backlight display (control/monitoring/configuration)
- Monitored data are automatically stored to a data log file in the TURBOLAB. Users can easily view the log file with the TURBOLAB data viewer software tool or via the data viewer in the web server

- Browser based webservice Control/Monitoring/Configuration Tool for mobile & desktop browsers & TURBOLAB Widget, the PC software tool for monitoring multiple TURBOLAB's status & key values
- Features dedicated ports for the connection of six different accessories and two gauges
- Benchmark functionality, reliability and design
- Excellent price-to-performance ratio

“The next generation of our high vacuum pump systems are taking the state-of-the-art a bit further,” explains Dr. Martin Füllenbach, CEO Oerlikon Leybold Vacuum. “In today’s world, data and their proper interpretation are crucial factors of the machining environment. This interface of measured values to adjusting research findings, or even later manufacturing processes and their outcomes will define the degree of success. Facilitating this task for the customer, this is what Oerlikon Leybold Vacuum stands for.”



Pictures: TURBOLAB Variants, Copyright Oerlikon Leybold Vacuum



Time (min)	Pressure (Pa)	Temperature (°C)	Current (A)	Voltage (V)	Power (W)
0.00	1950	95	1.5	230	345
0.10	1500	85	1.5	230	345
0.20	1000	75	1.5	230	345
0.30	500	65	1.5	230	345
0.40	200	55	1.5	230	345
0.50	100	45	1.5	230	345
1.00	50	35	1.5	230	345
2.00	20	25	1.5	230	345
3.00	10	15	1.5	230	345
4.00	5	10	1.5	230	345
5.00	3	5	1.5	230	345
6.00	2	5	1.5	230	345
7.00	1.5	5	1.5	230	345
8.00	1.2	5	1.5	230	345
9.00	1.0	5	1.5	230	345
10.00	0.8	5	1.5	230	345

Screenshots of TURBOLAB DATA VIEWER Software



Webserver "browser based" Control/Monitoring/Configuration Tool for mobile & desktop browsers and TURBOLAB Widget, the PC software tool for monitoring multiple TURBOLAB's status & key values.

For further information, please contact:

Christina Steigler  
Corporate Communications  
T: +49 221 347 1261  
F : +49 221 347 31261  
christina.steigler@oerlikon.com  
[www.oerlikon.com/leyboldvacuum](http://www.oerlikon.com/leyboldvacuum)

**About Oerlikon**

Oerlikon (SIX: OERL) is a leading global technology Group, focusing on providing market-leading technologies and services for surface solutions, manmade fibers manufacturing, drive systems and vacuum pumps and components in growth markets. These cutting-edge technologies benefit customers by improving their product performance, productivity, efficient use of energy and resources, and also by contributing to a more sustainable environment. A Swiss company with over 100 years of tradition, Oerlikon has a global footprint of over 15 500 employees at more than 200 locations in 36 countries and sales of CHF 3.2 billion in 2014. The company invested CHF 121 million in R&D in 2014 and has over 1 300 specialists developing innovative and customer-oriented products and services.

Oerlikon Leybold Vacuum offers a broad range of advanced vacuum solutions for use in manufacturing and analytical processes, as well as for research purposes. The Segment's core capabilities centre on the development of application- and customer-specific systems for the creation of vacuums and extraction of processing gases. Fields of application are coating technologies, thin films and data storage, analytical instruments and classic industrial processes.