## Hardening shop - Project reference







With EOS we reduce the peak power by up to 40% and now produce even cheaper. Klaus-Peter Wied, Director

#### Ferrum Stainless Steel hardening, Augustdorf (Germany)

Ferrum Edelstahlhärterei GmbH is an established, medium-sized company based in Augustdorf, district NRW Germany. Founded in 1975, the family business operates as a contract hardening shop in the field of modern tool treatment technology and provides the entire range of services for surface and heat treatment in order to optimally improve the quality and longevity of industrial tools.

The spectrum of services ranges from salt bath and vacuum hardening, tempering, annealing and various nitriding processes, with the subsequent possibility of oxidation, to various blasting processes and surface treatment, burnishing. With many years of experience and dedicated, qualified specialists, Ferrum offers experienced customer advice and process selection in order to provide heat treatment with the lowest energy consumption and high quality. The company also focuses on innovation in technological developments, including as an active industrial partner in the "Happy Power Hour II" project of the University of Wuppertal. For this successful project Ferrum was awarded the Innovation Prize of the State of NRW for "Energy Efficiency in Companies" in 2018.

#### Self-learning control permanently reduces energy costs in hardening shop

Company founder Helmut Wied recognized early on that the optimization of energy supply is a key to entrepreneurial success. Together with his son Klaus-Peter Wied, they tested various suppliers of energy management systems on the market. Ultimately, the positive experiences of a business colleague were the convincing argument for using the **EOS** load management system by dibalog.

**EOS** has been in continuous operation since 1993, and new developments from dibalog have since been gradually integrated into Ferrum's energy management system. Initially, the system monitored 62 consumers and optimized their use. In the meantime, the number has grown to over 180 consumers. This is not only due to the constantly growing production at Ferrum. By the descriptive representation of the energy consumptions in the dibalog visualization it was besides recognized that it is quite worthwhile from economical view to include also apparently small consumers into the optimization, since their multiplicity and the respective flexibility have significant influence on the total economy of the work.

All electrothermal processes and consumers such as inert gas and vacuum treatment, burnishing, nitriding, oxidizing, salt baths, blasting and deep-freezing are integrated into the **EOS** optimization. Within the working week **EOS** achieves a reduction of the peak power of almost 40% to 1.5 MW. The transparent visualization of the energy flows also revealed peak loads during non-production times at night and on weekends, so that Ferrum was able to influence production with regard to an optimized energy supply. Furthermore, an improved utilization of the plants could be realized.

With the intelligent, self-learning optimization of **EOS**, the performance peaks have been permanently minimized. Saved energy costs as well as increasing production output guarantee the innovative company Ferrum increased efficiency and competitiveness.

#### dibalog – Company- and Energy management Systems

With over 30 years of experience and more than 1,000 installations worldwide in industry, canteen kitchens, bakeries and other industries, **dibalog** is a leader in technical peak load limitation - and comprehensive energy management systems. Products and services of dibalog are universally applicable and modularly expandable. For our customers we offer measurement technology, own data communication as well as reliable hardware and software solutions for automatic energy data acquisition according to DIN EN ISO 50001, visualization and load management systems. Individual and competent consulting ensures that your project is implemented and commissioned on time and in line with your requirements. In productive operation, our flexible support supports you in permanently optimizing your energy management!

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# energy managed right.



### Decreasing costs in energy intensive companies.

### With dibalog EOS/EAS.

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