## Hardening shop - Project reference



# Gerster



The smart optimization of EOS guarantees the lowest possible power consumption with constantly changing production. This makes our work much easier - and saves costs accordingly.

**Jürg Moser**, Head of Occupational Safety, Environmental and Facility Management

#### Gerster AG, Egerkingen (Switzerland)

Hardening shop Gerster AG has been active in the field of hardening and heat treatment technology since 1950. From a small business with few processes, the family business has steadily developed into an established, medium-sized company with around 110 employees and all common heat treatment processes. With comprehensive knowledge, the experts are involved in the heat treatment of components, in consulting projects for process optimization or in tailor-made solutions for their customers' in- or outsourcing projects. Gerster has experience and competence in a wide variety of industries, such as mechanical engineering, hydraulics, drive technology, the automotive industry, medical technology, aviation, nuclear and food industries, thanks to a large number of international projects. With a wide range of heat treatment processes, Gerster also refines sophisticated metal parts optimally for the respective application and the individual needs of its customers. A large number of certificates prove the high-quality implementation of even complex requirements. Thanks to the more than 100 different systems on 25,000 square meters of production area, both heavy single pieces and very small parts can be efficiently treated in series of millions. With concentrated heat treatment and materials knowledge, the specialists also take over heat treatment and materials engineering. And with modern and versatile laboratories, analyses, examinations and quality controls are carried out promptly.

### Flexible and precisely tailored - Swiss precision in production and energy

Reducing energy costs and ensuring the high demands on component and process quality through reproducible processes was the declared goal of Gerster AG when it decided on the **dibalog EOS** on the recommendation of a Swiss industrial partner. In the future, energy-intensive processes should not run independently of each other as before, but coordinated with each other in order to reduce power peaks, balance each other out and reduce fluctuations in energy demand.

At the end of 2001, the company commissioned the first dibalog system at its Egerkingen plant. From the very beginning, the system has proven itself and successfully cut power peaks. Production was continued in the usual quantity and quality - but at significantly lower costs.

Gerster stands for innovation and perfection in detail. This is why Jürg Moser, together with dibalog, is looking for further individual solutions to improve production and energy costs. This resulted in a software extension to include the only conditionally controllable induction systems in the optimization. If a correspondingly high load is required, the next component is only released for heat treatment after completion of the induction process if it makes economic sense. Furthermore, a concept was developed with the supplier with which Gerster, as one of the largest customers in the supply area, proactively keeps the top of the supplier within defined limits. The purchase of additional power at peak times, which is no longer necessary, resulted in enormous savings. This benefits the utility as well as Gerster and all industrial customers in the supply area.

To this day, Gerster continues to expand monitoring and optimization by expanding production. The simple installation and configuration of new modules is carried out by Gerster itself. The dibalog systems have self-learning algorithms that automatically adjust the optimization and thus achieve the optimum energy cost savings for operation "as if by themselves".

#### 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!





Decreasing costs in energy intensive companies.

With dibalog EOS/EAS.

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