

## Simply & brilliant - gears from Humbel Zahnräder AG in Switzerland

### The company

Humbel Zahnräder AG is a family-owned company in its fourth generation located in Kradolf, Switzerland. Today Humbel Zahnräder AG is the biggest gear manufacturer in Switzerland. Manufacturing plants are in Switzerland, the Czech Republic and in Rumania. All manufacturing plants rely on the most modern technology and investment in the most advanced machinery and infrastructure.

### The technology

Therefore Humbel Zahnräder AG has access to almost all manufacturing technologies: From turning, drilling, milling, reaming, wire EDM, gear shaping, gear hobbing, gear grinding, outside diameter grinding, inside diameter grinding, flat grinding, surface grinding, centre grinding, sharpening of hobbors, heat treatment and quality inspection, everything is done "in house". This challenge means a lot of work for Mr. Häderli, chief of the maintenance department. "One of the most important criteria for high quality work is the machine tools, the raw material and the peripheral manufacturing technology" explains Mr. Häderli, who is in charge for all modern machine tools.



Photo: Klingelnberg H 10  
Gear grinding with DiaGrind 535/15



Photo: Gleason Pfauter 210 H Genesis  
Gear hobbing with DiaGrind 535/15

Clear competitive advantages and opportunities lie in the flexibility, speed, innovation and continuous improvement within all operations. In order to run the modern gear manufacturing equipment constantly and with the utmost efficiency the company Humbel Zahnräder AG is using the multifunctional metalworking fluid DiaGrind 535/15 from oelheld GmbH in Germany. oelheld GmbH is located in Stuttgart, Germany and has been developing and manufacturing metalworking fluids since 1887. In the field of metalworking lubricants oelheld GmbH has reached an outstanding reputation.

The multifunctional metalworking fluid DiaGrind 535/15 from oelheld GmbH has been in use for many years very successfully on gear hobbing, gear grinding and even for gear shaping applications on machines like Reishauer, Gleason Pfauter, Klingelnberg and Höfler. DiaGrind 535/15 contains a blend of high quality additives and superior base oil, even after many years of use it does not require regeneration (additives to be added) or a complete exchange.

Beside the high performance the DiaGrind 535/15 keeps the gear manufacturing machines clean and protected, the health of the machine operators is also of paramount importance, so the DiaGrind 535/15 was designed to offer the highest possible performance whilst protecting the operator from emissions with its low misting characteristics, additionally it does not contain harmful substances.

### The future

Since 1928 customer satisfaction is the driving force and fundamental component of the ethos of Humbel Zahnräder AG: With high-precision components, perfectly matched assembly groups and innovative engineering in order to serve our national and international customers and partners. The venerable company Humbel Zahnräder AG from Switzerland has established itself on the market due to the excellent quality, flexibility, adherence to delivery dates and reliability. Therefore Humbel Zahnräder AG is playing a major role in the gear industry as a centre of excellence for innovative gear technology.

Today Humbel Zahnräder AG is employing 250 people, specific training and further education of the employees and the consequent investment in latest manufacturing technology is making Humbel Zahnräder AG a trustworthy and competent partner offering best solutions. Through the mix of long lasting experience, distinctive and specific branch know how and highest commitment, the Humbel Zahnräder AG is already prepared to meet the challenges of the future.

For further information please visit:  
[www.humbel-gears.com](http://www.humbel-gears.com)  
[www.oelheld.de](http://www.oelheld.de)



Photo: Gleason Pfauter PSA 500  
Gear shaping with DiaGrind 535/15