

# Top Supplier to Top Customers.

**VOIT, Germany.**

## Challenge.

Gear components for the automotive industry are manufactured by an aluminum die casting process. In this process, molten aluminum with a temperature of 700 degrees Celsius is forced under high pressure and with high velocity into permanent dies made of hot-work steel. VOIT, a family-owned German company, is a specialist in this technically very demanding field, in which extremely tight manufacturing tolerances are specified when it comes to making gears. For many years, VOIT has been a key supplier to ZF Friedrichshafen, a leading manufacturer of high-class eight-gear power transmissions, supplying over 1.5 million intermediate plates, piston rings, and pots per year. For its production the Saarland-based company has relied for years on Bühler die casting technology.

## Solution.

When BMW started equipping all model series with ZF gear transmissions some time ago, the Munich-based carmaker was giving an indirect signal for launching the highest capital investment ever made in VOIT's history. Within a mere six months, a 4,000 square meter manufacturing hall was constructed for tens of millions, equipped with six Bühler die casting machines of the same type. "Six months – an incredibly short time for construction and start-up," says VOIT's Managing Director Christoph Langehenke. This accomplishment is "not least owed to the huge efforts and commitment of Bühler, from project engineering through commissioning." The group of six machines has been designed to allow each system to manufacture every product destined for ZF. "Supplying and starting up six casting systems at a time is something quite special, even in an industrialized country such as Germany," adds Hartmut Schmidt, die casting business unit manager in Bühler's branch office in Mannheim.

## Implementation.

Bühler and VOIT have worked together since the nineties. Since 2008, Christoph Langehenke has ordered 14 machines



Flyer VoIt en 01/18

**"Bühler machines are exceptionally modern and very rugged, and they boast numerous features and excellent control systems."**

Christoph Langehenke, VOIT Managing Director

from the Swiss Technology Group. Four of them are located at the company's Polish site in Nowa Sól; VOIT operates further production facilities in France and Mexico. "Bühler's track record in serving us has been outstanding," he explains, having formerly worked as a mechanical engineer with an original equipment manufacturer in the automotive industry. He says that the machines are exceptionally modern and very rugged, and that they boast numerous features and excellent control systems. He is just as satisfied with the online diagnostics, remote monitoring via the Internet, and service. In the new production hall up to 2.3 million parts are to be produced annually – exclusively for the high-quality eight-gear power train of ZF Friedrichshafen.

### About VOIT.

The family-owned company has been a classical "supplier to suppliers" of the automotive industry for over 65 years. VOIT's customers include ZF Friedrichshafen and a number of other industry giants such as Bosch, Continental, Behr, or Brose. The company supplies housings for windshield wipers and ABS motors, chassis parts and stampings for seats. With its 1,800 employees worldwide VOIT manufactures a total of some 140 million components annually – not only by the aluminum die casting process, but also by cold- and hot-forming – which are incorporated in more than 250 models of 40 car brands worldwide.

### Bühler AG

CH-9240 Uzwil, Switzerland  
buhlergroup.com/die-casting

T +41 71 955 12 12  
die-casting@buhlergroup.com

