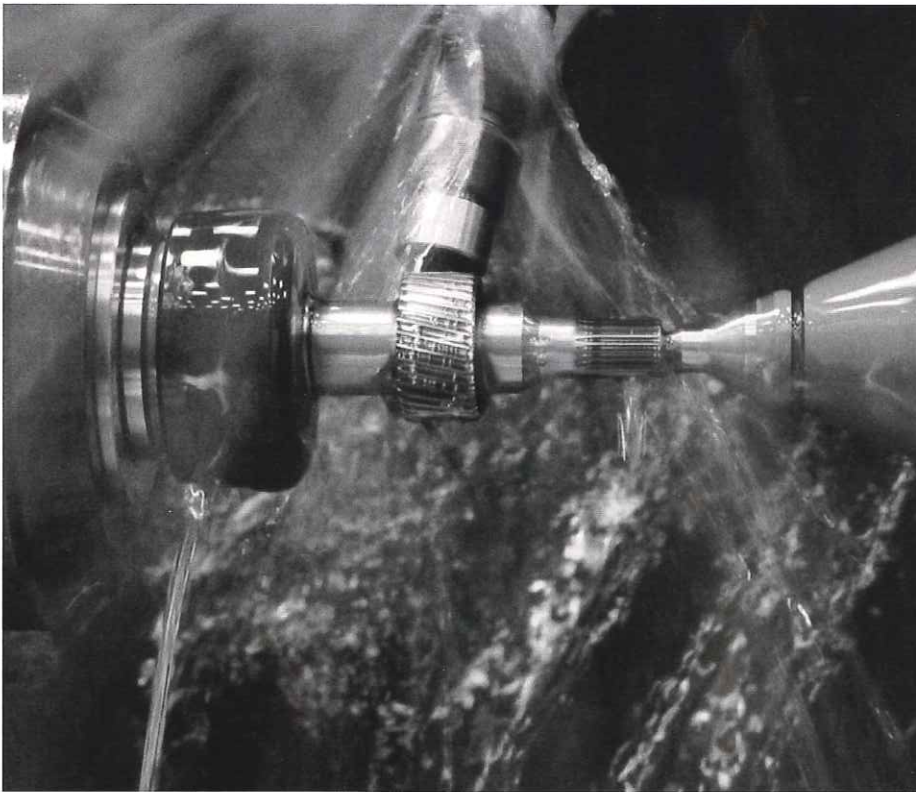


PRODUCT SHOWCASE

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Micro Gear Hob Machining Update: Affolter Technologies Introduces the Model AF 110 for High Speed CNC Hob Cutting of Larger Gears and Related Components



Affolter Technologies S.A. has unveiled from its innovative Gearline® of Micro High Speed Gear Hobbing machines the Model AF 110. The AF110 complements its range of gear cutting systems with a design that reaches Affolter's goal of hobbing larger module / diametral pitch gears, splines, and worms, including gear components with diameters up to 40mm / 1.575 inches and mod-

ules up to 1.0 mm/25.4 diametral pitch.

Micro gear hob cutting machines have developed along the same revolutionary path of progress as machines associated with high precision turning (e.g. precision "Swiss" screw machines or multiple spindle and axes turning centers) that once were cam and change gear driven. In the late 1970's and early 80's these CAM and

change gear driven machines were replaced with NC and CNC controlled turning machines. With micro gear hobbing machines there are two important differences: the development revolution was realized a few years later, and the machines dedicated to replacing the old cam and change gear driven gear cutting machines were not only much more efficient in terms of possibilities, but also much more productive. The market's hesitation in purchasing high-precision turning systems: e.g. finding a faster solution with greater productivity

According to Marc-Alain Affolter, CEO one of the primary strengths of the Affolter Technologies machines is the internally developed Leste CNC controller system. Interpolation functions are handled by a proprietary dedicated integrated circuitry or processing chip technology that while using off the shelf electronics were further developed within the company beyond what is available in today's marketplace. Yes, the race is on... As an immediate gain, the reaction time of the LESTE CNC is about 90 nanoseconds (transfer time in the integrated circuit speak). Compared with classical CNC's offer by the market leaders of CNC controllers, in which the calculation requires 200 micro-seconds best case

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scenario, the Affolter control is without question many times faster. "We can produce parts more quickly; 8-axis interpolation machining is not bottlenecked or slowed down by the CNC or numerical controller" explains Marc-Alain Affolter. He adds, "Our controller can handle up to 12 axes, and so we can also easily control loading and unloading numeric axes to save time." Development of the Leste CNC (the company markets today the third generation after introducing its first micro gear hobbers in 2004) represents to date about 30 man years of engineering.

Affolter's historical markets located in Europe are today an important gateway in its global sales turnover that has led to sales growth in Asia and the Americas to the extent that the company now has a sales and service subsidiary in China, and a newly formed distribution partner-

ship with PARKER Industries of Bohemia, New York. All Gearline® machines sold to these export markets in Asia and the Americas are always "built in Malleray" (Swiss Made!). When questioned about it, Mr. Affolter says: "Customers in these regions that design, produce and deliver quality and precision products are no different than ourselves and our European contemporaries. They demand high-tech production machines and tooling. Swiss Made is always a guarantee of quality, and here at Affolter we strive to design and produce robust machines that meet what the markets demand." He adds, "As things evolve in these countries, especially Asia, wage increases and industrial logic are the same as here in Europe, and production is automated wherever possible and practical to the maximum." For additional information, visit www.affoltergroup.ch.