





complete SOLUTION EN I 10.2024

PRECISION GEAR MACHINING EXCELLENCE // the ultimate solution



# PRECISION GEAR MACHINING EXCELLENCE

Unveil the true potential of gear machining with cutting-edge techniques: hobbing, power skiving, and InvoMilling<sup>™</sup>. These methods, seamlessly integrated through the EUKLID software and Weingartner's weinCAD Gear Designer, redefine precision and efficiency in gear manufacturing. Elevate your production with the ideal companion: Weingartner's *mpmc* range of machines.

# HOBBING

- // Unrivaled precision: Hobbing stands as a testament to decades of proven precision in gear manufacturing.
- // Consistent quality: Versatile for both small and large production runs, ensuring uniform quality throughout.
- // Diverse profiles: From simple to intricate gear profiles, hobbing delivers versatile solutions.
- // Industry compatibility: Hobbing adheres to industry standards, ensuring seamless integration.

## POWER SKIVING

- // Dynamic precision: Power skiving introduces dynamism to gear production, merging high speed with precision.
- // Phenomenal speed for small modules: A main advantage of power skiving for smaller modules is its remarkable speed This process demands backlash-free drives, making it the perfect match for our cutting-edge mpmc machines.
- // Adaptive capability: Power skiving accommodates diverse gear types and sizes, enhancing production flexibility.
- // Elevated efficiency: Shortened cycle times make it optimal for high-volume production scenarios.
- // Tool longevity: Innovative tool design and optimized paths contribute to extended tool life.

#### InvoMilling™

- // Efficiency and cost-effectiveness: InvoMilling<sup>™</sup> boasts lower tool costs by enabling the manufacture of different modules with a single cutter. This approach is exceptionally time-efficient for larger modules, resulting in unparalleled cost-effectiveness for larger gear modules.
- // Dual efficiency: Merging gear shaping and milling, InvoMilling™ sets new benchmarks in efficient manufacturing.
- // Complex gear forms: Ideal for intricate profiles, overcoming limitations of traditional approaches.
- // Surface excellence: Gears bear impeccable surface quality, boasting minimal tool marks.

## EUKLID SOFTWARE AND weinCAD GEAR DESIGNER

- // Seamless integration: EUKLID software and Weingartner's weinCAD Gear Designer work in harmony, providing a comprehensive solution for gear design and manufacturing.
- // Digital mastery: Design with precision and simulate with confidence through advanced CAD/CAM integration.
- // Optimized toolpaths: Generate toolpaths with precision for power skiving, InvoMilling<sup>TM</sup>, and hobbing techniques.
- // Simulated success: Visualize machining outcomes with simulations, refining processes to perfection.

# WEINGARTNER'S **mpmc** MACHINES

- // Unmatched synergy: Weingartner's mpmc range of machines perfectly unites hobbing, power skiving, and InvoMilling<sup>TM</sup>.
- // Engineering excellence: Precision engineering ensures consistent, high-quality results across techniques.
- // Future-ready: Industry-leading automation and integration capabilities prepare you for the future of manufacturing.

## Elevate Your Manufacturing

Embark on a journey where precision and innovation meet. Harness the power of hobbing, power skiving, InvoMilling<sup>TM</sup>, EUKLID software, and Weingartner's weinCAD Gear Designer in synergy with Weingartner's *mpmc* range.

For further insights or to explore how this powerhouse combination can revolutionize your manufacturing, contact us at info@weingartner.com



