

Press Release

Kind & Co. Launches MT1: High-performance tool steel engineered for next-generation die casting

Wiehl – 13 January 2026 — Kind & Co., part of GMH Gruppe, announces the launch of MT1, a newly developed tool steel engineered to meet the extreme demands of modern high-pressure die casting — from large structural components to giga-castings and advanced e-drive applications.

As the industry moves towards larger shot weights, more complex geometries, and greater functional integration within single castings, tool materials are exposed to significantly higher mechanical and thermal loads. MT1 was engineered specifically for these conditions and combines a set of material properties that directly support stability, tool life, and casting quality.

MT1 offers exceptional toughness and homogeneity, providing reliable performance even in large dies or in components with significant cross-section variations. The steel also exhibits excellent hardenability, enabling consistent distribution of hardness throughout large mould dimensions typical of structural and giga-cast applications. This uniformity contributes to improved tool performance and predictable behaviour throughout the die's service life.

A key advantage of MT1 is the significantly reduced risk of bainite formation during heat treatment. This is particularly important for dies with complex geometries, where thick and thin sections often pose challenges for achieving a stable microstructure. MT1's alloy design supports better dimensional stability, lower scrap rates, and reduced reworking effort during die manufacturing.

The material also demonstrates high resistance to tempering, allowing the tool to maintain its mechanical properties even under demanding thermal cycling. This ensures stable process conditions, longer service intervals, and improved operational efficiency for foundries.

MT1 has been developed with the needs of fast-growing die-casting applications in mind, especially structural castings, giga-cast elements, and high-performance components for electric drive systems. These segments require tool steels that combine robustness with consistent metallurgical behaviour across large and complex geometries — requirements directly addressed by MT1.

“With MT1, we are offering a tool steel that meets the real requirements of today's die-casting industry — high durability, reliable hardenability, and stability even in the largest dies,” says Marc Schmitz, Sales Director of Kind & Co.

About Kind & Co.

Kind & Co., part of the GMH Gruppe, is a globally recognised specialist in high-grade tool steels, combining more than 100 years of metallurgical experience with state-of-the-art production technologies.



About GMH Gruppe

GMH Gruppe is a full-service provider of steel products, ranging from scrap-based steelmaking to ready-to-install components. It is one of Europe's largest privately owned metal-processing companies. The group comprises more than 20 medium-sized steel, forging and casting industry sites, serving customers in over 50 countries. With around 6,000 employees, GMH Gruppe generates annual revenues of over 2 billion euros.

GMH Gruppe is a pioneer in sustainable steel production and a member of the 'German Association of Climate Protection Companies'. By recycling metal scrap, the company produces green steel and contributes to a circular economy. The use of electric arc furnaces at four sites reduces CO₂ emissions by 80% compared to the conventional blast furnace and converter route. This also reduces the carbon footprint of customers supplied by GMH. These include companies from the automotive, mechanical engineering, railway, energy, logistics, aerospace, agriculture, and construction machinery sectors. GMH Gruppe is committed to achieving full climate-neutrality by 2039. www.gmh-gruppe.de/en/.

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