

Press Information

Revolutionizing aluminum machining: The MD90 super fine pitch cutter

High efficiency, lightweight design, tailored solutions for modern manufacturing needs

Kyoto/Sunds, 17th July 2025. Kyocera Corporation announced the launch and commercialization of the MD90 super fine pitch cutter, a new milling tool specifically designed for machining aluminum parts in industries such as the automotive sector.

In recent years, there has been a growing demand for lightweight, high-strength aluminum components, driven by advancements in vehicle fuel efficiency and the rise of electric vehicles (EVs). Additionally, the increasing use of smaller machines in manufacturing sites has created a need for cutters that can efficiently and effectively process machines aluminum parts. The MD90 not only meets these needs but also offers potential cost savings through its high efficiency and quality, making it an attractive option for manufacturers.

The MD90 features a 24-insert design with a diameter of 125 mm, enabling highly efficient and high-quality machining of aluminum components.

MD90 main features

- 1. Maximize machining efficiency.** The unique shape of the holder ensures high rigidity, even with super fine pitch specifications. This design reduces chattering and enables highly efficient machining with a table feed of $V_f \geq 24,000$ mm/min.
- 2. Lightweight aluminum holders.** Lightweight aluminum holders are also available, making them suitable for small machines (BT30).
- 3. Deliver high-quality production.** PCD (polycrystalline diamond) inserts are specifically engineered to reduce burr, achieving surface roughness of $0.8 \mu\text{m Ra}$ or less. The double coolant holes and streamlined chip pocket structure offer excellent chip control performance, ensuring smooth and precise machining and long tool life.
- 4. Customization.** Every application presents unique requirements. For this reason, the MD90 is available with customized configuration options. Cutting diameters range from $\varnothing 20$ to

350 mm, and the cutting-edge geometry can be precisely tailored to suit specific operational demands. This level of flexibility ensures optimal utilization of the tool’s full potential.



Kyocera’s MD90 super fine pitch cutter for aluminum machining

MD90 super fine pitch cutter for aluminum machining	
Number of items	Inserts: 4 items Holders (steel body): 3 items Holders (aluminum body): 10 items
Main target industries	For example automotive industry
Recommended workpiece material	Aluminum alloy

The press material is available for download via the following link:

<https://spgroup.box.com/s/tklw6im3iwyursveneibxpav7b4vw8k2>



For more information on Kyocera: www.kyocera-unimerco.com

About Kyocera

KYOCERA UNIMERCO Tooling A/S specializes in the development, production, and distribution of innovative cutting tools for the metalworking, woodworking, and food processing industries. With a strong focus on providing standard and customized solutions that enhance productivity and precision, Kyocera Unimerco combines advanced technology with a deep commitment to customer service. Founded in 1964 under the name Unimerco, Kyocera Unimerco now operates in 15 countries and employs over 665 people. Since 2011, the company has been part of the Kyocera Group and belongs to [KYOCERA Europe GmbH](#), which has been successful in Europe for over 50 years.

KYOCERA Europe GmbH is a company of the [KYOCERA Corporation](#) headquartered in Kyoto/Japan, a renowned supplier in semiconductor, industrial and automotive components as well as electronic components, printing and multifunction systems, smart energy systems, and communications technology. Kyocera is one of the most experienced technology producers, with more than 65 years of industry expertise. The Kyocera Group comprises 288 subsidiaries (31 March 2025). With around 77,200 employees, Kyocera generated net annual sales of around EUR 12.43 billion in the 2024/2025 fiscal year.

Kyocera is ranked 874 on Forbes magazine's 'Global 2000' list for 2024, and ranked as 'The 100 Most Sustainably Managed Companies in the World' according to the Wall Street Journal. For the second year in a row, Kyocera qualified for the Dow Jones Sustainability Index (Asia-Pacific). As well, Kyocera receives a Bronze rating on EcoVadis Sustainability Survey and was acknowledged as a 'Top 100 Global Innovator 2025' for the ninth time by Clarivate, being one of the world's leading innovators.

Kyocera also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by Kyocera founder Dr Kazuo Inamori — to individuals worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (equivalent to approximately €596,500 per prize category).

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