AMB 2022

Direct cooling allows for process-reliable, controlled and efficient machining

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At AMB, Lach Diamant is amongst others presenting its Monoblock-PCD-milling cutter for HSC/HPC aluminium machining. This cutting solution features the latest direct cooling technology that ensures optimal machining of GRP, CFRP and non-ferrous metals.

Cool Injection cools the hot chip specifically after it has formed through the opened rake face of the PCD cutting edge.
(Source: Lach Diamant)

By using Lach Diamant PCD monobloc milling cutters, maximum service life, extremely high cutting parameters and infeeds are now a matter of course in aluminium machining for series production. Now the company has added the Cool Injection technology as well. It directs the coolant — emulsion, oil, MMS, cryogenic — through the open cutting face of the PCD insert below the produced chip.

The Cool Injection cooling system ensures a safe, controlled and efficient machining of aluminium, especially in the automobile and component supplier industries, e.g. all around the engine block.

Maximum service life, extremely high cutting data and infeeds are obtained, as well as perfect surface finish and component accuracy, including high performance (HPC) and up to 50 percent and more reduction of cycle time.

PCD cutters with Cool Injection-Plus are delivered completely assembled and balanced with the adapter of the customer's choice and can be mounted immediately on the machine without adjustment needed.