

» Cool Injection «

Direct Cooling (pat.)

from Emulsion to ice crystal (CO₂)

Your way to the optimum machining of aluminium
and fibre composite materials with **LACH** PCD tools
and more....

High speed cutting (HSC)

Maximum feeds
and depths of cut

Perfect chip removal

Best surface quality with
pre- and finish-machining

Longer tool life and better economy

dreborid® »Cool Injection« System (pat.)

LACH DIAMANT, the pioneer among the manufacturers of diamond tools again is presenting a world innovation:

»Cool Injection« - direct cooling - ❄️ from emulsion to ice crystal -

Technology of tomorrow –
already today from LACH DIAMANT

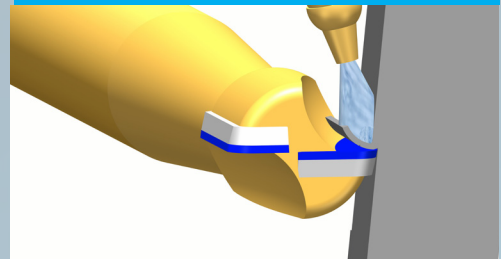
- ◆ the cooling takes place directly through the chipping surface of the PCD cutting edge
- ◆ the PCD cutting edge becomes a component of the cooling channel
- ◆ the outlet of the coolant stream, liquid or gas, is located directly at the PCD chipping surface
- ◆ the exiting coolant reaches the cutting edge from the machined material
- ◆ the just upcoming “thermoplastic“ chip in the “hot“ cutting zone is “shock-quenched“ – solidifies and breaks before the first contact with the component – and thus becomes the ideal chip breaker

»Cool Injection« - direct cooling – patented by LACH DIAMANT – signals new strategies for the efficient PCD machining – not only of non-ferrous metals, but also of cast iron and even of titanium.

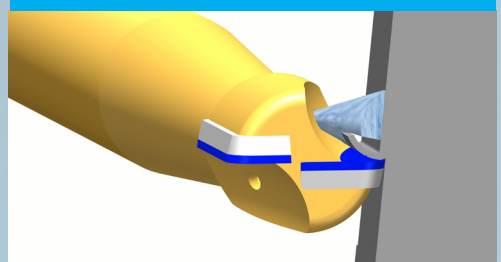
»Cool Injection« - direct cooling – particularly topical for cycle time reduction and improvement of the economic efficiency in the production of:

- ◆ Engine blocks
- ◆ Add-on engine parts
- ◆ Chassis parts
- ◆ Cylinder heads
- ◆ Gear boxes
- ◆ Components for the general machine and tool construction

External cooling



Traditional inside cooling



Either external or traditional inside cooling reach the hot cutting zone only to a limited extent.

With »Cool Injection«



»Cool Injection« acts directly, without any loss, through the PCD chipping surface to the chip, cools, lubricates and breaks the chip.



LACH DIAMANT®

Donaustr. 17 · D-63452 Hanau/Germany
Tel. +49 6181 103-0 · Fax +49 6181 103-860
www.lach-diamant.de · office@lach-diamant.de

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