

The mold & die journal

Jakob Lach GmbH & Co. KG, Hanau, Germany

The discovery of spark erosion for the efficient forming of polycrystalline diamonds (PCD) in 1978 by Horst Lach marks a milestone in the history of polycrystalline cutting tools. This brilliant idea sparked the awareness and increasing use of PCD, a newly launched cutting material, on a previously inconceivable scale. Today, in 2018, PCD tools are firmly established within the industry. Polycrystalline tools are an integral part of aluminium machining in the automobile and accessories industry, in wood and composite machining in the furniture, flooring, and laminate manufacturing industries, as well as in plastic and circuit board manufacturing and other industries. At LACH DIAMANT, a separate machine engineering department developed from discovering the many possibilities for spark erosion machining of PCD – at first only for on-site use. Since the mid-80s, so-called LACH DIAMANT spark erosion machines, type

»EDG- plus« were the core business idea for many start-ups who aimed to get into tool manufacturing and servicing of diamond tools for the wood and plastic industry – at the beginning mostly in Italy and Spain. When asked about the great variety of diamond tool manufacturers produced in this manner, Horst Lach can often be heard saying "these are all my children." At AMB in Stuttgart, LACH DIAMANT presents the universal sharpening machine »Dia-2200- mini«, compact and user-friendly for servicing and producing diamond tools in particular, up to a maximum of \varnothing 480 mm for wood and plastic manufacturing – diamond end mills, scoring saws, jointing cutters, profiling tools, saw blades – from individual production to serial production, tooth-by-tooth in automated processes. Since EMO 2017, the "mini" model is available as a special edition, named »Dia- contour-profiled«, for highly precise profiling (convex and concave) of metal-bond diamond and CBN grinding wheels for the serial production of carbide, HSS and ceramic tools.



Special model »Dia-contour-profiled« for precise profiling of metal-bond diamond and CBN grinding (Picture: Jakob Lach GmbH & Co. KG, Hanau, Germany)