



high precision tooling

Machine Tools, PCD, PVD, CVD, CBN, Hard Metal

Diamonds are (not only) a girl's best friend

LACH DIAMANT for 100 years



LACH DIAMANT – founded by Jakob Lach in Hanau in 1922 – as an enterprise for cutting diamonds to jewelry diamonds - “brilliants”. End of the 1930’s with up to 600 employees – diamond cutters – until then following the above mentioned motto... are a girl’s best friend.

War turmoils and then the strong DM brought cutting of diamonds to brilliants in Germany to a standstill until the mid 1950’s – it was too expensive for foreign customers.

Then came the break: “Diamonds are not only a girl’s best friend!” From the “white” brilliants to brownish and yellow – the no longer quite so clean octahedron industrial diamond. The business purpose had changed.

At the age of 61 Jakob Lach, born in 1894, accepted the challenge of starting a new line of business. Initially still alone with a suitcase full of diamonds – divided and sorted by price-qualities and different weights (in carat – 1 carat = 0,2 grams). Majority of the customers were in Schweinfurt, like Kugelfischer, or in Stuttgart Bosch and SKF.

On October 1, 1960, Jakob Lach received support through the entry of his son Horst.

Twenty years later – at the presentation of the technology developed for the first time by LACH DIAMANT Diamond – polycrystalline diamond tools for the superior processing of wood and composite materials in the furniture, flooring and plastics industries – the now 86-year-old Jakob Lach should make the following statement in a video film: “When I held my first diamond in my hand in 1908, I would not have imagined that one day diamonds would be used not only in the automobile industry but also for the machining of wood and plastics.”

From trading in industrial diamonds LACH DIAMANT had in the meantime developed into a reliable constant as a manufacturer of diamond dressing tools, diamond turning tools for copper collectors in the electronic industry, resin-bonded diamond and CBN- (Borazon™) grinding wheels, PCD cutting tools for the processing of aluminium, carbon fibre (CFRP) and glass fibre (GRP). The number of registered patents to date show the pioneering spirit and the uniqueness that made the company a global forerunner in many areas of newly applied manufacturing processes.

The know-how thus acquired also led to the award of licenses – for example in countries like Japan and Israel. Asked for the source of all these LACH DIAMANT successes you will hear Horst Lach say: “Everything started with the synthetic diamond. In 1957 it was offered for the first time by an American manufacturer as so-called ‘Man-made Diamond’ in grits as abrasive material for the production of diamond grinding wheels.

This fascinated me, particularly because I was – so to speak – born into the transition in my father’s enterprise from jewelry diamonds to industrial diamonds”.

In 1969 synthetic diamonds were followed by grits with cubic boron nitride (CBN) under the name of “Borazon”; from it LACH DIAMANT made the first CBN grinding wheel for grinding HSS tools.

This was followed in 1973 by a new diamond-containing cutting edge material – polycrystalline synthetic diamond (PCD), in 1974 came the polycrystalline boron nitride cutting insert (BZN) – for the turning of high-alloy hardened steels.

All these new superabrasive materials inspired the development of LACH DIAMANT. The groundbreaking invention of spark erosion/electrical discharge machining ultimately allowed the forcing of the NC/CNC technology in the machine tool industry and thus in series production.

This enabled the cost-effective manufacturing of polycrystalline diamond tools not only for machining wood and composite materials but also for applications in the automobile and automotive accessories industry.

The now possible installation of weight-saving light materials in automobiles and aircrafts, and ultimately the actually discussed and needed wind turbines which LACH DIAMANT can proudly write on its banner, created at an early stage a boost of energy while at the same time being climate friendly.

The list of all achievements from the work of now 100 years LACH DIAMANT adopted by the industry to date could fill a broad “who is who” of technology.

At the fairs of the year 2022 – like GrindingHub and AMB in Stuttgart – the company showed under the slogan “Tradition – Passion – Innovation”, that it is still ready to face today’s and tomorrow’s challenges at the service of the industry and thus to manifest itself as a reliable partner.

By the way, on the occasion of the academic jubilee celebration in the German Goldsmiths House in Hanau on October 13, 2022, an extensive exhibition was opened for all those who always wanted to know what is successfully done with diamond today. The exhibition runs until November 13, 2022.

This closed the circle “Diamonds are not only a girl’s best friend”.