

# Finer Points

**SUPERABRASIVE INDUSTRY REVIEW**

## **HORST LACH, Pioneer of the Diamond and CBN Tool Industry Celebrates His 80th BIRTHDAY**

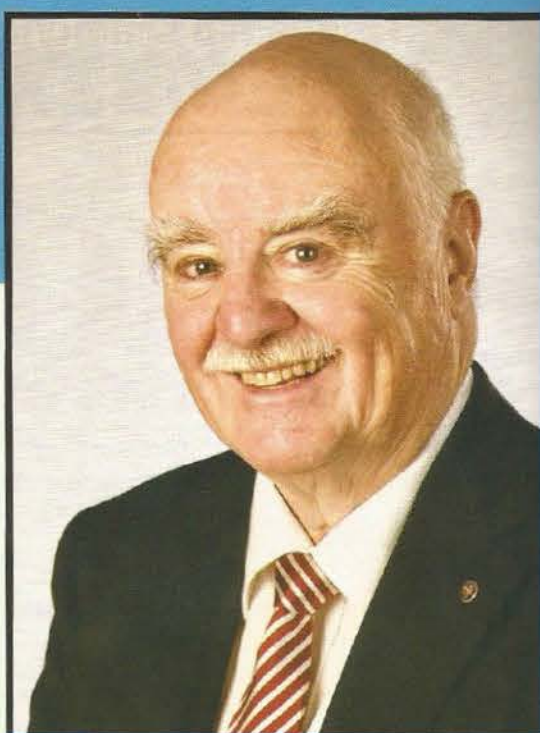
In his 80-years-long life Horst Lach has experienced several periods of crisis and has shown great skill in guiding the company founded by his father in 1922 and taken over by him in the 1960s through times, which have not always been simple. The company developed from a sought-after diamond cutting business in the 1920s into a successful tool manufacturer: LACH DIAMANT manufactures globally high-precision diamond and CBN tools and works out suitable tool concepts together with its customers in the automobile, aerospace, wind power, electronic and furniture industries as well as in the mechanical engineering. By now the company has more than 150 employees at the facilities in Hanau, Lichtenau near Chemnitz and Grand Rapids, Michigan, USA.

Not only in times of crisis has Horst Lach proved his skill and intuition for the next necessary step. In now 60 years of service he had a lasting influence on the tool industry with ideas "stepping out of line" and indispensable discoveries. For example, in 1969 Horst Lach intensively examined the (at that time) new cutting material BORAZON, recognized its potential and subsequently developed the first CBN grinding wheels for the grinding of high-alloy steels.

The emergence of new materials and their possible unprecedented use in industry was for Horst Lach like solving crosswords for other people, only much more sustainable: Thus, he was, as a "man of the first hour", jointly responsible for the change of paradigm in the wood and furniture industry during the 1970s. With the use of polycrystalline diamond (PCD) the tool lives at that time did not increase by seconds, as they are calculated today, but by weeks or even months. A revolution in tool industry.

Until then, the woodworking industry had worked exclusively with carbide tools. The introduction of man-made diamonds, the polycrystalline diamond by DeBeers and General Electric in 1973 should fundamentally change the industry. But how to machine the super-hard cutting material? Engineers all over the world were facing this riddle, after all, at that time it was commonly believed that diamond could only be worked with diamond.

Horst Lach had the brilliant idea "why not just use spark erosion?" And in fact, it worked! The "electric spark" as a medium for targeted shaping of super-hard PCD is considered as groundbreaking discovery enabling from that moment the efficient and economical machining of PCD circular blanks. In this way the cutting material can be used for milling cutters, drills, turning tools and saw blades. It laid the foundation for the future series production of furniture, floors and kitchen facilities and, some years later, also for cutting all types of non-ferrous metals and composite materials e.g. in the automobile industry. Without this discovery we wouldn't be able to buy cheap wooden furniture or fitted kitchen. Horst Lach's idea sparked the beginning of mass production. Diamond tools are also used e.g. for precise drillings in the wings of aircrafts as well as for the production of iPhones and iPads and many more applications where high precision is essential.



**On his 80th birthday, HORST LACH actually wanted to take a vacation and celebrate this special day together with his family, however, the Corona virus changed his plans. That does not bother him at all: for him it simply means another challenge and he is running up to top form. Hand in hand with his son Robert he is taking steps in his home office to ensure that the operations can continue at the best despite the crisis.**



**A life full of pioneering discoveries**

**and achievements. CONGRATULATIONS HORST LACH! We are curious to hear of your next sparkling idea ...**

Many people thought "now he has turned crazy, he wants to work wood with diamond", when LACH DIAMANT was the first company worldwide to present a complete range of diamond tools and saw blades for the woodworking industry at LIGNA 1979. As mentioned above with great success, not only for LACH DIAMANT, but for the entire sector. For this revolutionary step to use diamond as a cutting material for the woodworking industry, Horst Lach was honored with the "DeBeers Diamond Award" in 1999. This discovery led Horst Lach to a further bold step ... in addition to the tool business he started to manufacture sharpening machines according to the LACH-EDG-Process (electrical discharge grinding) and to continue their development to the present technically advanced level. These machines are used in sharpening companies all over the world.

Horst Lach is characterized by courage, intelligence and great risk-taking, with an infallible intuition for innovations and new discoveries and to venture into new territories despite many prophecies to the contrary. The long list of successful patents and implemented tool solutions gave Horst Lach the name "pioneer of the diamond and CBN tool industry" causing some white hair to many a competitor. In 1999 for example customers were enthusiastic about the idea to equip a cutting insert for turning aluminum with a chip-breaker. Finally, the problem was solved ... the inconvenient long chip is now broken into smallest parts and damages in the soft alloys are a thing of the past. Horst Lach can rely on a great team of staff members at all locations with a strong support alongside his son Robert, his daughters Iris, Denise and Annabelle. He is proud of this third generation, which is successfully continuing to run the enterprise with him. Presently he is writing from the view of a contemporary witness, the 12th part of an ongoing series about the exciting development of diamond and CBN tools and grinding wheels in modern industries. For further information visit: [www.lach-diamant.de](http://www.lach-diamant.de).

Horst Lach sees his greatest achievement in the professional field, however, his energy and commitment is also evident during leisure time. The 80-year-old entrepreneur still spends every free minute on the golf course, successfully playing with verve and enthusiasm. year-old entrepreneur still spends every free minute on the golf course, successfully playing with verve and enthusiasm. ●