



1970: Anton "Toni" Bächler founds the company. Start of development and sale of trail equipment.



1976: First deployment at the Olympic Games in Innsbruck in 1976. Many further Olympic deployments follow.



1985: Import of HKD snow guns from North America.



1999: Conversion of BÄCHLER TOP TRACK to a public limited company (AG) and takeover by CEO Claus Dangel (right) & CFO Bruno Koch (centre) – pictured with COO Mario Koch.



2000: BÄCHLER TOP TRACK first develops and markets its own snow gun, VANESSA.

50 YEARS OF BÄCHLER: THE SOLUTION FINDER

Always different, always a step ahead, always consistently perfectionist: a lot has changed at BÄCHLER TOP TRACK since 1970 but the philosophy has always remained the same.

"I generally felt like a missionary – in the integral system of working equipment on snow groomers and in understanding of the first snow guns on the European continent" – Toni **Bächler** summarises his life's work. For 50 years, the engineer pursued the objective of achieving the ultimate outcome from perfection – and his making his ideas attractive to the cable car industry. "Even in 1970, as a former ski racer and cross-country skier and as an FIS adviser, I wanted to prepare the perfect trail under any conditions," the 85-year-old reports. To implement the FIS rules, he founded the company BÄCHLER TOP TRACK, registered the name as a trademark and developed trail equipment that has become familiar in the industry through the World Championships and Olympic Games.

"One milestone in 1989 was the *front renovator*, which creates a compact, stable foundation for pistes, with good grip. Previously, the snow often collapsed, because the surface had been compacted but the subsurface remained loose," Bächler says. He was therefore one of the first to focus on the conditions before developing a product. This is an approach that the company still pursues even today – more about that later. In any case, the products from BÄCHLER became a selling point for piste vehicles, especially as Toni Bächler propagated the integral system: "In the past, the equipment – such as with tractors – was attached only

to a draw hook on the snow groomer. There were no hydraulic systems yet, with which the driver could control the equipment," the engineer says. The fact that he was also ahead of the competition here was also demonstrated by the development of the *Combistar* with caterpillar manufacturer KÄSSBOHRER: "With our exclusive series equipment, we were able to prepare the trails faster and at the same time better than all our competitors," Bächler remembers. Many further blowers and devices for pistes, trails and ski jumps followed – always with the idea of developing products that the market needs, rather than starting by manufacturing something to then sell with aggressive marketing.

From trail to snow gun

In 1985, the company finally began the gradual change from equipment manufacturer to producer of snowmakers. For several years, Toni Bächler imported HKD snow guns from North America and Top Gun snow guns from Scandinavia. After the company was taken over by Bruno **Koch** (CTO) and Claus **Dangel** (CEO) in 1999, the pair then set about developing their own significantly more efficient snow gun. In 2000, *VANESSA* saw the light of day, as the first snow gun with a Laval nozzle. Despite good performance, the team was not yet satisfied; it still needed too much compressed air. "As a small player, we knew we had to make maximum use of the potential, in



2005: Takeover of NIGA Maschinen- & Metallbau AG. Start of in-house production of snow handling equipment as well as accessories.



2015: Switch to completely in-house production and relocation to the present head office in Emmenbrücke near Lucerne.



2000: VANESSA, the first BÄCHLER gun developed in-house, is launched on the market and enjoys great success, such as in Zermatt.

order to survive in the market," Dangel emphasises. From 2004 to 2008, BÄCHLER therefore invested a great deal of time and energy in fundamental research. "Before we began a CTI project with FHNW University of Applied Sciences and Arts Northwestern Switzerland and the Institute for Snow and Avalanche Research (SLF), there was little knowledge of the snow process," Koch reports.

NESSy came at the right time

The results included not only 150 pages of new scientific findings but also the energy-efficient *NESSy* snow gun technology. "Since then, 25 patents have allowed us a completely different snow process, which is more efficient than all our competitors," COO Mario Koch, who has worked at the company since 2006, is pleased to report. *NESSy* came at exactly the right time, as the trail equipment business was in decline. At the same time, with the development of scientific knowledge, BÄCHLER backed a stronger depth of production and acquired machine construction companies NIGA and ARMEC. "Now with 90 percent in-house production, we are able to guarantee top quality, flexibility, modularity and customised small series," Dangel confirms. The range of standard models has also been greatly expanded in the last ten years,



2008: BÄCHLER revolutionises energy-efficient snowmaking with the *NESSy* snow gun system.

ars, with the *SnoTek* product line. "With the double-head *MEDUSA* gun & the triple-head *TRIDUSA* gun, we offer snowmakers that make snow in an energy-efficient way without compromising on performance and that can also be upgraded on existing infrastructure," Bruno Koch says. All models are based on the *NESSy* technology.

Electricity-free & snowmaking indoors

In addition to product development, BÄCHLER has always continued to conduct scientific research together with its CTI partners. "Milestones have included the *NESSy ZeroE* snow gun, which operates entirely without electricity and additional energy, and our *LIMES*, which can also make snow in continuous operation without increasing the indoor temperature," Mario Koch reports. BÄCHLER received significant awards for both inventions. "As a solution finder for our customers, we are currently working on further innovations and we have a number of irons in the fire," Dangel looks to the future. At the same time, international expansion of the BÄCHLER brand is being honed and making great progress with sales growth of ten percent per year. This is because the company is doing as it did 50 years ago: always different, always a step ahead, always consistently perfectionist. ts



2011: Spreading distances and snow volumes such as with low-pressure snowmakers are achieved with the *SnoTek* product range.



2013: The very compact CSV combination shaft valve is developed especially for use with *NESSy* and *SnoTek* guns.



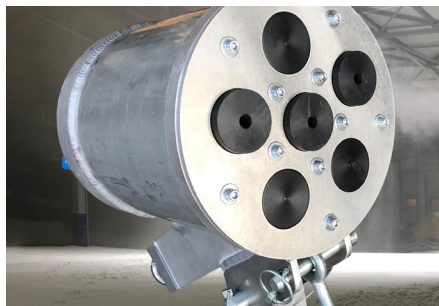
2014: *NESSy Zero E* – The world's first snow gun to operate entirely without electricity and additional energy.



2015: *SnoTek MEDUSA* – The power package optimised for maximum performance. Up to 900 litres of water per minute can flow at -8° WBT.



2018: Establishment of the branch in Austria with a three-person sales and support team.



2018: *LIMES* offers high-performance snowmaking without increasing the indoor temperature, even in continuous operation.



2017: *SnoTek TRIDUSA* – According to BÄCHLER, no snowmaker achieves better values in the marginal temperature range.