

Connections that last

Baier & michels (b&m) develops and produces high-quality direct screwing systems in Germany

Automotive engineering, electrical engineering, construction machinery – the screw manufacturer baier & michels (b&m) supports these industries with fastening solutions. The focus is increasingly on systems that rely on the principle of work hardening in the nut material: Direct screwing connections offer cost advantages by eliminating the need for thread cutting. The thread forming process does not produce any disturbing chips, but rather connections of outstanding strength and resilience.

The developments from b&m support OEMs and suppliers in being able to use the right materials in the right places and to join them together in a process-safe manner in the sense of an economical hybrid construction. What makes b&m screws stand out is above all their geometry and their ability to perform reliably in automated serial production.

For example, in contrast to trilobular direct screw connections, the b&m-TIGHT has a circular cross-section covering the entire thread area. The forming zone also has fully and sharply pointed thread flanks. This makes the b&m-TIGHT suitable for designs in aluminum-steel hybrid applications. Its special feature: with an appropriately adapted core hole, it is self-sealing against gases and liquids.

The b&m-FORM LG Vario feels at home in light metals as well as in thermoplastics and thermosets. Its flank geometry enables high flank coverage and homogeneous material flow. Even in ductile materials, the pull-out and preload forces reach high values.

And for robust direct screwing of carbon fiber reinforced plastics, the special steel of b&m-CARBON-PLAST is recommended. This allows direct contact with carbon fibers without causing a corrosion reaction. At the same time, the thread geometry avoids radial stresses that could lead to delamination effects.



b&m production team in the company headquarters in Ober-Ramstadt. (© b&m)



The optimized flank geometry of the b&m-FORM LG Vario enables high pull-out and preload forces – even in ductile materials. (© b&m)