

SCHNEEBERGER mineral casting press release

Linear technology and mineral casting – a promising duo

SCHNEEBERGER is well-known for its unique range of highly precise and reliable linear technology products, which runs the gamut from standard components to complete systems. These products also contain substructures consisting of mineral casting components which are produced in-house, a process which has been going on for approximately five years now. The material, which has substantial damping characteristics, provides the most effective properties for highly dynamic linear technology.

Mineral casting is the ideal material for use in any supporting structures and foundation structures where dynamic and highly precise movements are required. It exhibits clear technological, economical and ecological benefits in comparison to steel, grey cast iron and cast iron. It isn't just the attention of machine tool producers which is piqued due to the material's excellent vibration damping properties, resistance to chemicals and thermal stability; medical engineering, solar technology, electronics, and packaging companies as well as many other branches are also convinced by the advantages of mineral casting.

Over the years, SCHNEEBERGER has accumulated a wealth of experience in working with this material and has realised that in ready-to-install designs which are compatible for the material, mineral casting components are up to 30 percent more cost-effective in comparison to grey cast iron parts or similar welded structures; this is in addition to significantly reduced lead and delivery times. This is a good reason to not only make use of mineral casting, but to produce it in-house as well. Our factory which opened in Cheb, Czech Republic, in 2007 is now the most modern of its kind in Europe and guarantees accurately coordinated and precise deliveries of the highest quality. Another production facility has been in operation in China since 2010.

The user is guaranteed substantial benefits, particularly when combined with SCHNEEBERGER's core business of linear technology. Mineral casting exhibits up to ten times more effective damping than steel or grey cast iron, thereby ensuring that the machine structure maintains a high level of dynamic stability; these are optimum prerequisites for components featuring highly dynamic linear technology.

As a provider of complete machine structures which are assembled on-site, SCHNEEBERGER also benefits from the fact that connecting components, lines, sensor technology and measuring technology can be cast into the structure. As such, the customer receives fully assembled construction and assembly groups which are optimally adapted to their kinematic requirements – they can also be fully fitted with linear bearings, electronics and sensor technology, linear motors or other drive units if required.

And now a final word on environmental considerations, which play a major role within the SCHNEEBERGER Group: thanks to the cold casting process, mineral casting does not require any additional thermal energy during the production process. Energy consumption and CO₂ emissions are therefore significantly lower in comparison to steel or grey cast iron production.



Caption

SCHNEEBERGER can supply the right mineral casting to suit every purpose, regardless of whether it weighs 80 grams or 30 tons.

SCHNEEBERGER group

SCHNEEBERGER® operates worldwide as an established OEM supplier in a wide variety of sectors – from the solar, semiconductor and electrical industries to the machine tool and medical devices sectors, and beyond. The product and manufacturing program includes linear bearings and profiled linear guideways as well as measuring systems, gear racks, slides, positioning systems and mineral casting. A.MANNESMANN, headquartered in Remscheid, Germany, has been part of the SCHNEEBERGER Group since October 2017. werotec ag, headquartered in Reigoldswil, Switzerland, has also been part of the SCHNEEBERGER Group since early 2018. werotec ag's core competence lies in precision grinding technology and in the complete production of anti-friction bearing rollers.

Order SCHNEEBERGER product images via e-mail or give us a call.