

“KIPPblock” workholding towers are used as an alternative to cast or steel tooling columns. Due to its low specific weight (lighter than aluminium), mineral cast towers are suitable for keeping the loading on 4 and 5-axis machines as low as possible. Ideal for use on machines with high accelerations and rapid traverse speeds.

The flexibility of design is highly convincing. Steel jacketed versions are also available in a wide range of shapes and sizes.

The KIPPblock clamping elements can be used in machines with high rapid traverses. The reduced load on the machine by the clamping system is a crucial factor. The KIPPblock clamping elements can be produced in different sizes. We make a distinction here between clamping elements that are cast entirely out of mineral cast and those with an external steel jacket. The elements with a grid system are available as standard in the M12/F7 and M16/F7 system sizes with grid 40 and 50.

ADVANTAGES:

- Outstanding absorption properties, 6-10 better than grey cast iron
- Very low specific weight, lighter than aluminium
- Low heat conductivity
- Chemically and mechanically resistant to aggressive and abrasive media
- Design freedom with regard to shaping
- Increased service life of the cutting tools by up to 30%
- No corrosion
- Integration of machine elements, such as load anchors, air or hydraulic connections
- Appealing surface, no painting required

For many years mineral cast has been used as an alternative to iron castings and steel constructions. Today it is the leading technology for many applications. It is thanks to mineral cast that new innovations in electronics and medical technology were made possible.

MINERAL CAST TECHNOLOGY

1. Mineral cast is a dual component system consisting of a mineral filler and an epoxy resin bonding agent.
2. The mineral filler makes up roughly 90% of the total weight.
3. Mineral cast is produced using a cold casting method injected into precision negative moulds at room temperature.
4. Due to the true form and high precision casting method, added elements such as plates, thread inserts, guides or tubes can be precisely placed in the casting mould.



KIPPblock



Mineral cast workholding tower



Mineral cast workholding tower with steel jacket



Mineral cast workholding tower with zero-point clamping system



Mineral cast cross tower



Mineral cast plates

