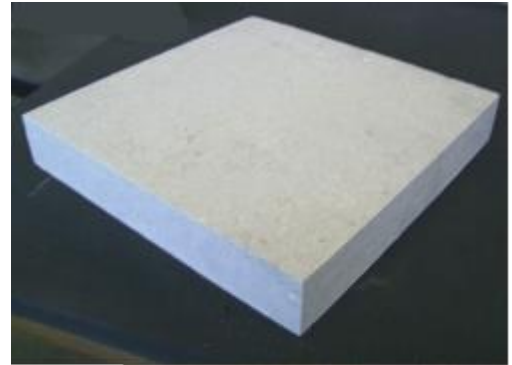




## Cavuscore Block / Mandrel Data Sheet

Our unique Cavuscore Blocks / Mandrels are designed for high-temperature and high-pressure applications, such as hot pressing with thermoplastics or HP-RTM. Nevertheless, they offer an extremely easy wash-out, even with complex geometries. They are also suitable for general moulding and tooling applications where high-temperature, high-pressure resistance and a low coefficient of expansion are important.

- Blocks: Prefabricated and dried
- Mandrels: Produced according your CAD file
- Vacuum sealed to avoid moisture uptake
- CC-GP white colour / CC-BX black colour
- Ready to use
- Machinable (see instructions)
- Various thickness available
- Other dimensions on request



Technical Properties	Blocks / Mandrels	Mandrels
CavusCore	Glass Beads (CC-GP)	Bauxite (CC-BX)
Density (g/cm <sup>3</sup> )	1.50	2.00
Temperature Resistance (°C)	>300	>300
CTE (10 <sup>-8</sup> /K)	9.05	7.10
Thermal Conductivity (W/mK)	1.13	0.20
Heat Capacity (J/kg-K)	1329	872
Flexural Strength (N/cm <sup>2</sup> ) approx.	400	500
Compressive Strength (bar)	200 (20MPa)	200 (20MPa)

### Standard Sizes Cavuscore Blocks CC-GP

Article No.	Dimension
79955	500 x 500 x 50 mm (12.50 Litre / 19.0 kg)
79956	500 x 500 x 75 mm (18.75 Litre / 28.5 kg)
79957	500 x 500 x 100 mm (25.00 Litre / 38.0 kg)
79958	500 x 500 x 150 mm (37.50 Litre / 57.0 kg)

Use flat surface on the milling table!



Hot pressing Thermoplastic part produced with Cavuscore mandrel (process data 280°C / 45bar)

### Basic data for machining Cavuscore Blocks

Roughing	Finishing
Speed 5'000rpm	Speed 8'000rpm
Feed 60in / 1524mm / min	Feed 25in / 635mm / min
Cutting depth 0.2" / 5.0mm	Cutting depth 0.005" / 0.13mm

Cutting depth relating to a 3-flute end mill carbide cutter (face- or ball end).

Meant as a guide only! If a complex shape operator should adjust accordingly. Call or fax Aero Consultants AG for assistance with your specific manufacturing requirements. Aero Consultants AG makes no warranty expressed or implied, including warranties of merchantability or fitness for a particular use. Under no circumstances will Aero Consultants AG be liable for incidental, consequential or other damages, alleged negligence, breach of warranty, strict liability, tort or any other legal theory arising out of the use or handling of this product.