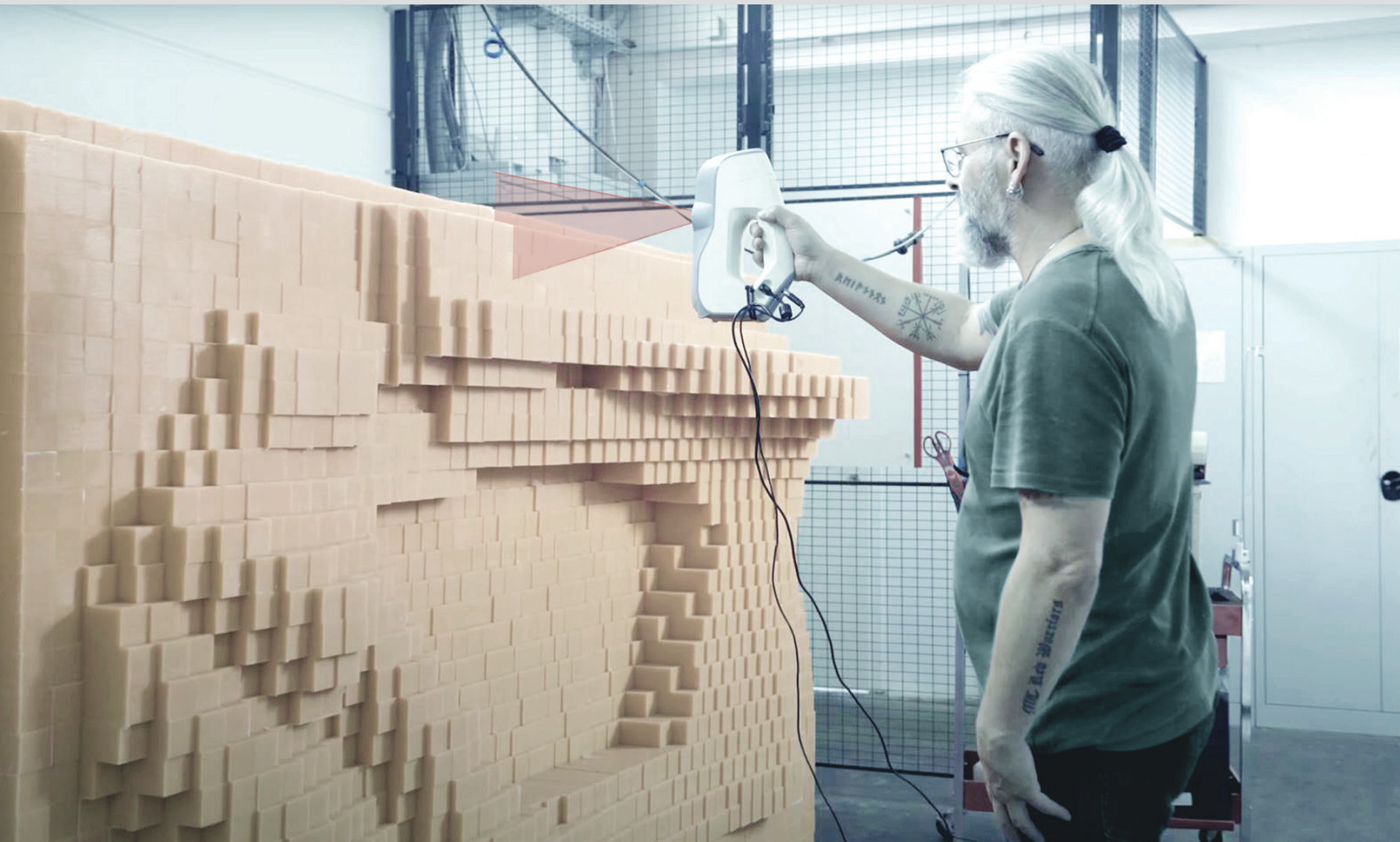


CUBES BLOCK GROUTING WITH SikaBiresin® PRODUCTS



Model casting resin cast close to contour or in blocks with different densities CPU 0800 to 1600

Tried and tested **SikaBiresin® PU** is cast in the globally unique and patented production process of CUBES GmbH for the manufacture of shape-matched raw blocks and guarantees the highest component quality possible.

- density 0.80 - 1.60 g/cm³
- component sizes (3 x 2 x 1.5m) from 100 ltr. to max. 2,000 ltr. can be realised
- excellent price-performance ratio
- simple, low-dust processing
- high surface quality
- low thermal expansion
- good compressive and edge strengths
- additional matching **SikaBiresin®** repair solutions such as adhesives and fillers

IN COOPERATION
WITH



APPLICATION AREAS

- Blank density from 0.80 to 1.60 g/cm³
- Near-net-shape blanks for mold and gauge construction (also with low wall thickness)
- Model blocks for autoclave tools

PRODUCT ADVANTAGES

- good machinability
- low dust generation
- good surface after machining
- very fine, closed surface
- good compressive and flexural strength
- Dimensionally stable and high edge strength

- high abrasion resistance and impact strength
- Subsequent changes are very easy to implement with block materials
- finished surfaces

DESCRIPTION

- Base polyurethane, light brown

Mechanical properties (approx. Values)

			CPU - LD		CPU - HD	
			CPU - 0800	CPU - 1000	CPU - 1200	CPU - 1600
Density	ISO 845	g/cm ³	0,80	1,00	1,20	1,60
Shore hardness	ISO 868	-	D 67	D 76	D 84	D 87
Modulus of elasticity	ISO 178	MPa	1.300	2.100	2.600	5.900
Flexural strength	ISO 178	MPa	30	50	105	70
Compressive strength	ISO 604	MPa	29*	47*	81*	88*
Heat resistance	ISO75B	°C	58	65	79	78
WAK _{αT}	DIN 53 75	K ⁻¹	78 x 10 ⁻⁶	78 x 10 ⁻⁶	80 x 10 ⁻⁶	55 x 10 ⁻⁶

* at 10% compression

FACTS & ADVANTAGES



Gogreen

sustainable process with minimal waste. No auxiliaries such as polystyrene moulding



Tempering

almost tension-free through subsequent heat treatment



High quality

From one piece - no plate gluing, high optical and mechanical quality



Material savings

up to 40% (to conventional methods)



Suitable for autoclaves

up to 55°C / 7bar (at density 1,6 g/cm³)



Fast delivery

Delivery time from 3 days (within DE and AT)

QUALITY

Quality assurance is central for us and also for you as a customer. That is why we check the chemical, mechanical and thermal properties of each individual component. We will send you the detailed test report with the moulded part you have ordered.



Chemical properties and thermal stability. With the help of DSC measurements (Differential Scanning Calorimetry), we carefully examine every component.



We use a DMA (dynamic mechanical analysis) for **mechanical quality assurance**. By measuring the storage modulus G', we can conclude that the mechanical product parameters are being adhered to.



Contour inspection (3D). With a 3D hand scanner, we create an image of each molded part as a point cloud. With this comparison you will not only see the maximum deviation of our cast from the calculated model, you can even see where any deviations can be expected.

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