



Now also  
as individual  
block casting

# SikaBlock® M980

## LONG TERM STABILITY

### Triple dimensional stability

- Very low coefficient of thermal expansion ( $\alpha_T=60 \times 10^{-6} 1/K$ )
- Very high swelling resistance
- Very low warpage due to low inner stress

### High durability

- Very high abrasion resistance
- Very high compressive, flexural strength and edge stability

### Best milling properties

- Very good chip formation without dust
- Very low electrostatic charging
- Very dense polishable surface

BUILDING TRUST



# SikaBlock<sup>®</sup> M980

## AREAS OF APPLICATION

- Manufacture of core boxes, foundry models and match plates in Coldbox Processing
- Manufacture of divers moulds, tools and gauges

## PRODUCT BENEFITS

- Very low coefficient of thermal expansion
- Very high abrasion resistance
- Very high swelling resistance
- Very high compressive and tensile strength as well as edge stability
- Excellent, dust-free milling properties

## DESCRIPTION

- **Basis:** Polyurethane, blue
- **Adhesive:** Biresin<sup>®</sup> Power Adhesive Thix, 2K-EP-System
- **Adhesive:** Biresin<sup>®</sup> Adhesive green, 2K-PUR-System
- **Size in mm:**  
1000 x 495  
Thickness: 30/50/75/100  
special dimensions on demand

### PHYSICAL DATA (APPROX. VALUES)

Density	ISO 845	kg/ltr.	1.35
Shore hardness	ISO 868	-	D 86
Flexural strength	ISO 178	MPa	145
E-Modulus	ISO 178	MPa	4,000
Compressive strength	ISO 604	MPa	120
Impact resistance	ISO 179 Ue	kJ/m <sup>2</sup>	35
Heat distortion temperature	ISO 75 B	°C	85
Coefficient of thermal expansion (CTE), $\alpha_T$	ISO 11359	K <sup>-1</sup>	60 x 10 <sup>-6</sup>

### MILLING PARAMETERS

Milling steps	1.	2.	3.	4.	5.	6.	7.
Strategy	Roughing Z-constant	Rest material Z-constant	Rest material Z-constant	Rest material Z-constant	Finishing flat areas	Finishing Z-constant	Finishing rest material shapes
Milling tool	Torus cutter	Torus copying cutter	Ball nose copying cutter	Ball nose copying cutter	Torus copying cutter	Ball nose copying cutter	Solid carbide ball nose cutter
Diameter [mm]	42	20	12	6	8	8	4
Number of teeth	3	2	2	2	2	2	2
Radius [mm]	3	4	6	3	1	4	2
Cutting speed (Vc) [m/min]	500	500	600	300	400	400	200
Revolutions [1/min]	3,800	8,000	15,900	16,000	16,000	16,000	16,000
Feed rate per tooth [mm]	0.5	0.5	0.2	0.15	0.1	0.1	0.1
Feed rate (Vf) [mm/min]	5,700	8,000	6,400	4,800	3,800	3,800	3,800
Cutting depth (ap) [mm]	5	2,5	2	0,5	0,3	0,15	0.1
Cutting width/Line spacing (ae) [mm]	30	10	2	0.5	4	0.3	0.1

Changes that serve technical progress, as well as errors and misprints reserved 06/2019

Our most current General Sales Conditions shall apply.

Please consult the Product Data Sheet prior to any use and processing.

Actual Product Data Sheets and information about additional products please find in:

[www.sikaadvancedresins.com](http://www.sikaadvancedresins.com)



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