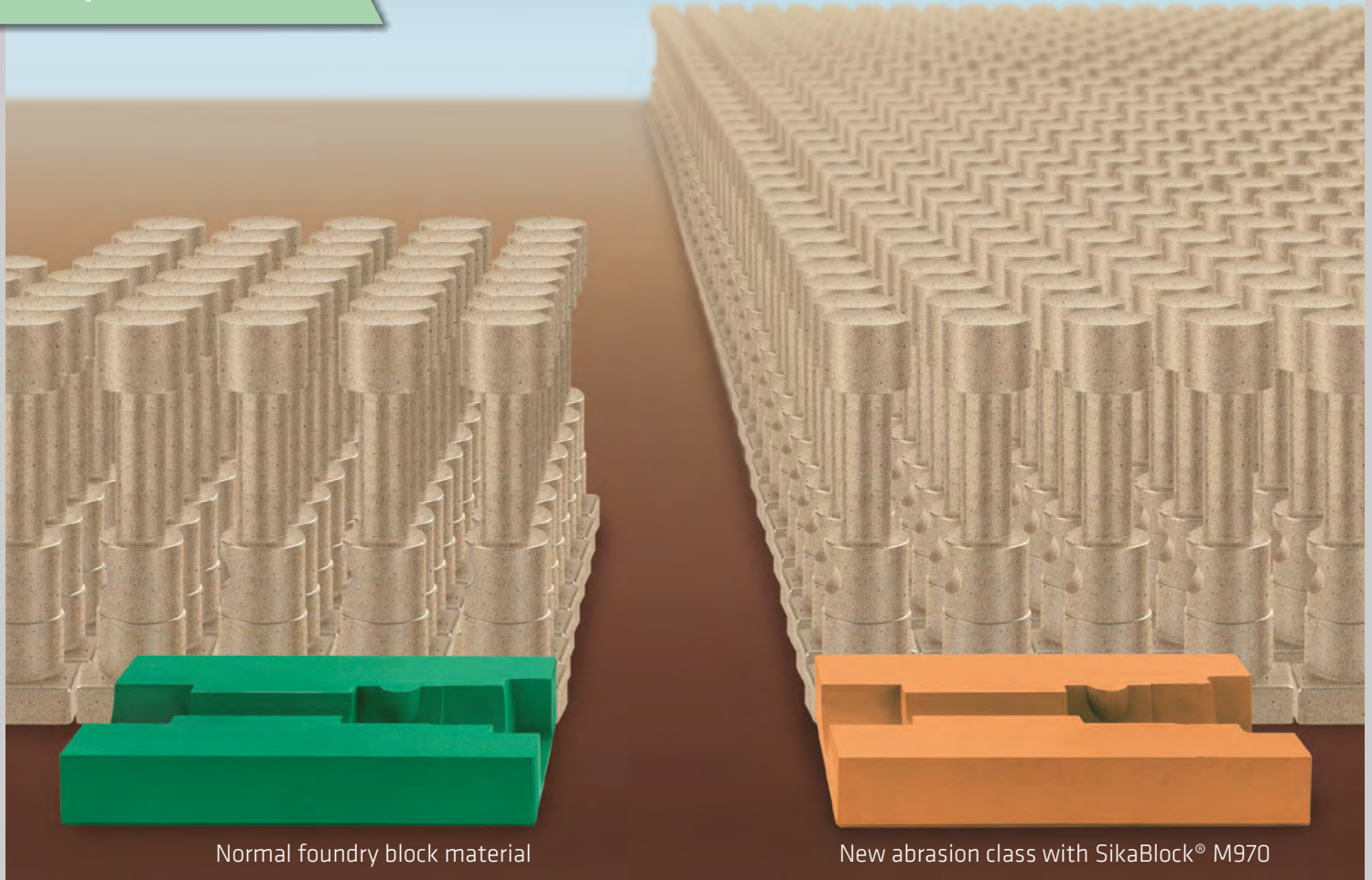


SikaBlock® M970  
really does more



Normal foundry block material

New abrasion class with SikaBlock® M970

# SikaBlock® M970

## SAFELY FROM PROTOTYPING TO SERIES PRODUCTION

**High abrasion resistant core boxes – from prototyping  
to series production with only one material.**

- Very high abrasion resistance
- High compressive strength and edge stability
- Excellent milling properties and high-grade surface
- High dimensional stability due to very low CTE-value

**BUILDING TRUST**



# SikaBlock<sup>®</sup> M970

## AREAS OF APPLICATION

- Manufacture of core boxes, foundry models and match plates in coldbox processing

## PRODUCT BENEFITS

- Very high abrasion resistance
- Very high compressive and tensile strength as well as edge stability
- Low coefficient of thermal expansion
- Excellent milling properties
- High-grade, dense surface

## DESCRIPTION

- **Basis:** Polyurethane, orange (formerly turquoise)
- **Adhesive:** Biresin<sup>®</sup> Kraft Kleber Thix, 2K-EP-System
- **Adhesive:** Biresin<sup>®</sup> Kleber grün Neu or Kleber blau Neu, 2K-PUR-System (with accelerator Biresin<sup>®</sup> HC586)
- **Size in mm:**  
1000 x 500 x  
Dicke 30/50/75/100

## PHYSICAL DATA (APPROX. VALUES)

Density	ISO 845	kg/ltr.	1.2
Shore hardness	ISO 868	-	D 84
Flexural strength	ISO 178	MPa	110
E-Modulus	ISO 178	MPa	2,550
Compressive strength	ISO 604	MPa	105*
Impact resistance	ISO 179 Ue	kJ/m <sup>2</sup>	230
Heat distortion temperature	ISO 75 B	°C	78
Coefficient of thermal expansion (CTE), $\alpha_T$	ISO 11359	K <sup>-1</sup>	68 x 10 <sup>-6</sup>

\*at 10% compressive strain

## 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]	600	500	600	250	400	400	200
Revolutions [1/min]	4,000	8,000	15,900	13,300	16,000	16,000	16,000
Feed rate per tooth [mm]	0.41	0.5	0.2	0.2	0.15	0.15	0.15
Feed rate (Vf) [mm/min]	5,700	8,000	6,400	5,300	4,800	4,800	4,800
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)



### Sika Deutschland GmbH

#### Sika Advanced Resins

Stuttgarter Strasse 139  
72574 Bad Urach

Germany

Telefon + 49 (0) 7125 940-492

Fax + 49 (0) 7125 940-401

E-Mail [tooling@de.sika.com](mailto:tooling@de.sika.com)

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

### Sika Automotive France SAS

#### Sika Advanced Resins

Z.I. des Béthunes – 15 rue de l'Équerre  
CS 40444 Saint Ouen l'Aumône

95005 Cergy pontoise Cedex – France

Phone +33 (0) 134 40 34 60

Fax +33 (0) 134 21 97 87

E-Mail [advanced.resins@fr.sika.com](mailto:advanced.resins@fr.sika.com)

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

**BUILDING TRUST**

