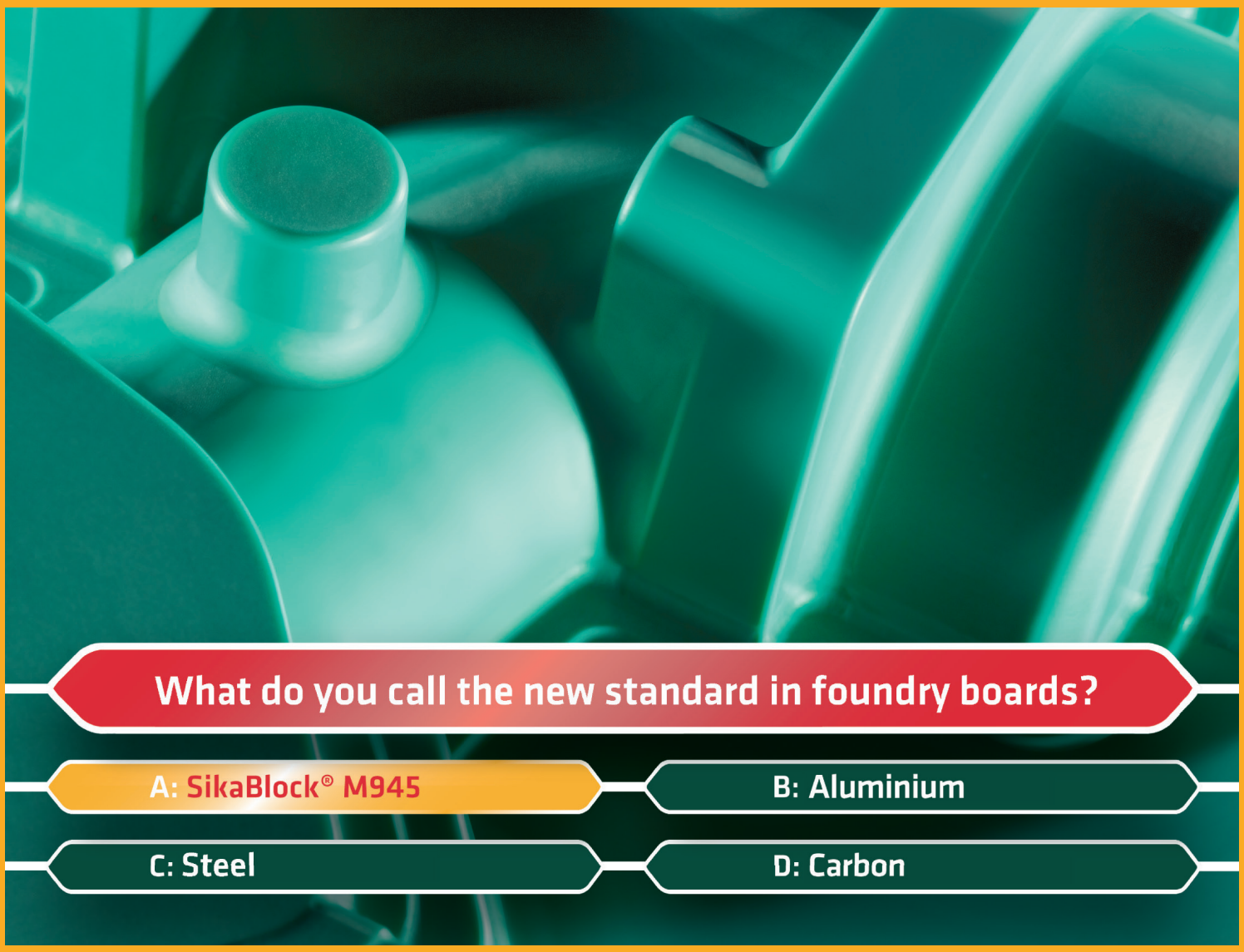


# SikaBlock® M945
# Your joker for every use

**The excellent package of processing and final properties for model maker and foundry alike makes the new M945 a desirable all-rounder with the best price/ performance ratio.**

- simple and reliable bonding (without previously grinding)
- very good milling behaviour
- high dimensional stability (low CTE value)
- high abrasion and swelling resistance
- best edge stability and rib stiffness
- excellent price/performance ratio
- tailor-made adhesive solution Biresin® Kleber grün Neu

Axson

BUILDING TRUST

Sika®

# SikaBlock® M945

## AREAS OF APPLICATION

- manufacture of foundry models, match plates and coldbox core boxes
- manufacture of various moulds and tools (e.g for metal sheet forming)
- manufacture of master models and mouldings for high quality demands

## PRODUCT BENEFITS

- excellent milling properties
- easy bonding
- low CTE value
- high abrasion resistance
- very high compressive and flexural strength as well as edge stability
- dense surface with good slipping properties

## DESCRIPTION

- **Basis:** Polyurethane, green
- **Adhesive:** Biresin® Kleber Thix, 2K-EP-System, farblos, thixotrop
- **Adhesive:** Biresin® Kleber grün Neu, 2K-PUR-System (with accelerator Biresin® HC586)
- **Dimensions in mm:** 1000 x 500 x Thickness 30/50/75/100

## PHYSICAL DATA (APPROX. VALUES)

| | | | |
|---|---|---|---|
| **Density** | ISO 845 | kg/ltr. | 1.3 |
| **Shore hardness** | ISO 868 | – | D 83 |
| **Flexural strength** | ISO 178 | MPa | 100 |
| **E-Modulus** | ISO 178 | MPa | 3,400 |
| **Compressive strength** | ISO 604 | MPa | 95 |
| **Impact resistance** | ISO 179 Ue | $kJ/m^2$ | 25 |
| **Heat distortion temperature** | ISO 75 B | °C | 80 |
| **Coefficient of thermal expansion (CTE), $\alpha_T$** | DIN 53 752 | $K^{-1}$ | 65–70 x $10^{-6}$ |

## 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 | Airline end mill 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 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 |
| **Feedrate per tooth [mm]** | 0.5 | 0.5 | 0.2 | 0.15 | 0.12 | 0.12 | 0.12 |
| **Feed rate (Vf) [mm/min]** | 5,700 | 8,000 | 6,400 | 4,800 | 3,800 | 3,800 | 3,800 |
| **Cutting depth (ap) [mm]** | 3 | 2 | 1 | 0.3 | 0.3 | 0.3 | 0.1 |
| **Cutting width/Line spacing (ae) [mm]** | 30 | 10 | 2 | 0.5 | 4 | 0.3 | 0.1 |

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