



SikaBlock® M990 –
REALLY DOES MORE !

SikaBlock® M990

High abrasion resistant Elastomeric board for long-lasting core boxes and match plates

The orange foundry board SikaBlock® M990 offers a great package of high abrasion resistance with a good dimensional stability for an attractive price.

- High numbers of demouldings due to a very high abrasion resistance
- Free of softener – no dimensional change due to softener migration
- Coefficient of thermal expansion is reduced by around one third
- Excellent milling behaviour and very low-dust formation
- Good edge stability and rib stiffness
- Good heat resistance



BUILDING TRUST



SikaBlock® M990

AREAS OF APPLICATION

- Manufacture of core boxes, foundry models and match plates in Coldbox Processing

PRODUCT BENEFITS

- Very high abrasion resistance
- Very high impact resistance
- Good heat resistance
- Excellent milling properties
- High-grade, dense surface

DESCRIPTION

- **Basis:** Polyurethane, orange
- **Adhesive:** UR 3490, 2K-PUR-System, beige with comparable abrasion resistance to SikaBlock® M990, Biresin® Power Adhesive Thix, 2K-EP system, colourless, thixotropic

PHYSICAL DATA (APPROX. VALUES)

Density	ISO 845	g/m ³	1,2
Shore hardness	ISO 868	-	D 80
Flexural strength	ISO 178	MPa	60
E-Modulus	ISO 178	MPa	1.500
Compressive strength	ISO 604	MPa	56
Impact resistance	ISO 179 Ue	kJ/m ²	without break
Abrasion resistance	ISO 4649	mm ³	170
Heat distortion temperature	ISO 75 B	°C	80
Linear thermal expansion coefficient α_T	DIN 53 752	K ⁻¹	105 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]	3,789	7,957	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]	5,684	7,957	6,366	4,800	3,840	3,840	3,840
Cutting depth (ap) [mm]	3	2	1	0.3	0.3	0.15	0.1
Cutting width/Line spacing (ae) [mm]	30	10	2	0.5	4	0.3	0.1

Sika Deutschland GmbH - SikaAxson

D-72574 Bad Urach

Tel.: +49 7125 940 492 · Fax: +49 7125 940 401

E-mail: tooling@de.sika.com · www.sikaaxson.de



BUILDING TRUST

