

## DESCRIPTION

Models and mocks-up production by extrusion process.

## PROPERTIES

- Very good surface aspect.
- Good behaviour on vertical support up to 30 mm
- Short hardening time even for 2 mm thick.
- High using temperature
- Low CTE : good dimensional stability

PHYSICAL PROPERTIES				
Composition		RESIN	HARDENER	MIXING
Mix ratio by weight		100	100	
Aspect		viscous paste	viscous paste	viscous paste
Colour		grey	white	grey
Viscosity at 25 °C 0,9 s <sup>-1</sup> (Pa.s)	RM 100 Lamy	800	800	800
Specific gravity at 25 °C (g/cm <sup>3</sup> )	ISO 1675 : 1985	1.06	1.06	1.06
Specific gravity of cured product at 23 °C	ISO 2781 : 1996	-	-	1.08
Pot life at 25 °C on 500 g (min)	-			140

THERMAL AND MECHANICAL PROPERTIES (1)				
Applied layer			30 mm	15 mm
Glass transition temperature (Tg) 24 hours at 25 °C + 16 hours at 60 °C / 80 °C	ISO 11359 : 1999	°C	71 83 / 89	54 82 / 91
Deflection temperature	ISO 75 : 2004	°C	78	
Coefficient of thermal expansion (CTE) 24 hours at 25 °C + 16 hours at 60 °C / 80 °C	ISO 11359 : 1999	10 <sup>-6</sup> .K <sup>-1</sup>	59 53 / 55	61 59 / 58
Hardness 24 hours at 25 °C + 16 hours at 80 °C	ISO 868 : 2003	Shore D1/ D15	73 / 71 75 / 74	69 / 65 75 / 74
Tensile modulus	ISO 527 : 1993	MPa	2,400	
Tensile strength	ISO 527 : 1993	MPa	21	
Elongation at break	ISO 527 : 1993	%	2.2	
Flexural modulus	ISO 178 : 2001	MPa	2,000	
Flexural strength	ISO 178 : 2001	MPa	36	
Compressive strength at yield	ISO 604 : 2002	MPa	36	

(1) : Average values obtained on standard specimens / Hardening 24 hr at 25 °C + 16 hr at 80 °C

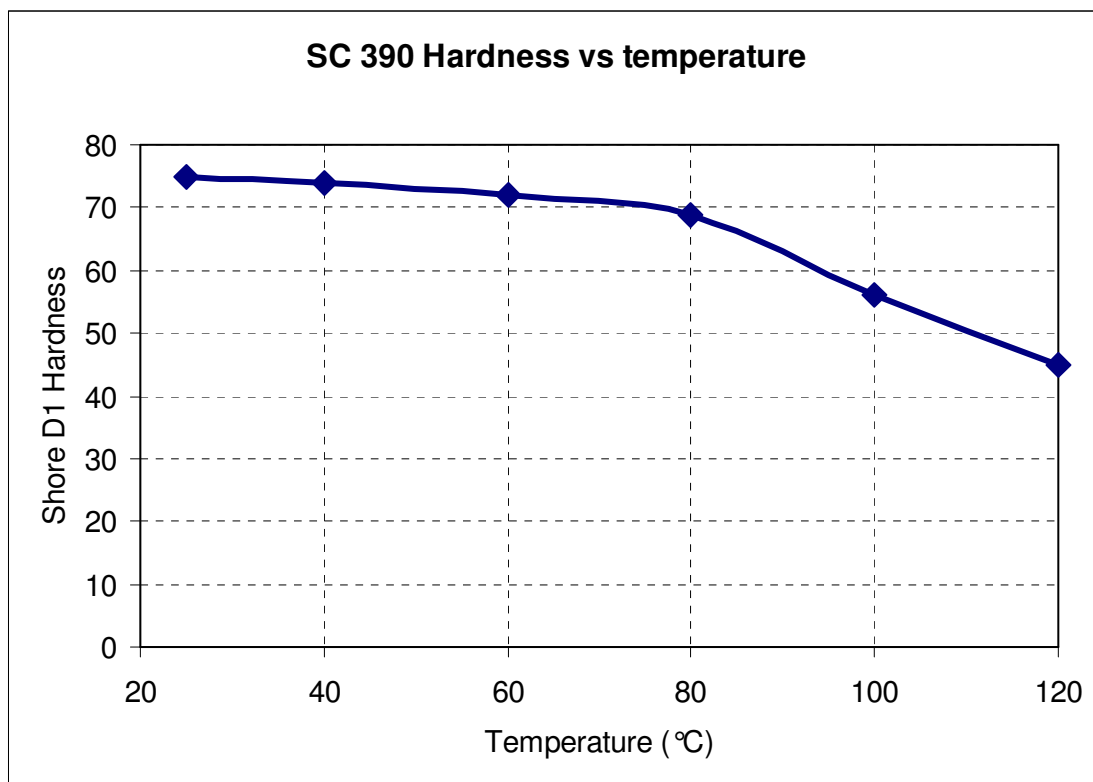
**During processing the dispensing nozzle must be maintained perpendicular to the surface on which the product is applied. Ensure overlap of ribbon.**

**CAUTION : Exotherm mostly depends of the type of machine and of the working parameters such as :**

- Room temperature.
- Insulating property of support.
- The mixture temperature (depending of the type of mixer: static or dynamic) and the speed of mixing and output.
- Applied thickness.

EXOTHERMIC PEAK AND HARDENING TIME *					
Thickness (mm)	Product temperature (°C)	Exothermic peak (min)	Exothermic peak (°C)	Workability (hours)	Linear shrinkage (mm/m)
30	29	140	82	12	< 2
15	29	140	46	16	< 1
2	29	200	35	16	-

\*Room temperature: 25 °C; polystyrene support.



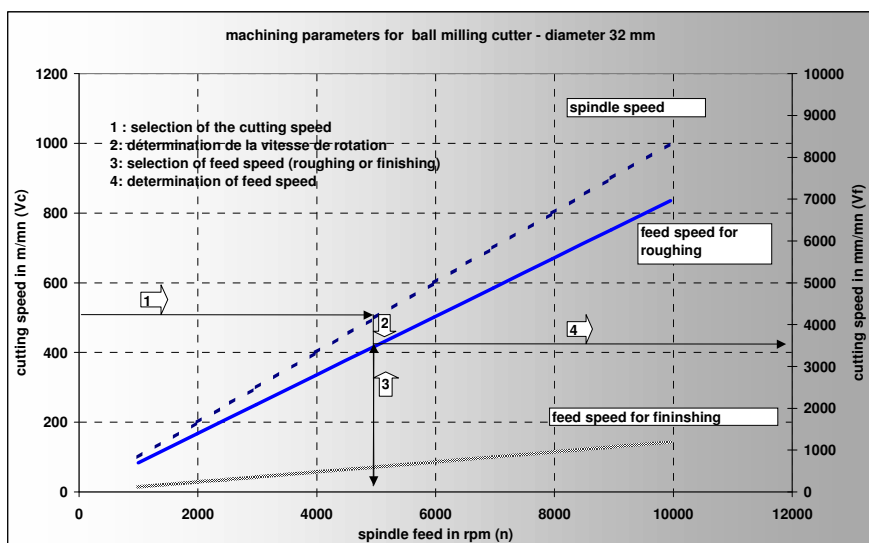
## PROCESSING CONDITIONS

On vertical support, it is sometimes recommended to apply a thin coat of product with a spatula; this will help to reinforce the bonding on the support.

For ceiling application, we recommend 30 mm of maximum thickness.

For dynamic mixing machine ,please contact us for parameters : [composite@axson.fr](mailto:composite@axson.fr)

### Machining parameters determined with ball milling cutter like GRT 32, GRT 25 and GRT 16

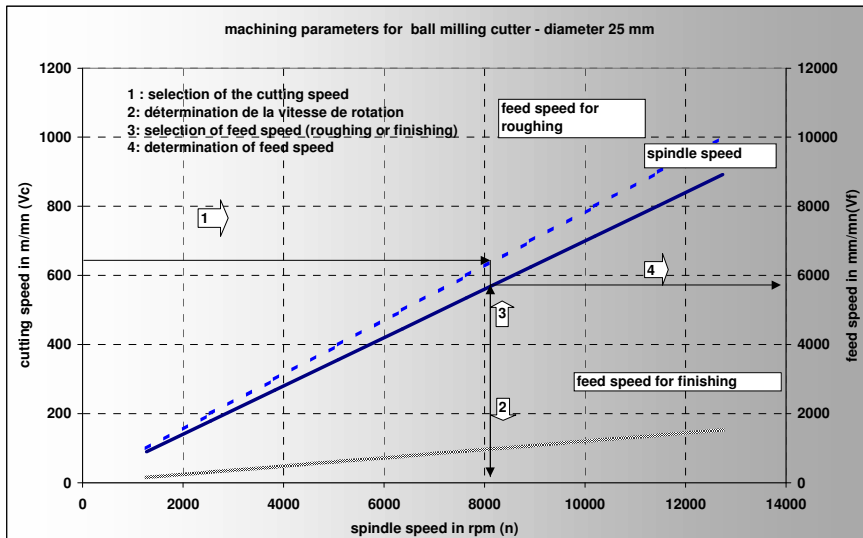


$$Vc = \frac{\pi * D * n}{1000} \quad \text{m/min}$$

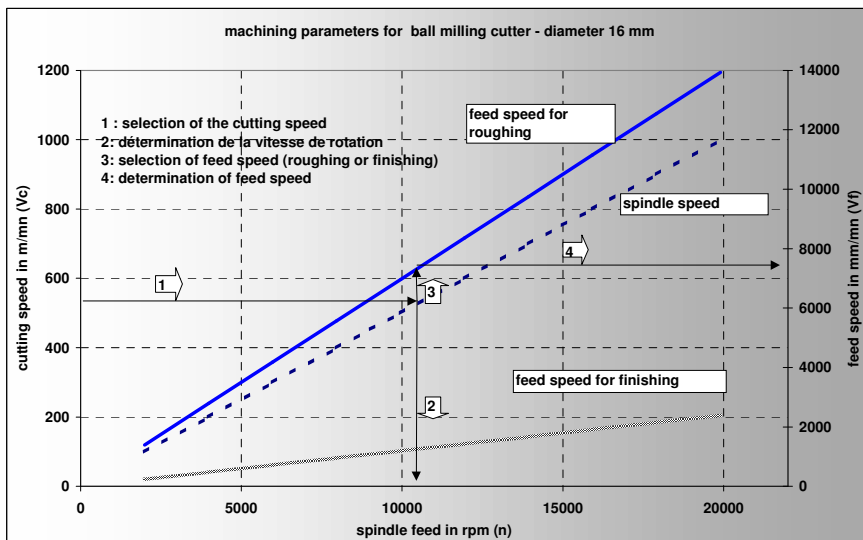
$$n = \frac{Vc * 1000}{D * \pi} \quad \text{tr/min}$$

$$fz = \frac{Vf}{Z * n} \quad \text{mm}$$

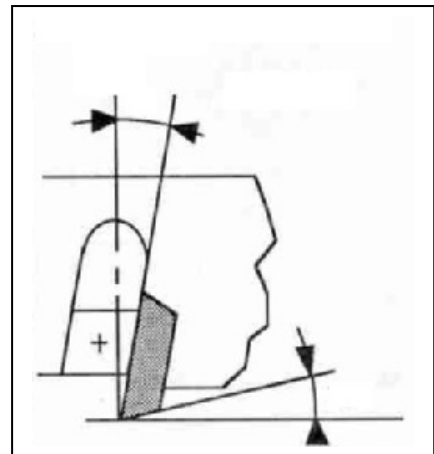
$$Vf = fz * z * n \quad \text{mm/min}$$



**Vc** : Cutting speed (m/min)  
**fz** : Feed rate per tooth (mm/rpm)  
**Z** : Number of teeth  
**D** : Tool diameter (mm)  
**n** : R.P.M.  
**Vf** : Feed speed (mm/min)



It is recommended to use always a tool with positive angle of cutting, clearance angle and angle of taper.



$\gamma_p$  : cutting angle 6 to 30°  
 $\alpha_p$  : Clearance angle 14°

## HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

- ensure good ventilation,
- Wear gloves, safety glasses and protective clothes.

For further information, please consult the product safety data sheet.

## STORAGE CONDITIONS

Use within 9 months of the manufacturing date. Expiry date indicated on the packaging.

## PACKAGING

RESIN	HARDENER	INTERNAL DIAMETER OF DRUMS
1 x 45.0 kg	1 x 45.0kg	360 mm
1 x 195.0 kg	1 x 195.0kg	570mm

## GUARANTEE

The information of our technical data sheet is based on our present knowledge and the result of tests conducted under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON refuse any guarantee about the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The guarantee conditions are regulated by our general sale conditions.

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