



**MODELS** **NEGATIVES**

**CORE BOXES**

**PLATES**

**PATTERNS**

PARIS FRANKFURT LONDON MILANO BARCELONA BRATISLAVA SHANGHAI NAGOYA DUBAI PUNE DETROIT MEXICO CITY

# FOUNDRY TOOLING SOLUTIONS



ISO 9001

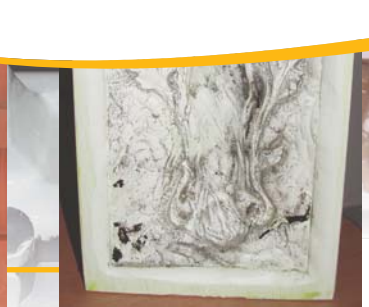


ISO 14001



## MODELS

Thanks to its experience on the design market, Axson develops products dedicated to the production of prototypes parts.



### SC 258

Smooth epoxy paste easily mixable and machinable for any shape modeling. Very low density. 1 hour open time. Ideal for reinforcement and sealing.

### PROLAB 65

Medium density machinable board replacing wood, for the production of accurate models, mock up, master, models, either in NC machining or manual operation with traditional wood tools.

### F 23

Quick setting polyurethane system having a texture close to modelling plaster, which produces tools, models and parts with a high finished surface. Easy Sanding and polish.

## NEGATIVES



### F 1

F1 is a quick setting prefilled PU\* resin with a simple mixing ratio 1 to 1, low shrinkage. Fine grain and texture for fast model and/or negative making. 3 colours available.



### F 18/F 16

This two quick setting polyvalent PU resins are not prefilled and gives possibility of adding up to 200 % filler proportion depending on the final usage. Both deliver good mechanical and thermal performances. F18 has a longer pot life and demoulding time.



### F 50

This PU\* resin is dedicated for large dimensions models/negatives with an ability of a high thickness casting (400 mm) with a very low exotherm compatible with all kind of moulds materials. Capable of being tiled additionally, F50 is a fast and economic solution.



### GC1 050

White Epoxy Gelcoat to produce a rigid surface, quick hardening, easy sanding and polishes.

## CORE BOXES



### EPOPAST 400

Ready-to-use epoxy mixture of fibres and resin. EPOPAST 400, after mixing with its hardener gives a rigid paste for tough reinforcement. Light weight and easy to use.



### UR 3558

Here is a flexible Elastomer (95 sh A) highly resistant to abrasion and high mechanical properties but showing a surface elasticity far helping prevent sand build up and dust collection.



### GC3 090

Here is a polyurethane gel coat showing both mechanical resistance and ease of application. As PU\* material, this is also a flexible and elastic material. To be used as working layer behind an Epoxy concrete block.

## ANCILLIARY PRODUCTS

### SEALERS & RELEASE AGENT

#### WAX 827

Multipurpose wax in paste form for low porous supports, Apply with a rag.

#### Release agent 841

Wax in solvent phase for non porous supports, Polishable product.

#### Release agent 851

Heavy wax in spirit suspension, not polishable.

#### Release agent 870

Wax in aerosol in solvent phase. Sprayable.

### FILLERS

AXSON fillers are compatible with polyurethanes and epoxies.

\* PU stands for Polyurethane



# FOUNDRY PATTERNS

## Casting resins



### F40

This quick setting PU\* resin is highly resistant to abrasion and is easily processed. One part is prefilled.



### UR 5983

New rigid PU\* resin dedicated to make patterns on plates by direct casting. Up to 40 mm in one casting, low viscosity, good abrasion resistance and yellow colour for better surface identification.



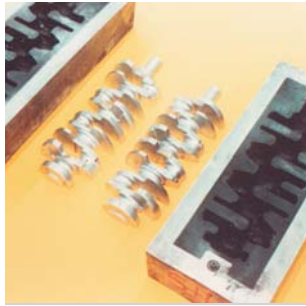
### UR 3569/3490

Those 2 PU\* semi rigid elastomers shows outstanding abrasion resistance performances for pattern making (skin) from metallic pre shape backup...  
Nota: UR 3490 shows lower viscosity and improved health and safety.



### EPOLAM 2010/2001

Here are two standard epoxy laminating resins showing high mechanical properties and good wetting out. Both systems accept filler to make a resin concrete block or laminate fabrics for composites backup. Several hardeners available for variable reactivity.



### EPO 5019/5030

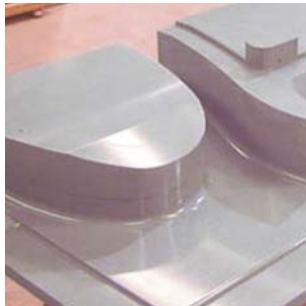
Both are casting epoxies dedicated to heavy duty patterns requiring both compressive strength and abrasion resistance and high dimensional stabilities. EPO 5019 is iron pre filled the other with mineral and different in rheology.



### GC2 070/120

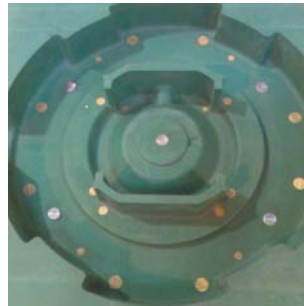
This filled epoxy gel coat shows high mechanical features and high resistance to abrasion. GC 2 120 resists up to 120°C Tg. To be used as working layer behind a resin concrete block according application.

## CNC machinable blocks



### PROLAB 75

Prolab 75 is also a medium density board with higher Tg° resistance and greater dimensional stability than PROLAB 65. Those two benefits give an ability to Prolab 75 to be used as model as well as also tooling board.



### LAB 920

This PU\* machinable board shows enough dimensional stability and resistance to abrasion to be used as a intermediate series tooling up to 40,000 sand casts. Additionally, LAB 920 is easy machining thermoplastic surface aspect.



### LAB 850

As a superior PU\* board, Lab 850 shows high resistance to abrasion. Easily machinable, it also holds a good top edge and complex shape up to 70,000 sand casts, both as patterns but especially as a core box material.

References	Type	Particle or fiber size	density		Main application	Packaging	
			true	apparent		kg	liter
RZ 209/6	Aluminium powder	< 63 μ	1	1	Physical linkage between gelcoat and laminate or casting Light concrete mixes	5 or 50	5 or 50
RZ 331	Short glass fibres	length 6 mm	2.5	1.7		20	11.7
RZ 30002	Aluminium silicate microballon	0.3 mm	.7	.4		20	50
RZ 30150	Hydrated alumina	0.07 mm	2.4	1.2	Surface casting (Resin + 150phr of RZ 30150)	25	20.8
						15	12.5
						5	4.2

# Selector Guide

References	Features	Models	Negatives	Core boxes	Patterns	Mixing ratio	Pot life	Density	Hardness	Small shot*	Medium shot*	Large shot*
										up to 20000	up to 100000	>100000
<b>FASTCAST</b>												
F1	Negatives, copying models.	x	x			100/100	4'	1.63	73D	x	NA	NA
F16/F18	Possibility to choose a type and rate of filler depending on application and fill up to 150 % with RZ 30150 or RZ 209/6.		x			100/100	3'30"	1.67	82D	NA	NA	NA
						100/100	2'	1.60	82D			
F23	High finished surface.	x				100/20	4-5'	1.58	80D	NA	NA	NA
F40	Direct casting. Abrasion resistant.				x	100/20	6'	1.70	83D	x	x	NA
F50	To be filled. High volumes.		x			100/50	40'	1.80	83D	NA	NA	NA
<b>CASTING EPOXY</b>												
EPO 5019	Multi purpose. Heavy handling.				x	100/10	100'	2.30	90 D	x	x	x
EPO 5030	High abrasion resistant.				x	100/10	45-55'	1.80	90 D	x	x	x
<b>CASTING PU</b>												
UR 3569	Face casting, high abrasion resistant.			x	x	100/80	15-23'	1.07	70D	x	x	x
UR 3490	Polyvalent, high abrasion resistant.			x	x	100/50	14'	1.08	67D	x	x	x
<b>LAMINATING RESIN</b>												
EPOLAM 2001/2001	Concrete or polyvalent system.		x			100/20	50'	1.10	82D	x	x	NA
EPOLAM 2001/EPO 95 S						100/32	40'	1.10	82D	x	x	NA
EPOLAM 2010/2010		x	x			100/50	30'	1.10	83D	x	x	NA
EPOLAM 2010/2011						100/50	60-70'	1.10	83D	x	x	NA
<b>REINFORTS</b>												
SC 258	Models. Filets.					100/100	60'	.50	55D	NA	NA	NA
EPOPAST 400	Laminating paste.		x			100/14	70-90'	.90	80D	NA	NA	NA
<b>GELCOAT</b>												
GC1 050	Polyvalent	x				100/10	50	1.45	83D	NA	NA	NA
GC2 070/GC2 120	Abrasion resistant.				x	100/10	15-20'	1.65	88D	x	NA	NA
GC3 090	PU gelcoat. Abrasion resistant.				x	100/80	15'	1.12	65D	NA	x	NA
References	Features					TG	CTE	Density	Hardness			
<b>MACHINABLE SLABS</b>												
PROLAB 65	Prototype, model.		x			85	75	.65	63D	NA	NA	NA
PROLAB 75	Models and prototypes tool.		x			85	50	.75	73D	NA	NA	NA
LAB 920	Pattern, high abrasion.			x	x	90	85	1.30	85D	x	NA	NA
LAB 850	Pattern, high abrasion.			x	x	80	95	1.18	80D	NA	x	x

NA: non applicable

\* depending on process and material used.

Axson Spain Tel. +34 9 32 25 16 20  
 Axson Italy Tel. +39 02 96 70 23 36  
 Axson France Tel. +33 1 34 40 34 60  
 Axson Slovakia Tel. +42 1 76 42 25 26  
 Axson Germany Tel. +49 6 07 44 07 11-0  
 Axson UK Tel. +44 16 38 66 00 62  
 Axson Japan Tel. +81 5 64 26 25 91  
 Axson China Tel. +86 21 58 68 30 37  
 Axson Middle East Tel. +97 1 43 35 32 81  
 Axson India Tel. +91 20 25 51 07 10/11  
 Axson North America Tel. +15 1 76 63 81 91  
 Axson Mexico Tel. +52 55 52 64 49 22

**AXSON TECHNOLOGIES** 15, rue de l'équerre - BP 40444 - 95005 Cergy cedex - FRANCE

Tel. (+33) 01 34 40 34 60 - Fax (+33) 01 34 21 97 87 - E-mail: axson@axson.com

More information and downloads available on the Website: [www.axson.com](http://www.axson.com)

