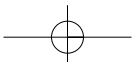
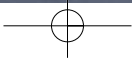
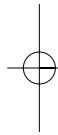
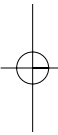




# SIRCA MARINE LINE



# SIRCA MARINE LINE



VESSELS AND BOATS PRODUCTION WAS FOR YEARS THE LEADING SECTOR FOR RESINS MANUFACTURERS . THE CONSIDERABLE VARIETY OF MODELS AND DIMENSIONS PUSHED RAW MATERIALS MANUFACTURES TO A CONTINUOUS RESEARCH OF PERFORMING PRODUCTS, WITH A RIGHT PROPORTION BETWEEN QUALITY AND PRICE.

DIFFERENT NATURE OF POLYESTER RESINS WERE DEVELOPED FOR MARINE USE, ORTHOPHTALIC, DCPD, ISOPHTALIC AND VINYLESTER ONES, WITH DIFFERENT MECHANICAL CHARACTERISTICS.

CUSTOMERS, WHICH ARE USING SIRCA PRODUCTS, TAKE ADVANTAGE FROM THE HIGH CUSTOMISATION LEVEL OF ITS PRODUCTS, THANKS TO A FULLY EQUIPPED AND MODERN RESEARCH AND DEVELOPMENT LAB.

CERTIFICATIONS CONNECTED TO PRODUCTS PRESENTED IN THIS CATALOGUE GUARANTEE THE QUALITY OF INDUSTRIAL PROCEDURES AND FINISHED PRODUCTS.

HIGH QUALITY ISO AND ISO-NPG GELCOATS ALLOW AN EXCELLENT SURFACE FINISH, AN HIGH BRIGHTNESS AND REMARKABLE PERFORMANCES, IN TERMS OF STABILITY OVER TIME AND TOWARDS ATMOSPHERIC AGENTS.

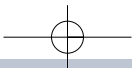
SIRCA RANGE OF PRODUCTS INCLUDES A WIDE RANGE OF POLYESTER ADHESIVES, WITH AND WITHOUT FIBREGLASS, AND BONDERS USED TO JOIN EXPANDED MATERIALS.

THE IMPORTANCE OF DESIGN PHASE IN THE MARINE INDUSTRY HAS GENERATED A FAST SYSTEM FOR MOULDS PRODUCTION, SIRCA EASYMOULD SYSTEM, WHICH INCLUDES GELCOATS, SKIN COATS, BARRIER COATS AND FILLED RESINS.

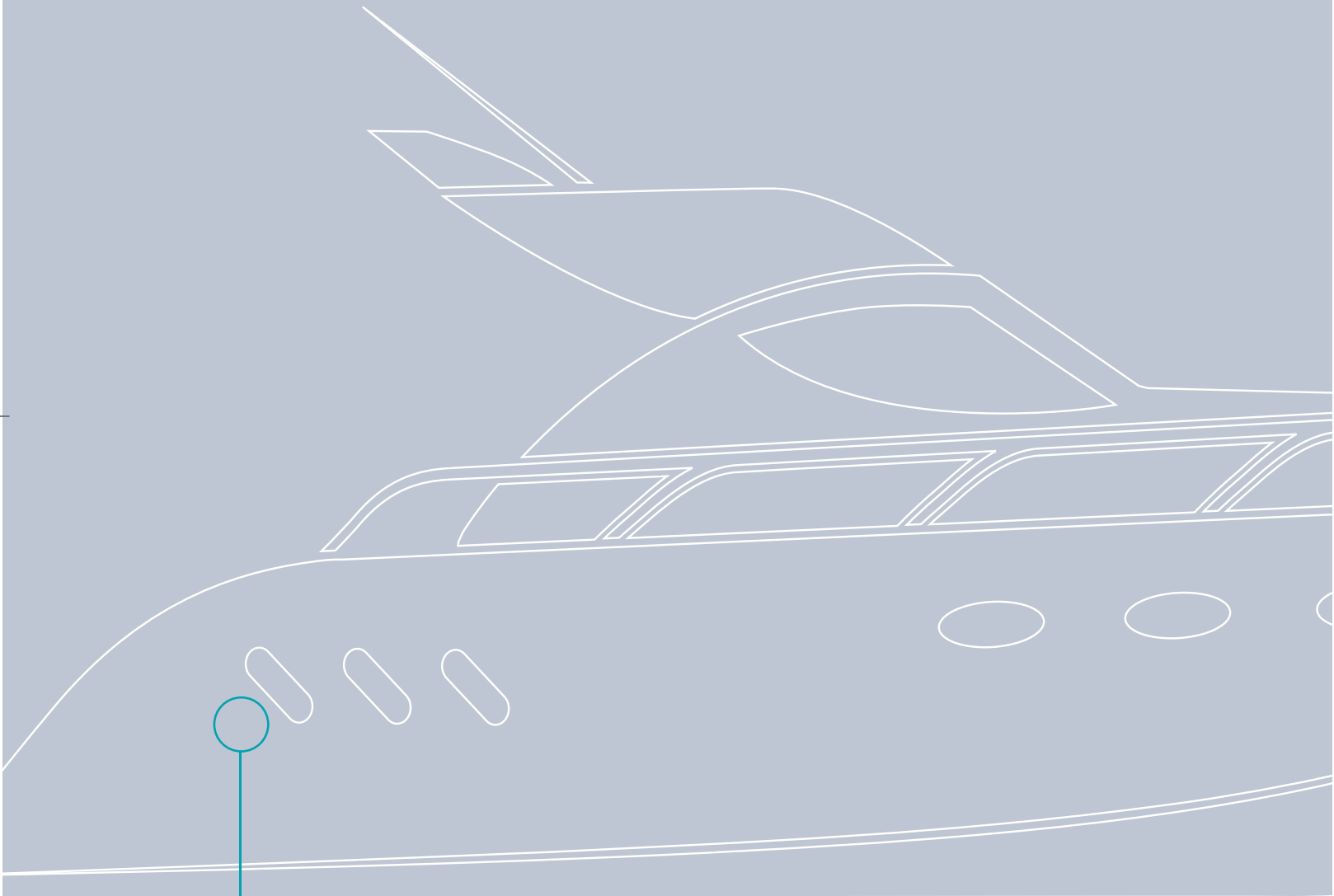
EXCELLENCE OF THIS SYSTEM ARE SURELY THE QUICKNESS OF EXECUTION AND THE HIGH WETTING OF THE RESIN, WHICH ALLOWS MATERIAL SAVINGS.

THE PACKAGE OF MARINE PRODUCTS IS COMPLETED WITH AN HIGH PERFORMANCES CLEAR COATING SYSTEM FOR INTERIORS, CHARACTERISED BY HIGH MECHANICAL AND CHEMICAL RESISTANCES, RESISTANCE TOWARDS ATMOSPHERIC AGENTS, ESPECIALLY TOWARDS UV SUNLIGHT, HIGH SURFACE HARDNESS, TRANSPARENCY AND COVERAGE.

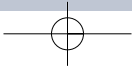
ALL THESE WOOD COATINGS ARE M.E.D. CERTIFIED.

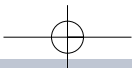


# SIRCA MARINE LINE



**EASY MOULD SYSTEM**





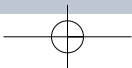
## TECHNOLOGICAL RESINS

RESINS FOR LAMINATING  
RESINS FOR INFUSION

## GELCOATS

## WOOD COATINGS

## BONDERS AND ADHESIVE BONDERS





## TECHNOLOGICAL RESINS

Marine industry is an important sector of the market, constantly looking for new and advanced technological solutions, necessary to develop products characterised by high quality, attention to design, safety and excellent performances in sea.

The final quality connected to a vessel could be high only if particular attention is paid to each structural and furniture element, which constitutes it, starting from a proper selection of each material used.

Sirca S.p.A., renowned company in the wood coatings and resins and gelcoats productions fields, developed a specific line of products, properly formulated for the marine industry, certified by external labs accredited by national and international certifying authorities specialized in this field.

The products range includes technological resins, bonders, adhesive bonders, gelcoats and wood coatings for interiors, characterised by high mechanical, UV, osmosis, water and marine atmospheric conditions resistances.

# RESINS FOR LAMINATING

## HA184TPR series

This is a series of thixotropic, preaccelerated orthophtalic polyester resins. It's characterised by good mechanical properties, good reactivity, medium-high exothermal peak.  
Hand lay-up, spray-up application. It's Lloyd's register certified.

## HN306TA series

This is a series of thixotropic, preaccelerated isophtalic polyester resins. It's characterised by good mechanical properties, low exothermal peak, ideal for the construction of laminate in high thickness with wet on wet system.  
Hand lay-up, spray-up application. It's Lloyd's register certified.

## HN380TA series

This is a series of thixotropic, preaccelerated isophtalic polyester resins. It is characterised by very good mechanical properties, good resistance towards osmosis, high exothermal peak. Fast hardening ideal for rapid mould turnaround.  
Hand lay-up, spray-up application. It's Lloyd's register certified.

# RESINS FOR INFUSION

## HQ306A series

This is a series of isophthalic preaccelerated polyester resins. It is characterised by good mechanical properties and low exothermal peak, ideal for construction of laminates with high thickness. It's Lloyd's register certified.

## HQ800A series

This is a series of modified vinylester preaccelerated resins. It is characterised by very good mechanical properties and low shrinkage. It's Lloyd's register certified.



# GELCOATS

## Silkcare M08S53G15

This is an ISO-NPG based barrier coat, characterised by a very good resistance to osmosis, total absence of print effect through barrier, excellent adhesion on gelcoat and polyester resin surfaces, short application timing and high uniformity of application thickness.

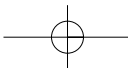
So, it's applied between gelcoat and resin, to improve the quality of the their interface, in order to achieve an uniform and homogeneous composite material.

## H08 series

This is a series of ISO-NPG based gelcoats, characterised by excellent resistance to UV, high gloss retention and excellent resistance to water. Any kind of RAL colour is available, along with customised ones.

# BONDERS AND ADHESIVE BONDERS

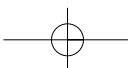
The Sirca Marine Line range of products includes a complete line of adhesives for bonding of fibreglass parts, wood and expanded materials. These bonders and adhesive bonders can be formulated with or without glass fibres, with chopped strands or milled fibres. These products can be lightweight or ultra lightweight. Hereby a summary table of the full range. Pic.1



## BONDERS AND ADHESIVE BONDERS

<b>TIX INDEX</b>	High thixotropy	High thixotropy	High thixotropy	High thixotropy	High thixotropy	High thixotropy	High thixotropy	High thixotropy	High thixotropy
<b>GEL TIME IN MINUTES AT 25°C</b>	10-18	10-18	45-70	'18-24 MEKP50 7-10 PBO	'18-24 MEKP50 7-10 PBO	30-50	10-18	20-35	18-27
<b>APPLICATION</b>	Spatula	Spatula	Spatula/Machine	Spatula/Machine	Spatula	Spatula	Spatula	Spatula/Machine	Spatula
<b>Tensile shear bond strenght (Mpa ASTM D3163-01)</b>	4,5	5,8	4						
<b>Specific Weight ± 0,1 (g/cc at 25°C)</b>	1,45	1,45	0,62	1,6	1,6	1,25	1,25	0,95	1,5
<b>CHARACTERISTICS</b>	Easy spatula application	Chopped strand contained	Super light, fibreless adhesive	Double catalysis filling adhesive MEKP/PBO. Available also in white pigmented version.	Double catalysis filling adhesive MEKP/PBO. Chopped strand contained.	Isophthalic with excellent sanding	Easy spatula application	Light adhesive with excellent spatula application and low specific weight. Available also as low viscosity version	Adhesive with milled fibers based on vinylester resin.
<b>USE</b>	Suitable as corner filler or for parts that are difficult to mould in order to prevent the formation of bubbles.	Suitable for polyester/polyester assembly and as corner filler.	Bonder adhesive for spatula applications requiring a low specific weight and excellent fibreglass-PVC adhesion.	Suitable as corner filler or for parts that are difficult to mould in order to prevent the formation of bubbles.	Suitable as corner filler for parts that are difficult to mould in order to prevent the formation of bubbles. Suitable also to glue structures subject to light flections.	Suitable for polyester/polyester assembly and as corner filler.	Suitable for polyester/polyester assembly and as corner filler.	Suitable for sandwich construction.	Suitable as corner filler and for the assembly of fiber glass reinforced parts which requires particular chemical resistances.

PIC.1



# WOOD COATINGS

Sirca is known in the worldwide market as a manufacturer of high quality wood coatings. Sirca studied and developed two products specific for marine sector, which are certified for this kind of use. These clear products are characterised by high performances in terms of resistance towards atmospheric agents, especially towards UV sunlight, surface hardness, transparency, coverage and chemical resistances. Hereby a brief description of each product and the suggested cycle.

## FPU18 - CLEAR PU sealer

This is a polyurethane sealer characterised by good general characteristics and a quite high viscosity, which allows it also to be applied vertically on accessories (small wooden parts, etc.) and assembled furniture. It dries quickly and sands very well. It can be applied in one or two coats.

This product is Marine Equipment Directive M.E.D. certified.

## OPU901G series - Clear PU topcoat

OPU901G is a series of polyurethane topcoats, giving excellent weather and UV resistances.

This series combines duration of protection and a surface aspect of high quality, in terms of surface hardness, transparency, smoothness and uniformity.

This product is Marine Equipment Directive M.E.D. certified.

The full cycle is tested on aluminium substrates, in order to evaluate the real resistance towards fire of the coating package. This resistance doesn't include the one related to the wooden substrates used, which may change for every production.

## SUGGESTED CYCLE

- Sanding of the raw wood
- First coat of CTE5000 series stain by spray - 70 - 90 g/sqm
- Second coat of FPU18 clear sealer by spray - 110 -120 g/sqm
- Wait the overnight then sanding
- Third coat of OPU901G series clear topcoat by spray - 110 - 120 g/sqm
- Stackable in 24 hours

To achieve a semi closed grain , an additional coat of FPU18 is needed, in the same described way.

# EASY MOULD SYSTEM

Sirca S.p.A. presents the tooling system for the fast construction of composite moulds, in order to decrease significantly related costs and working time.

This system gives excellent dimensional stability, very good mechanical properties and absence of fibre print through effect. This system includes a laminating resin, a modified vinylester resin, a barrier coat and a series of isophtalic gelcoats.

## **H09E Isophtalic gelcoat series - First layer**

This series of gelcoats is characterised by good chemical and mechanical resistances and very good gloss retention. It's easy to use, it can be applied by spray or brush, it's possible to work at room temperature with thicknesses around 700-900 microns.

## **HN800TA31 vinylester resin - Second layer (first option)**

This is a modified vinylester tixotropic resin of high quality, characterised by high tensile elongation and mechanical properties and low shrinkage; it can be applied by hand lay-up or spray. Very high HDT. It's possible to work at room temperature.

## **Silkcare M08S53G15 - Second layer (second option)**

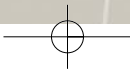
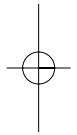
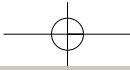
This is an ISO-NPG based barrier coat, characterised by a very good resistance to osmosis, total absence of print effect through barrier, excellent adhesion on gelcoat and polyester resin surfaces, short application timing and high uniformity of application thickness. So, it's applied between gelcoat and resin, to improve the quality of the their interface, in order to achieve an uniform and homogeneous composite material. It's possible to work at room temperature.

## **R918A0000G40 tooling resin - Third layer**

This is a laminating resin characterised by excellent mechanical properties, no shrinkage expected and high HDT value. This resin is ready to use and can be applied by hand lay-up or spray. The ratio between fiber glass and resin is around 1:3. It's possible to work at room temperatures.

# SIRCA MARINE LINE

MADE IN ITALY





**Sirca**  
THE WOOD COATINGS

[www.sirca.it](http://www.sirca.it)