Resins

West System

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Velsheda, the J Class Yacht racing during the America's Cup Jubilee has been restored using WEST SYSTEM brand products.

Epoxy Products For the Construction, Restoration, Maintenance and Repair of Boats of All Sizes.....

Technical Helpline 0870 7701030 Email: info@wessex-resins.com Website: www.wessex-resins.com

### Resins

### West System Resins & Hardener Packs

#### Packs with 205 Standard Hardener

Used in the majority a situations to produce a rapid cure and results in an epoxy that will develop its physical properties very quickly of metals.

#### Packs with 206 Slow Hardener

A slightly slower curing hardener than the standard 205. This can be very useful when larger jobs may require longer set-ups, as the epoxy can be left mixed up for longer durations without curing.

#### **105 Epoxy Resin**

105 resin is the base material of the West System family of products, on which all possible composites are built. The resin is a clear, light amber, low viscosity epoxy, which, when mixed with one of the West System hardeners, is formulated to wet out wood fibre, fibreglass and a variety of metals.

#### 205 Standard Hardener

is used in a majority of situations to produce a rapid cure. The cured resin yields a high strength, rigid, solid with excellent cohesive properties and provides an outstanding moisture/ vapour barrier.

#### **206 Standard Hardener**

A slightly slower curing hardener than the standard 205. This can be very useful when larger jobs may require longer set-ups, as the epoxy can be left mixed up for longer durations without curing.

#### 207/209 Special Coating Hardener

is formulated for use with 105 resin for applications where an extremely clear finish is desired, especially when working in humid conditions.

#### West System 105/205 Standard Packs

1.2 Kg	A pack	WS/105/205A
6.0 Kg	B pack	WS/105/205B
30 Kg	C pack	WS/105/205C
270Kg	E pack	WS/105/205E

Pot life when mixed with 105 resin = 10-15 minutes @ 25° C

#### For use with 301 pump set

When ordering resin, hardener and gradated minipumps, please ensure all items correspond to the same pack size. (eg. 'A' pack, 'B' pack, 'C' pack or 'E' pack).

#### West System 105/206 Slow Packs

1.2 Kg	A pack	WS/105/206A
6.0 Kg	B pack	WS/105/206B
30 Kg	C pack	WS/105/206C
270Kg	E pack	WS/105/206E

Pot life when mixed with 105 resin = 20-30 minutes @ 25° C

#### For use with 301 pump set

When ordering resin, hardener and gradated minipumps, please ensure all items correspond to the same pack size. (eg. 'A' pack, 'B' pack, 'C' pack or 'E' pack).

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#### West System 105 Epoxy Resin

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1Kg	WS/105A	
5Kg	WS/105B	
25Kg	WS/105C	
225Kg	WS/105E	
-		

When ordering resin, hardener and gradated minipumps, please ensure all items correspond to the same pack size. (eg. 'A' pack, 'B' pack, 'C' pack or 'E' pack).

West System 205 Hardeners		
	Hardener	
0.2 Kg	WS/205A	
1 Kg	WS/205B	
5 Kg	WS/205C	
45 Kg	WS/205E	

# West System 206 Hardeners Hardener 0.2 Kg WS/206A 1 Kg WS/206B 5 Kg WS/206C 45 Kg WS/206E

West System 207/209 Special Hardeners		
	Hardener	
0.33 Kg	WS/207/9A	
1.66 Kg	WS/207/9B	
4.16 Kg	WS/207/9C/1	
8.33 Kg	WS/207/9C	
75 Kg	WS/207/9E	

207 Pot life when mixed with 105 resin = 20-30 minutes @ 25° C 209 Pot life when mixed with 105 resin = 75-90 minutes @ 25° C

#### For use with 303 pump set

When ordering resin, hardener and gradated mini-pumps, please ensure all items correspond to the same pack size. (eg. 'A' pack, 'B' pack, 'C' pack or 'E' pack).

Please note that all resin and hardener sizes can be bought separately if required.





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West System Mini Pack Mini Pack WS/MINI



#### West System G5 Five Minute Adhesive 200gm WS/G5/200 pack 2 Kg WS/G5/2 nack



#### West System 104 Junior Pack pack

WS/104 600gm



# **Resins**

#### West System **Repair Packs**, **Epoxy Filler & Rapid Adhesive** Mini Pack

Containing a selected mix of materials to complete smaller repairs around the boat, in the workshop or at home. Contents include; 105 resin, 205 hardener, 403 & 407 fillers, application tools, gloves and instructions. (5:1 mix ratio).

#### **G5** Minute Adhesive

An easy to use two part, fast setting resin/hardener system. It is suited for spot applications to hold component parts in position whilst bonding is completed with West System epoxy. G5 will adhere to most prepared surfaces including; wood, fibreglass and most metals. (1:1 mix ratio).

#### **104 Junior Pack**

A 600gm pack of West System epoxy (105/205) ideal for those small jobs, for the first time user, or simply as a top-up for an 'A' pack or handy repair pack. (5:1 mix ratio).

West System 301 Mini Pumps

Suitable for 'A' packs WS/301A Suitable for 'B' packs WS/301B Suitable for 'C' packs WS/301C

Please ensure that you order the correct mini pump for the size of resin, ie. 301A for the 'A' pack.

Ensure pumps are primed before use!



#### **Epoxy Dispensers** 301 Mini Pumps

Designed for convenient and accurate dispensing of West System 105 resin and 205 or 206 hardeners. Mini pumps ensure accurate metering of the resin/hardener mix and eliminates the mess involved with hand proportioning.

West System 303 Special Ratio Mini Pumps Suitable for 'A' packs WS/303A Suitable for 'B' packs WS/303B Suitable for 'C' packs WS/303C

Ensure both pumps are primed before use!



West System 306 Model A Dispensing Pump Pump WS/306

Also available in 306 - 3 special ratio configuration for use with 207 or 209 hardeners.

West System 306-K Model A Pump Rebuild Kit

West System 309 High Capacity Gear Pump

Reservoirs hold 10Kg of resin and 2Kg of hardener.

Also available in special configuration for use with

WS/309

207 or 209 hardeners.

WS/306K

#### Resins

#### West System Repair Packs, Epoxy Filler & Rapid Adhesive 303 Special Ratio Mini pumps

Designed for use with West System 207 and 209 special application hardeners *only*. The mini pumps mount directly on to the resin and hardener containers and have been calibrated to deliver the correct working ratio. This is 3 parts by weight of resin to one part by weight of hardener with one stroke of each pump.

#### **306 Model A Dispensing Pump**

Ideal for dispensing larger quantities of epoxy, approximately 15gms of resin and hardener per pump stroke. For projects larger than a dinghy, a dispensing pump will soon pay for itself by reducing mixing time and waste. The pump is complete with a carrying handle.

#### 306-K Model A Pump Rebuild Kit

Includes seals, balls, gaskets, springs, high-rise tubes with ferrules, new resin and hardener reservoirs with lids.

#### High Capacity Gear Pump

Designed and built by the Gougeon Brothers. The home builder and professional alike, will enjoy the benefits of this pump. The resin/hardener mix is delivered by continuous rotation of the crank. Dispenses approximately 500gms per minute, yet can dispense smaller quantities with partial crank rotation.

A positive shut-off valve eliminates resin and hardener loss, and dripping spouts.



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Kit

Kit

#### West System 403 Microfibres

0.15 Kg	Off white	WS/403
0.75 Kg	Off white	WS/403A
3.2 Kg	Off white	WS/403B
20 Kg	Off white	WS/403C

Add 4% to 16% by weight of 403 to West System epoxy mix.

#### West System 404 High-Density Filler 0.25 Kg Off white WS/404S

0.209	0	
1.75 Kg	Off white	WS/404A
10 Kg	Off white	WS/404B

May be added to the resin/hardener mix at a rate of 35% to 60% by weight, depending on the viscosity needed.

#### West System 405 Filleting Blend

0.15 Kg	Tan	WS/405S
0.70 Kg	Tan	WS/405A
5 Kg	Tan	WS/405B

Add 15% to 25% by weight to the epoxy mix.

#### West System 404 High-Density Filler 0.06 Kg Off white WS/406S

0.009	0	
0.275 Kg	Off white	WS/406A
1.5 Kg	Off white	WS/406B
10 Kg	Off white	WS/406C

Add 3% to 8% by weight to the epoxy mix.

#### West System 407 Low-Density Filler

0.15 Kg	Dark reddish/brown	WS/407S	
0.70 Kg	Dark reddish/brown	WS/407A	
3.5 Kg	Dark reddish/brown	WS/407B	
15 Kg	Dark reddish/brown	WS/407C	

Add 20% to 40% by weight to the epoxy mix.

West System 409 Microsphere		
200gm	WS/409S	
4.5 Kg	WS/409B	
20 Kg	WS/409L	



# West System Fillers & Additives

#### 403 Microfibres

A blend of cellulose cotton fibres, used as a general purpose thickening additive for bonding and gap filling applications. Epoxy thickened with microfibres provides good wetting out of the substrate and excellent gap filling properties.

#### 404 High-Density Filler

Developed to maximise bond strength in hardware bonding where high cyclic loads are anticipated. It can also be used for filleting and gap filling applications.

#### 405 Filleting Blend

Consists of a mix of cellulose fibres and other fillers used in filleting applications when a naturally finished interior is intended. Alcohol or water based stains may be added to adjust the colour.

#### 406 Colloidal Silica

General thickening additive, suitable for bonding, gap filling and thickening. It can also be used to prevent flow on vertical or overhead surfaces and to control the viscosity of the epoxy. It is often used in combination with other fillers to control the working characteristics of the epoxy mix, eg. improve the consistency of fairing compounds. Especially good for hardwood bonding.

#### 407 Low-Density Filler

A blended micro-balloon based filler used to make fairing putties which are easy to sand, but remain strong on a strength to weight basis.

#### 409 Microspheres

This filler consists of hollow glass spheres particle size that is more variable than that of microballoons. These spheres are more coarse and physically harder than 407 Low Density Filler and because of this characteristic, filled resin mixes are noticeably more difficult to sand.

#### West System Fillers & Additives 410 Microlight

The ideal low-density filler for creating a light, easily worked fairing compound especially suited for fairing large areas. Microlight mixes with greater ease than 407 Low Density Filler or Microballoons and is approximately 30% easier to sand. It feathers to a fine edge and is also more cost effective than other fillers for large fairing jobs.

#### 420 Aluminium Powder

Add between 5% to 10% by volume, to provide protection from ultraviolet light in areas that will not be protected by other coatings and as a base for subsequent painting. Will substantially increase the hardness of the coated surface.

#### **421 Fire Retardant**

Is a fine white powder added to West System epoxy mixture in the ratio of one to one by weight. The cured mixture is a fire retardant composition for use in engine or galley areas. 421 fire retardant will greatly increase the viscosity of the epoxy and will require trowelling or squeegeeing into place.

#### 422 Barrier Coat Additive

A proprietary blend designed to provide the moisture exclusion effectiveness of West System epoxy and to combat osmosis. It is an excellent additive for providing a barrier coating to overcome gelcoat blistering and also increase abrasion resistance.

#### 423 Graphite Powder

A fine black powder added to West System epoxy to produce a low friction exterior coating, with increased durability, scuff and mark resistance. Epoxy/ graphite is commonly used as a coating on rudders and centreboards or on the bottoms of racing craft that are dry sailed. The epoxy/graphite mix can also be used in Teak deck construction to simulate traditional seams in appearance and to protect resin from sunlight.

#### West System 410 Microlight

0.05 Kg	WS/410
0.2 Kg	WS/410A
1.5 Ka	WS/410B

Not recommended under dark paint or other surfaces subject to high temperatures.

West System 420 Aluminium Powder 0.10 Kg WS/420

West System 421 Fire Retardant 1 Kg WS/421

 West System 422 Barrier Coating Additive

 0.5 Kg
 WS/422

 3 Kg
 WS/422B

Add 20% to 25% by weight to the epoxy mix.

West System 423 Graphite Powder 0.20 Kg WS/423 3 Kg WS/423B

Add 10% by volume to the epoxy mix.

#### West System 425 Copper Compound

0.5Kg WS/425 2.5 Kg WS/425B

West Syste	em 501/506	<b>Colour Compounds</b>
125gm	White	WS/501
1Kg	White	WS/501B
125gm	Black	WS/502
1 Kg	Black	WS/502B
125gm	Blue	WS/505
1 Kg	Blue	WS/505B
125gm	Grey	WS/506
1 Kg	Grey	WS/506B

NB. because the epoxy will cure to a slightly opaque colour, several coats of white pigment will be required to build an acceptable 'white' finish.

#### West System Episize" Reinforcing Materials

All reinforcing materials sold under the Episize" trade mark are manufactured under strict quality control guidelines. Materials undergo periodic testing at Wessex Resins to ensure materials selected for building or repair projects, meet the highest possible standards.

## West System Fillers & Additives

425 Copper Compound

can be added to the mixed epoxy to provide a base coat for conventional antifouling paint. When added to the epoxy at the rate of 80% by weight, the resultant hard surface increases the moisture exclusion effectiveness, abrasion resistance and provides some backup antifouling properties. It is ideal for coating any substrate that will be in contact with the water, and can be used when a hard surface is required. eq. coating moulds.

#### 501/506 Colour Compounds

Can be added to epoxy to provide a base for a colour for a final finish system. The coloured surfaces also tend to highlight flaws and imperfections. Pigments should be added at a rate of approximately 3% to 5% by weight and should only be added to the final coat of epoxy. This is because the increased viscosity of the mix will impair the ability of the epoxy to penetrate and seal surfaces.

Available in white, black, blue and grey.

#### Reinforcing Materials Episize" Reinforcing Materials

Specifically treated with an amino-silane coupling agent for use with epoxy systems. When used with West System epoxy, reinforcing materials exhibit significantly improved peel strength; flexural modulus, tensile and compressive load carrying ability, compared with other chemical finishing systems. This is especially so with those reinforcing materials manufactured for bonding polyester resins.

#### West Enisize" Glass Fahric

West Episize" Glass Fabrics				
Plain weave				
135gm/M²x100cm wide	WS/740			
135gm/M²x100cm wide	WS/740-10			
135gm/M²x100cm wide	WS/740-5			
Plain weave				
200gm/M²x80cm wide	WS/741			
200gm/M²x80cm wide	WS/741-10			
200gm/M <sup>2</sup> x80cm wide	WS/741-5			
200gm/M <sup>2</sup> x80cm wide	WS/741B			
Twill weave				
200gm/M <sup>2</sup> x120cm wide	WS/742			
200gm/M <sup>2</sup> x120cm wide	WS/742-10			
200gm/M <sup>2</sup> x120cm wide	WS/742-5			
Twill weave				
with tapered edges				
280gm/M <sup>2</sup> x100cm wide	WS/743			
280gm/M²x100cm wide	WS/743-10			
280gm/M²x100cm wide	WS/743-5			
Twill weave				
300gm/M²x80cm wide	WS/744-10			
300gm/M <sup>2</sup> x80cm wide	WS/744-5			
Twill weave				
190gm/M²x100cm wide	WS/745			
190gm/M <sup>2</sup> x100cm wide	WS/745-10			
0	WS/745-10 WS/745-5			
190gm/M²x100cm wide	vv3/740-0			

#### West System Episize" Glass Tapes WS/429A 25mm x 10m 25mm x 50m WS/429B 50mm x 10m WS/430A 50mm x 50m WS/430B WS/431A 75mm x 10m

75mm x 50m WS/431B 100mm x 10m WS/432A 100mm x 50m WS/432B 150mm x 10m WS/433A 150mm x 10m WS/433B

#### West System Biaxial Glass Cloths 125mm x 5m

WS/727A 446gm/M<sup>2</sup> 446gm/M<sup>2</sup> 125mm x approx.90m WS/727A

West System Biaxial	Glass Fabric
$318 gm/M^{2} \pm 45^{\circ} x1.25 m$	WS/736-5
$318 gm/M^{2} \pm 45^{\circ} x 1.25 m$	WS/736-10
$602gm/M^{2}\pm45^{\circ}x1.25m$	WS/738-5
$602gm/M^2 \pm 45^{\circ}x1.25m$	WS/738-10
$446 gm/M^{2} \pm 45^{0} x1.25 m$	WS/739-5
$446 gm/M^{2} \pm 45^{\circ} x1.25 m$	WS/739-10



Other cloths & roll sizes available 'phone for details

# West System **Reinforcing Materials**

#### West System Episize" **Glass Fabrics**

are ideal for building composite laminates and for the repair of fibreglass structures.

May also be used to provide abrasion resistant covering for wood structures.

When thoroughly wetted with West System epoxy, the lighter fabrics become transparent, allowing a clear, natural wood finish. Also available; biaxial glass fabrics. These non-crimp fabrics combine two layers of unidirectional fibres, stitched together using light thread. The result is an engineered biaxial fabric with predictable properties.

#### Episize" Glass Tape

Versatile glass tapes are ideal for reinforcing chines, hull-deck corners and similar structural applications. When bonded with West System epoxy, they provide extra tensile strength to resist hairline crack development and provide added abrasion resistance.

#### **Biaxial Glass Cloths**

These will significantly increase structural strength where major reinforcement is required.

#### **Biaxial Glass Fabric**

These non-crimp fabrics combine two layers of fibres, stitched with light thread resulting in a predictable engineered biaxial fabric.

#### **Carbon Twill Fabric** Twill weave carbon fibre

fabric provides improved tensile and compressive strength to laminates.

All available in 5m, 10m, 25m, 50m & 100m lengths



All available

# West System Episize" Graphite Fibres 25mm x 6m WS/701-20 25mm x 30m WS/701 25mm x 30m WS/701 25mm x 304m WS/701B

#### West System Peel Ply

Plain Weave		
83gm/M <sup>2</sup> Cloth	800 x per M	WS/775-1
83gm/M <sup>2</sup> Cloth	800 x 100M	WS/775
83gm/M <sup>2</sup> Cloth	1600 x 100M	WS/775-160
Peel Ply Tape		
50 x 50M	WS/775-50	
100 x 50M	WS/775-100	

# West System Roller CoversPack of two3" x 1/2"WS/800-2

Pack of twelve 3" x 1/2" WS/800-12



West System Roller Covers

Roller frame 3" x 3/4" WS/801

West System Roller Pan 7" & 9" Roller pan WS/802 Available in 7" and 9" sizes.

West System	Professional	Foam Roller Covers
Roller cover	7" x 1³/4"	WS/790-1

Pack of 6 7" x 1<sup>3</sup>/<sub>4</sub>" WS/790-6

West System Professional Foam Roller FrameRoller frame $7'' \times 1^{3}/_{4}''$ WS/791-1

West System Glue Application Brush 5 Glue brushes WS/803-5

 West System Mixing Sticks

 Pack of 100
 150mm x 18mm
 WS/791-1

 Pack of 25
 150mm x 18mm
 WS/791-25

# West System Fillers & Additives

## Episize" Graphite Fibres

25mm graphite fibres are continuous length fibre tows with a modulus of approximately 200,000 MPa. They are much stronger and more stiff for their weight than nearly all engineering materials, including steel and aluminium. Graphite fibres are used as secondary engineering material where space is confined, yet are cost effective and contribute significantly to overall structural capability. Average tow thickness is 0.25mm.

#### Peel Ply

Is a finely woven fabric treated with a release agent to which epoxy will not bond. Excellent for providing a release and reducing subsequent sanding prior to applying more epoxy. Available in both rolls and tape.

#### Application Tools Roller Covers

A specially designed, high density polyurethane foam roller ideal for epoxy application. Can be cut shorter to match application area.

#### **Roller Frame**

3" roller cover frame for use with the 800 rollers

#### Roller Pan 7" & 9"

Flexible plastic roller pan allows cured epoxy to 'pop-out', so the pan can be reused. Eliminates the need for liners.

#### **Professional Roller Foam Covers**

High density polyurethane foam roller on a plastic core, designed to last longer than the standard 800 foam roller cover.

#### **Professional Roller Frame**

7" wide birdcage roller frame designed for use with the 790 foam roller covers.

#### **Glue Application Brush**

Handy, disposable, glue brushes with a wooden handle that can be used for a wide variety of gluing and coating applications.

# Mixing Sticks

150mm x 18mm wide rounded end mixing sticks for blending epoxy. Also ideal for small radii fillets. 9

#### Resins

## West System Application Tools

#### **Plastic Squeegees**

Lightweight, reusable squeegees for fairing and filling applications. Both double edged and serrated are available.

**Paddle Rollers** Rigid aluminium rollers for thoroughly wetting out fabrics with epoxy.

**Finishing Brush** High quality brush for varnish or paint application.

#### Laminating Brush

Good quality firm bristle brush for applying epoxy over the laminating and for consolidating the fabric.

#### **Mixing Pots**

Strong reusable plain white mixing pots out of which cured, solid epoxy is easily expelled.

#### Syringes

Reusable syringes which can be loaded with epoxy for injecting into difficult working areas. Ideal for bonding and plywood repairs.

#### Scarfer"

A unique tool designed by the Gougeon Brothers for cutting accurate scarfe joints in plywood up to 9mm thick. Attaches easily to most circular saws and is simple to remove.

# Skin Protection &

## Tool Cleaners

**Resin Removing cream** Formulated to remove uncured epoxy from skin.

#### **Disposable Gloves**

Lightweight, seamless disposable gloves help prevent exposure to chemicals. Excellent protection with good finger sensitivity and dexterity. CE marked.

#### 850 Cleaning Solvent

A specially blended cleaning solvent for removing uncured epoxy from tools, boat and workshop surfaces. Also excellent for cleaning contaminates from cured epoxy surfaces.

#### West System Plastic Squeegees

9011111 X 15011111	Pack of Z	VV 3/808-2
90mm x 150mm	Pack of 12	WS/808-12
Notched		
90mm x 150mm	Pack of 2	WS/809-2
90mm x 150mm	Pack of 36	WS/809-36

#### West System Paddle Rollers

Roller  $2''x^{1/s''}$  WS/811 Roller  $6''x^{1/s''}$  WS/811B

#### West System Finishing Brush

Brush 1" WS/817-1 Brush 2" WS/817-2

#### West System Laminating Brush

Brush 2" WS/818-2 Brush 4" WS/818-4

#### West System Mixing Pot

800ml Gradated WS/805 500ml Plain WS/806A 1 Litre WS/806B 2.5 Litre TD/Bucket/2.5

5 Litre TD/Bucket/5

10 Litre TD/Bucket/10

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#### West System Syringes

1	10ml + 1	60ml	WS/807-2
2	10ml		WS/807-10
2	50ml		WS/807-2

#### West System Scarfer" Scarfer WS/875

West Syste	m Resin Removing Cream
250ml	WS/820
500ml	WS/820A
1Kg	WS/820B

# West System Disposable Gloves50 pairsWS/8325 pairsWS/832-5

#### West System 850 Cleaning Solvent 1 Litre WS/850 2.5 Litres WS/850B

West System Barrier Cream250mlWS/8311 KgWS/831B

West System Reusable Gloves 1 Pair WS/834

# West System 855 Cleaning Solution1 LitreWS/8555 LitresWS/855B

#### West System The Gougeon Brothers on Boat Construction Book WS/002

Hard Cover



#### West System Fibreglass Boat Repair & Maintenance Book WS/002-550

Soft Cover

West System Gelcoat Blisters: Diagnosis, Repair & Prevention Book WS/002-650

Soft Cover

# West System Skin Protection & Tool Cleaners

#### **Barrier Cream**

A non-irritant , multi-purpose barrier cream which has special bactericidal ingredients to minimise risk of infection. Protects against; resins, oils, grease and petroleum spirits. For use under gloves.

#### **Reusable Gloves**

Heavy duty rubber gloves that offer superior tear and abrasion resistance and are liquid proof. Can be reused. CE marked.

#### **855 Cleaning Solution**

A safe easy to use, cleaning solution developed to remove uncured epoxy from tools, workbenches, minipumps etc. Can also be used to wash out mini pumps and to remove amine blush that may appear after applying epoxy in cold conditions

## **Instructional Publications**

# The Gougeon Brothers on Boat Construction

Over thirty years of experience in building wooden and epoxy boats is in this, the latest edition of this book. Nearly 40,000 copies are now in circulation, with extensive chapters on lofting, safety, tools and construction techniques. Also included are hundreds of detailed diagrams and photographs. This book is hardbacked with over 375 pages.

#### Fibre Glass Boat Repair & Maintenance

A comprehensive guide to a variety of fibreglass repair problems. Includes; detailed instructions on repairing delamination, keel and core related damage. Also covers fairing keels for better performance, hardware bonding, finishing and installing teak veneers on decks, hatches and cabin tops. A soft cover book with over 50 drawings and photographs.

#### Gelcoat Blisters: Diagnosis, Repair & Prevention

This manual provides a thorough explanation of the osmotic blistering phenomenon. Detailed instructions are provided on effective laminate drying techniques, repairing localised and severe interlaminate blister damage, application techniques for applying an effective epoxy barrier coat, and more. A must for the boat owner and repair yard operator alike.

# West System **Instructional Publications**

#### **Final Fairing & Finishing**

Techniques for fairing wood, fibreglass and metal surfaces. Includes details on fairing tools, materials and a general guide to finish coatings.

#### **Advanced Vacuum Bagging Techniques**

A definitive guide to vacuum bagging techniques for composite construction with epoxy. Complete instructions describe the various techniques, materials and equipment in detail.

#### **Wooden Boat Restoration** & Repair

A complete guide to restoring wooden structures, improving the appearance, reducing the maintenance and prolonging the life of boats. Chapters include localised dry rot, basic frame repair, hardware bonding, skin repairs, protection and maintenance. 76 pages with numerous diagrams and drawings.

**Pro-Set** Laminating Epoxy

The Pro-Set epoxy system is a two part solvent free epoxy, formulated primarily for the production of high strength lightweight structures; involving glass, carbon fibre and other hybrids, by standard wet lay-up procedures and normal contact pressure.

For glass and composite fibre cloths please see our 'Reinforcing materials' section in this catalogue.

Please use Pro-Set thinner with Pro-Set resin. A full range of thinners is detailed in the 'Solvents' section.

For full range of thinners and cleaners available, see relevant section.

Full range of West System

products available.

See also Vacuum

bagging section

#### 125/145 Resin

The resin is mixed with one of our Pro-Set hardeners in the ratio of 100 parts of resin to 30 parts of hardener (3 parts by volume resin to 1 part by volume hardener) to produce a low viscosity epoxy, which together with its natural air displacing properties will ensure outstanding 'wetting out' of the area being reinforced and a low resin content within the laminate; thereby ensuring all the desirable properties of the laminate are emphasised.

Soft Cover

#### West System Advanced Vacuum **Bagging Techniques** WS/002-890 Book

Soft Cover

#### West System Wooden Boat **Restoration & Repair**

WS/002-970 Book

Soft Cover



Use 303 pump sets and ensure pumps are 'primed' prior to use.

6 Kg 25 Kg 145 Resin 1 Kg

# West System

## **Pro-Set**

#### 226 Hardener

The pot life of a 50gm mix at 20°c, in the correct proportions of the 125 resin and 226 hardener is approximately 26 minutes. This is a fast hardener, therefore, only mix quantities that can be used within 20 minutes.

#### 229 Hardener

When mixed in a 3 part Pro-Set 125 resin to 1 part Pro-Set 229 hardener, the pot life of a 50gm mass at 25°c is approximately 120 minutes. Thus, this slow hardener is ideal for use in warm climates, when laminating large lay-ups and/or using vacuum bagging techniques.

Tvcoat

The Pro-Set Tycoat is a low viscosity two part modified polyester based resin formulated to significantly improve the bond between a polyester gelcoat and an epoxy based composite; for example, where the physical properties of the laminate need to be coupled with the aesthetically acceptable surface of the polyester gelcoat - two dissimilar synthetic based systems.

Pro-Set Tycoat overcomes the recognised problems that may be encountered when laminating with epoxy onto polyester gelcoat, which may result in poor interlaminate adhesion. It does this by acting as an intermediate between the two dissimilar resins, that both can bond to equally well, thereby vastly increasing the reliability and strength of the bond.

Pro-Set Tycoat			
1 Kg Translucent	WS/PS/360/1		
2.5 KgTranslucent	WS/PS/360/2.5		
20 Kg Translucent	WS/PS/360/20		
1 Kg Orange	WS/PS/362/1		
2.5 KgOrange	WS/PS/362/2.5		
20 Kg Orange	WS/PS/362/20		
1 Kg White	WS/PS/364/1		
2.5 KgWhite	WS/PS/364/2.5		
20 Kg White	WS/PS/364/20		

#### **Gel Times**

100gm mass at 25°c Gel times Pro-Set 32X resin/West System 205 hardener 10-15 mins Pro-Set 32X resin/West System 206 hardener 20-30 mins Pro-Set 32X resin/Pro-Set 226 hardener 25-35 mins Pro-Set 32X resin/Pro-Set 229 hardener 50-70 mins

#### **Mix Ratio**

00 parts by weight 8 parts by weight	Pro-Set 36X resin West System 205 or 206 hardener <b>OR</b>
00 parts by weight	Pro-Set 36X resin
3 parts by weight	Pro-Set 226 or 229 hardener

#### **Pro-Set Gelcoat Resin**

This resin was developed for use as a gelcoat with a number of epoxy curing agents. The selection of the curing agent is dependant upon the working and gelation time required in the application.

The Pro-Set 36X gelcoat must be thoroughly mixed with the selected hardener for 2 minutes. The mixed material can be applied with a brush or roller.

#### **Pro-Set 320 Epoxy High Build Filler**

Pro-Set 320 is a two part solvent based epoxy which has been developed as a surfacing system having high build characteristics. It is ideal for use as an undercoat or a surfacing composition onto which high performance finishes can be applied, providing an excellent base for both polyurethane and acrylic paints. Pro-Set 320 epoxy has good adhesion to a variety of substrates and possesses extremely good sanding properties with little tendencies to clog the abrasive paper. The pro-Set 320 system can be used for general purpose filling and fairing.

The epoxy composition can be used for mould and plug production. The final application of the Pro-Set 320 system must be well sanded, finishing with a fine grit paper to produce a very smooth surface. When this is achieved, the finished exterior of the mould or plug must be well polished to give an ideal surface for the subsequent release of component parts.

#### **Pro-Set Tycoat**

Pro-Set 226 Hardener

**Pro-Set 229 Hardener** 

WS/PS226/A

WS/PS226/B

WS/PS226/C

WS/PS226/D

WS/PS226E

WS/PS229/A

WS/PS229/B

WS/PS229/C

WS/PS229/D

WS/PS229E

0.3 Kg

1.8 Kg

7.5 Kg

32.5 Kg

67.5 Kg

0.3 Kg

1.8 Kg

7.5 Kg

32.5 Kg

67.5 Kg

1 Kg	White	WS/PS/340/1
5 Kg	White	WS/PS/340/5
1 Kg	Clear	WS/PS/342/1
5 Kg	Clear	WS/PS/342/5



Complete Pack with 125226 resin

Complete Pack with 125226 resin

WS/PS125/226/A

WS/PS125/226/B

WS/PS125/226/C

WS/PS125/226/E

WS/PS125/229/A

WS/PS125/229/B

WS/PS125/229/C

WS/PS125/229/E

1.3 Kg

7.8 Kg

32.5 Ka

1.3 Kg

7.8 Ka

32.5 Kg

292.5 Kg

292.5 Kg

Thinners

#### WS/PS320/4 Pack 4 Litres Pack WS/PS320/10 10 Litres Thinners 1 Litre WS/PS320T/1

2.5 Litres

WS/PS320T/2.5

**Pro-Set 320 Epoxy High Build Filler** 

For spraying, thinners will be required.

			Wessex Resins Pro-Set			
Pro-117 Resi	n/Pro-Set 229PF or 238 Hardener	The combinedian of Dre Cot 117 with either Dre Cot	117 Resin/Pro-Set 229PF			
Resin only		The combination of Pro-Set 117 with either Pro-Set 229RF or 238 hardener is intended specifically for	or 238 Hardener			
25 Kg	WS/PS/117/25	resin infusion processes. This production technique h	as become increasingly			
The Phenol - free resin infusion system very low viscosity; medium/long		important to the composite industry and has made inr the manufacture of lightweight, high performance hul assemblies and superstructure.	oads into the marine market for			
gelation time.		Pro-Set 117 resin is mixed with either Pro-Set 229RF or 238 hardener, both of which are free of phenol and phenol related products. These produce an extremely low viscosity epoxy that provides fast and thorough wetting of reinforcing fabric(s) within the laminates when using the resin infusion process. Gelation times between four and twelve hours are available dependent upon the ambient temperature, the temperatures of the two components and the size and thickness, ie. the bulk of the laminate.				
Pro-Set 127F	R Resin/Pro-Set229 Hardener					
25Kg WS/PS/127/25		This epoxy composition is based upon a brominated resin and has been specifically formulated as a laminating system that has excellent fire retardant	Pro-Set 127FR Resin/ Pro-Set 229 Hardener			
	gister of shipping has approved nating epoxy for its fire	characteristics when fully cured, the viscosity of Pro-	Set 127FR resins is increased			
	perties; this composite system	with the inclusion of fire retardant additives but, desp				
complies with	IMO Resolution MSC.81 (70)	229RF phenol-free hardener, the mixed system has good laminating properties, such				
Part 1 for survival craft and with SOLAS 74 for use with ships and offshore installations.		as easy wet-out and handleability. That with the elimination of the phenol content, provides laminators with a more user- friendly epoxy.				
WRA Svstem	200 Clear Epoxy Sealer & Coating		WRA System 200			
1 Litre	thinners for WRA 200 WS/WRA200T1	WRA System 200 is a two part solvent based epoxy developed primarily for use with sealer or primer, but having the application properties of a varnish. Due to the the				
2.5 Litres 7.5 Litres	thinners for WRA 200 WS/WRA200T2 Resin/hardener	advantages associated with epoxy compositions, WRA System 200 offers excellent protection against moisture, and once cured, provides a very tough but flexible coating. Furthermore, the epoxy system will air dry to a high gloss finish, giving good chemical				
WRA 200 WS/WRA200/7.5 30 Litres Resin/hardener		resistance and will withstand both impact and abrasion.				
OU LILIUS	WRA 200 WS/WRA200/30	Used as a sealer or primer, WRA System 200 provides	an excellent base for polyurethane			
2.5 Litres	Hardener only	and acrylic paints.				
	WRA 200 WS/WRA200/2.5H		stem 200 will adhere successfully to a variety of substrates including; wood, epoxy wood, reinforced plastics, steel and non-ferrous metals and is ideal for the coating r shuttering.			
WRA Permak	cote		WRA Permakote			
500ml	WS/WRA/PC/500	Permakote is a two part solvent free epoxy coating s				
2 Litres	WS/WRA/PC/2	hardens to a glass-like finish, giving a stunning effect				
10 Litres	WS/WRA/PC/10	pictures, paint, cloth, stone, acrylics etc. Preserves p stops metals from tarnishing. This product has resista				
Coverage; 1 -	1.5 m² per litre in one coat.	and solvents.				
	ct us for more details and advice on on of this product.	his catalogue represents a sma baction of products available	111			
		- Laloque represente initable				
	T					
	1	his catalogue represents a selection of products available selection of products full range. Price list offers full range.				
	i	selection of provide full range. Price list offers full range.	Ig new de			
		VILLE WE I HOUR DEVELOT	neeus.			

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Price list offers full range. West System are always developing new

products, please call us to discuss your needs.

We may well have a new product

to suit your needs.

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**FEW Filler** 

Bondaglass FEW Filler						
500gm	BOND/09134					
1.5 Kg	BOND/09136					

Bondaglass	V11 Filler					
400gm		D/09134				
1 Kg	BON	D/09152				
2.5 Kg		D/09154				
Bondaglass		sin Polye	ster Resir		•••••	••••••
250gm	BON	D/01100				
500gm		D/01102				
1 Kg		D/01104				
2.5 Kg		BOND/01106				
5 Kg	BON	D/01108				
Bondaglass	V11 Filler					
250gm	Whit		OND/0120	)2		
1 Kg	Whit	e B	OND/0120	)4		
2.5 Kg	Whit	e B	OND/0120	06		
250gm	Clear	r B	OND/0118	34		
1 Kg	Clear		OND/0118			
2.5 Kg	Clear	r B	OND/0118	38		
Bondaglass	Bonda To	pcoat also	o known	as Flow coa	 t	
1 Kg	Clear	r B	OND/0121	12		
2.5 Kg	Clear		OND/0121			
1 Kg	Whit		OND/0120			
2.5 Kg	Whit	e B	OND/0120	D6		
Bondaglass Mat Packs	Glassfibro	e Mat & C	loth Pack	s		
1 oz mat (300	am/m²)	26″v 12″	Vallow	B0ND/0310	in in	
	•			BOND/0310		
1 oz mat (300gm/m <sup>2</sup> )				-		
1 oz mat (300gm/m <sup>2</sup> )						
1 <sup>1</sup> / <sub>2</sub> oz mat (3	0.,	36° x 12°	Urange	BOND/0310	6	
Surface Tiss				1 <i>1</i> 1		
For reinforci	ng Gelcoa	it (or mark 36″x 36″	ang expo	sed pattern) BOND/0311	4	
Cloth Pack				20112/0011		
Woven Glass	sfibre clot	h				
		36"x 36"		BOND/0312	6	
Glassfibre Ta	ape					
Close weave		2m x 50mm		BOND/0314	2	

## V11 Filler

Glassfibre reinforced for strength, non tack surface.

topcoat application.

#### Bonda-resin Polyester Resin

**Bondaglass Products** 

White fine particle surfacing filler. Provides a fine dense surface. Normally requires no priming before

General purpose complete with liquid catalyst and mixing cup. Lloyds approved. For car, boat and house repairs. Also for making GRP moulds and laminates.

#### Gelcoat Polyester Resin

Thixotropic for moulds and laminates complete with catalyst. Clear or white.

#### **Bonda Topcoat**

Air curing thixotropic resin for surfacing, clear or white. State colour when ordering.

#### **Glassfibre Mat & Cloth Packs**

Easy 'wet out' for repairs and GRP laminates.

Glassfibre Tape		
Close weave	2m x 50mm	BOND/03142
Open weave	2m x 50mm	BOND/03154
Glassfibre Repair Kit		

Glassfibre resin, glassfibre mat, hardener, mixing cup and 'How to repair' leaflet. BOND/14102 *Aluminium Mesh* For reinforcing and bridging holes

10"x 8" BOND/05200

#### **Bondaglass Sealants - Surface Coating**

#### Bonda Wood Hardener

Penetrates deep intorotten wood, forming a<br/>band tough surface500mlBOND/48005Bonda Marine WoodSealClear moisture cured high gloss seal with goodUV light resistance250mlBOND/12198500mlBOND/122001 LitreBOND/122022.5 LitresBOND/12204

#### Bonda Marine Wood Seal

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Moisture cured sealer for wood, metal, ferro and cement. Bonding agent when sheathing wood/metal hulls - primer for cast iron ballast keels. For use in treatment of hulls with blistered gelcoat. 500gm BOND/12180 1 Kg BOND/12182 2,5 Kg BOND/12184

#### **Sealants - Surface Coating**



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