

## TYPE APPROVAL PROGRAM

00PA19210-X 18 APRIL 2000

ATTACHMENT TO CERTIFICATE NUMBER DATE

9 9

PAGE OF

### **Epoxy chocking resin**

**Chockfast Orange PR-610TCF**

#### **Intended Service:**

Chocking of propulsion machinery, generators, auxiliaries and deck machinery. Installation of stern tube, strut and rudder bearings.

#### **Ratings:**

Compressive Strength: 1336 kg/cm<sup>2</sup> (19,000 psi) ASTM D-790 (Mod.)  
Tensile Strength: 349 kg/cm<sup>2</sup> (4,970 psi) ASTM D-638

#### **Standards:**

ABS Rules.

**Service Restrictions:** The product is to be applied in accordance with the manufacturer's recommended procedures (see bulletin No. 655A).

### **Epoxy chocking resin**

**Chockfast Black**

#### **Intended Service:**

Casting of large, thick chocks for propulsion and other marine machinery.

#### **Ratings:**

Compressive Strength: 1216 kg/cm<sup>2</sup> (17,300 psi) ASTM D-695  
Tensile Strength: 204 kg/cm<sup>2</sup> (2900 psi) ASTM D-638

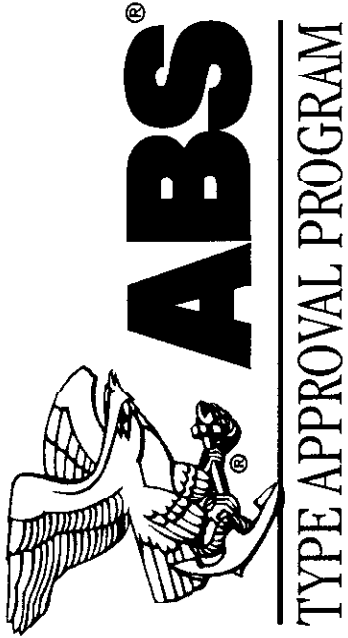
#### **Standards:**

ABS Rules.

**Service Restrictions:** The product is to be applied in accordance with the manufacturer's recommended procedures (see bulletin No. 666A).

#### **Comments:**

Regarding SOLAS/IMO Codes compliance, any material, for acceptance under SOLAS, etc., will be required to be non-combustible and have an "Administration" approval for its intended purpose.



00PA19210-X 18 APRIL 2000

ATTACHMENT TO CERTIFICATE NUMBER  
2

DATE  
9

PAGE

OF

### Epoxy smoothing and fairing paste

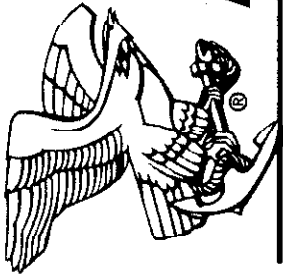
### ITW PHILADELPHIA RESINS REPAIR COMPOUND

Intended Service: Filling, smoothing and fairing of hulls, superstructure, decks, etc.

Ratings: Compressive Strength: 623 kg/cm<sup>2</sup> (8,900 psi) ASTM D-695.  
Tensile Strength: 183 kg/cm<sup>2</sup> (2,600 psi) ASTM D-638.

Standards: MIL-CF 24176.

Comments: 1. Manufacturer's recommended surface preparation and mixing instructions are to be followed (see technical bulletin No. 951A).  
2. Repair of pressure containing or force transmitting components will be specially considered upon submission of the intended repair procedure and details.  
3. Cavitation damage to plates including the fair or corroded or uneven hull and deck plating vary with the type of vessel and the specific location within the vessel. The proposed repair to this damage using Phillybond Blue 6A will require specific ABS approval. Our Surveyor is to be contacted and consulted as to the permissible limits of cavitation damage including the fairing of corroded or uneven hull and deck plating and suitability of the intended repair. If the repair is acceptable, the workmanship is to be to the Surveyor's satisfaction and a map of the repaired area is to be recorded.



## TYPE APPROVAL PROGRAM

00PA19210-X 18 APRIL 2000

ATTACHMENT TO CERTIFICATE NUMBER

3

DATE

9

PAGE

OF

### Dense epoxy paste

#### Phillyseal R (Ratseal)

Intended Service: Sealing cable and pipe bulkhead penetrations against vermin and water or gases (see Note 2).

Standards: QPL-24176-23.

Service Restrictions: 1. The product is to be mixed and applied in accordance with the manufacturer's recommendations (see technical bulletin No. 961A).

2. The manufacturer does not propose this material for bulkhead penetrations where specific performance or testing are required.

### Brushable hard facing compound for metals

#### Super Alloy Ceramic Repair Liquid

Intended Service: Repair and protection of metal surfaces subject to abrasion and erosion e.g. pump casings.

Ratings: Compressive Strength: 1190.0 kg/cm<sup>2</sup> (16,900 psi) ASTM D-695  
Adhesive Tensile Shear: 220.0 kg/cm<sup>2</sup> (3,125 psi) ASTM D-1002  
Flexural Strength: 563.4 kg/cm<sup>2</sup> (8,000 psi) ASTM D-790

Standards: QPL-24176-23.

Service Restrictions: 1. Repair procedure including surface preparation and application are to be carried out in accordance with the manufacturer's recommendations (see technical bulletin No. 819B).

2. Repair of pressure containing or force transmitting components will be specially considered upon submission of the intended repair procedure and details.



# TYPE APPROVAL PROGRAM

18 APRIL 2000

00PA19210-X

DATE

ATTACHMENT TO CERTIFICATE NUMBER

4

9

PAGE

OF

## Paste consistency hard facing compound for metals

## Super Alloy Ceramic Repair Putty

Intended Service: Repair and protection of metal surfaces subject to abrasion and erosion e.g. pump casings.

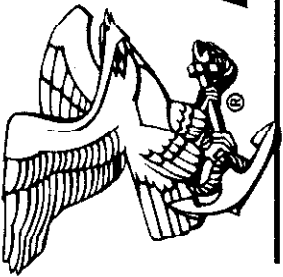
### Ratings:

Compressive Strength: 877.5 kg/cm<sup>2</sup> (12,700 psi) ASTM D-695  
Adhesive Tensile Shear: 125.4 kg/cm<sup>2</sup> (1,800 psi) ASTM D-1002  
Flexural Strength: 455.7 kg/cm<sup>2</sup> (6,600 psi) ASTM D-790

### Standards:

QPL-24176-23.

Service Restrictions: 1. Repair procedure including surface preparation and application are to be carried out in accordance with the manufacturer's recommendations (see technical bulletin No. 821D).  
2. Repair of pressure containing or force transmitting components will be specially considered upon submission of the intended repair procedure and details.



# ABS<sup>®</sup>

## TYPE APPROVAL PROGRAM

00PA1921D-X

18 APRIL 2000

ATTACHMENT TO CERTIFICATE NUMBER

5

DATE

9

PAGE

OF

**High bond strength repair system to join dissimilar metals**      **Super Alloy Titanium Repair Putty**

**Intended Service:** High performance repair of metal surfaces and profiles, machined and unmachined.

**Ratings:**  
Compressive Strength: 1,070 kg/cm<sup>2</sup> (15,200 psi) ASTM D-695  
Adhesive Tensile Shear Strength: 140 kg/cm<sup>2</sup> (2,000 psi) ASTM D-1002  
Flexural Strength: 542 kg/cm<sup>2</sup> (7,700 psi) ASTM D-790

**Standards:** N/A

**Comments:**

1. Repair procedure including surface preparation and application are to be carried out in accordance with the manufacturer's recommendations (see technical bulletin No. 820F).
2. Repair of pressure containing or force transmitting components will be specially considered upon submission of the intended repair procedure and details.
3. Erosion/corrosion damage to plates and internals varies with the type of vessel and the specific location within the vessel. The proposed repair to this damage using Super Alloy Titanium Repair Putty will require specific ABS approval. Our Surveyor is to be contacted and consulted as to the permissible limits of erosion/corrosion damage and suitability of the intended repair. If the repair is acceptable, the workmanship is to be to the Surveyor's satisfaction and a map of the repaired area is to be recorded.



00PA1921D-X

ATTACHMENT TO CERTIFICATE NUMBER  
6

18 APRIL 2000

DATE  
9

PAGE

OF

**Epoxy paste adhesive**

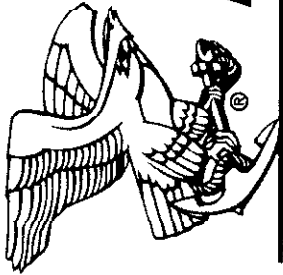
**Phillybond TA-30**

Intended Service: General purpose adhesive for metals, rubber, wood, glass and many plastics.

Ratings: Compressive Strength: 700 kg/cm<sup>2</sup> (11,000 psi) ASTM D-695  
Tensile Strength: 224 kg/cm<sup>2</sup> (3,200 psi) ASTM D-638

Standards: MIL-A-24456.

Service Restrictions: Manufacturer's recommended mixing and application procedures are to be followed (see technical bulletin No. 958A).



# ABS<sup>®</sup>

## TYPE APPROVAL PROGRAM

00PA19210-X

18 APRIL 2000

ATTACHMENT TO CERTIFICATE NUMBER

7

DATE

9

PAGE

OF

### **Epoxy laminating resin for fiberglass**

#### **Phillyclad No. 8**

**Intended Service:** Repair of leaks, cracks and other damage to metal, fiberglass or wood in conjunction with fiberglass tape or cloth.

**Standards:** ABS Rules, MIL-R-17882.

**Service Restrictions:** All repairs including surface preparation and application technique are to be carried out in accordance with the manufacturer's recommendations.

### **Epoxy repair paste**

#### **Phillyclad No. 6**

**Intended Service:** Repair and restoration of metal parts damaged mechanically or by erosion or corrosion.

**Ratings:** Shear Strength: 70.3 kg/cm<sup>2</sup> (1,000 psi).

**Standards:** ML-R-17882-C.

**Service Restrictions:**

1. Repair procedure including surface preparation and application are to be carried out in accordance with the manufacturer's recommendations (see technical bulletin No. 965A).
2. Repair of pressure containing or force transmitting components will be specially considered upon submission of the intended repair procedure and details.
3. Mechanical and erosion or corrosion damage to plates and internals varies with the type of vessel and the specific location within the vessel. The proposed repair to this damage using Phillybond No. 6 will require specific ABS approval. Our Surveyor is to be contacted and consulted as to the permissible limits of mechanical and erosion or corrosion damage and suitability of the intended repair. If the repair is acceptable, the workmanship is to be to the Surveyor's satisfaction and a map of the repaired area is to be recorded.



# ABS<sup>®</sup>

## TYPE APPROVAL PROGRAM

00PA19210-X

18 APRIL 2000

ATTACHMENT TO CERTIFICATE NUMBER

DATE

8

9

PAGE

OF

### Epoxy/fiberglass tape propeller shaft coating

Phillyclad 1775/62(TS)

Intended Service: Protection of tailshafts from corrosion due to sea water or fresh water exposure.

Ratings: Flexural Strength: 366 kg/cm<sup>2</sup> (5,200 psi) ASTM D-790  
Tensile Strength: 285 kg/cm<sup>2</sup> (4,050 psi) ASTM D-638

Standards: ABS Rules, MIL-R-23461.

Service Restrictions: The product is to be applied in accordance with the manufacturer's recommended procedures (see bulletin No. 970B) and relevant requirements of the Rules for Building and Classing Steel Vessels.

### Epoxy chocking resin

Chockfast Gray PR-610FR

Intended Service: Chocking of deck and auxiliary machinery where alignment is not considered critical. This includes skid mounted generators.

Ratings: Compressive Strength: 1125 kg/cm<sup>2</sup> (16,000 psi) ASTM D-790  
Tensile Strength: 281 kg/cm<sup>2</sup> (4,000 psi)

Standards: ABS Rules

Service Restrictions: The product is to be applied in accordance with the manufacturer's recommended procedures (see bulletin No. 656C).



30PA19210 18 APRIL 2000

ATTACHMENT TO CERTIFICATE NUMBER

DATE

1

9

PAGE

OF

**ITW Philadelphia Resins Corporation**

13C Commerce Drive  
P.O. Box 309  
Montgomeryville, PA 18936  
USA  
Telephone: 215-855-8450  
Fax: 215-855-4688

**Equipment**

**Socketing Resin for Wire Rope Termination**

Intended Service: Replace zinc in socket type end fittings for wire rope.

Standards: ANSI USAS M11.1-1980 - Mine Elevators.  
ANSI/ASME Code A17.1 - Passenger Elevators.

Service Restrictions: Manufacturer's installation procedures are to be strictly observed (see bulletin 621E).

**Model**

Socketfast