

Precision Grouts for Foundation Systems





Introduction

ABOUT US

We are a global supplier of long-lasting polymer solutions for uniquely demanding challenges. Through decades of experience in the petrochemical market, we have gained a deep understanding of our customers’ challenges, and we use our niche application expertise to deliver solutions of the highest quality.

BRANDS

Our range of proven products and world-renowned brands along with our extensive global distribution means that our customers have access to our high-performance products wherever and whenever they need them.

CUSTOMER RELATIONS

We work closely with our customers to provide them with value-added solutions, and are committed to continuous delivery of outstanding customer experiences through world-class quality and service.

HEALTH & SAFETY

At ITW Performance Polymers, we strive each and every day to operate responsibly. We are driven by the belief that we must all play a positive part in our shared world, a notion that is deeply rooted in our core values.

Our health, safety and environmental policies fully reflect this idea, and our HSE initiatives ensure best-in-class conditions for our employees, our customers and the environment.

DISTRIBUTION

Our specialized technical distributors provide regional support during installations of complex grouts and pours. They provide application expertise and ensure optimal installation every time.

Precision Grouts for Foundation Systems

Chockfast epoxy grouting systems have been specifically engineered to provide the optimal performance and reliability for use under critically aligned equipment.

The right grouting system, as part of a well engineered equipment system, can provide years of cost effective, reliable performance.

The “Chockfast System” supports more horsepower than any other system. From thin pour epoxy chocks to large foundation repairs, Chockfast has the properly engineered system for all your critical equipment needs.



CHOCKFAST RED HF

Pumpable, High-Flow Epoxy Grout

Chockfast Red HF Epoxy Grout offers improved working and placement properties, and is suitable for small and large volume pours - achieving excellent cured properties for dependable, long-term service.

Pumping Chockfast Red HF Epoxy Grout:

A key feature of Chockfast Red HF Epoxy Grout is its fluid consistency, which allows it be effectively pumped using worm-drive and peristaltic type pumps to those difficult and hard to reach areas.

For Precise and Permanent Alignment of all Machinery

- Lowest Total Cost of Ownership
- Excellent Vibration Damping
- High Compressive & Bond Strengths
- Superior Resistance to Shrinkage, Fretting and Shear loads
- Ease of Installation
- Chemical Resistance
- High Surface Contact Area

Why choose Chockfast? If you are interested in...

- Increasing Equipment and Foundation Service Life
- Lowering Equipment Operating Costs
- Increasing Mean Running Time Between Failure

... Then the choice for your next installation is Chockfast grout



Epoxy Grout Systems for Precise and Permanent Alignment of All Machinery

Gentle Exothermic Reactions and Low Coefficients of Thermal Expansion

Chockfast grout systems provide all of the advantages necessary for superior performance including fast, convenient installations; precise, reliable alignment; resistance to expansion under hot-running machinery; rapid curing with negligible shrinkage; and maximum versatility for dependable solutions with the most difficult installation problems. There is an ideal epoxy product for each grouting or chocking application.

Chockfast grout systems have earned an unmatched reputation for reliability with major gas pipelines; chemical, petrochemical and refining complexes; power facilities; mining operations; manufacturing; engineering and design organizations; and industrial construction operations worldwide.

Applications	
• Compressors	• Fans
• Process Pumps	• Coker Drums
• Turbines	• Separators
• Engines	• Fluid Drives
• Generators	• Gear Drives
• Blowers	• Conveyors
• Electric Motors	• Cooling Towers
• Pelletizers	



Which Product is Right for You?

Chockfast Red	A 3-component, 100% solids, deep-pour, multi-purpose epoxy grout for fast, permanent alignment of reciprocating equipment. Also used as a polymer concrete for fast reconstruction of worn or damaged foundations. Chockfast Red provides excellent vibration damping for static and dynamic loads, while its gentle exothermic cure allows for single pours from 2” to 18” (51 mm to 457 mm).
Chockfast Red SG	A 3-component, 100% solids, enhanced flow, epoxy grout, Chockfast Red SG is used to grout large machinery applications where a lighter consistency material is required and clearances from 1” to 4” (25 mm to 102 mm) are typical.
Chockfast Red HF	A 3-component, 100% solids, epoxy formulated to meet the demands of larger, thinner pours associated with packaged equipment. With the advent of more difficult, larger pours a 3-component highly flow able material with a long pot life is required. This versatile material can be poured conventionally or pumped into place. It is the ideal epoxy grout for applications where conventional 3-component grouts cannot be placed.
Escoweld® 7505/7530	A 3-component, 100% solids, deep pour, epoxy grout; ESCOWELD® 7505/7530 offers many benefits designed to simplify equipment installation while providing excellent chemical resistance and vibration damping for pumps and other critically aligned rotating equipment. Pours from 2” to 18” (51 mm to 457 mm) are typical. ESCOWELD® is available in North America only.
CWC 604 Machine Bond®	A 3-component, 100% solids, deep pour, epoxy grout; CWC 604 Machine Bond® offers many of the same benefits characteristic of our other fine epoxy grouts, but where a lighter consistency material is required. Pours from 1” to 18” (51 mm to 457 mm) are typical. CWC 604 Machine Bond® is available in North America only.
Chockfast Blue	A 3-component, 100% solids, high chemical and temperature-resistant, high flow epoxy grout for new or retrofit installations in caustic environments. Chockfast Blue can also be used as a substitute for steel soleplates or rails; normally used in a thickness range of 1” to 1-1/2” (25 mm to 38 mm).
Chockfast Orange	A 2-component, low viscosity, structural epoxy “chock”, or “poured shim” with variable hardener ratios options. Replaces tediously fitted steel chocks or shims. Assures intimate contact with machined or un-machined equipment bedplates. Virtually 100% effective bearing underneath supported equipment. Normally poured in thickness’ of 1/2” to 4” (12 mm to 100mm)
Chockfast Black	A 2-component, 100% solids, highly flowable, thin pour “chock” or “poured shim”; designed to maintain proper alignment and support of machinery and equipment. Able to withstand severe industrial environments with a high degree of both physical and thermal shock resistance. Normally poured in thicknesses of 1 - 1/4 ” to 2 - 1/2” (30 mm to 65 mm).
Chockfast Gray	A 2-component, highly flowable, thin pour “chock” or “poured shim”; designed to maintain proper alignment and support of machinery and equipment. Able to withstand severe industrial environments with a high degree of both physical and thermal shock resistance. Normally poured in thicknesses of 1 - 1/4” to 2 - 1/2” (30 to 65 mm).
ITW PRC 100 Non-Shrink Cementitious Grout	A precision, non-shrink, cement grout that meets or exceeds all requirements of the Corps of Engineers ASTM C-1107.



Specifications

Product	Features	Unit Size	Minimum & Maximum Pour Dimensions	Compressive Strength	Compressive Modulus of Elasticity	Flexural Strength	Coefficient of Linear Thermal Expansion
3-Component Epoxy Grouts							
Chockfast Red	High strength, 100% solids epoxy grouting compound which is used to grout large machinery and to support soleplates. Ideal for final positioning of critically aligned equipment within close tolerances.	1.6 ft³ (45.3 L)	2" (5 cm) to 18" (46 cm) in thickness and 7' (2.2 m) square	15,250 psi (1,072 kg/cm²) (105.1 MPa)	2,000,000 psi (140,600 kg/cm²) (13,790 MPa)	4,025 psi (283 kg/cm²) (27.8 MPa)	11.2 x 10 ⁻⁶ in/in/°F
Chockfast Red SG	Thin Pour, Rapid Cure, High Strength Epoxy Grout.	1.6 ft³ (45.3 L)	1" (25 mm) to 4" (100 mm) in thickness and 5' (1.5 m) square	18,120 psi (1,274 kg/cm²) (124.9 MPa)	1,970,000 psi (138,535 kg/cm²) (13,583 MPa)	4,800 psi (340 kg/cm²) (102 MPa)	10.8 x 10 ⁻⁶ in/in/°F
Chockfast Red HF	A versatile 3-component epoxy which can be poured conventionally or pumped into place. An ideal epoxy grout for applications where conventional 3-component grouts cannot be placed.	2.51 ft³ (71.0 L)	1" (25 mm) to 4" (100 mm) in thickness and 5' (1.5 m) square	14,100 psi (991 kg/cm²) (97.2 MPa)	1,600,000 psi (112,491 kg/cm²) (11,032 MPa)	5,200 psi (366 kg/cm²) (35.9 MPa)	19.1 x 10 ⁻⁶ in/in/°F
Escoweld® 7505E/7530	High Strength, Deep Pour, Very Fluid, Epoxy Grout for mounting precisely aligned equipment. Ideal for installing baseplate mounted pumps.	2.4 ft³ (68 L)	1.25" (3 cm) to 18" (46 cm) in thickness and 7' (2.2 m) square	14,000 psi (984 kg/cm²) (96.5 MPa)	1,800,000 psi 126,550 kg/cm²) (12,410 MPa)	4,700 psi (329 kg/cm²) 32.4 MPa	14.6 x 10 ⁻⁶ in/in/°F
CWC 604 Machine Bond	100% solids, deep pour, epoxy grout; offers many of the same benefits characteristic of our other epoxy grouts, but where a lighter consistency material is required.	2 ft³ (56.63 L)	1" to 18" (25 mm to 457 mm) in thickness and 7' (2.2 m) square	16,100 psi (1,132 kg/cm²) (111 MPa)	3,800,000 psi (267,166 kg/cm²) (26,200.1 MPa)	7,880 psi (554 kg/cm²) (54.3 MPa)	16.0 x 10 ⁻⁶ in/in/°F
Chockfast Blue	Epoxy Grout for Severe Applications. Aggregate comes premixed with resin.	800 in³ (13.1 L)	1" (25 mm) to 1-1/2" (38 mm) in thickness and 3'-6" (1.1 m) square	19,000 psi (1,336 kg/cm²) (131 MPa)	1,640,000 psi (115,300 kg/cm²) (11,307 MPa)	4,920 psi (345 kg/cm²) (33.9 MPa)	15.4 x 10 ⁻⁶ in/in/°F
2-Component Epoxy Chocking Compounds						Shrinkage	
Chockfast Orange	Marine & Industrial Chocking Compound for Precisely Aligned Equipment with chocks of the same or variable thickness. Smooth flowing, epoxy that can be injected into very narrow areas.	Small: 120 in³ (1.9 L) Large: 260 in³ (4.3 L)	1/2" (12 mm) to 4" (100 mm) thick using a variable amount of hardener and 30" (800 mm) Long x 8" (200 mm) Wide	19,000 psi (1,336 kg/cm²) (131 MPa)	533,000 psi (37,482 kg/cm²) (3,674.9 MPa)	0.0002 in/in (0.0002 mm/mm) or 0.02%	
Chockfast Black	High Temperature, Industrial Chocking Compound for Precisely Aligned Equipment with chocks of the same thickness. Viscous, gritty epoxy.	265 in³ (4.3 L)	1-1/4" (32 mm) to 2-1/2" (62 mm) thick and 30" (800 mm) Long x 8" (200 mm) Wide	17,300 psi (1,216 kg/cm²) (119.3 MPa)	800,000 psi (56,246 kg/cm²) (5,515.8 MPa)	0.00018 in/in (0.00018 mm/mm)	
Chockfast Gray	General Purpose Chocking Compound for installing Non-Precisely Aligned Industrial or Marine Equipment or for installing anchor bolts.	Small: 187 in³ (3.06 L) Large: 816 in³ (13.37 L)	1/2" (12 mm) to 2" (50 mm) thick and 24" (610 mm) Long x 24" (610 mm) Wide	16,000 psi (1,125 kg/cm²) (110.3 MPa)	520,000 psi (36,568 kg/cm²) (3,585.3 MPa)	0.0003 in/in (0.0003 mm/mm)	
Cementitious Grout							
ITW PRC 100	Non-shrink, precision cement-based grout that can be used in a wide range of consistencies from damp pack to high fluidity.	Plastic 0.43 ft³ Flowable 0.44 ft³ Fluid 0.45 ft³	Up to 2" (50 mm) deep. 2" to 5" deep with 25% 3/8" pea gravel by weight. Over 5" deep, use 50% 3/8" pea gravel by weight.	Plastic 3 days 5,900 7 days 8,900 28 days 11,500 Flowable 5,400 7,700 8,400 Fluid 4,800 6,200 7,700	3 days 2.64 x 10 ⁶ psi 7 days 2.79 x 10 ⁶ psi 28 days 3.00 x 10 ⁶ psi	3 days 1,055 psi 7 days 1,230 psi 28 days 1,430 psi	4.76 x 10 ⁻⁶ in/in°F

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