EQUIPMENT FOUNDATION SYSTEMS

CHOCKFAST® Black

High Temperature Chocking Compound

Technical Bulletin # 666H

Product Description

CHOCKFAST® Black is a specifically formulated 100% solids, inert filled casting compound developed for use as a chocking material. It is a cost-effective method of maintaining permanent precise alignment of critical equipment. It will withstand severe environments involving high physical and thermal shock.

Use & Benefits

This unique product is used under gas and diesel engines, compressors, generators, turbines, motors, pumps and various other types of equipment. CHOCKFAST® Black is ideal for use under these hot running reciprocating and rotating machines because of its excellent resistance to creep and fatigue at high operating temperatures. It is non-shrinking and has a very high impact and compressive strength. Resin chocks made with CHOCKFAST® Black reduce possible bearing or crankshaft damage because they (1) minimize heat build-up on foundations, (2) assure precise and unsurpassed contact with bedplates, and (3) provide a high coefficient of friction to help hold engines down tight. The excellent flow-ability of CHOCKFAST® Black allows it to fill voids in the chock area and conform to all surface irregularities

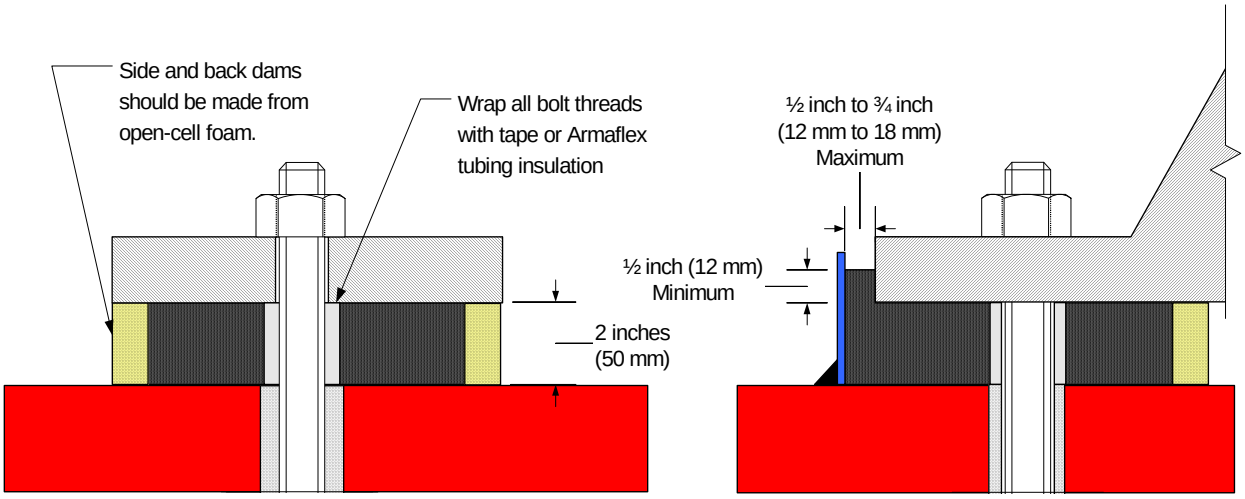
Design Considerations

CHOCKFAST® Black was designed to be a thick pour liquid chocking material. A chock depth of 2" (50mm) is standard; however, thinner or thicker pours can be made satisfactorily. The 2" (50mm) chock elevates equipment above the underlying foundation, which allows a free flow of air thereby reducing possible foundation humping problems.

Contact ITW Polymer Technologies for information regarding pours less than 1-1/4" (32mm) in thickness or greater than 2-1/2" (62mm) in thickness.

Installation Instructions

Construct a chock mold around one or more anchor bolts using open cell foam damming material on three sides. Wrap the shank of the anchor bolt with tape, cover with foam pipe insulation or coat with non-melt grease to prevent the CHOCKFAST from sticking to it and to seal the bolt hole. Place a metal dam 1/2" to ¾" (12mm to 18mm) from the mounting pad and seal with caulk. Spray the inside of the mold and front metal dam with Release Agent. Mix and pour the epoxy as directed.



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Physical Properties

COMPRESSIVE STRENGTH	17,300 psi (1216 kg/cm^2)	ASTM C-695 (Modified)
COMPRESSIVE MODULUS OF ELASTICITY	800,000 psi (5.6x104 kg/cm^2)	ASTM C-695 (Modified)
LINEAR SHRINKAGE	0.00018 in/in (0.00018 mm/mm)	ASTM D-2566
COEFFICIENT OF LINEAR THERMAL EXPANSION	32°F to 140°F @ 15.0 X 10^{-6}/F° (27.0 x 10-6/C° @ 0°C to 60°C)	ASTM D-696
FLEXURAL STRENGTH	6,200 psi (435 kg/cm^2)	ASTM C-580
FLEXURAL MODULUS OF ELASTICITY	1.4 x 10^6 psi (101,300 kg/cm^2)	ASTM C-580
TENSILE STRENGTH	2,900 psi (204 kg/cm^2)	ASTM D-638
SHEAR STRENGTH	5,000 psi (350 kg/cm^2)	FED-STD-406 (Method 1041)
IZOD IMPACT STRENGTH	5.1 in.lbs./in (0.23 N.m/cm)	ASTM D-256
FIRE RESISTANCE	Self Extinguishing	ASTM D-635
SPECIFIC GRAVITY	1.94	
BARCOL HARDNESS	55 Full Cure	ASTM D-2583
MAXIMUM OPERATING TEMPERATURE	200°F (94°C)	

Product Information

UNIT COVERAGE	265 in^3 (4,343 cm^3)
APPLICATION TEMPERATURE	55°F (13°C) to 95°F (35°C)
UNIT PACKAGING	Resin (NH) – 18.2 lbs. (8.3 kg), 1.2 gal (4.5 L) in a 2gal pail Hardener (H) – 0.74 lbs. (0.34 kg), 11.5 oz (0.34 L) in an 16 oz plastic bottle
SHIPPING WEIGHT	21 lbs. (9.5 kg)
CURE TIME (approximate)	48 hours @ 60°F (15°C) 36 hours @ 65°F (18°C) 24 hours @ 70°F (21°C) 18 hours @ 80°F (26°C)
POT LIFE	45 min. @ 70°F (21°C)
SHELF LIFE	Exceed 18 months
CLEAN UP	IMPAX IXT-59 or similar epoxy cleaner

Reference

For design considerations and application details please request Bulletin No. 642 or contact ITW Polymer Technologies' Engineering Services Department.

Date

08/2008