

Technical Bulletin # 477

## Product Description

CWC 646 is a two-component, 100% solids, high strength, pourable epoxy resin grout designed to replace steel chocks for maintaining permanent alignment of industrial equipment and machinery.

Features:

- Pour in place installation
- Free flow of air under equipment
- Maximum effective load bearing area
- Excellent resistance to water, oils, salts, non-oxidizing acids and most solvents

## Basic Uses

Use to install:

- Reciprocating and centrifugal equipment
- Steam and gas turbines
- Pumps and motors
- Storage tanks and towers
- Crane rails

## Application Method

Pour in place.

## Package and Yield

A unit of CWC 646 Machine Chock consist of two components: Part A - resin, a pourable paste packaged in a plastic gallon pail, and Part B - hardener, a liquid packaged in a plastic half pint bottle.

Yield	150 cu.in./0.65 gallons
Shipping weight.	9.2 pounds (4.2 kilograms)

## Surface Preparation

Substrates must be clean and sound. Paint, dust, grease, oil, launch and all other foreign materials must be removed prior to application. Concrete surfaces should be prepared by mechanical abrasion such as chipping, bush hammering or similar methods. A rough surface will aid adhesion. Sandblasting to white metal is recommended in preparing metal surfaces.

## Forming

This is a flowable grout and must be retained within watertight forms until cured. Open cell urethane foam is compressed between the frame and foundation surfaces to construct a sealed form. Consult "CWC 646 Machine Chock Specifications for Installation" for detailed instructions.

## Proper Tools, Supplies and Accessories

All material and equipment for mixing, placing and clean-up of CWC 646 Machine Chock should be on hand before any mixing is started. Rubber gloves, safety glasses, particle masks, protective clothing, electric or air drill and jiffy mixer attachment are recommended.

## Mixing and Placing

Pour the contents from the half-pint bottle labeled "Part B, hardener" into the one gallon container labeled "Part A, resin". Mix the two components thoroughly for approximately three minutes using a slow speed (200-300 rpm) drill with jiffy mixer attachment. Properly mixed CWC 646 will be a uniform color without streaks of unmixed components. Pour immediately from container. Do not mix material that cannot be placed immediately.

## Temperature Factors Affecting Grouting

The temperature of all components of CWC 646 Machine Chock Part A resin and Part B hardener, should be 60° to 75°F before mixing. Mixing grout materials when their temperatures are below or at the low end of the indicated ranges adversely affects proper mixing and inhibits the flowability of the grout. Mixing grout materials at the high end of the indicated ranges hastens the cure of the grout thus reducing the "working time". The grout materials should be stored at a temperature within the range indicated. Work area and substrate temperatures should also be within the recommended temperature range.

## Technical Information

COMPRESSIVE STRENGTH (ASTM D-695):	19,000 psi
COMPRESSIVE MODULUS OF ELASTICITY:	1.11 x 106 psi
TESILE STRENGTH (ASTM D-638):	5,400 psi
TESILE MODULUS OF ELASTICITY:	1.06 x 106 psi
FLEXURAL STRENGTH (ASTM D-790):	8,100 psi
FLEXURAL STRENGTH OF ELASTICITY:	0.98 x 106 psi
BOND STRENGTH (ASTM C-882):	14 Day 2400 psi (Concrete Failed) 28 Day 4770 psi (Concrete Failed)
SHEAR STRENGTH:	4770 psi
COMPRESSIVE CREEP (ASTM C-1181):	500 psi loading 0.0014 in/in @ 75°F 28 days 0.0088 in/.in @ 150°F 28 days
SPECIFIC GRAVITY:	1.55
HARDNESS (SHORE D):	93
STORAGE CONDITIONS:	Store dry at 40° to 95°F Condition to 60° to 75°F prior to application.
PRECAUTION:	Caution: Eye and skin irritant (evidenced by itching, redness). Potential skin sensitizer. Avoid contact with eyes. Avoid prolonged or repeated skin contact. Do not take internally. Wash thoroughly after handling.

First Aid: Eyes-flush with water for 15 minutes. Get immediate medical attention. Skin-remove contaminated clothing and excess contaminant, wash skin with soap and water. Inhalation-remove to fresh air. Ingestion-get immediate medical attention.  
See Material Safety Data Sheet for complete information.

Date

07/2006

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