ONECOAT BRAKE ROLLER REPAIR KIT

CLASS 4 INSTRUCTIONS

TK/MOT5 Engineer's Kit

This kit has been specially developed to produce a hard & durable surface on Brake Testing Rollers. It contains enough material for 3 Sets of Class 4 MOT Rollers & can be used for patching or fully replacing the existing coating. Stored material will keep at least a year between jobs, usually much longer.
Kits are also suitable for applying Slip-Resistant Coatings to metal, concrete, wood, stone, brick, and other surfaces.

ENGINEER'S CONTENTS CHECK LIST

- ☐ 1x Large Bag MEDIUM GRIT BR1
- ☐ 3x Bottle Hardener
- ☐ 3x Brown 50mm Measuring Cup
- ☐ 9x Mixing Spatulas & Pairs Gloves
- ☐ 3x Tub BL1 Bonding Agent
- ☐ 3x Brown 25mm Measuring Cup
- ☐ 3x 1" Brush
- ☐ 1x Set of Instructions
- ☐ 1x Medium Bag Thickener
- ☐ 3x White 50mm Measuring Cup
- ☐ 9x Mixing Cups

Contents Checked by..... Date.....

HEALTH AND SAFETY

With simple precautions the chemicals used before mixing are straightforward to use. (See C.O.S.H.H. Sheet.) Once the Bonding Agent and Hardener have been mixed and gone hard, the high-friction surface is completely safe and remains so. For your own safety, please observe the following simple precautions during application. As with all chemicals, keep them off your skin by using the gloves supplied, and avoid getting them on clothing which touches the skin, such as cuffs. Ensure adequate ventilation. Keep them out of your eyes - don't splash. Avoid any chance of swallowing by not smoking, eating, or drinking whilst working, and wash your hands afterwards. If you do get any on your skin, clean it off immediately, using a solvent-free hand cleanser. For splashes in the eyes, wash with lots of water, and seek medical attention, if necessary. Keep chemicals away from food and children.

IMPORTANT POINTS

In cold weather, if possible, keep the rollers (or area being coated) at 15-21oC (60-70°F) throughout the work. Curing will work down to below 5°C, but more slowly. Surface moisture on cold, damp days can reduce adhesion. Screen to prevent draughts, & heat with infra red, space heaters etc. Tube heaters, lead lights etc in the pit will help overnight. Remember, it's the roller or floor temperature that matters, not the air temperature!
Store the kit in a warm room before use.
Avoid starting with cold or hot chemicals - 12 to15°C is best for speed & pot life. Use a bowl of water to adjust. For periodic brush cleaning, use cellulose thinners, epoxy thinners, or trichloroethylene. The Surface or Rollers MUST NOT BE USED until the coating is HARD.
To check, make a test piece (metal or wood, say 2"x2") when the coating is complete. Put a 'dab' of coating on it (do not grit) and leave next to the gritted area. Test by first thumb pressure and then with a screwdriver before using. When hard, the coating still continues to gain strength over several days, so build up the work load. After a very long period of storage, (several years), the Bonding Agent may stiffen. If so, place the tub in hot water (60oC), and stir until liquid again. To save grit, make a simple catcher. Take a piece of cardboard the width of the pit and fold and tape the lower end to form a trough. Remove the side plates on Brake Rollers, & fit the catcher. If an area is being coated, obtain a long brush-type draught excluder as used on the bottom of internal doors. Half provides an excellent levelling brush.

WWW.MOTSUPPLIES.COM

Tel: 01302 718220

DETAILED INSTRUCTIONS

Stage 1: SURFACE PREPARATION

It is extremely important that the surface is prepared properly before applying coating. The new coat bonds most strongly to clean, rough metal, so complete removal of the old coating down to metal is essential.
Degrease where needed. If fully recoating rollers, removal by heating & scraping, using a propane torch, to 100-150°C for cold-cured coatings or 200°C for baked on coatings is effective.
Extreme care to avoid damage to sensors, pipework & wiring etc is required. For removed rollers high pressure shot blasting is ideal, preferably using chilled slag.
For patching or full rollers, an angle grinder, needle descaler or air chisel are also effective. If not shot blasted, final cleaning & roughening with an angle grinder must be carried out to provide a 'key'. Any corrosion in 'pits' must be removed preferably using a light duty handheld shotblaster, applied through a small cardboard box to minimise mess. This removes starting points for new corrosion.
Complete ALL PREPARATIONS before moving on. Make sure all parts and the surrounding area are warmed to (say) office temperature, certainly to above the 'dew point' to avoid moisture condensing on the surface. This is **very important on cold, damp days.** The use of infra red or halogen heaters together with some form of screen to keep cold air away keeps both the equipment and the person recoating warm and ensures a longer lasting job!

Stage 2: MIXING THE BONDING AGENT

Wear gloves. Ensure ALL surfaces to be coated are FULLY prepared and CLEAN BEFORE mixing chemicals. **Stir Bonding Agent before use.** Take one measure (brown) of Bonding Agent (50ml), and one measure of Hardener (25ml) and mix well in a paper cup, using one of the spatulas supplied. The correct mixture is important, so make sure the measures are filled and emptied completely. Use separate spatulas to remove the last of the Bonding Agent & Hardener measures. Mix in a measure (50ml white) of Thickener until smooth. This may need increasing by ¼ to ½ measure in hot weather or decreasing in cold. Adjust after the first mix. Once mixed, the material must be used within 15-20 minutes.

Stage 3: APPLYING THE COATING

Brush an even, smooth, coat onto the surface. If carrying out a repair, brush to the edge of, but not on top of the existing coating. The coating thickness should be thicker than that of domestic paint, and should be inspected carefully for thin or thick areas, which should be corrected. Brushing is more difficult than for paint. If runs occur when the roller is turned, more thickener is needed. If brushing is almost impossible use less. When a convenient area has been coated, lightly brush in both directions to further even the thickness. Dip the brush in cleaner periodically, (see previous page), and wipe after each mix is applied to prevent it hardening. Apply Ceramic Grit frequently, say after every two mixes, or complete roller. This ensures the strongest bonding.
When complete, make a TEST PIECE (see previous page) from final Bonding Agent mix for checking readiness for service.

Stage 4: APPLICATION OF THE CERAMIC GRIT

Application of the grit requires care. Too little grit results in grit 'sinking', leaving insufficient on the surface for correct grip. For rollers fit the grit catcher (see previous page). Gently broadcast the grit over the surface ensuring complete coverage with slight excess falling into the catcher. Allow a little time for the grit to settle in. Following application, check for any spots with two light a coating, and carefully correct. (For non-slip use, avoid buildup. Use long brush (above) to remove excess. Remove masking tape.)

Stage 5: CURING

Allow the surface to cure for as long as possible (up to 16 hours at 65°F (19°C), longer at lower temperatures). Where applicable brush off any excess Ceramic Grit and retain. When the TEST PIECE IS HARD, (see previous page) the surface is ready for use. Allow the workload to build up as the surface continues to to get stronger and stronger for up to a week.

HEALTH & SAFETY DATA

ONECOAT & ONEDAY ROLLER KITS (Sheet 5B)

The product comprises a Bonding Agent, Hardener, & Thickener which are mixed in correct proportions, and brush applied to bond a Ceramic Grit to the required substrate.

COMPOSITIONS

BONDING AGENT: Dark brown viscous blend of Liquid Epoxy Resins with non-hazardous additives & fillers to improve application, performance, & storage. Flash Pt: >100oC.

HARDENER: Straw coloured, medium viscocity blend of liquid amines. Flash Pt: >100oC.

THICKENER & CERAMIC GRIT: Non Hazardous.

HEALTH HAZARDS

BONDING AGENT: Irritating to eyes and skin. May cause sensitization by skin contact.

HARDENER: Corrosive in contact with skin and if swallowed. Causes burns.

PRECAUTIONS IN USE & FIRST AID

GENERAL: Avoid contact of chemicals with skin & eyes. To avoid ingestion, do not eat, smoke or drink whilst working until hands have been washed. Keep chemicals away from children. Wear impervious (polythene and/or rubber) gloves. Wear glasses if splashing is likely. Avoid contact of chemicals with clothing which touches the skin, such as cuffs etc. In case of skin contact, wash immediately with a solvent-free hand cleanser. Do not use solvent. Remove contaminated clothing. Ensure adequate ventilation, especially if using in confined warm conditions, or use a mask suitable for light fumes. In case of eye contact, irrigate with water for 15 minutes & seek medical attention.

HARDENER: In case of ingestion seek medical attention. Drink 1 or 2 pints of water. Do not induce vomiting.

Relevant COSH Sheets for our products are available on request.

Black Bonding Agent:
Irritating to eyes and skin
May cause sensitisation by skin contact.

Liquid Resin Hardender/Curing Agent:
Harmful by inhalation, in contact with skin and if swallowed
Causes burns & May cause sensitisation by skin contact.
Possible risk of irreversible effects.

WWW.MOTSUPPLIES.COM

JHM Butt & Co Ltd • Station Yard • Station Road • Bawtry • Doncaster • South Yorks • DN10 6QD
Tel: 01302 718220 - Fax: 01302 719481 - Email: info@motsupplies.co.uk

Did you know we did...

Garage Equipment

Equipment Spares

Tools

Health & Safety Prodcuts

MOT Prodcuts

Printing

Security Products

Workshop Products

www.motsupplies.com

www.buttsequipment.com

Tel: 01302 710868