

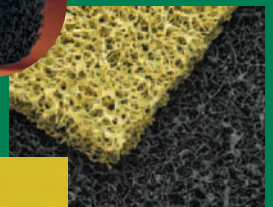


3M MRO Solutions for the Oil, Gas & Petrochemicals Industry



Continuity of daily operations is vital to the success of your business, and Maintenance, Repair & Operations (MRO) activities remains a key component contributing to this success.

3M's MRO solutions can help you protect your piping and equipment from the hazards associated with corrosion, and to prepare and maintain the metal surfaces in your plant. With our maintenance products, you can expertly clean and protect your floors and surfaces, be it drilling platform or refinery. And 3M's range of electrical products can help to ensure long-term reliable performance from your electrical cables and connections.



In the Oil, Gas and Petrochemicals industry, specification approval and testing is key. Our products have been rigorously tested to help ensure that they meet the most stringent industry standards. Our product range and training can help you to streamline your business and maximise your operating potential.



Abrasives

3M provides a wide range of coated abrasive and surface conditioning products to meet the needs of both production applications and day to day MRO situations. Choose from hand pads, rolls, discs, wheels, belts and various bench area products.

Scotch-Brite™ Bristle Discs and Brushes

Scotch-Brite™ bristle discs and brushes last longer than most abrasives and provide the same finish and cut throughout their life. For productivity in automated procedures, there are fewer changeovers. Unlike most abrasives, Scotch-Brite™ bristle products are flexible in order to penetrate and conform to irregular surfaces. You can expect a consistent finish even on the most complex parts.

To help you meet increasingly tough safety standards, Scotch-Brite™ bristle discs and brushes contain no wire filaments. When replacing chemicals or compounds, they have the added benefit of not emitting harmful chemical vapours.

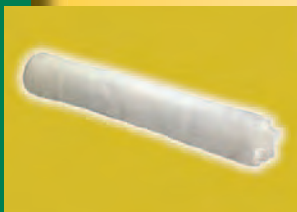
Scotch-Brite™ bristle discs and brushes outperform many general-purpose wire and nylon brushes.



Liquid Filtration

3M High Flow Filtration systems are designed to provide high performance filtering that is easy to use, inexpensive to operate, and that increases your productivity.

3M High Flow Filtration systems use filter cartridges with a patented pleated design that results in higher filtering surface areas in the same space of a typical cartridge system. Using 3M filter cartridges, refineries can maintain a clean amine system reducing upsets and minimizing amine foaming and poor heat exchanging and other problems. The same cartridges can be used in brines, acids and water in platform applications.



Features and Benefits:

- Very efficient filtration
- A high retention capacity
- Long working life
- Allows high flow rates, reducing the number of cartridges needed per filter vessel
- Large filtration area in relation to the volume capacity
- Double O-ring seals on a single open end for elimination of bypass, quicker installation, a better and more secure fit

Aerosols

5-Way Penetrant

A multi-purpose lubricant that out-performs its competitor products in terms of penetration, rust resistance & protection, demineralisation, and cleaning.

Features and Benefits:

- Reaches deep within ensuring greater area of coverage, loosens stubborn rusted nuts, bolts and other parts.
- Protects parts from rust as it keeps components well protected
- Lubricates machine parts better than others and minimizes scar and wear
- Leaves moisture-free circuitry and other vital components
- Removes grit and grime and leaves a clean, thin, corrosion-resistant film



Anti-Slip Products

3M Anti-Slip Matting

3M Anti-slip matting helps improve worker safety. It provides good traction to help reduce accidental slips and falls. Applications include staircases, top of storage tanks, slippery walkways (in plants/offices), workshops, fire escapes, cafeteria/kitchens, and warehouse floors.

Features and Benefits:

- Made of resilient textured polymer
- Strong adhesive backing
- Easy application and maintenance
- Conformable - use on checkered plate
- Long lasting
- Wide selection of sizes and colors

3M Safety-Walk™ Petrochemical Traction Matting

3M Petrochemical Traction Matting provides traction and at the same time, allows oil, grease and other liquids to pass through with its open construction. The walking surface stays clean, helping to keep work environment safe.

Features and Benefits:

- Made of a unique blend of synthetic fibers and abrasive particles
- Easily power-washed
- Long lasting
- Perfect for tough and slippery areas
- Custom sizes are available for different requirements



Cleaner/Degreaser

3M Sharpshooter™ Extra Strength No Rinse Cleaner

3M Sharpshooter™ extra strength no rinse cleaner is specially designed to remove grease and difficult stains from almost any washable hard surface.

Special Features:

- Removes grease and glue residue, as well as difficult spots and stains
- Ready-to-use formulation, no rinsing required
- Ideal for surface preparation
- Clean scent
- Biodegradable and nonflammable
- Food safe (can be used in food processing areas)



Corrosion Protection

Liquid Epoxy Coatings

Scotchkote™ 323 Liquid Epoxy Coating

A two part system designed to protect steel Pipe and other metal surfaces from the harsh affects of corrosion. It can be used as a patch material, a girthweld coating, a stand alone coating for pipe rehabilitation, and in a wide variety of other field applications where corrosion protection of metal is required.



Scotchkote™ 324 Liquid Epoxy Coating

Designed to protect metal from corrosion and is particularly useful in coating tanks, valves, piping and special fabrications where a wide range of chemical resistance is required.

Scotchkote™ 352 Urethane Coating System

A plural component coating system designed to protect buried steel structures from the harsh affects of corrosion.

Corrosion Protection Tape

Scotchrap 50 and 51 Corrosion Protection Tapes are tough, polyvinyl chloride based tapes with special high tack adhesives formulated to resist corrosion of metal piping systems above and below ground, fittings and joints on all mill-coated pipe and electrical conduit systems. Scotchrap 50 and 51 tapes are:



- Resistant to corrosive salt water, soil acids, alkalies and salts, common chemicals, chemical vapors, and exposure to outdoor weathering and sunlight.
- Resistant to impact, abrasions, punctures, and tears. Scotchrap 50 is a highly conformable, all-weather 10 mil (0,254 mm) thick tape designed for application over a wide temperature range. Scotchrap 51 provides similar qualities in a thicker, 20 mil (0,508 mm) tape. Both tapes have high electric strength, excellent insulating properties.

Electrical Solutions

3M has a variety of electrical solutions to suit your requirements, ranging from vinyl tapes, insulation and splicing tapes, to Cold Shrink termination as well as diagnostic and detection equipment.

3M vinyl electrical tapes are used for jacketing and mechanical protection, while 3M Scotch-Seal™ mastic tapes are designed for quick and easy insulating, padding and sealing of electrical connections.

3M ScotchCode™ identification systems give dozens of ways to mark your product. The line includes dispensers, preprinted alphanumeric and colored tape, write-on books and tags, and computerized system of markers.

Some applications, such as electrical and electronic components, require solvents that dry rapidly and for these applications, the 3M Quick Drying Contact Cleaner is an excellent choice. This petroleum distillate/alcohol-based solvent quickly tackles precision cleaning jobs such as sensors, relays, motor controls, switches, generators, contacts, electro-mechanical assemblies, circuit breakers, printed circuit boards, plugs and jacks, and terminals. It removes soil and other contaminants from delicate equipment with a fast drying solution that leaves no residue.

The 3M Zinc Spray provides an effective way to inhibit rust and corrosion with 97% pure zinc. Used for generation, transmission and distribution equipment including towers, transformers, light standards and other metal and galvanized surfaces, this convenient aerosol leaves a barrier coating similar to hot dipped galvanized surfaces. Noted for its quick drying capability, zinc spray preserves base metal, even when scratched or chafed.

3M Cold Shrink termination and splices do not require any heat, offer easy installation and reliable performance when terminating indoor and outdoor cables.

In terms of diagnostic and detection equipment, 3M provides a family of infrared thermometers for leading edge temperature measurement technology. These thermometers provide fast, easy and accurate way to measure a wide range of temperatures at a safe distance.

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