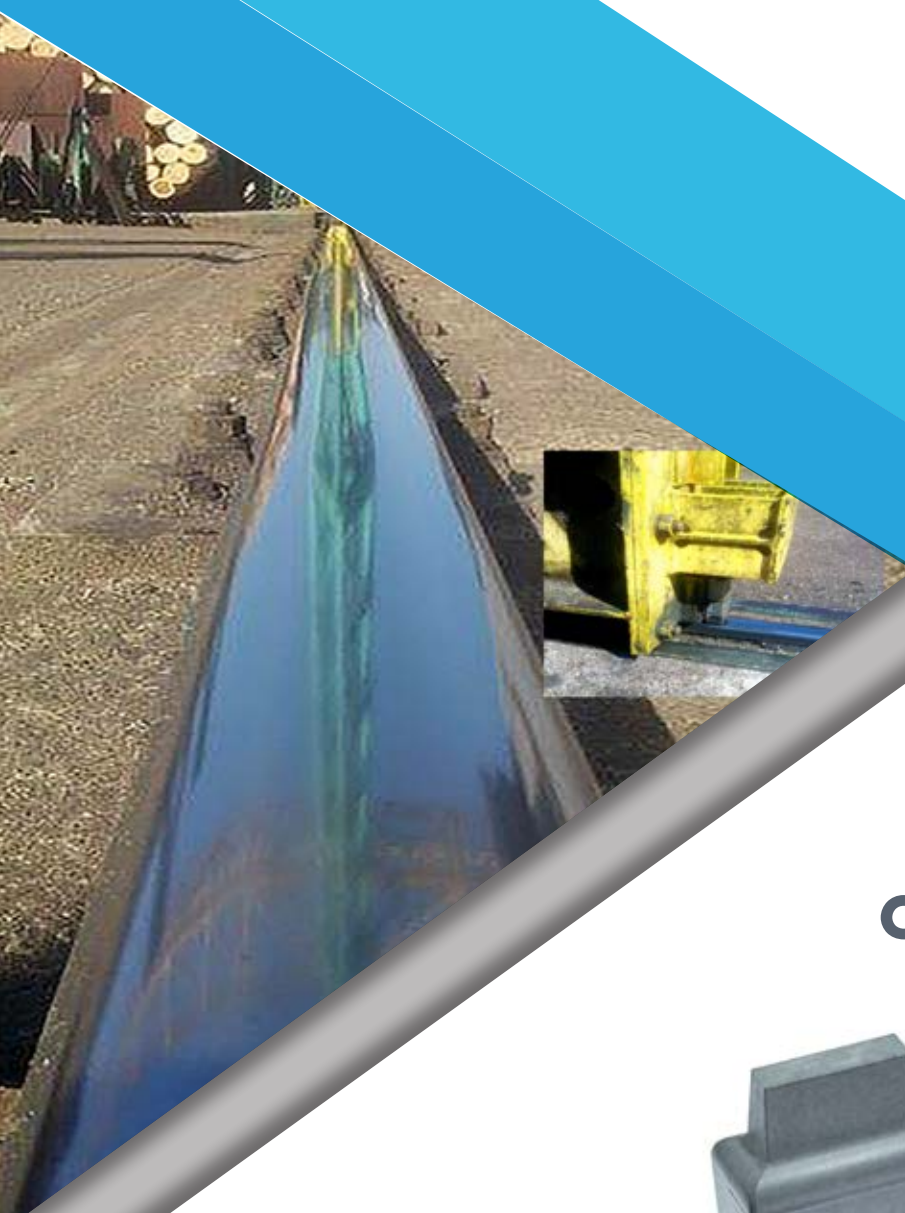
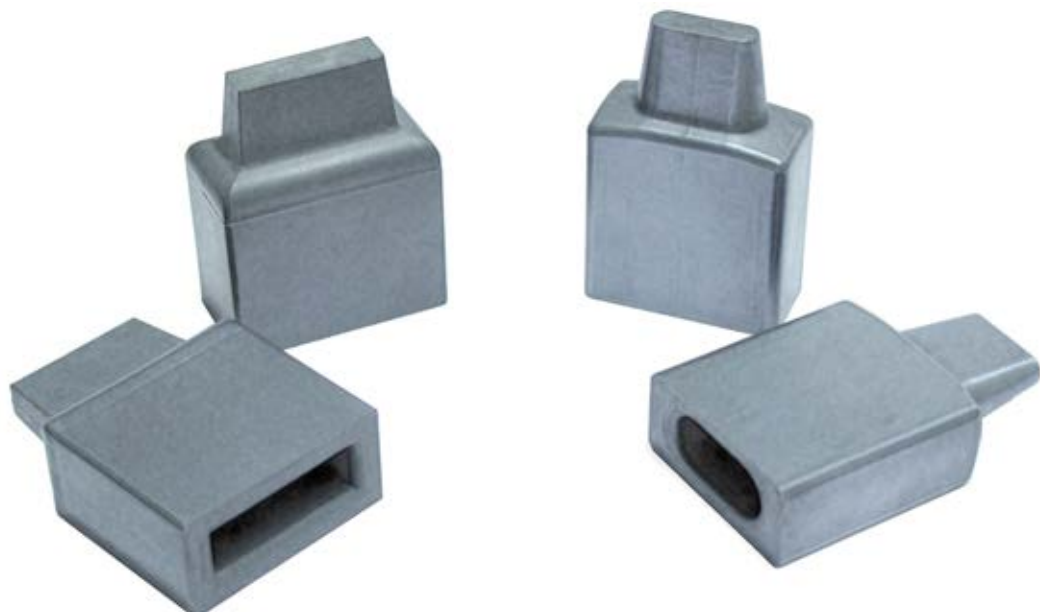




dMT Ecotech



**dMT-SPC®  
Protective Coating  
System for  
Crane Wheels/Rails**



# CRANES AND ALL OTHER WHEEL / RAIL TYPES OF CONVEYING / PRODUCTION MACHINERY

**DMT-SPC®** Products are ideal for reducing wear and flaking on wheels / rollers and rails on cranes, whether in-door types or large, out-door industrial or port cranes, and on all other wheel / rail type conveying systems (especially AS/RS stacker cranes in warehouses) and production machinery. SPC products can also be applied successfully in wet environments.

**DMT-SPC®** apply and maintain a thin protective coating on the surfaces of wheels / rollers or rails. This coating, applied to one surface, transfers to any other surface coming into contact with the coated one. The coating is continually consumed but just as quickly replaced by the blocks set in spring-loaded applicators, pressing a fresh, dry coating onto the metal surface each time they pass over the metal surface. Thus the wear-down and flaking of the costly met-

al surfaces of valuable machinery is substantially reduced and high cost-savings are the beneficial result.

**DMT-SPC®** dry protective coatings bond strongly to metal surfaces and modify the structure by patching and filling the surface fissures. Coatings bond extremely well to the surface and, with a very thin film, create a dry, smooth surface condition. This in turn distributes heavy loads more evenly over the increased surface, reducing damage.

The **DMT-SPC®** blocks are self-applying and continually repair the coatings to maintain a constant, optimum coefficient of friction between the contacting surfaces. This reduces stress and wear on the metal surfaces.

**SPC® - TSB-** for Crane Wheel Flanges



**SPC®-MSB-** rail-mounted for standard crane rail tread



### SPC®-MSB-(Traction) Blocks on Wheel Treads or Top-Rail Surfaces

Containing an innovative traction enhancer, the block type MSB improves the contact between two surfaces and reduces wear and metal flaking.

By increasing the traction wheel slippage and “slip-stop” motions, as well as lateral wheel movement, are substantially reduced. Thereby, creating less resistance and wear between the contact surfaces.

- Reduce flaking and increase life-time usage of the wheel tread / rail heads
- Reduce wheel-slip, corrugations and vibrations
- Reduce lateral wheel migration (crabbing)
- Coating remains on the tread area and can not migrate to the flange area of the wheel



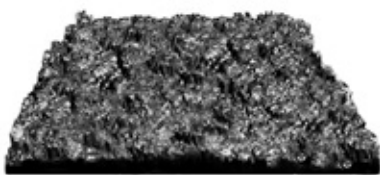
### SPC®-TSB-Wheel Flanges, Guide Tracks or Rail Corners

Generating a very low coefficient of friction between two surfaces by acting as a dry lubricant, the block type TSB reduces the friction (to constant 0.05  $\mu$ ) and subsequently the wear between the surfaces.

- Reduce metal flaking and increase the life-time usage of the wheels by at least 3-times on the average and often more, based on extensive experience
- Coating remains in the flange area and can not migrate to the tread surface of the wheel



**DMT-SPC® SURFACE PROTECTIVE COATINGS ARE PRIMARILY APPLIED WHERE CONVENTIONAL LIQUID LUBRICANTS CANNOT BE USED OR, IF SO, THEN WITH HIGH MAINTENANCE COSTS.**



Certainly metal surfaces are not as smooth as they appear to the eye. Surfaces, seen through a microscope appear peppered with peak and canyons, reducing the actual surface which can support heavy loads.

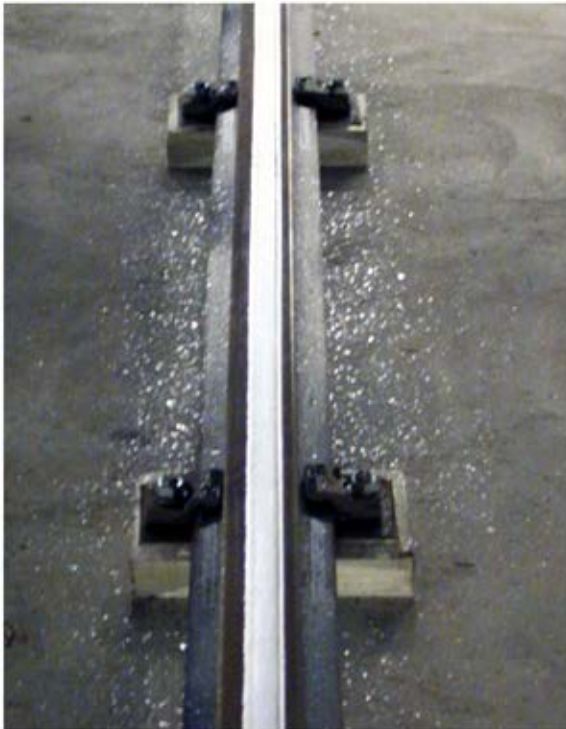
SPC® protective coatings create a smooth surface, filling the canyons and providing additional support for heavy loads, thus increasing traction and reducing wear.



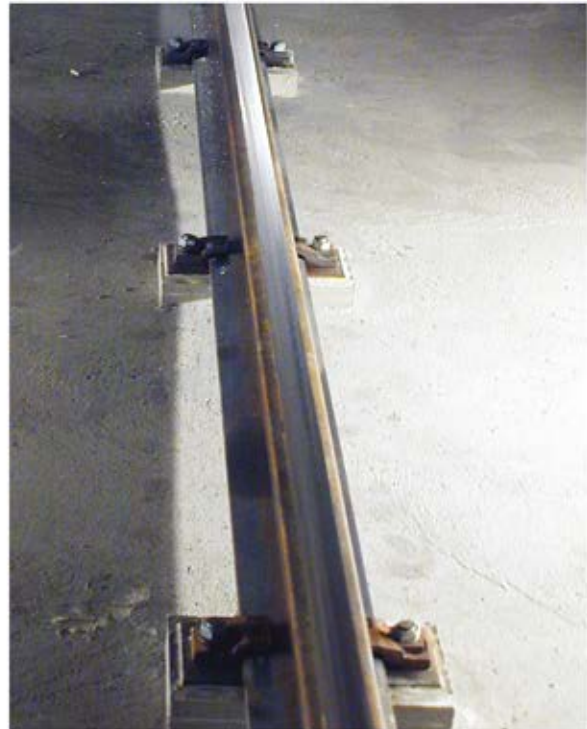
## BENEFITS & CHARACTERISTICS

- Substantial reduction of wear (metal flaking) = increased operating lives of wheels / rails, generally 3-5 times longer minimum. Proven wear reduction up to 80%;
- Continual, balanced coating (conditioning) of the metal surfaces to achieve a permanent, optimum coefficient of friction;
- Dry coating – does not absorb dust particles, excellent bonding to metal surfaces, weather-resistant, temperature resistant up to 310 deg. C;
- No negative influence on the operation of the machinery, no major alterations necessary for installation;
- Maintenance-free, except when replacement blocks to be inserted;
- Environmentally safe / does not endanger ground, water or air / not toxic / no-flammable or explosive / clean area near equipment as coating does not drip or migrate and is neither a grease nor an oil.

## BEFORE - AFTER



Prior: picture with uncoated rail



Solution: picture of rail after many months of treatment with SPC® protective coating (note absence of metal flakes)

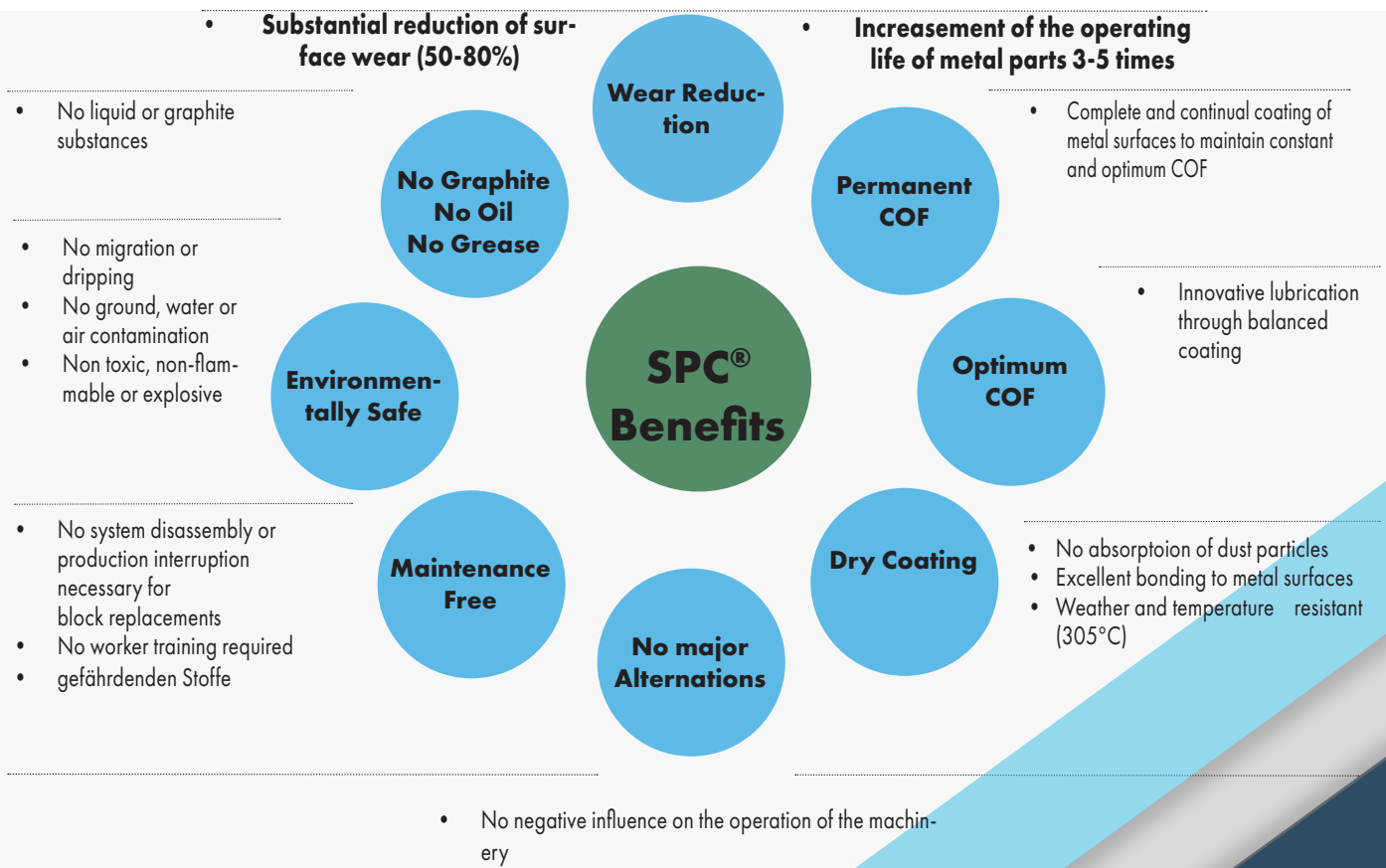


MSB-075 traction block with high c.o.f.



TSB-085 low c.o.f. lubricant blocks





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