# The Ultimate Protection Against al-To-Metal We



### **ATTRIBUTES**

- Increased Train Velocity
- Protects Moving Metal Parts
- Extends Parts Life
- Dramatically Reduces Wear
- Smoother Operation
- Improves Lubrication
- Reduces Maintenance
- Reduces Friction
- Reduces Operating Temperatures



ТМ

# Setting The Standards In Anti-Wear & Extreme Pressure Through ABF Technology

RAIL EQUIPMENT SHIELD™ is the ultimate protection for the moving metal parts in light rail transit and heavy railroad equipment.
Utilizing the most Advanced Boundary Film

(ABF) Technology, it protects moving metal parts from heat, friction and wear in engines, transmissions, differentials, transfer cases, hydraulic pumps and motors, gear boxes, and other enclosed lubrication systems, due to boundary conditions of frictional abrasion, extreme

pressure torque, dry startup and shutdown.
Increased train velocity and on time train
performance are the results when costly
setouts, maintenance repairs and downtime
are reduced. These performance goals are
achieved through ABF Technology by lowering
the operating temperatures and extending the
life of component parts and reliability.



Steel Shield Technologies' mechanism of operation is based upon advanced methods of Tribology that improve lubricity and load carrying capacity. This, in turn, improves surface characteristics while simultaneously creating a stable chemical Advanced **Boundary Film** on the contacting metal surfaces of whatever equipment it is added to. The process of Advanced Boundary Film formation is achieved through a unique combination of long-chain halogenated hydrocarbons and other proprietary additives that are highly stable and non-corrosive to the equipment's metal parts, and pose no threat to the environment or waste oil recovery systems. Steel Shield reacts chemically, under thermal conditions with the contacting metal surfaces, to form a complex surface attaching film of protection. Steel Shield's characteristics are "electro-negative", which causes it to seek out and affix itself to the metallic surface areas. During this process, surface smoothing is accomplished, resulting in improved spread characteristics of the surfaces themselves. The final state of the opposing metal surfaces increases the fluid film strength even more, resulting in greatly reduced wear while imparting extreme pressure (EP) properties to the opposing metal surfaces. The result is a virtual elimination of frictional wear and significant cooling of the entire lubricated area yielding higher energy savings and reduced metallic debris and acids in the oil. This is extensively proven through elemental oil analysis and Ferrography of the used oil. before and after the use of Steel Shield's Advanced Boundary Film Technology.

#### MSDS DATA

• Flash Point : 226°C

• Non-Hazardous

Non-Flammable

• Synthetic Hydrocarbons

## **PHYSICAL DATA**

Boiling Point: 238°C
Evaporation Rate: < 0.01</li>
Specific Gravity: 1.07
Insoluble In Water

Vapor Pressure : <1@25°C</li>Medium To Dark Amber

#### **PERFORMANCE DATA**

- Reduces Wear
- Increases Horsepower
- Reduces Costly Repairs
- Smoother Operation
- Reduces Operating Temperatures
- Increases Train Velocity
- Reduces Friction
- Improves Oil Flow
- Reduces Maintenance & Downtime
- Increases Parts Life
- Reduces Metal Debris In Oil
- Reduces Chain & Roller Stretching

#### DIRECTIONS

Engines: Add 2 oz. per quart of oil. Locomotive Engines: Add 1 oz. per quart of oil. Transmissions: Add 1 oz. per quart of fluid.

Manuel Transmissions & Differentials: 1 oz. per lb. of gear lube/oil.

Gear Boxes: 2-3 oz. per quart. Hydraulics: 1 oz. per quart of fluid.

Contains no volatiles or solvents. Contains synthetic hydrocarbons and advanced chemical additive technology. Non-toxic and environmentally friendly.

ITEM Number	ITEM DESCRIPTION	CASE PACK
RES-MT-16	Rail Equipment Shield - Metal Treatment - 16 Oz.	12 / Case
RES-MT-128	Rail Equipment Shield - Metal Treatment - 128 Oz. (1 Gallon)	4 / Case
RES-MT-5G	Rail Equipment Shield - Metal Treatment - 5 Gallons	
RES-MT-55G	Rail Equipment Shield - Metal Treatment - 55 Gallons	
RES-MT-300G	Rail Equipment Shield - Metal Treatment - 300 Gallons	

Steel Shield Technologies (Asia Pacific) Ltd. Unit K, 11/F., Leader Ind Ctr, Phase 2, 188-202 Texaco Rd, Tsuen Wan, Hong Kong.

Tel: +852-25458029 Fax: +852-25458030

Website: www.steelshieldtech.com.hk Facebook: www.facebook.com/steelshieldtech



STEEL SHIELD TECHNOLOGIES, INC.

3351 Industrial Blvd. Bethel Park, PA 15102-2543 800.390.1535 www.steelshieldtech.com