



Technology beyond lubrication

ADVANCED LUBRICATION & PROTECTION



www.POLYTRONOFFICIAL.com

BACKGROUND

We are sole importer and supplier of scientifically-superior Polytron lubrication products in India. Developed & manufactured in the USA, Polytron is one of the best lubricants in the world that protects metal parts by acting on metal surface by forming a protective coating which minimizes the friction.



Manufacturing Plant Is Located in California, USA.

Until 1994 Polytron Was Primarily Used By Armies, Mainly In Helicopters, Armored Tanks & Submarines.

Commercially Available Since 1994

Focus On Asia, Africa And Australia Since 2003-China, Malaysia, Vietnam, Thailand, Cambodia, Myanmar, Philippines And More.

LAUNCHED IN INDIA 2016



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POLYTRON™

PRODUCTS FOR

HEAVY INDUSTRY, HEAVY ENGINES, HEAVY TRUCKS

- Eliminates Upto 95% Of Engine And Equipment Wear And Extend Service Life Of Engine And Equipment By 600% To 900%.
- Reduces Engine & Equipment Operating Temperature, Vibrations And Noise Level.
- Eliminates Deposit Buildup And keep Engine / Equipment Completely Clean.
- Extends Oil Change Intervals & Oil Filter Life By 300% To 600%
- Contributes To Considerable Fuel And Oil Economy.
- Contributes To 70% To 75% Cleaner Emission Gases.
- In the Event Of Oil Loss, Engine / Equipment Is Protected For Tens of Kilometers / Work Hours.

RESULTING IN REDUCTION OF UPTO 60%
IN MAINTENANCE AND OPERATIONAL COST.



SOME IMMEDIATELY NOTICEABLE BENEFITS OF USING POLYTRON

- Reduced Temperature
- Reduced Vibrations
- Reduced Noise Level
- Reduced Electrical Power Consumption
- Considerable Reduction In Emission Pollutants
- Increased Engine Power And Smoother Operation
- Very Effective Protection Of The Engine Against Moisture, Water Flooding and dust

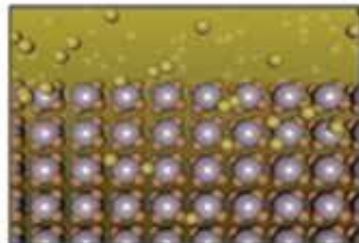
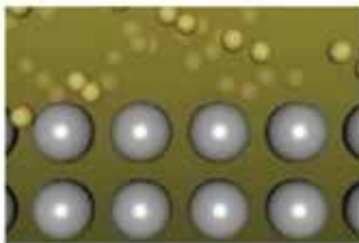
POSSIBLE PROBLEMS THAT CAN BE SOLVED IMMEDIATELY, USING POLYTRON

- Overheating
- Excessive Vibrations
- Excessive Noise Hazard
- Excessive Electrical Power Consumption
- Poor Air Quality In Closed Areas With High Concentration of Engine Operated Equipment
- Sluggish Engine And Equipment Operation
- Reinstating And Putting Vehicles And Equipment Back To Work After They Submerged In Water During Flood (like In Floods That Occur In Some Countries)

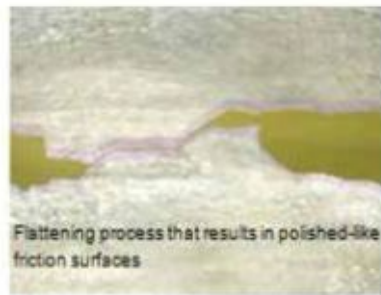
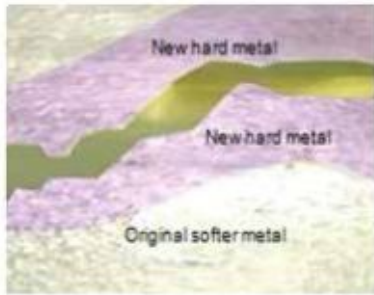
HOW DOES POLYTRON WORK?



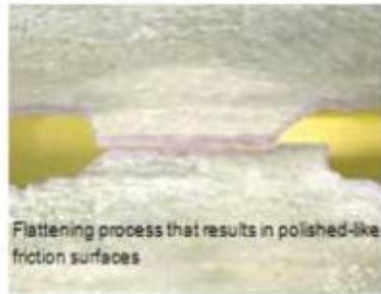
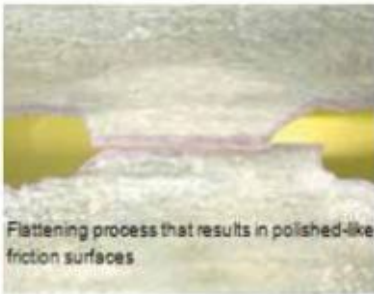
Conventional lubricants are based on maintaining high strength and thickness of oil-film in order to separate the friction surfaces from touching each other under higher pressure generated by heavy working loads, conventional lubricants introduce an EP (Extreme Pressure) protective deposit between moving/mating surfaces in order to replace the oil layer squeezed out by pressure. In this way, they try to resist failure from scoring, seizure or accelerated wear and tear. The conventional lubricants succeed in their task only partially, so a continuous wear process still takes place, contributing to deterioration in performance. This in turn, plays a significant role in the vicious cycle of deterioration in performance accelerated wear etc.



Because active elements of Polytron are polarized, when Polytron is applied, they are attracted to the metal. Under heat and pressure these polarized elements metallurgically impregnate the metal's crystal structure on its mating friction surfaces.



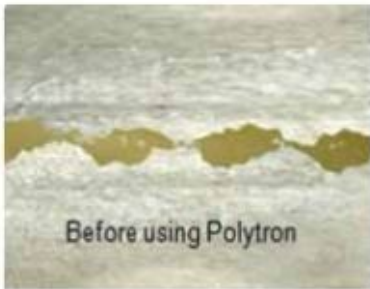
As a result of the metallurgical process, a very thin layer of original metal is converted into a new type of metal that is much harder and has a wear life that is at least 15 times longer than the original metal. This newly formed layer of metal protects the original "softer" metal beneath it from wear.



Since the protective layer is very thin, it is very flexible (like very thin sheet metal). Because it is flexible, it allows the metal underneath to be pushed horizontally by the horizontal force generated by collisions. At the same time, the hardness of the protective layer does not allow metal particles to break away during collisions. Thus metal on the "mountains" is "pushed" into the "valleys", flattening out the friction surface. This results in smooth polished-like surfaces that have much lower friction coefficients. Not only the metal friction surfaces become much harder which results in elimination of wear but also much smoother, which results in much lower friction.



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Before using Polytron



After using Polytron

This advanced technology that allows the formation of hard, smooth, polished-like surfaces from the original metal on friction surfaces, is one of the main features that makes Polytron so different from other lubricants on the market today. This feature together with other features of Polytron MTC additive package contributes to 4 to 7 times longer oil change intervals and 4 to 7 times longer service life of engines and equipment. (See explanation about "Used Oil Analysis"). When added to grease, motor and transmission oils, Polytron additive packages dramatically reduce wear of the mating friction surfaces in car engines, transmissions, and other equipment (up to 95%), considerably extending their life span. The lower friction results in lower fuel consumption. In the event of lubricant loss the protective layer provides a temporary protection against failure. For example, a vehicle that lost its oil can get to the nearest repair shop and your expensive equipment is protected for some time allowing timely detection of the problem.

POSSIBLE PROBLEMS THAT CAN BE SOLVED WITHIN SHORT PERIOD OF TIME USING POLYTRON.

- Excessive Fuel Consumption (Due To Aging Equipment, Or Poor Maintenance)
- Excessive Wear (Due To High Loads, Insufficient Lubrication, Defects In Equipment Production And Design, Poor Maintenance, Harsh Environment)
- Need To Change The Oil More Frequently (Due To Engine Problems Or Poor Maintenance)
- Excessive Top-up Volumes of Oil (Due To Engine Ageing Problems Or Poor Maintenance)

ADDITIONAL BENEFITS OF USING POLYTRON, MEASURABLE OVER SHORT PERIOD OF TIME

- Reduction In Fuel Consumption, 10% On The Average. (Through Monitoring Fuel Consumption)
- Reduction In Wear By More Than 95% (Through Used Oil Analysis)
- Oil Change Intervals can be extended by 300% To 600% (Through Used Oil Analysis)
- Reduction In Top-up Volumes Of Oil (Through Monitoring Oil Consumption)



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MAJOR BENEFITS OF USING POLYTRON, MEASURABLE OVER SERVICE LIFE OF EQUIPMENT

- Overhauling period of the equipment can be extended by 300%-600%
- Considerable Reduction In Parts Replacement
- Considerable Reduction In Equipment Replacement

COMBINED VALUE OF THE BENEFITS

- Up To 65% Reduction In Maintenance And Operation Costs
- Up To 90% Reduction In Downtime
- Considerable Increase in Productivity
- Much Cleaner Emissions
- Much Less Waste Oil



Volvo Group Trucks Technology

STD 417-0001 approval request

Data supplied by requesting company

Company name: Eptech Corporation
Brand name: Polytron 15W-40
Oil code: OS246091
Viscosity grade: 15W-40
Marketing area: Chile, Bolivia, South America, North America
Other approvals: ACEA E7-04
API CJ-4
OEM CES20081, DDC39K218
*) As they shall appear in approved products lists

Date of submission 1-Apr-15

Submitted by

Name: David Glass
Company: Eptech Corporation

Return approval to:

Name: David Glass
e-mail: esp_tech@men.com

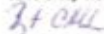
Approval

Volvo VDS-4 approval	Yes
Mack EO-O Premium Plus approval	Yes
Renault VI RLD-3 approval	Yes

Approval date: April 14, 2015 **Approval #:** 417-0001-15-651

Validity: Approval expires two years after the approval date.
For approval extension, a complete and updated approval form must be submitted at the expiry date ± two months.

Signed: Volvo Group Trucks Technology


Bengt Osterholm
Lubricants Coordinator



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Detroit Diesel Corporation
13400 Cassin Drive, Troy
Detroit, Michigan 48065-0001
Telephone: 313-493-5599

Fact Engineering Inc.
12718 Cimarron Path
San Antonio, Texas 78249-3423

Date: 09/15/15

EPTECH Corporation
1388, Irvine Avenue, # 629
Newport Beach,
CA - 92659

RE: CONFORMANCE TO DFS OIL SPECIFICATION 93K216

Results from engine and bench tests, in accordance with DFS Oil Specification 93K216, have been presented to TDI for review as requested by DDC. In view of the results, we would like to make the following comments.

The results reported on the registration request have been found to be within DFS Oil Specification 93K216 limits and specifications. Hence the formulation as stated in your request can be labeled as conforming to DFS Oil Specification 93K216.

Company Name: EPTECH Corporation

Product Name: POLYTRON 15W-40

SAE Grade: 15W-40

The oil shall be used per the ambient temperature and grade guidelines in the engine specific Operation and Maintenance (O & M) manual, as well as in any DDC service documents.

Please notify TDI and DDC immediately if, for any reason, the formulation for this oil changes. Changes to the oil formulation, without written approval, may void this letter of conformance. In addition, as per DFS Oil Specification 93K216, this product is subject to future test sample analysis for compliance.

Signature

Steve L. Gough

cc: M. Belay / J. Cruz / J. Olson



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License No: 2158

SCHEDULE A - LICENSE AGREEMENT

The marks referred to and licensed under the Agreement between API and
EPEICH CORPORATION
for the period beginning 2/1/2016 and ending 2/1/2017 are as follows:



API SERVICE SYMBOL

Licensee is authorized to display the API Service Symbol on the following products:

BRAND NAME	SAE DENSITY	SERVICE CATEGORY
	GRADE	* - Energy Conserving, ** - CJ-4 PLUS
POLADINE	10W-30	SE *
POLADINE	10W-40	CJ-4 SE
POLADINE	15W-40	CJ-4 SE
POLADINE	40	CF,CF-2SE
POLADINE	50	CF,CF-2SE
POLADINE	10W-20	SE *
POLYTRON	10W-30	SE *
POLYTRON	10W-40	CJ-4 SE
POLYTRON	15W-40	CJ-4 SE
POLYTRON	10W-20	SE *
POLYTRON	10W-30	SE *

Engine Oil Licensing and Certification System

2201 L Street, NW • Washington, DC 20037-4370 • USA • www.api.org/retail

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John Ferrell
EOLCS Manager of Operations

Date: 2/1/2016



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POLYTRON PRODUCTS AND THEIR MAIN APPLICATIONS

POLYTRON MTC

- Diesel And Gasoline Engines
- Auto / Manual Transmissions
- Differentials
- Power Steering
- Hydraulics (5% Added By Volume)
 - a) Farm Machinery
 - b) Construction Equipment
 - c) Other Off-highway Application
 - d) Heavy Duty Diesel Trucks
 - e) Light Diesel Trucks
 - f) Diesel/Petrol Passenger
 - g) Pumps
 - h) Diesel Electricity Generators
 - I) Diesel Marine Engines
 - j) Mining Equipment
 - k) Two-stroke Engines
 - l) Torque Converters

AUTOMOTIVE

- 90 ML Bottle (For Bikes)
- 300 ML Bottle (For Passenger Cars And Light Vehicles)
- 500 ML Bottle (For SUVs)
- 4 Lit Bottle (For Trucks And Heavy Duty Equipment)

INDUSTRIAL GRADE

- 4 Lit Bottle
- 208 Lit Drum

COMPRESSORS

(3 - 5% ADDED TO COMPRESSOR OIL)

In all types of compressors (piston/screw) for industrial and pneumatic equipments.

GEAR OILS

(5% To 10% ADDED TO GEAR OIL) IN:

Open Gears-Wire Ropes And Cables

All The Grades that Provide Lubrication For Mining Equipment Including:

Girth And Pinion Gears On Rod And Ball Mills Rack And Pinion Gears On Shovels Dipsticks Swing And Pinion Gears On Top To The Lower Frame Of Shovels And Deadlines Which Are Sometimes Served With An Automatic Lubrication System.

Gear Oils For Electric Shovels And Deadlines.

METALWORKING CUTTING OILS (5%TO 10% BY VOLUME) FOR:

Milling, Shaping, Planning, Lathe Work, Drilling And Pipe Perforating Operations, Broaching, Gear Hobbing, Threading, Tapping And Other Demanding Works. Machining Of Aluminum And Aluminum Alloys, Copper, Brasses, Bronze, And High Strength Copper Alloys.

BENEFITS USING POLYTRON (METAL CUTTING)

- May extend tools life by 3-4 times.
- Much Smoother Surface Finish.
- Prevents Welding
(Sticking To The Cutting Tool)
- Recommended for almost all types
of Ferrous and Non-ferrous Metals.

GEAR OILS (10% BY VOLUME) Closed Gear Oils In The Following Application:

- Rear Axles
- Transmissions
- Differentials
- Spiral Bevel
- Power Dividers
- Oil Lubricated Steering Axle Wheel Bearings

HANDY OILS (10% BY VOLUME) FOR LUBRICATION OF:

- Small Electric Motors Such As Used In Household Appliances,
- Sewing Machines.
- Office Equipments
- Garden Tools
- Door Hinges And Locks.

KNIT OILS, (5% BY VOLUME) FOR:

- Circular Double Knit Machines
- Circular Single Knit
- Full-fashioned
- Tricot And All Other
- Knitting Machines.

WAY OILS (10% BY VOLUME) THE LUBRICATION OF:

- Way In Many Types Of Machining Equipment, E.g. Lathers, Planers, Shapers, Drilling And Tapping. Machines Including Those Where The Loads Can Be Very High.
- Enclosed Gears-Industrial Plain And Anti-Frictional Bearing.
- Lubrication Of Chain Drives.

CHAIN BAR OILS (10% BY VOLUME) FOR:

- Chainsaws With Either Hand Operated Or Automatic Chain Oilers To Lubricate The Chain, Bar And Sprocket.
- Chain Drivers On: Straddle Lift, Lumber Carriers
- Motorcycle Chains Lawnmowers Farm Equipment.

AND MANY MORE APPLICATION ...

For Any Specific Application That Is Not Listed Here, Please We Advise To Consult The Local Distributor.



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AUTOMOTIVE

- 30 ML Bottle (For Bikes)
- 50 ML Bottle (For Passenger Cars And Light Vehicles)
- 200 ML Bottle (For SUVs)
- 4 Lit Bottle (For Trucks And Heavy Duty Equipment)

INDUSTRIAL GRADE

- 4 Lit Bottle
- 208 Lit Drum

AS AN ADDITIVE PACKAGE TO DIESEL / PETROL (0.1% BY VOLUME) IN HEAVY DUTY DIESEL / PETROL ENGINES WITH THE FOLLOWING BENEFITS:

- Keeps The Entire Fuel System And Upper Engine Free From Carbon Deposits, Injectors, Valves, Valve Seats, Ports, Upper Piston Rings, Piston Tops And Combustion Chamber.
- And At The Same Time Lubricates The Moving Part Of The Fuel System And Upper Engine (injectors, Valves, Valve Seats, Upper Piston Rings, Fuel Pumps And Injector Pumps).

COMBINED BENEFITS FOR DIESEL / PETROL ENGINES:

- Extended Service Life Of Fuel System Moving Parts And Upper Engine By More Than 100%
- In Combination With The Use Of POLYTRON MTC, The Exhaust Pollutants Are Reduces By Up To 75%
- In Combination With The Use Of POLYTRON MTC May Reduce Fuel Consumption By Up To 20% Or More.

IMPORTANT

In Engines It Is Absolutely Necessary To Use Polytron MTC Together With Polytron FC In Order To Get The Best Possible Performance And The Longest Possible Service Life Out Of It.

AS AN ADDITION PACKAGE TO PETROL FUEL (0.1% BY VOLUME) FOR PASSENGER CARS, LIGHT TRUCKS AND TWO-STROKE ENGINES WITH THE FOLLOWING BENEFITS.

- Provide Prompt Engine Start-up At Cold Weather
- Keeps Clean The Entire Fuel System And Upper Engine From Carbon Deposits, Spark Pulgs, Injectors, Valves, Valve Seats, Ports, Upper Piston Rings, Piston Tops And Combustion Chamber.
- And At The Same Time Lubricates The Moving Part Of The Fuel System And Upper Engine (Injectors, Valves, Valve Seats, Upper Piston Rings, Fuel Pumps And Injector Pump)
- Protects The Entire Intake System Against Rust And Corrosion That Can Be Caused By Corrosion In Petrol Tanks.
- Helps To Remove Water To Prevent fuel Line Freeze.

COMBINED BENEFIT FOR PETROL ENGINES:

Extended Service Life Of Fuel System Moving Parts And Upper Engine By More Than 100% In Combination With The Use Of POLYTRON MTC. The Exhaust Pollutants Are Reduces By Up To 75% In Combination With The Use Of POLYTRON MTC. May Reduce Fuel Consumption By Up To 20% Or More.



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POLYTRON PENETRATING LUBRICANT

PACKAGES:

- 100ML Spray Can
- 200ML Spray Can
- 4 Lit Bottle

EXCELLENT LUBRICANT FOR:

- Slides, Guides, Way, Chains
- Screw, Cams, Racks Pinion Sets, Moving Parts Of Electrical And Air Tools.
- Moving Parts Of Conveyors And Electrical Motor In A Variety Of Industrial And Commercial Equipment.

DIRECT BENEFITS :

- Protects Equipment In Harsh Environment Of Dust, Moisture And Extreme Temperatures.
- Equipment Is Protected In Wider Range Of Temperatures.
- Eliminates 90% To 95% Of Equipment Wear, thus Extending Its Service Life By 600% To 900%
- Lower Operating Temperature And Noise Level.
- Keep Equipment Parts Clean From Any Deposit Build-up.

MACHINING OF FERROUS AND NON FERROUS METALS:

- Spraying Or Brushing The Product On Cutting Tools Or Saw Blades From Time To Time Results In The Following.

DIRECT BENEFITS:

- Cutting Tools Service Life May Be Extended More
- Much Smoother Surface Finish.
- Prevents Welding (Sticking Or Processed Metal To The Cutting Tools) in Ferrous And Non-Ferrous Metals.

PROTECTION Of Electrical Contacts, Terminals, Electrical Collectors From Corrosion And Electrical Oxidation, As Moisture Repellent In Electric-motor Operated Equipment, Like Cranes, Elevators, Etc.

PREVENTIVE LUBRICATION OF Parts Before Assembly of Mechanisms (or Engines)

- Lubrication Of Parts For Smoother / Easier Fitting -In During Assembly of Mechanisms (Or Engines).
- Very Effective in Penetrating And Retarding Rusty And Oxidized Surfaces In Mechanisms That Work In Severe Conditions Of Moisture And Temperature.

AND MANY MORE APPLICATION ...

For Any Specific Application That Is Not Listed Here, Please We Advise To Consult The Local Distributor.



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POLYTRON EP-2 LITHIUM COMPLEX GREASE

PACKAGES:

- 0.4 kg Tube, 16 Kg Pail, 180 Kg Drum

AUTOMOTIVE AND INDUSTRIAL EQUIPMENT OPERATING UNDER SEVERE AND A WIDE RANGE OF TEMPERATURE AS:

- Mining Equipment
- Construction Equipment
- Material Handling Equipment
- Marine Deck Equipment And Cranes
- Oil Field And Offshore Drilling Equipment
- Pulp And Paper Machines
- Dredging Equipment
- Logging Equipment
- Rock Quarry Equipment (Jaw Crushers)
- Truck Fleets
- Track Roller Bearings On All "Tracked" Type Tractors Rotary Drill Collar Threads And Drill Pipe Threads.

CURVE LUBRICATION:

Lubrication Of Contact Areas Between Wheel Flanges Of Locomotives And Railroad Cars And Railroad Tracks Using Automatic Rail Curve Lubricators.

LUBRICANT FOR:

- Slides And Guides
- Way, Chains, Screws, Cams
- Racks
- Pinion Sets In Sawmills, Plywood Presses And Chain Tracks.

LUBRICANT FOR:

Fifth Wheels, King Pins, Wheel Bearings, Steering System Bearings, And All Chassis Point Including Ball Joint And Universal Joint, Journal Bearings In Low And Moderate Speed Antifriction Bearing In Construction Equipment Such As:

- Bulldozers, Scraper, Loaders, Shovels.
- Rollers Chain, Trunnion, Gears, Cables Sheaves, Sliders, Chassis Bearings,
- Conveyor Bearing, Sliding And Rubbing Surface, Kiln Car Bearing, Heavily Loaded Pivot Pins, Splined, Shafts, Or Other Surface Subjected To Sliding , vibration Or Oscillation Where Fretting Is Encountered.



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MORE SPECIFIC APPLICATIONS INCLUDE LUBRICATION OF:

- Steering Drag Links, Transmission Cross Shaft Spring, Pins, Shackle Pins, Brake
- Cam Shafts, Fifth Wheel Faceplate And Pivots Operating Under Wide Range Of Temperature.
- Water Pump Operating In Water, Mud Or Dusty Conditions.
- Bearings On Air-conditioning Units In Buildings.
- Unsealed Electric Motor Bearings Operating Under Moist Conditions.
- Application where Silent Operations Are Called For.

AND MANY MORE APPLICATION ...

For Any Specific Application That Is Not Listed Here, Please We Advise To Consult The Local Distributor.

DIRECT BENEFITS:

- Extended Maintenance Intervals 300% To 600%
- Extended Service Life of Equipment 600% To 900%
- Lowers Temperature And Vibrations

FEW EXAMPLES OF APPLICATIONS BY INDUSTRY

STEEL MILLS

Main Areas Of Application



Coke Plants



Blast Furnaces



Rolling Mills



Casters



Electric Arc Furnace

SOME SPECIFIC APPLICATION

- Bearing Lubrication
- Gear Lubrication
- Heat Transfer Fluids
- Machining of Metals
- Refrigerators
- Compressors And Exhaustless
- Special Application
- Waste Gas Fans
- Heat Treatment of Metals
- Hydraulic Equipments
- Railroad Oils
- Rust Prevention
- Turbines
- Dg Sets
- Greases
- Trunnion Bearings



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FEW EXAMPLES OF APPLICATIONS BY INDUSTRY POWER GENERATION PLANT



- Coal Conveyor
- Stoker
- Pulverizer
- Boiler
- Coal Ash
- Air Pre - heater
- Electrostatic Precipitator
- Smokestack
- Turbine
- Condenser
- Cooling Towers
- Generator
- High Voltage Power Lines

SOME SPECIFIC APPLICATION

- Coal Grabbers
- Coal Crushers
- Vibrating Screens
- Coal Conveyors
- Gearboxes (Turbine & Generator)
- Gearboxes (Boiler Feed Water Pumps)
- Motors (Especially Grease)





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A GLIMPSE AT THE TYPE OF CUSTOMERS THAT BUY AND USE POLYTRON PRODUCTS

DEFENSE

- US Army
- Israeli Army
- Singapore Navy & Army
- Serbian Army
- Korean Army

RETAIL

- Auto Parts Stores
- Car Agencies
- Repair Workshops
- Gas Stations

CORPORATE & GOVT.

- Transportation, Railroad, Trucking, Government Vehicles, Police Vehicles
- Steel Mills (Europe, Malaysia, Singapore And More)
- Manufacturing Plants (Malaysia, Singapore And More)
- Shipping Vessels (Singapore And More) Power Plants (Bulgaria, Serbia And More)
- Quarries And Cement Plants (Israel, Malaysia, Serbia, Bulgaria, Greece And More)



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Polytron products are developed and continuously improved through rigorous R&D by leading lubrication scientists from the USA.



www.POLYTRONOFFICIAL.com

**For any Assistance
+91 9911480444, 9911480555**

Authorised Dealer/Distributor:

