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Manufacturing Professional grade coatings for the Automotive – Marine – and Industrial Market



TECHLINECOATINGS.COM

Who We Are?

TECH LINE COATINGS INDUSTRIES, INC. was established over 30 years ago to bring the advantages of Aerospace coating technology to the automotive aftermarket. Rather than simply utilize existing coating technology, Tech Line has modified formulas and created new ones to fit the specific needs for performance and protection including industrial applications. Rigorous testing, including both lab and track testing is carried out to assure that the coatings will meet the high standards of our customers.

More information on our industrial coatings can be found in this brochure, or website, or by calling our office.

Tech Line works with the best materials currently available, yet also recognizes that those materials are constantly changing. Research and development are always ongoing. For new development and in reformulating our current technologies, we intend to make the best coatings with minimal environmental impact. Water based coatings, lower volatile organic compounds (VOCs), and lower toxicity is a priority as we move forward.

Tech Line makes coatings available in easy to use packaging, appropriate to the hazard level and shipping regulations. Most of our coatings are only available to professional applicators, though we do make some coatings for the do-it-yourself market. Many of our coatings require curing in industrial equipment. Consult the Instruction Sheets and Safety Data Sheets (SDS) available on our website or call our sales office for assistance. Unless otherwise specified, the coatings listed are sold only to commercial accounts.



CARRERA™EXHAUST COATING

Designed as an air curing high temperature resistant coating. Carrera can handle substrate temperatures over 1800°F and has good corrosion resistance and excellent chemical resistance. Carrera may be applied over any of our base coats to increase the thermal barrier function and corrosion resistance. Available in a range of colors. Solvent based with low VOC content.

CARRERA™THERMAL DISPERSANT (CARTD)

Carrera TD is designed to rapidly disperse heat away from any component. It aids in cooling by evenly distributing and dispersing heat over a surface. Excellent for intake manifolds, intercoolers, turbo intake housings, oil pans (inside and out), brake calipers, wheels and more. It is an excellent oil shedder with good chemical and corrosion resistance. It is available in matte black only. Air cures at ambient temperature.

CARRERA CLEAR FOR CHROME™ (CFC™)

Designed to be applied to the exterior of a chrome exhaust component to prevent it from turning blue up to base metal temperatures of 1100°F. For applications exceeding that temperature, a thermal barrier such as MCS™ Insulating Base Coat could be applied to the inside of the chrome part to further reduce temperature. CFC™ has been used for many years by manufacturers of chrome exhaust stacks for over the road trucks. Application requires Primer for Chrome (PFC™), then topcoat with CFC™. Can air cure over 24 hours or oven cure at 400°F for one hour.

CARRERA™LTMC™MARINE COATING

Designed for boat hulls and equipment in fresh or saltwater to reduce friction, cavitation, and biological growth. Can be sprayed or wiped on. Air curing.

CARRERA™LOW TEMP CLEAR

Designed to provide a clear protective film to any part. Increases chemical and corrosion resistance and is a non-stick material so it sheds mud and other debris. Can be used over polished metal with our *Brilliance* dye additives for a wide variety of translucent to solid color finishes. Air curing.

FOR MORE INFORMATION AND TO DOWNLOAD OUR FULL CATALOG PLEASE VISIT OUR WEBSITE: www.techlinecoatings.com

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POWERKOTE PKSX[™] DRY FILM LUBRICANT

PKSX is an extreme pressure and temperature lubricant designed for cylinder walls, lifter bores and valve guides. It can carry extreme loads and reduces friction, wear and improves ring seal and leak down. Bonds at approximately 25-millionths of an inch, so it does not impact clearances. Dry powder coating, simply buff on. Available to professionals and doit-yourselfers.

POLYPHEN[™] TLMB BASE BUILDUP COATING

TLMB is a high load buildup coating for piston skirts and other components where buildup will benefit the assembly. It is used in very high RPM engines as well as engines where long strokes are common. TLMB may be used as a standalone coating where a conformal coating is needed. Topcoat with TLML (see above) for increased lubrication. Solvent based, requires oven curing at 300°F for one hour.

POLYPHEN[™] THERMAL DISPERSANT COATING (TLTD)

TLTD is designed to rapidly disperse heat away from any component. It aids in cooling by evenly distributing and dispersing heat over a surface. Excellent for intake manifolds, radiators /intercoolers, turbo intake housings, oil pans, brake calipers, wheels and more. It is an excellent oil shedder with excellent chemical and corrosion resistance. Available in black and dark gray. Requires oven curing at 300°F for one hour.

POLYPHEN™ TLML DRY FILM LUBRICANT

TLML is an extreme pressure bonded dry film lubricant coating that is best for valve springs and other flexing parts. It does not change the clearance and can be buffed back with '0000' steel wool if desired, or it will burnish during use, remaining fully functional. Reduces friction, scuffing, galling while improving part life, horsepower and torque. Can also be used as a topcoat over TLMB (see below). Solvent based, requires oven curing at 300°F for One hour.

POLYPHEN™ GOLD THERMAL BARRIER COATING (TL-PTG)

Extremely effective thermal barrier coating for combustion chamber surfaces, piston tops, valve faces, cylinder heads, etc. Increases engine efficiency, creates more horsepower and torque and reduces or eliminates detonation. For use in all types of engines. Gives a unique gold finish to parts. Requires oven curing at 300°F for one hour.

POLYPHEN[™] TLHB HOT STOP THERMAL BARRIER

TLHB is designed as a thermal barrier that can be applied to a variety of surfaces. It provides a smooth heat barrier to intake and exhaust ports, the inside diameter of exhaust manifolds/headers/pipes, brake pads, brake calipers and even on wheels to reduce tire temperature (best when combined with Thermal Dispersant). Requires oven curing at 300°F for one hour.

HIGH TEMPERATURE COATINGS

Depending in the resin system, most of our high temperature coatings will maintain adhesion above 2000°F base metal temperature. Some coatings may display color change at such high temperatures. It does not reflect a failure of the coating as color stability is secondary to the protective function. The use of insulating base coatings and/or inside diameter coatings can improve the protective function and color stability of all the following coatings.

COVERAGE (APPROXIMATE) ALL EXHAUST SYSTEM COATINGS

SMALL V8 HEADERS AND CAST IRON MANIFOLDS: 4 OZ. PER PAIR

MEDIUM V8 HEADERS: 6 TO 8 OZ. PER PAIR

LARGE V8 HEADERS: 10 TO 12 OZ. PER PAIR

INDUSTRIAL: 400 SQUARE FEET PER GALLON

SPECIALTY COATINGS

ANEALON™

Anealon™ is a surface modification coating that creates an extremely thin, self-lubricating ceramic film on any substrate that can handle the temperatures and pressures needed to form the active film during operation.

IC-1™ INSULATING COATING

IC-1 is an air curing coating designed to reduce thermal transfer.

Excellent for floorboards and firewalls, it is a reflective silver color and provides an effective thermal barrier above exhaust systems and other heat sources. Can be sprayed, brushed or rolled on.

LIQUIPOWDER™ (L2O)

LiquiPowder is a water-based suspension agent for powder coating, allowing the application of powder to any surface without the need for electrostatic equipment. It can be applied to metal, glass, plastic, ceramics, wood and a variety of other materials. Excellent for powder coating repairs in the shop or in the field. Water based and nonhazardous. Can be applied with standard spray paint guns or brushes. Cures at recommended powder cure temperature. Available to do-it-yourselfers.

HIGH HEAT BASE COAT BLACK™ HIGH HEAT BASE COAT BLUE™

Designed as base coats for a variety of topcoats, imparting higher temperature resistance and improved corrosion resistance. Will withstand substrate temperatures over 2000°F and reduce thermal transfer. Excellent for hiding flaws in substrate. Water based and no VOCs. Cures at 500°F for one hour. Must be top coated.

HIGH TEMPERATURE COATINGS

MCS™ INSULATING BASE COAT

MCS is a base coat capable of handling temperatures over

2000°F, providing excellent thermal barrier protection and increasing the temperature the topcoat can withstand. MCS also improves corrosion resistance. Water based and cures at 500°F for one hour. Water based and no VOCs. Must be etched and top coated.

LUBRICANTS

RSI™RING SEAL IMPROVER

RSI is designed to improve ring seal on start up. It provides lubrication even after long term storage and will not "wipe off" off during the initial revolutions of the engine. It enhances lubrication, protecting the rings and bore against excessive wear and allows the rings to seal efficiently and with minimal wear. RSI can be applied during assembly or to engines that have been in storage.

ULTRA GEL TECH™ ASSEMBLY LUBE

Ultra Gel Tech (UGT) is an extreme pressure assembly lubricant that protects bearings, cams, cranks, valve stems, pushrod ends, lifters, gears and more. Used by many race teams, it is suitable for any 2-stroke, 4-stroke, rotary, top fuel, alcohol, supercharged, turbocharged or normally aspirated applications.

INDUSTRIAL COATINGS

TECHTREX™ 70000 series is a series of coatings created from PEEK™. Several formulas are available to fit specific needs. It can be used in the Automotive Industry, Oil Exploration Field, Chemical Industry, Marine, Printing and Copying, Electrical, Transportation and a host of others. TechTrex[™] is a water based dispersion and is not hazardous for shipping.

AMADENE™ Is a series of coatings formulated from a highly modified polymer. In a thin film, the Amadene™ 80000 Series allows a user to benefit from the advanced performance benefits commonly found in molded polymer plastics, in a spray applied coating. The Amadene™ Series has excellent chemical, tribological, and corrosion resistance, in one package. The formulation can be modified to suit specific customer needs for lubrication, release, wear resistance, etc.

TLHC[™] is a version of TLHB[™] that incorporates very hard ceramics to increase the wear resistance and hardness without any deterioration of the other characteristics. Application and curing process is the same as TLHB™.

CERMAKROME™METALLIC CERAMIC

EXTREME TEMPERATURE CYCLE TEST

- 1. Plates fully immersed in liquid nitrogen (-273°C) for one hour.
- 2. Plates immediately heated by blow torch to +1300°C
- 3. Plates re-immersed in liquid nitrogen.
- 4. Continues cycle of test for 8 hours

NO FAILURE/NO DELAMINATION



SUPERIOR SALT/CORROSION PROTECTION (INDEPENDENT TESTING)

CERMAKROME COATED TEST PANELS AFTER 6524 HOURS OF SALT SPRAY:



COMPETITORS TEST PANELS AFTER 4000 HOURS:



BLACK SATIN™ (BHK)

Originally formulated as a protective coating for the fuselage of the X-30 Aero-Space Plane, this ceramic reinforced coating withstands 2000°F substrate temperature while reducing radiated heat. The result is lower under-hood temperatures and increased exhaust gas velocity producing more horsepower and torque. Applying Black Satin (BHK) over HHBK will further increase the thermal barrier function. Recommend full oven cure at 750°F.

CERMAKROME™METALLIC CERAMIC

CermaKrome is the highest performing metallic ceramic coating available. Capable of maintaining adhesion and color stability on substrate up to 1500°F (over 1800°F EGTs). CermaKrome has surpassed most salt spray tests (ASTM 1178) to over 6500 hours. Full oven cure at 500°F for one hour. Polishes to a chrome-like finish (recommend vibratory polisher). Water based with no hazardous solvents and nonhazardous for shipping.

CERMAKROME™LOW HUMIDITY

CermaKrome is available in a special formulation for low humidity environments and to control drying. CermaKrome LH has all the same properties as the standard version.

CLEAR TOPCOATS

A variety of clear topcoats are available to enhance the surface finish and impart a mild gloss to any of the above coatings. Increases the thermal barrier function and corrosion resistance. Low VOCs. See specific instructions for the cure temperatures needed for each variation.

TURBOX™ SERIES COATINGS

TurboX is an extreme temperature exhaust system coating designed especially for the exhaust side of turbos. Applied to exhaust components, it will also reduce temperatures under the hood and on the exhaust manifold surface while improving exhaust gas velocity and horsepower. TurboX will handle substrate temperatures over 1600°F (over 2000°F for short periods). Recommend full cure in oven at 600°F to 700°F. Available in Black and Blue with a matte finish.

COLORGARD™ SERIES COATINGS

ColorGard series coatings reduce temperature under the hood and on the exhaust manifold surface. ColorGard also improves exhaust gas velocity and increases horsepower. Colorgard coatings will withstand substrate temperatures over 1300°F, some colors over 2000°F. ColorGard will full cure at 600°F to 700°F (depending on color). Available in a wide range of colors with most having a slight glossy finish.

CILOXIDE™SERIES COATINGS

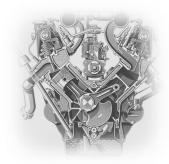
Ciloxide is a family of ceramic coatings capable of providing extremely high levels of thermal protection in very thin films. When properly applied, Ciloxide will withstand substrate temperatures of over 1800°F and environmental temperatures of up to 2000°F. In addition, direct flame will not cause delamination if the substrate temperatures do not exceed 1800°F. Ciloxide coatings have excellent corrosion and chemical resistance. Activator (ACT) is required to use Ciloxide. It cures at 750°F. The coating cures to a very hard surface with excellent adhesion. Ciloxide is solvent based with low VOCs. Available in a wide range of colors with a satin finish.

POWERKOTE C-LUBE™DRY FILM LUBRICANT

C-LUBE is a water based ceramic dry film lubricant coating best applied to rigid surfaces such as piston skirts, cam lobes, gears and similar. C-lube handles extreme pressure and is an excellent fluid-retaining coating, reducing oil loss and reducing hot spots. It is applied in a very thin film so that no clearance changes are required. Any buildup may be burnished down with '0000' steel wool or green "Scotch Brite™" pads without affecting coating function. Reduces friction, scuffing, galling while increasing part life, horsepower and torque. Requires oven curing at 350°F for one hour.

POWERKOTE DFL-1 ™DRY FILM LUBRICANT

DFL-1 is the best dry film lubricant for rod and main bearings and any part subject to sliding or rotational friction. A unique water based binding system reduces friction even under extreme pressure, reduces galling and scuffing while increasing part life for both soft and hard substrates. Does not affect clearances, can be burnished to near zero buildup while still performing. Requires oven curing at 300°F for one hour. Available to professionals and do-it-yourselfers.



POWERKOTE CBC1 ™THERMAL BARRIER COATING

CBC1 is a water based thermal barrier coating that provides a hard, durable surface on any component. Formulated to be used in any engine running compression ratios of less than 12.5:1. Excellent for combustion chambers, piston tops, valve faces and cylinder heads. CBC1 manages thermal transfer, reducing part temperature and helping to reduce or eliminate detonation. Results include increased fuel efficiency, power and torque. Requires oven curing at 300°F for one hour. Available to professionals and do-it-yourselfers.

POWERKOTE CBC2[™]THERMAL BARRIER COATING

Similar to CBC1 (above), this coating can be polished to a chrome-like finish. Requires oven curing at 350°F for one hour.

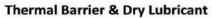
POWERKOTE CBX™THERMAL BARRIER COATING

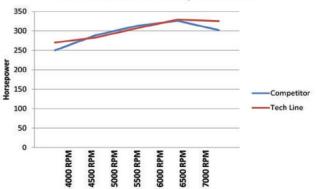
Formulated for performance engines running compression ratios greater than 12.5:1, turbo/supercharged or using nitrous oxide. Managing heat in critical engine components extends life and increases horsepower, torque and efficiency. Requires oven curing at 350°F for one hour.

COATINGS APPLICATION CHART

	DFL-1	CCL	PKSX	MCS	MCX	ColorGard	Ciloxide	CBC-1	CBC-2	CBX	TL-PTG	TLTD	ТГНВ	TLML
Bearings/Cam/Rod	~	~												~
Piston Top								~	>	>	~			
Piston Skirt	~	~												
Piston Underside												~		
Headers/Exhaust Man				~	~	~	~							
Valve Springs														~
Valve Face								~	~	>	~			
Valve Stem	~	~												
Valve Seat	~	~												
Intake Manifold	~	~						~	~	>			~	
Crank Shaft Journals	~	~												
CrankShft Counterwts												~		
Combustion Chamber								~	~	~	~			
Cylinder Walls			~											
Intake Runner	~	~												
Exhaust Port													~	
Ext Cylinder Head												~		
Rocker Arms/Gears	~	~												~
Gears	~	~												~
Oil Pan												~		
Radiator												~		

PERFORMANCE REPORTS





Black Satin Header Coating

