Tribo Surface Engineering, LLC is a World-Wide Leader in Advanced PVD Coating Technology

Tribo’s surface engineering staff has over 25 years of combined expertise in developing molecular level surface modification technologies. Many of our processes are proprietary and protected from years of perfecting our methods. It's our PVD coating that gives tools and parts added life, improved performance and greatly reduced friction.

We work closely with our clients to bring a multidisciplinary approach to develop solutions. We are specialists in mechanical design, controls, fabrication and surface engineering.

Magnetic Sputtering, Cathodic Arc Deposition – and NEW for the Summer 2012 – Heavy Metal Ion Implantation, are all available for batch processing of your components.

We have also have extensive on-site machining capabilities.

Machine Design and Technology Licensing are also available for clients who may require having dedicated equipment installed at their facilities.

MoS₂ Molybdenum Disulfide

FRICTIONAL COEFFICIENT – MUCH LOWER THAN – 0.01

Our unique TCMoly process uses a proprietary composite material, based on MoS₂, with a durable surface that remains superbly slippery.

EXCELLENT ADHESION – with lubricity even under extreme loading.
- Works well with all metals, including Aluminum –

We have provided parts for the US AND EUROPEAN SPACE PROGRAMS & The US MILITARY
HIGH HEAT TOLERANT– 800°F IN AIR  900°F IN AN INERT ATMOSPHERE

EXCELLENT APPLICATIONS IN BEARINGS, PLASTIC PARTS and PLASTIC INJECTIONS MOLDS, ENGINE COMPONENTS, FASTENERS, MANDRELS AND DIES, LINEAR WEAR SURFACES, CUTTING TOOLS, GEARS AND SHAFTS, WEAR PLATES & GIBS, PUNCHES AND DIES.

Tribo Surface Engineering, LLC has been serving the engineering community since 1989 providing coating, design and manufacturing solutions to Aerospace, Racing, Electronics, Automotive, Heavy Industrial, Railroad, Marine, Medical and a host of other demanding and leading edge industries.

Tell us what solutions you require. We are here to help.

310.329.1955   FAX 310.329.1804   WWW TRIBOSURFACEENGINEERING.COM
PVD stands for Physical Vapor Deposition and it is one of Tribo Surface Engineering’s most successful processes. The Potential and Flexibility is nothing short of amazing!

High hardness for tools and parts that can withstand temperatures in excess of 900° C

PVD can coat CERAMICS, METALS, PLASTICS, CARBON, AND EVEN GLASS. Our PVD technology has achieved unheard of low-temperature processes. Our parts are produced under 240° F.

COATINGS OFFERED:

<table>
<thead>
<tr>
<th>HARDNESS</th>
<th>HIGH-TEMP HARDNESS</th>
<th>LUBRICITY</th>
<th>SPECIAL NEEDS</th>
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<tbody>
<tr>
<td>TiN</td>
<td>CrN</td>
<td>MoS₂</td>
<td>Ni</td>
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<td><strong>TiB₂</strong></td>
<td>TiAIN</td>
<td>WS₂</td>
<td>Any Metal</td>
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With several years of experience in developing the technology and building equipment for all kinds of plasma coating concepts in a vacuum environment, Tribo is an excellent partner for companies with new application ideas.

Creative research and engineering for innovative results.

Ask about our extensive fixturing design and manufacturing experience.

ONLY AT TRIBO SURFACE ENGINEERING...

THE WORLD’S LARGEST HEAVY METAL ION IMPLANTER

www.tribosurfaceengineering.com

or CALL US FOR MORE INFORMATION.