**Coating Specification:**
- AMS 2444

**Benefits:**
- Reduction of friction
- Improved lubricity
- Abrasion & wear resistance
- Better release of plastic parts
- Less galling and die polishing
- Reduces downtime

Call: (937) 253-5311
www.techmetals.com

**Physical Vapor Deposition (PVD)** is widely becoming the coating of choice for the manufacturing industry, specifically being used with molds, dies and tooling components.

When compared to legacy plating processes, PVD coatings offer improvements in **lubricity** and the **release of plastic parts**. This thin film coating also provides an excellent **resistance to abrasion and wear** — making it the logical solution.

When applied to a base metal, PVD coatings provide hard, wear-resistant surfaces that don’t interact with the materials they cover – dramatically **reducing friction** and **prolonging the life of the part**. This is just one of the many reasons it’s use is growing in the mold and die industry.

Techmetals has over 50 years experience in metal plating and our processes are backed by certifications with the industry’s most stringent testing facilities.

You can rest assured that Techmetals’ PVD coatings will add greater efficiency, durability and value for your mold or die casting projects.
### TechCoat 100 (TiN) Medically Validated
TechCoat 100 is a proprietary general purpose coating providing universal improvement for most wear applications. Used within the medical, molding and cutting industries.

### TechCoat DLA 200 (DLC) Medically Validated
TechCoat DLA is a proprietary Diamond Like Alloy coating series utilizing the latest coating technology to provide an extremely effective solution for high wear, high friction and surface roughness problems. Industries utilized include: aerospace, automotive, medical, optics, injection molding, die casting and more.

### TechCoat 200 (TiCN) Medically Validated
TechCoat 200 is a proprietary hard purpose coating with a low coefficient of friction. Industries utilize in low-temperature applications for stamping, forming and cutting.

### TechCoat 300 (AlTiN)
TechCoat 300 is a proprietary high-temperature, high hardness coating provides increased performance for high-speed machining, stamping and sawing applications.

### TechCoat 400 (CrN) Medically Validated
TechCoat 400 is a proprietary high performance, hard coating provides increased performance for optimal release characteristics in molding and stamping applications.

### TechCoat 500 (ZrN)
TechCoat 500 is a proprietary high performance coating with great lubricity. It provides increased performance within the medical and machining industries.

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### PVD Coating Chart

<table>
<thead>
<tr>
<th>Coating Type</th>
<th>Color</th>
<th>Hardness (HV)</th>
<th>Thickness (µm)</th>
<th>Coefficient of Friction</th>
<th>Max Usage Temp (˚F)</th>
<th>Description</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>TechCoat DLA 200</td>
<td>Charcoal Gray</td>
<td>2500 - 3300</td>
<td>1 - 5</td>
<td>0.10</td>
<td>750˚</td>
<td>Coating with high mechanical hardness and very low coefficient of friction</td>
<td>Aerospace, Medical, Optics, Molding, &amp; Stamping</td>
</tr>
<tr>
<td>TechCoat 100</td>
<td>Gold</td>
<td>3100 - 3200</td>
<td>1 - 5</td>
<td>0.55</td>
<td>1100˚</td>
<td>Universal coating for all applications</td>
<td>Medical, Molding and Cutting</td>
</tr>
<tr>
<td>TechCoat 200</td>
<td>Rose</td>
<td>3100 - 3200</td>
<td>1 - 5</td>
<td>0.20</td>
<td>750˚</td>
<td>Coating with high hardness and lower coefficient of friction</td>
<td>Low Temp. Stamping, Forming &amp; Cutting</td>
</tr>
<tr>
<td>TechCoat 300</td>
<td>Charcoal Gray</td>
<td>3100 - 3300</td>
<td>1 - 5</td>
<td>0.70</td>
<td>1600˚</td>
<td>High temperature and high hardness coating that provides increased</td>
<td>Machining, Stamping, &amp; Sawing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>performance in high speed machining</td>
<td></td>
</tr>
<tr>
<td>TechCoat 400</td>
<td>Silver</td>
<td>1800 - 2000</td>
<td>1 - 5</td>
<td>0.30</td>
<td>1300˚</td>
<td>Ductile coating with high release properties</td>
<td>Die Casting, Molding &amp; Stamping</td>
</tr>
<tr>
<td>TechCoat 500</td>
<td>Pale Gold</td>
<td>1900 - 2100</td>
<td>1 - 4</td>
<td>0.40</td>
<td>1050˚</td>
<td>Coating with good lubricity</td>
<td>Medical &amp; Machining</td>
</tr>
</tbody>
</table>

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ISO 13485:2016  
ISO 9001:2015  
AS9100  
REV D CERTIFIED  
ISO 13485:2016  
ISO 9001:2015  
ITAR  
Nadcap Accredited NonDestructive Testing  
Nadcap Accredited Coatings  
Nadcap Accredited Chemical Processing