

# SM&RT

Die Coating  
Technology

## Technical precision and detailed artistry for long term performance

Physical Vapour Deposition (PVD) Die Coating Technology Process—jointly developed by the Royal Canadian Mint and Miba Coating Group-Teer Coatings Ltd—significantly revolutionises die life and coin quality for environment-friendly coin production.



ROYAL CANADIAN MINT  
MONNAIE ROYALE CANADIENNE

## PVD DIE COATING TECHNOLOGY PROCESS

New cutting edge technology advancements are poised to set higher minting industry standards worldwide. The Royal Canadian Mint successfully deployed the process for using solid lubricant and hard coatings. Jointly developed by the Royal Canadian Mint and Miba Coating Group-Teer Coatings Ltd, this process creates unique properties, combining very low friction with extreme smoothness and high wear resistance.

This ground-breaking process to create a hard, dense wear resistant coating of dies significantly reduces striking damage, increases die-life and coin quality. In fact, results show an increase in die-life by up to three times when compared to those that without using Teer Coating, all the while maintaining an environmentally friendly process.

When it comes to numismatic coining dies, new minting records were set by providing surface protection for highly polished surfaces with complex features and textures allowing for improved performance with technology applications such as hologram and ultra high relief and even undulated coin surfaces.

The **Royal Canadian Mint** collaborated with **Miba Coating Group-Teer Coatings Ltd** to bring you innovation and expertise in PDV die coating processes.

**SM&RT VISION**—Technology is the cornerstone of the Royal Canadian Mint's SM&RT service package. Built on the industry's most cutting-edge techniques and brightest talent, SM&RT technology provides the beautiful, affordable and proven foundation for you to tell your country's story.

The Royal Canadian Mint is the global leader in minting through people, innovation and quality.

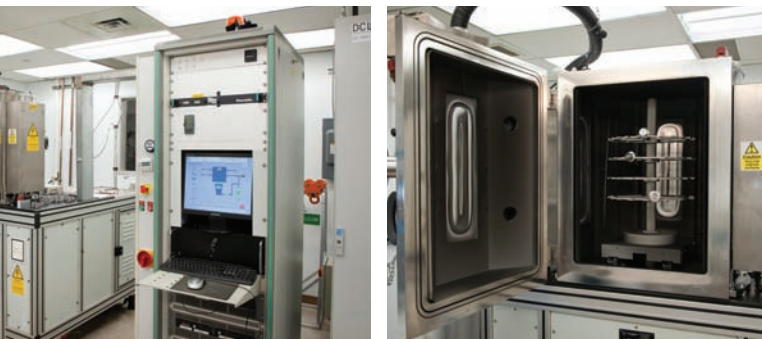
## BENEFITS

- Increased die-life and coin quality
- Hard coating reduces wear, scratches and surface damage on coining dies
- Smooth coating surface (as required in the production of numismatic proof products)
- “Green” and environment-friendly process
- Eliminates Health and Safety concerns as compared to other processes such as chrome plating

## APPLICATIONS

Significant improvement in coining die-life for:

- Circulation Coins
- Numismatic Coins
- Bullion, wafers
- Security Tokens
- Other minting tools where wear resistance is required e.g. Rimming segment



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CONTACT US:  
SMART@MINT.CA OR VISIT [MINT.CA/SMART](http://MINT.CA/SMART)

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**SM&RT**

SECURE,  
MODERN &  
RESISTANT  
TECHNOLOGY



ROYAL CANADIAN MINT  
MONNAIE ROYALE CANADIENNE

*Innovation in Motion*

