



Machine Shields

Technical Brochure



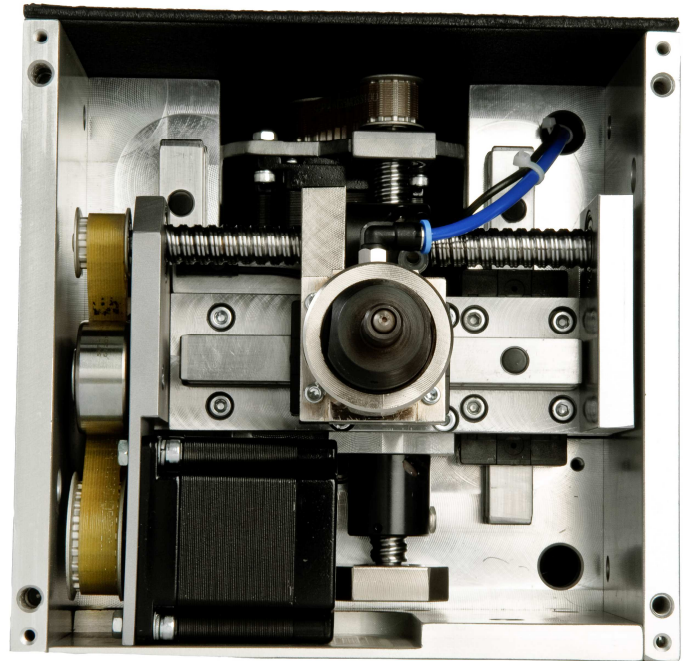
I-Mark

I-Mark I Series Shields

Protects the internal working of the marking system

High volume industrial part marking inevitably not the cleanest manufacturing environment. Industrial traceability is usually located in or near forging, machining, or welding cells. Traceability of the parts is most often required at the most critical and difficult manufacturing point. This point is also prone to significant metal debris.

The inner workings of the I-Mark dot-
peen or scribe units must be kept free
of metal particulate to assure
production uptime and machinery life.



Compatible Systems

- I-Mark I Series

There are three options for protection of internal parts

- Protective flexible bellows
 - Dot peen - IMID60DBC
 - Scribe - IMIS60DBC
- Protective high temp flexible bellows
 - Dot peen - IMID60DBCH
 - Scribe - IMID60DBCH
- Stainless steel debris shield
 - Dot peen - IMID60SHIELD
 - Scribe - IMIS60SHIELD

Marking Machines



Ensuring machinery uptime

Debris in the inner workings of the I-Mark is a leading factor in many service issues. As demonstrated by Figure 1, many I-Mark systems in use in industrial traceability end up covered in oils and particulates. This debris may cause the following service issues:

- Failed idle pulley assembly
- Failed linear bearing assembly
- Drive pulley wear, then too loose
- Home position sensor failure
- Belt wear and failure
- Air supply restrictions

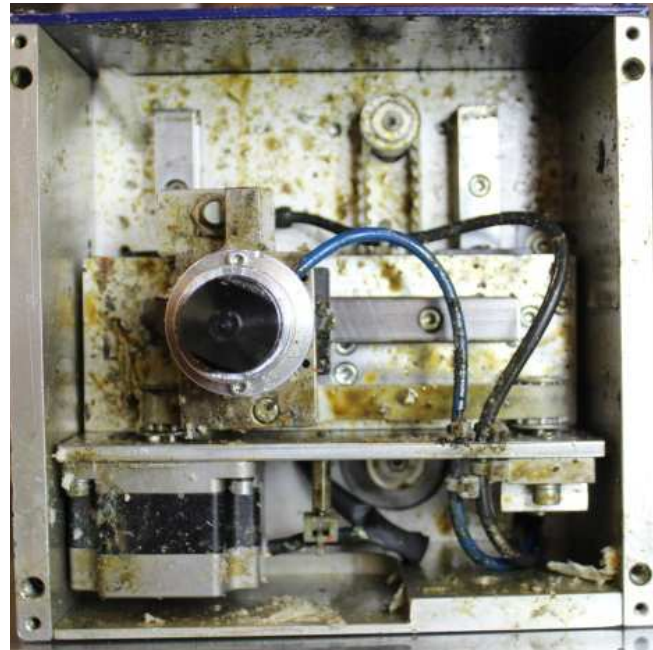


Figure 1 Industrial debris impacting function of I-Mark

Figure 2 shows a clean I-Mark system shielded from external debris. For high volume manufacturing seconds count, CMT strongly recommends the use a shield in all industrial applications.

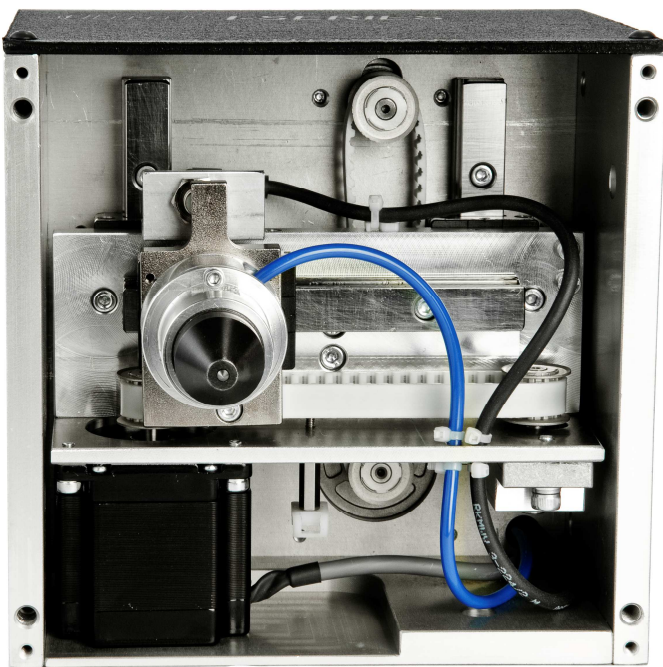


Figure 2 Clean system shielded from external debris



I-Mark

Stainless-Steel Machine Shield

The stainless-steel shield provides complete protection from dust and airborne particles. It is designed for industrial applications for protection from fluid and weld spray. Because of the moving plates, this style of shield is not recommended with the pin “up” position. Also, this design is not available for the large marking windows.

The shield should be considered a wearable part and should be replaced as part of normal preventative maintenance.

Part Numbers -Stainless steel debris shield

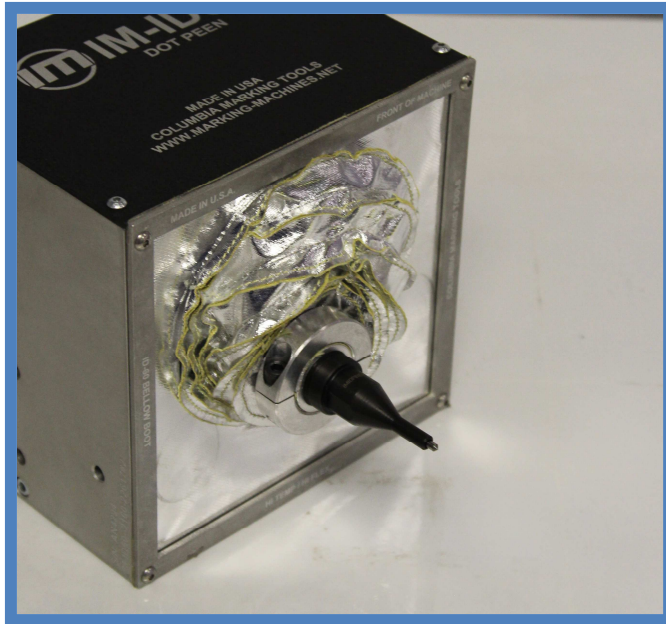
- Dot peen - IMID60SHIELD
- Scribe - IMIS60SHIELD



Marking Machines



Flexible Bellows Machine Shield



IMIS60DBC

Flexible bellows is the most popular machine shield option. This is a great solution for installations with the pin pointing up. The bellows protects the internal working parts of the marking system. The flexible bellows is available in Standard and High Temperature material.

- Part Number: Protective Flexible Bellows
 - Dot Peen - IMID60DBC
 - Scribe -

- Part Number: Protective High Temp Flexible Bellows
 - Dot Peen - IMID60DBCH
 - Scribe - IMID60DBCH

The bellows is a wearable part, while most applications require changing this once per year – some applications may experience faster wear.

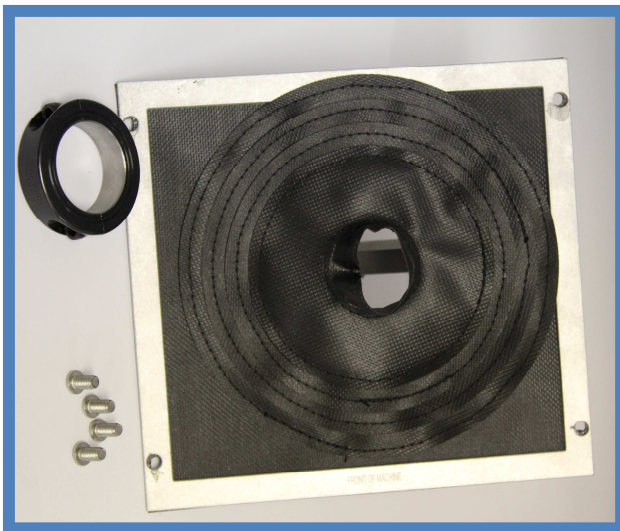


Figure 3 Standard Flexible Bellows

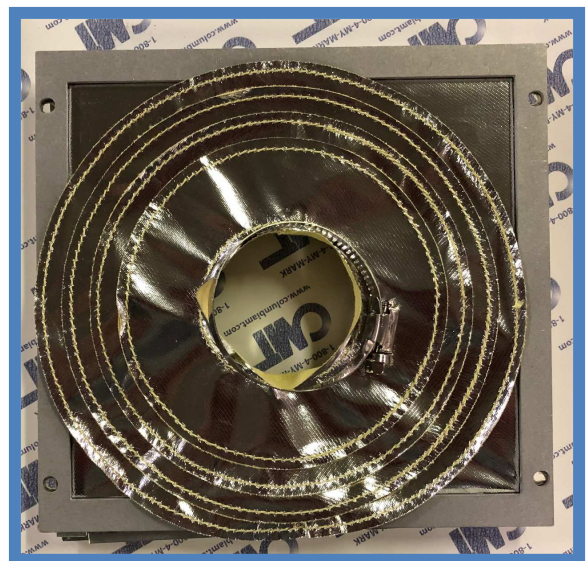


Figure 4 - High Temperature Flexible Bellows