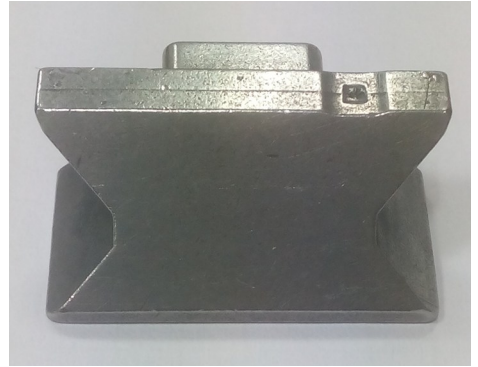


Complexity Simplified

In this issue, we introduce a component found in most door locks in our homes & offices. This component has been in use for decades and is traditionally made through machining. Manufacturing the component through Metal Injection Molding (MIM) helped bring the costs down significantly. The component is an example of how MIM technology is gradually being adopted by the lock industry.

Manufacturing Challenge

- **Earlier method** : Machining the component from a steel blank
- **Reason for change** :
 - Cost benefits offered by MIM
 - Ability to manufacture in large volumes with consistent quality



Latch

Solution

- Entire component was produced through MIM with only surface finishing as the post-MIM machining operations

Engineering Challenge

- **Demanding quality requirements** :
 - Surface finish of R_z 8 μ m required on the functional area
 - Tighter tolerance requirements in the interior areas

Solution

- **Grinding operation on the functional area to achieve uniform surface finish**
 - Barreling operation performed to achieve a polished surface
- **Tolerances achieved in as-MIM condition due to Indo-MIM's expertise in tool manufacturing**

Newsletter Spotlight

An excellent example of component to demonstrate the benefits of migration from conventional production methods to MIM

Indo-MIM created estimated cost savings of approx. 30% over the previous manufacturing method

Indo-MIM delivers forty thousand pieces to the customer every year

Indo-MIM reduced material wastage by approx. 35% over the previous manufacturing method

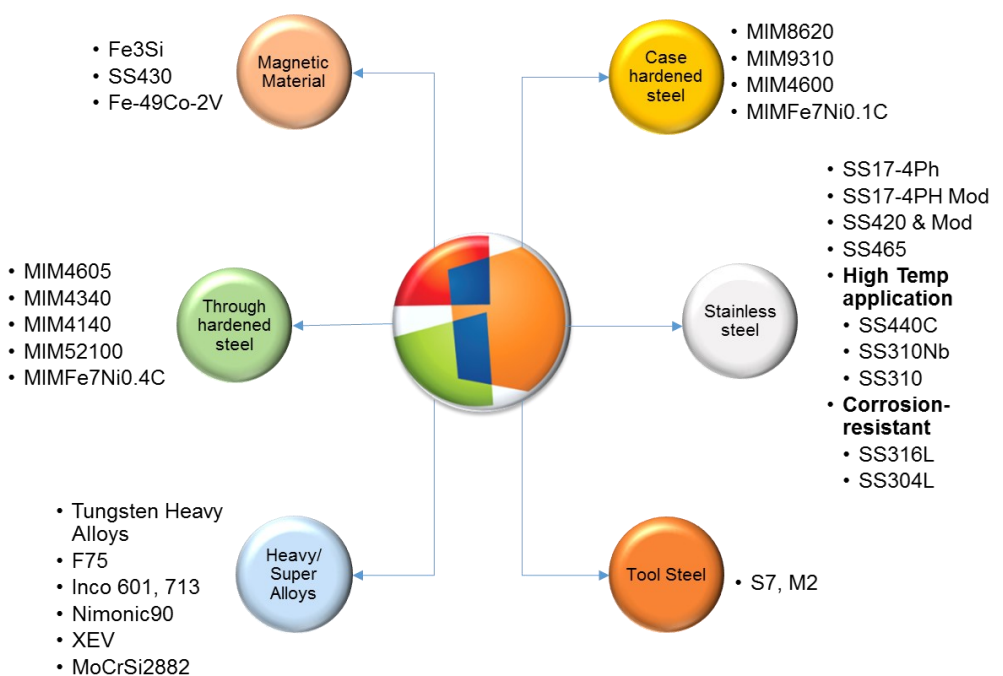
Material used was MIM 4605 in as-MIM condition

Indo-MIM Advantages

Indo-MIM reduced the manufacturing cost of the component by approx. 30% over the previous method. No industrial pollutants were released during the manufacturing process.

Indo-MIM's specialty lies in manufacturing highly complex parts. Mechanical properties of parts produced through MIM are superior to castings & powder metallurgy (reflecting fine particle size & high sintered density). Parts made through MIM are near net shape.

Materials We Offer



Questions or comments - Write to us at innovation@indo-mim.com or call at +91 80 2204 8800/2797 1419

Visit us at <http://www.indo-mim.com/>