



INDO-MIM[®]
COMPLEXITY SIMPLIFIED

CASE STUDIES - MEDICAL



ABOUT US



85+

Material Options

24

**MPIF
Awards**

6000+

**MIM Parts
Variety**

650+

**Customers
Globally**



150M+

**Parts Shipped
Annually**



3000+

Employees



\$200M+

Annual Revenue

METAL INJECTION MOLDING PLANTS



Over 8,90,000 sq. ft. of MIM manufacturing in multiple locations in 2 countries



**Manufacturing Plant – 1
Hoskote, Bengaluru**



**MIM Manufacturing Plant – 2
Doddaballapur, Bengaluru**



**MIM Manufacturing Plant – 3
INDO-MIM Inc., USA**

INTEGRATED VALUE CHAIN



One-Stop Solution Provider

MIM

**METAL INJECTION
MOLDING**

Largest installed
capacity



CIM

**CERAMIC INJECTION
MOLDING**

ISO 9001 and
ISO 14001 Certified



IC

**INVESTMENT
CASTING**

Temperature and
Humidity controlled



PMG

**PRECISION
MACHINING**

Aerospace, Oil & Gas,
Medical



**SURFACE
TREATMENT**

**SPECIAL
PROCESSES**

AS9100 & NADCAP
Approved



MBJ

**METAL BINDER JET
3D PRINTING**

New Addition to
INDO-MIM



GLOBAL PRESENCE



CERTIFICATIONS



 <p>CERTIFICATE</p> <p>INDO-MIM Private Limited</p> <p>AS 9100:2016</p> <p>AEROSPACE</p>	 <p>CERTIFICATE</p> <p>INDO-MIM PVT. LTD.</p> <p>IATF 16949:2016</p> <p>AUTOMOBILE</p>	 <p>CERTIFICATE</p> <p>INDO-MIM PVT. LTD.</p> <p>ISO 13485:2016</p> <p>MEDICAL</p>	 <p>CERTIFICATE</p> <p>INDO-MIM PRIVATE LIMITED</p> <p>ISO 14001:2015</p> <p>ENVIRONMENT</p>	 <p>CERTIFICATE</p> <p>INDO-MIM PVT. LTD.</p> <p>ISO 9001:2015</p> <p>QMS</p>	 <p>CERTIFICATE</p> <p>ISO CLASS 8</p> <p>CLEAN ROOM</p>	 <p>CERTIFICATE</p> <p>INDO-MIM PRIVATE LIMITED</p> <p>OHSAS 18001:2007</p> <p>HEALTH & SAFETY</p>	 <p>GC-MARK CERTIFICATE</p> <p>INDO-MIM PRIVATE LIMITED</p> <p>GC-MARK</p> <p>ENERGY EFFICIENT</p>
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PRODUCT PORTFOLIO



AUTOMOTIVE

Turbochargers, sensors,
pumps, seating, door
mechanism, nozzle,
etc.



CONSUMER

Fashion accessory,
Mountaineering, Lock
parts, Home appliances,
Personal care etc.



DEFENSE

Firearm parts, sights



AERO & MEDICAL

Surgical parts,
Staplers, Implants,
Brackets

CASE STUDY – VESSEL SEALING



APPLICATION - VESSEL SEALING DURING ENDOSCOPIC SURGERY



PRODUCT DESCRIPTION

- Material: MIM 17-4PH (SS)
- Weight: 0.3gm
- Segment: Medical
- Annual Requirement: 200K

- Part consistency is an inherent capability of MIM, resulting in best fit parts.
- High volume easily achievable.

SOLUTION

- Improper alignment of matching jaws during assembly due to inconsistency in the machining process.
- Challenging to meet high volume conventional process.

CUSTOMER PAIN POINTS

CASE STUDY – OPEN HEART SURGERY



APPLICATION – OPEN HEART SURGERY

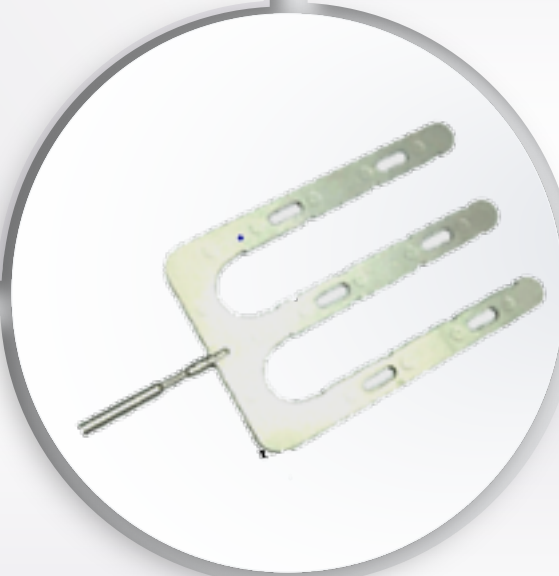


- MIM integrated positioner arm and grip as a single component.
- Sharp edges eliminated by providing radius/chamfer directly in the tool.

SOLUTION

PRODUCT DESCRIPTION

- Material: MIM 316 (SS)
- Weight: 23g
- Segment: Medical
- Annual Requirement: 12K



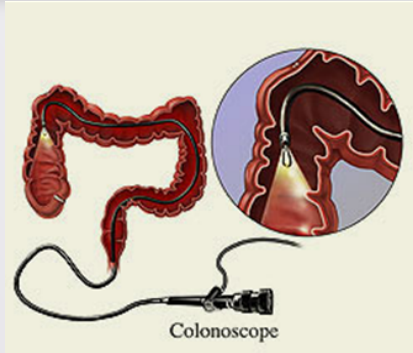
- Positioning arm and grip, produced separately and welded.
- Secondary operation required to remove sharp edges.

CUSTOMER PAIN POINTS

CASE STUDY – COLONOSCOPY SURGERY



APPLICATION – COLONOSCOPY SURGERY



- MIM is capable of producing complex tiny parts in high volumes without compromising quality.
- No post MIM machining required for the profile.

SOLUTION

PRODUCT DESCRIPTION

- Material: MIM 17-4 PH (SS)
- Weight: 0.06gm
- Segment: Medical
- Annual Requirement: 1440K



- Tiny part with complex end profile, difficult to manufacture through any of the conventional processes.

CUSTOMER PAIN POINTS

CASE STUDY – SOUND TUBE



APPLICATION - WIRELESS HEARING AIDS



PRODUCT DESCRIPTION

- Material: MIM 17-4PH
- Weight: 3.5gm
- Segment: Medical
- Annual Requirement: 100K

- Tooling mechanism designed to form curved hole in mold
- All dimensions achieved without machining

SOLUTION

- Existing plastic part not ideal for sound transfer
- Manufacturing limitations to achieve design in metal

CUSTOMER PAIN POINTS

CASE STUDY – CARTRIDGE BLADE



APPLICATION - SURGICAL STAPLER



PRODUCT DESCRIPTION

- Material: MIM SS17-4PH
- Weight: 1.1gm
- Segment: Medical
- Annual Requirement: 70K



- Customized staging ceramic fixture used to avoid distortion
- High strength achieved through modified material

- Difficult to consistently maintain low corner wall thickness
- High strength requirement

SOLUTION

CUSTOMER PAIN POINTS

MORE THAN 3000 HEARTS – ONE TARGET

Creating Value :

In-depth technical competence

International presence

Application and Industry Expertise

Long-term Relationships

THANK YOU

www.indo-mim.com

