

# Making Products That Fly Indo-MIM Aerospace Products Group



Using input from leading aerospace manufacturers, we have integrated global OEM quality standards into our facility from the ground up.

### Here's an overview

- A sophisticated 23,000 Sq Ft. production facility, located on 16 acres north of Bangalore, the aerospace capital of India.
- Less than 30 minutes from an international airport with good connections, and located near the new aerospace SEZ.
- A one-stop-shop that provides fully-finished components, precision machined through finally treated.
- A highly knowledgeable team that has many years of experience in satisfying global aerospace OEM's.
- CNC machines with a proven stock of spare parts and service engineers in India, to deliver your parts with the right quality and on time.
- An extensive list of special processes, with a Level 3 NDT NAS410 on-site.

### Quality

- AS9100 Rev B certified in June of 2011 in both the machine shop and special processes facility
- Global OEM approval granted in August of 2011 for machine shop and special processes facility
- We are audited through the AS9100 program as well as through OEM's that conduct multiple audits throughout the year
- NADCAP certification on track for July of 2012 in all special processes

#### **Supply Chain Management**

• We utilize effective Supply Chain Management to meet customer expectations of on-time delivery

### Engineering

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- We have a deep and talented team of engineers with extensive aerospace experience
- Our customers benefit from efficiencies in operational methods, leading to lower cycle times.

### **Program Management**

- Each client is given a program manager as a point of contact and accountability through all phases of planning and production
- Each program manager is empowered internally to manage cross-functional teams in their network

We can offer customers the highest quality and a broad variety of products and services on one campus in India, a "one-stop-shop" to global OEM's.

Please contact us to learn more about the capabilities of Indo-MIM Aerospace Products Group.



## Precision Machining Center

Indo-MIM's precision machining center was conceived with quality and cost as the most important priorities. We have spent the past year proving out quality systems and controls that meet all global OEM standards. In June, Lloyds Registrar of London certified our QMS as AS9100 Rev B Compliant. On a parallel track, we have ramped up our capacity with a wide and extended range of CNC machines and ancillary equipment. Our business model is designed to meet the portfolio of parts that global OEMs will source in India. Our formula here is based on having the right equipment on the floor, to provide a reliable and cost-effective solution to our customers.

As of April 2012 we will have 16 operational CNC Machines of various makes and sizes.



www.indo-mim.com

### Indo-MIM CNC Machines Operational

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Quantity	2x	1x	1x	1x	1x	1x	1x	1x	2x	2x	2x	1x
Туре	VMC	VMC	VMC	НМС	Turn Mill	Turning	Turn Mill	Turn Mill	Turning	Turning	Turning	НМС
Control Systems	Fanuc	Fanuc	Fanuc	Siemens	Siemens	Fanuc	Fanuc	Fanuc	HAAS	HAAS	HAAS	HAAS
X axis travel / Max cutting dia, mm	1020	720	510	560	240	16	260	260	356	356	381	508
Y axis travel, mm	550	460	460	600								457
Z-axis travel/ Max cutting length, mm	560	510	410	600	310	200	589	530	356	356	521	356
Tool stations, Nos	16	16	16	60	12	17	12	12	12	12	12	24
RPM	8000	8000	8000	12000	6000	15000	3500	6000	6000	6000	4000	12000
Power, KW	18.5	7.5	7.5	20	12.6	8	15	15	11.2	11.2	14.9	22.4
4 <sup>th</sup> axis capability	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No	Yes







## Special Processes

Indo-MIM Special Processes Plant is open to serve all customers with a broad range of special processes under one roof. In June 2011, we passed our AS9100 Rev B by Lloyd's Registrar of London; we are on track to complete NADCAP certifications in all processes by July of 2012.

We have also taken our environmental commitment seriously, investing in an effluent treatment plant that will treat and recycle the by products of production. Indo-MIM can produces ready to ship parts that can be precision machined, treated and tested on one site.

### Processing Capabilities:

- Non-Destructive Testing
- Chemical Processing
- Surface Cleaning
- Painting
- De-Embrittlement



### Non-Destructive Testing

- Fluorescent Particle Inspection
  Magnetic Particle Inspection
- Conductivity Testing
- Hardness Testing
- Grain Flow Check
   Acid Etch Inspection
   Anodic Flaw Detection

### Chemical Processing

- Electrochemical Etch Marking
   Ink Jet Part Marking
   Chromic Acid AnodizingTartaric Acid/ Sulfuric Acid Anodizing
- Boric Acid/ Sulfuric Acid Anodizing
- Sulfuric Acid Anodizing
- Electroless Nickel Plating + w/ Teflon Coating
- Chemical Conversion Coating
  Cadmium Plating/ Nickel Cadmium Plating
  Zinc Plating w/ Blue and Yellow Passivation
- Manganese Phosphate w/ Solid Film Lubricant Coating
- De-Ionized Water, Nickel Acetate, Dichromate,
- Dye and Clear Sealing ProcessAluminum EtchingHard Anodizing

- Silver Plating
- Chrome Plating
- Titanium Cadmium Plating
- Zinc Spray Passivation of Steels
- Surface Cleaning
  - Vacuum Blast Cleaning

  - Vacuum biast Cleaning
    Glass Bead Cleaning
    Aluminum Oxide Cleaning
    Ultrasonic Cleaning
    Vapor Degreasing
    Shot Peening

### Spray Painting

- Primer Application
   Semi-Gloss and High-Gloss Paint Application
- Abrasion Resistant Paint Application
- Abrasion Resistant Pain
  Over Coat Application
  Masking Solutions
  Solgel Application
  Solid Film Lubricant

- Powder Coating

### Laboratory Capabilities

- Salt Spray Chamber
  Ph, Conductivity, TDS Meter
  Metal Conductivity Meter
- Cross Hatch Tester
- UV-Visible Spectrophoto Meter
- Distillation Unit
- Quantitative and Qualitative Chemical Analysis
- Coating Thickness-DT/NDT-Eddy Current
- Coating Weight Test
- Magnification Lens
- Muffle Furnace
- Chemical Balance
- Gloss Meter
- Millipore Testing
- X-Ray Testing
- Heat Treatment
  - Vacuum heat treatment
  - Solutionizing
  - Age Hardening
  - Atmospheric Heat Treatment
  - Normalizing
  - Stress Relieving







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To be the world's leading producer of precision engineered products by exceeding our customers' expectations on quality, delivery, cost and service.

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