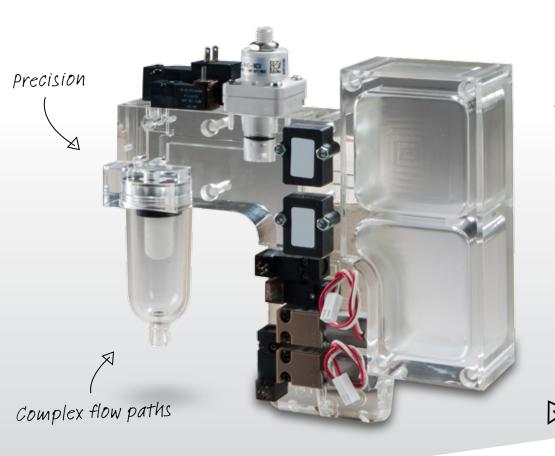


# Manifolds Innovative Solutions to Increase Quality and Reduce Cost



Acrylic manifold

Engineering

GREAT Solutions



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## Engineering GREAT solutions through people, products, innovation and service

IMI Precision Engineering is a world-leader in fluid and motion control. Building close, collaborative relationships with our customers, we gain a deep understanding of their engineering needs and then mobilise our resources and expertise to deliver distinctive products and solutions.

Wherever precision, speed and engineering reliability are essential, our global footprint, problem-solving capability and portfolio of high performance products enables us to deliver GREAT solutions which help customers tackle the world's most demanding engineering challenges.

#### > Reliability

We deliver and support our high quality products through our global service network.

#### > High performance products

Calling on a world-class portfolio of fluid and motion control products including IMI Norgren, IMI Buschjost, IMI FAS, IMI Herion and IMI Maxseal. We can supply these singly, or combined in powerful customised solutions to improve performance and productivity.

#### > Partnership & Problem Solving

We get closer to our customers to understand their exact challenges.

## Innovation & Technical Excellence

Our highly experienced engineering and production teams design and manufacture custom manifolds from Aluminum, Brass, Stainless Steel and a wide range of plastics, from PTFE to Acrylics. Our engineers incorporate the latest techniques and technologies to ensure the best design for your application - whether your unique application requires a simple machined manifold or full integration of a complex fluidic circuit in a multi-layered, multi-channel manifold.

#### **High Performance Products**

With our extensive selection of products, we will be able to design a manifold solution that will deliver some or all of the following advantages.

- > Reduce overall solution footprint and weight
- > Eliminate potential leak paths
- Integrate multiple discrete components such as fittings, valves, pressure regulators, check valves, restrictors, filters, pressure and flow sensors
- > Incorporate complex pneumatic and/or fluidic circuits directly into the manifold
- > Allow for the maximum number of components on a given manifold face (high density of fluid circuits)
- > Consistently maintain the exact fluidic volume between discrete components
- > Eliminates potential dead spaces within the manifold (elimination of dead (static) volumes)
- > Improved reliability
- > Complex multi-directional flow paths

#### **Exceptional Local Service**

We're a global business with extensive resources, but our focus is always local. Whether you're being helped by a Key Account manager or working directly with one of our design engineers, we will work with you and your team to determine the best solution for your challenge.

Flame polished

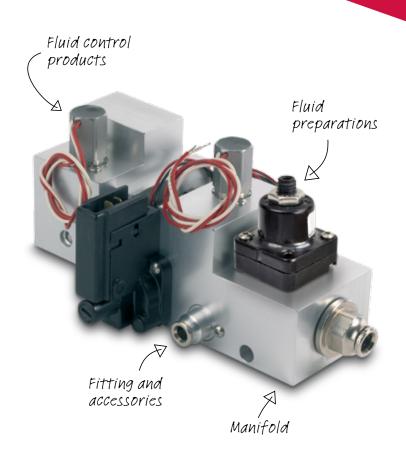
Complex flow paths ---



## Creating your custom manifold

IMI Norgren Manifolds enable component integration for a compact, clean, and manageble package.

These products represent some of the unlimited component possibilities.



#### **Fluid Control Products**

- > High flow proportional controls
- > Low watt digital solenoids
- > 2/2 and 3/2 Media Separated Valves

#### **Fitting and Accessories**

- > Cartridge, threaded or coupling designs
- > Easily connected
- > Check and relief valves

#### **Fluid Preparations**

- > Precision and manifold mount pressure regulation
- > Oxygen compatible
- > Filtration down to 0.01 micron



## Choose your manifold

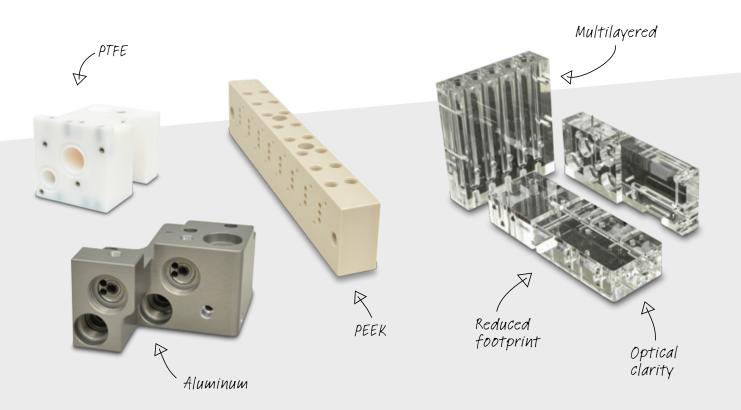
IMI Precision Engineering offers a variety of manifold materials compatible with your application.

#### **Precision Machined Manifolds**

- > Robust, compact designs
- > Aluminum, SS, Brass, and Acetal
- > Burr free intersections
- > NPT straight thread and flat bottom ports

#### **Precision Acrylic Manifolds**

- > Multi-layered designs
- > Custom geometries and volumes
- > Complex three dimensional flow paths
- > Thermal or Solvent bonded
- > Flame and vapor polishing



### Complete manifold solutions

IMI Precision Engineering can configure manifolds for your custom solution



#### **Custom Complete Acrylic Solutions**

- > Simplified Designs
- > Reduced overall foot print
- > High density fluid circuitry
- > Integrated control components

#### **Custom Complete Machined Solutions**

- > Improved reliability
- > Simplified designs
- > Reduced complexity
- > Out of the box ready

### Customer challenge



#### **Customer Challenge**

- > Low profile air horn control
- > In-field modification

#### **Our Solution**

- > Low profile for ceiling mounting
- > Low pressure drop



#### **Customer Challenge**

- > Simple to use system
- > Meet certifications levels

#### **Our Solution**

- > Increased Safety
- > Easy serviceability



#### **Customer Challenge**

- > Small envelope
- > Ensure precise fluid dispense

#### **Our Solution**

- > 12-channel syringe pump
- > Simplified fluidic circuit















#### **Customer Challenge**

- > Reduce leaks
- > Centralized controls

#### **Our Solution**

- > Reduced connections
- > Reduced footprint



## Commercial Vehicles

#### **Customer Challenge**

- > Consolidate air accessories
- > Handling discrete input/output

#### **Our Solution**

- > Reduction of potential leaks
- > Faster installations



#### **Customer Challenge**

- > Expandable solutions
- > Reduced maintenance

#### **Our Solution**

- > Easy expandability
- > Minimal lime scale for long life

IMI Precision Engineering operates four global centers of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in the USA, Germany, China, UK, Switzerland, Czech Republic, Mexico, Brazil, and India.

For information on all IMI Precision Engineering companies visit

www.imi-precision.com

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