

## Custom Machined Seals on Demand

**Allegheny York** will manufacture custom sealing products to meet your demands using advanced rapid prototyping technology. Parts can be made from over 100 profiles for same-day delivery using our extensive inventory of available materials. Our Engineering team will design the part to fit your requirements and supply a drawing and quotation for your approval prior to manufacturing.

## Size Capabilities:

**Inch (5/16" I.D. to 23-1/2" O.D.)**

**Metric** (8mm I.D. to 600mm O.D)

## What we need from you:

**Part Profile:** Call our engineering department for available profiles.

**Dimensions:** We prefer metal dimensions (actual gland dimensions) If you do not supply gland dimensions, we will manufacture the part to *your* nominal part dimensions.

**Material:** Tell us what material you would like the part to be made from. If we don't have that material in stock, we will suggest alternatives or order the preferred material. See page 13 for material list.

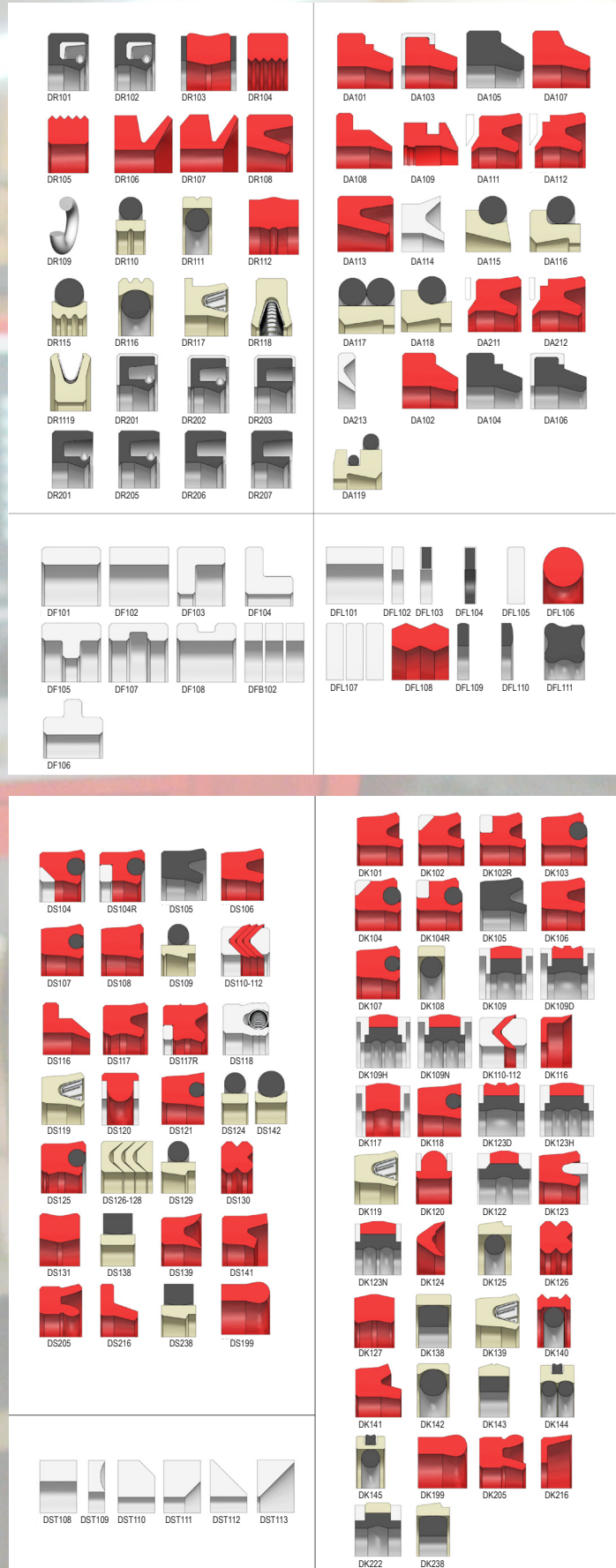
**Operating Conditions:** Give us as much information as you have about the operating conditions the part will be used in.

- Temperature
- Application
- Media (Fluid)
- Pressure
- Speed

### Larger Quantity items:

If the part you need becomes a production part, we have the capability of injection molding or compression molding the part in larger quantities at lower prices.

Contact our Engineering department  
for more information.



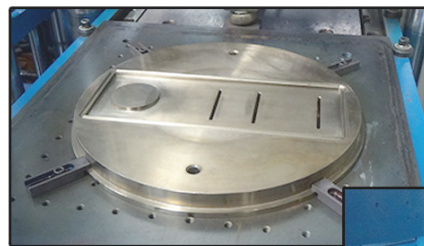
## Custom Molded Parts on Demand

Over the years, we've listened to our customers tell us about what will help them most. That's how we've developed many of our core products - to meet the specific needs of our customers. But we know that, sometimes, a customer may need something special.

If you have a product with components that are no longer manufactured or if you have a plan for marketing a molded or machined product yourself, we will gladly serve as your manufacturing source. Our engineering design team can create custom molding solutions to solve the toughest problems and deliver the finest details.

Chances are, we can come up with the perfect solution for you. If we cannot make what you need, we'll help you find someone who can. See page 12 for material list.

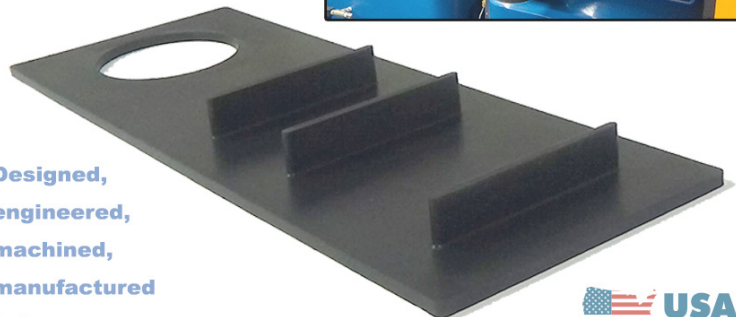
### CASE STUDY



**70 EPDM  
COVER PLATE  
FOR PARTICLE  
ANALYZER**



**Designed,  
engineered,  
machined,  
manufactured  
in house.**



# Allegheny York Capabilities

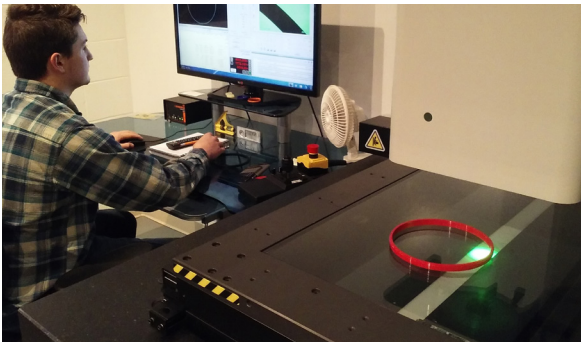
## Engineering

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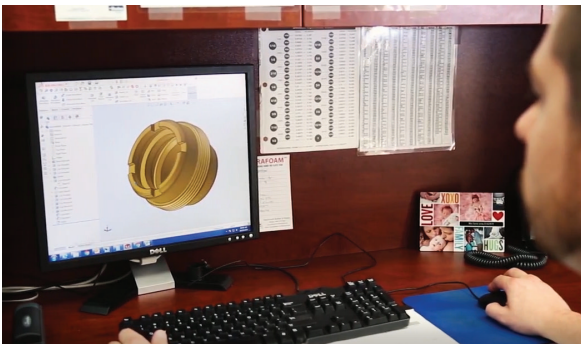
Our skilled team of engineers is always available to answer your questions and will identify your part or help start the process for fabricating a new part. This hands-on approach sets us apart and helps our customers rest assured they will get the best parts and service available.

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We utilize SprintMVP® automatic measurement systems to accurately measure fine features that require multi-step measurement routines, automatically combining autofocus, edge detection, programmable lighting, laser scanning and touch probing.

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Our engineers are fluent in the use of industry standard software, Solidworks®, which helps our customers save time, reduce costs, increase accuracy, improve quality, facilitate collaboration and ensure design for manufacturability throughout the design process.

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Allegheny York's quality control standards require our team to manually review and inspect every custom made part several times in the manufacturing process.

In ongoing consultation with our customers, we will revise schematics and tooling as needed.

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# Allegheny York Capabilities

## Machine Shop

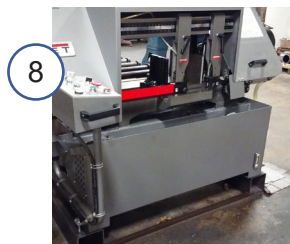
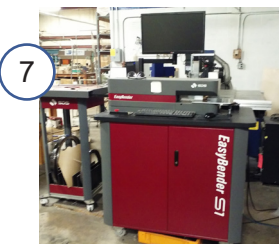
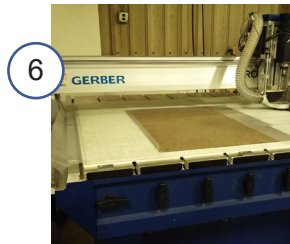
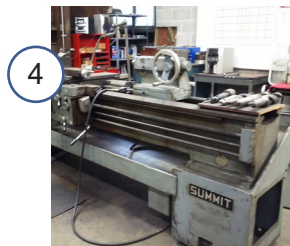
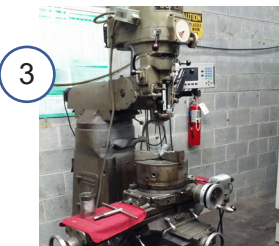
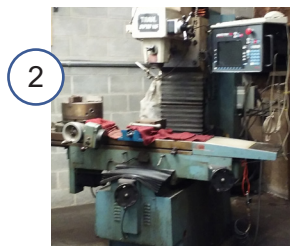
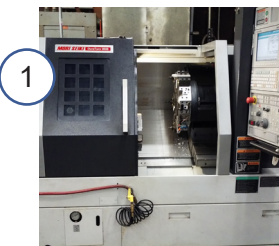


The first step in meeting customer's satisfaction is in the preparing of the mold cavities to meet the required specifications.

Allegheny York currently has over 5,000 molds and dies of vee packing and custom parts.



If a mold or die is not already in our extensive inventory, Allegheny York can design and machine the tool to meet almost any specification.

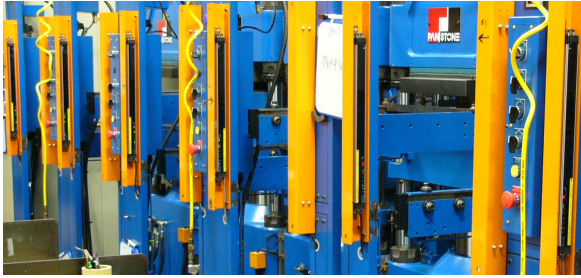


Machine #	Manufacturer	Type	Material
1	Mori Seiki® Duro turn 2030	CNC Turret Lathe	Metals Hard Plastic
2	Pro Track®	CNC Vertical Mill	Metals Hard Plastic
3	BridgePort® Super Max	Manual Vertical Mill	Metals
4	Summit®	Manual Lathe 12" Chuck	Metals
5	Summit® 24-4	Manual Lathe 12-25" Chuck	Metals
6	Gerber®	CNC Router	Most Non-Metal Sheet
7	EZ Bender® Steel Rule	CNC Rule Bender	Trim Dies
8	JET®	Bandsaw	Metal
9	Bridgeport® GX 1000 OSP	CNC Machining Center	Metal

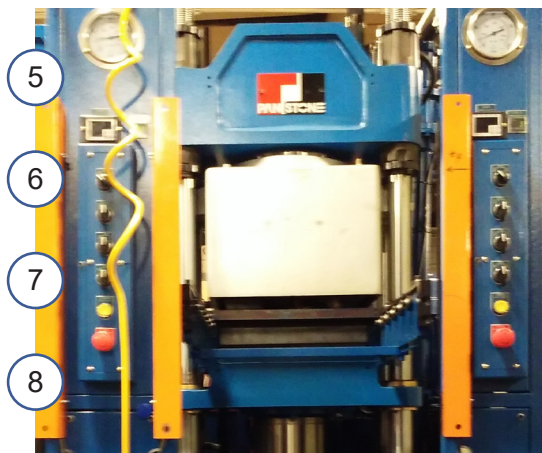
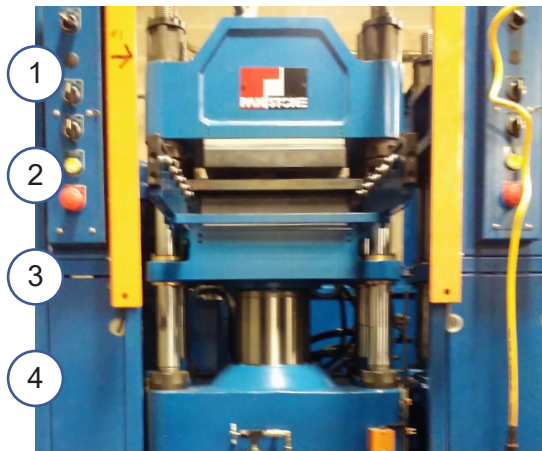


# Allegheny York Capabilities

## Compression Press



It takes expertise to produce quality products using a compression mold. At Allegheny York, our 35+ years of experience with rubber compression molding helps to benefit every client. We can help guide you through the process of using compression molded rubber to create any products you need.



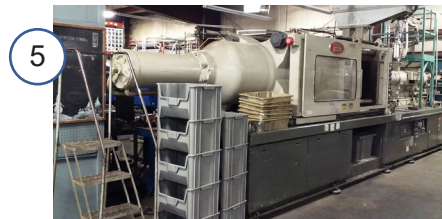
Machine #	Manufacturer	Platten Size	Tonnage
1	2013 Pan Stone®	16" x 18"	Metric Tons 100 US Tons 110
2	2013 Pan Stone®	16" x 18"	Metric Tons 100 US Tons 110
3	2013 Pan Stone®	16" x 18"	Metric Tons 100 US Tons 110
4	2013 Pan Stone®	16" x 18"	Metric Tons 100 US Tons 110
5	2013 Pan Stone®	16" x 18"	Vacuum Metric Tons 100 US Tons 110
6	2013 Pan Stone®	16" x 18"	Vacuum Metric Tons 100 US Tons 110
7	2013 Pan Stone®	16" x 18"	Vacuum Metric Tons 100 US Tons 110
8	2013 Pan Stone®	16" x 18"	Vacuum Metric Tons 100 US Tons 110
9	2015 Pan Stone®	42" x 42"	Metric Tons 600 US Tons 661

# Allegheny York Capabilities

## Injection Press



Many different plastic and elastomer type products are produced in our Injection Molding Department at Allegheny York  
Sizes available up to 20".



Machine #	Manufacturer	Tonnage	Shot Size
1	2014 Sumitomo® SE130EV	Metric Tons 130 US Tons 143	8.6 OZ
2	2015 Sumitomo® SE100EV	Metric Tons 100 US Tons 110	6.8 OZ
3	2015 Sumitomo® SE75EV	Metric Tons 75 US Tons 82	1.7 OZ
4	2014 Sumitomo® SE50EV	Metric Tons 50 US Tons 55	1.3 OZ
5	1988 Nissei®	Metric Tons 360 US Tons 396	40.24 OZ
6	Matsui® Hopper Plastic Material Drying System		

# Allegheny York Capabilities

## CNC Machines



If you have prototypes and short runs, CNC machining may be the best solution.

Allegheny York can help you manufacture products which are difficult or nearly impossible to make on conventional machinery.



Machine #	Manufacturer	Type	Material
1	2003 DMH® 600	CNC Turret Lathe with 16 Tool Capacity	Rubber and Plastic
2	2016 DMH® 400	CNC Turret Lathe with 12 Live Tool Capacity and Bar Feeder	Rubber and Plastic
3	2012 Mori Seiki® Duro Turn 2050	CNC Turret Lathe with 12 Live Tool Capacity	Plastic and Steel

## Our Balanced Manufacturing Approach

**QUALITY IS OUR FIRST PRIORITY.** Through a combination of **FLEXIBLE**, **LEAN**, and **SERVICE BASED MANUFACTURING** we aim to make the manufacturing process as efficient as possible by streamlining the manufacturing process to reduce wasted labor and materials. Our process is easily customizable to fit ever-changing market solutions. This allows us to adapt to market changes more readily than competitors keeping **QUALITY HIGH** and **COSTS LOW**.

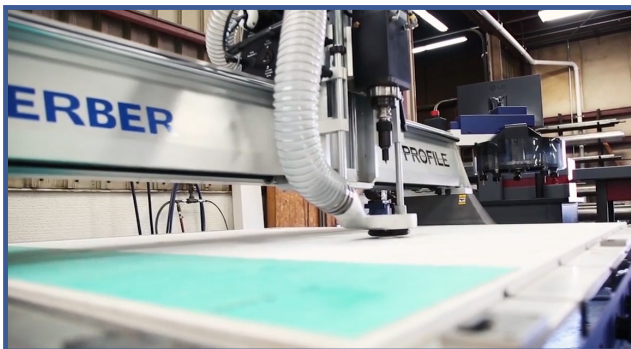
### Hands On - Attention to Detail



PAN STONE® V-13 KNIFE TRIMMER  
for the highest quality hard rubber and  
plastic components.



HUDSON® CLICKER DIETRIMMERS  
produce clean and uniform rubber parts and  
gaskets for large and small production runs.



CNC ROUTER CUTTING  
uses a thin gauge router and can be  
computer programmed to cut multiple shaped  
parts out of a single sheet as large as 4'x 8',  
eliminating the need for additional setups, maxi-  
mizing yields of parts per sheet and resulting in  
cleaner finished edges. Faster and less labor  
intensive, results in increased cost efficiency  
and higher quality parts.



## Standard Materials for Molded Parts

Compound Number	Temperature Range	Description
N701	-45/+225	70 A Durometer Nitrile
N801	-45/+225	80 A Durometer Nitrile
N901	-45/+225	90 A Durometer Nitrile
N1001	-45/+225	55 D Durometer Nitrile
V601	-25/+400	60 A Durometer Fluorocarbon Elastomer
V751	-25/+400	75 A Durometer Fluorocarbon Elastomer
V901	-25/+400	90 A Durometer Fluorocarbon Elastomer
FN101	-45/+225	High Tensile Fabric Reinforced Nitrile
FN102	-65/+225	High Tensile Fabric Reinforced Nitrile (Rock Hard Cure)
FV101	-25/+300	High Tensile Fabric Reinforced Fluorocarbon Elastomer
P901	-65/+200	90 A Durometer Polyurethane
H901	-65/+225	90 A Durometer Polyester Elastomer
H1001	-65/+275	55 D Durometer Polyester Elastomer
NY33G	-40/+275	33% Glass Reinforced Nylon Heat Stabilized (Exceptional Extrusion Resistance)
HNBR	-35/+300	Highly Saturated Nitrile

Many other materials available by request.  
Contact our Sales Office for more information.

## Standard Materials for Machined Parts

Material Code	Material Description	Other Names	Standard Color
01	Other Urethanes	PU, Polyurethane	Black, Blue, Red
02	Water Resistant Urethane	H-PU, Water PU	Red
03	NBR Rubber	NBR, Nitrile, Buna	Black
04	Highly Saturated Nitrile	HNBR, HSN	Green, Black
05	KTW EPDM	EPDM, Ethylene Propylene	Black
06	Silicone	Silicone	Natural, Clear, Blue
07	Viton®	Fluorocarbon, FKM, FPM	Brown, Black, Green
08	Delrin® / POM	POM, Acetal	White
09	Nylon	PA, Poly Amid	Natural, Black, Grey
10	Virgin Teflon®	TFE, Polytetrafluorethylene	White
11	15% / 5% Glass-Moly Filled TFE	15/5 GMTFE	Gray
12	40% Bronze Filled TFE	40% B-TFE	Brown
13	60% Bronze Filled TFE	60% B-TFE	Brown
14	25% Carbon Graphite Filled TFE	25% CG-TFE	Black
15	15% Graphite Filled TFE	15% G-TFE	Black
16	25% Carbon Only	25% Carbon Only	Black
17	15% Glass Filled Teflon®	15% GL-TFE	White
18	Low temp NBR	TNBR	Black
19	FDA-EPDM	Ethylene Propylene	
20	FDA - Viton®	Viton®, Fluorocarbon	
22	25% Glass Filled TFE	25% G-TFE	Natural, White, Blue
23	Hytrel® 40d (90A shore)	Polyester	Black
25	Hytrel® 63d	Polyester	Blue, White, Natural
26	Hytrel® 72d	Polyester	Blue, Orange, Natural
27	Hytrel® 55d	Polyester	Orange, Blue
28	Nylon 33% Glass Filled	33%GL-PA	Black
29	Carboxilated Nitrile	X-NBR	Black
30	Nylon 40% Mineral Filled	40%M-PA	White
33	Aluminum	Aluminum	Silver
34	Phenolic	Phenolic	Brown Fiber
35	Springs	Garter, Meander, spring-locks	Stainless Steel
36	Low Temp Urethane	PU, Polyurethane	Blue
38	Urethane 55 durometer	PU, Polyurethane	Yellow
39	Urethane 72 durometer	PU, Polyurethane	
40	Aqua Blue Virgin Teflon®	PTFE	Aqua Blue
41	UHMW	Low Density Polyethylene	White
42	20% Polyamide/TFE (Rulon J)	Rulon J	Brown, Gold
43	Delrin® 500AF	Teflon® Filled Acetal, POM	Brown
44	AFLAS	AFLAS	Black
45	PVDF	Polyvinylidene Fluoride	Natural
46	SAE 660 Bronze	Bronze	Bronze
48	PEEK	PolyEtherEtherKeytone	Light Brown
49	85 Duro Neoprene	Chloroprene	Black
50	Mineral Filled Teflon®		Off White