



Personnel, Plant and Equipment

Personnel and Plant

Pneumafil's Metal Products Division, established in 1975, has a plant area of 200,000 ft² in Charlotte, NC. We are well equipped to meet close tolerance industrial and military requirements in machining, fabricating, welding, assembly, and finishing. Our capabilities cover a wide spectrum of precision sheet metal and machined parts in a variety of metals, and specialty work such as prototypes, development units, and models. Our welding and finishing departments carry multiple certifications to meet our customers' needs. A complete tooling facility is maintained for design and production of new dies and fixtures.

Pneumafil's Quality System and processes are certified to ISO 9001:2000.

Equipment

Metal Cutting

- (1) Cincinnati 1/4" x 12' Shear, auto gauging, CNC control
- (1) Cincinnati 1/4" x 12' Shear, manual
- (1) Strippet Fabricator Punch, 30" throat with duplicator
- (1) Wiedematic Magnum 5000 Punch, 45 Ton, 52 station, with 2 indexing stations, 62" x 144", CNC control
- (1) Rockwell 40 ton Notcher
- (1) DoAll TF-14H universal bandsaw
- (1) DoAll 305A automatic bandsaw
- (1) DoAll Model C916 cutoff saw

Forming

- (1) Cincinnati 135 ton Break, 3/16" x 10', CNC control
- (2) Pacific 230 ton Break, 5/16" x 10', CNC Fabri-Former III with Hammerle tooling break
- (1) Cincinnati 400 ton Break, 1/2" X 12'
- (1) Verson 45 ton Break, 16 Ga. x 5.5'
- (1) Wysong 12 Ga. Roller, 4'

Drilling

- (1) 6-station overhead drilling and tapping unit, 18' x 32' x 12'
- (1) Snow tapping machine, 0.00" to 0.38"
- (8) Heavy-duty drill presses, multiple spindle arrangement
- (3) Flexible arm drilling and tapping machines

Machine Shop

- (5) Alliant Series I mills, vertical with digital readout
- (1) Anayak production mill, horizontal or vertical
- (1) DoAll 3012 vertical band saw
- (2) Drill presses
- (1) Acer AGS-1632 Surface Grinder
- (1) Sunnen honing machining
- (1) Toyo Seiki Tool Setter

CNC Machine Centers

- (1) Fadal Vertical 907-1, 3 axis, 60" x 30" x 25"
- (1) Fadal Vertical 907-1, 3 axis, 80" x 30" x 25"
- (1) Kitamura Vertical Bridge Center, 3 axis, 80" x 42" x 27"
- (1) Mitsui Seiki HR6A Horizontal, 4 axis, 51" x 39" x 33"
- (1) Mitsui Seiki HS5A Horizontal, 4 axis, 33" x 27" x 29"
- (1) Mori Seiki SV-500, 4 axis, 38" x 20" x 20"
- (1) Mori Seiki SV-50, 4 axis, 31" x 20" x 20"
- (1) Kiwa Vertical 4L, 3 axis, 31" x 18" x 18"
- (1) Kiwa Vertical 1310 Mustang, 4 axis, 51" x 21" x 21"
- (1) Mitsubishi Vertical MPV55, 3 axis 39" x 21" x 24"

Turning Centers

- (1) Mori Seiki SL25 turning center with barfeed
- (1) Mazak CNC Quick Turn 15
- (1) Harrison M350
- (1) Hardinge Tool Room Lathe w/ digital readout
- (1) Hardinge Secondary Lathe
- (1) Harrison lathe

Welding

Certified processes:

AWS D1.1	MIL-STD-2219
AWS D1.3	MIL-STD-248
AWS D1.6	MIL-STD-278
AWS D17.1	MIL-W-6858 (resistance)

(12) TIG Welding machines

- (4) Miller Syncrowave 300 Amp
- (3) Miller Syncrowave 350 Amp
- (4) Miller Dynasty 300 TIG Runners
- (1) Lincoln Squarewave TIG 355

Continued overleaf

- (10) MIG Welding machines
 - (2) – ESAB 450I (pulse or standard)
 - (2) – ESAB 250 MIGmaster
 - (1) – Miller Pulsestar 450 (pulse or standard)
 - (1) – Miller CP 200
 - (2) – Miller Invision 450
 - (2) – Miller CP 300
- (3) Portable Plasma Cutters
- (15) Universal welding tables

Spot Welding

- (2) Sciaky 250 KVA Spotwelder
Chemistry / metallurgy capability for testing, developing, and maintaining spot welding qualification requirements
- (1) Tinus-Olsen tensile tester
- (1) Beuhler polisher
- (2) Ballentine Model 3205B Micro-Ohm meters

Finishing

- (1) Paint prep room, 1600 ft², with dust filters
- (1) Manual touch-up paint booth, 325 ft²
- (1) Manual Powder Coat Booth, 200 ft² with (3) Nordson High Flow Versa Coat Fan Modules and Sure Coat Powder applicator gun
- (1) Sweco Vibro-Finishing mill FHD-7L8
- (1) Timesaver finishing machine, 43"
- (1) Steam cleaning booth, 200 ft² with 1500 PSI jet spray
- (2) Large air-filtered grinding rooms
- (1) Pangborn Sandblast booth, 170 ft²
- (1) Cyclone Bead Blaster
- (1) EUTECIC metalizing facility (MIL-STD-2138A M6874)
- (1) Binks spray booth, 14' x 10' x 18' with 150' overhead conveyor and filtered air makeup unit
- (2) Despatch convection oven, 500° F, 9' x 9' x 12'
- (1) 24,000 CFM gas fired air makeup unit
 - Film thickness and gloss measurement units

Facilities for:

- Iron phosphating (TT-C-490, type II and IV)
- Conversion coating (MIL-C-5541 C1 and C3)
- Lubricant film coating

Local certified sources for:

- | | |
|-------------------|-----------------------|
| • Anodizing | • Zinc phosphating |
| • Cadmium plating | TT-C-490 type I and V |
| • Zinc plating | • Conversion coat |
| • Passivation | (MIL-C-554I-Clear) |

Assembly

- (1) Dake hydraulic press, 12-ton
- (1) Despatch convection oven, 600° F, 8' x 8' x 7'
- (1) Hager hydraulic press
- (1) Clean room for adhesive bonding, 12' x 15'
- (1) Water flow and pressure test facility, 235 psi, 10 gpm
- (1) Auto-cert AS-7.5 press (PEM type fasteners)
- (1) U.S. Tool compression riveter
 - Experienced in assembly of mechanical, adhesive bonded, and electrical units to MIL standards

Inspection

- (1) Brown & Sharpe Validator Series 7300 CMM, 72" X x 48" Y x 32" Z, using PC-DMIS software
- (1) Mitutoyo B504B CMM, 20" X x 16" Y x 12" Z
- (1) Micro-Vu Optical Comparator

NC Programming

- G-ZERO Conversional CAM
- GibbsCam CNC Machining Interface
- Merry Mechanization SMP/IS Sheetmetal Layout

Production Control

- IBM AS-400 computer, Oracle ERP software

Engineering

- | | |
|-----------------------------|-----------------|
| • AutoCAD | Also available: |
| • Autodesk® Inventor | • SolidWorks |
| • DXF and Pro E translation | • Pro/ENGINEER |
| | • FEA |

* All software latest release

Quality

- ISO 9001:2000 certified
- Certified Quality Engineer (CQE)
- AWS Certified Welding Inspectors (CWI)
- Level II VT Inspector by the American Society for Nondestructive Testing
- Personnel qualified per ASTM-E-1417 (NDT) Dye Penetrant
- Six Sigma Black Belt

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For more information, visit www.pneumafil.com