

# **Company Overview**

MIL-I-45208 Approved

CSA B51 Certified

2019

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# **CFC** Facilities

Chase Filters and Components is headquartered in Hampton, VA with a satellite office in Chicago, IL. Each facility includes offices with the Hampton facility totaling 21,000 sq./ft. in warehouse space.





Founded: 1966 Founder: J. Chase Fielding

For over 50 years, The Fielding Company has been specializing in marketing, technical sales, and product development for numerous clients with the goal of facilitating the ultimate approval and procurement process for such products within the DOD and other government agencies.

Over the years The Fielding Company has developed strong contacts in many areas of the DOD. Through these relationships, FC is able to work with DOD engineers and architects to find problem areas and to create new market areas.

"The key to our success has been to strategically seek out companies that are the best in their respective fields, as well as complimentary to our existing principles"



#### Founded: 2000 Founder: Fred Fielding & J. Ron Fielding

Chase Defense Partners was started in 2000 as a distributor to help service the products and services that were driven by the Fielding Company's efforts.

Chase Supply specializes in products, testing, assembly, and manufacturing with emphasis towards the DOD and marine industry.

We supply a variety of leading brand components with superb quality. Our goal is to act as a distributorship with a rep philosophy, and to align ourselves with companies that are the best in their fields, while providing a small business partner.

We pride ourselves on discovering new technologies and helping facilitate those advancements into the DOD.



Founded: 2006 Founders: Fred Fielding , J. Ron Fielding & David Weeda

- The Fielding Company had always been involved with various filter companies. We worked to qualify products on various DOD applications and specifications. These included Hydraulics, O2, air, etc.
- In 2006, Chase Filters and Components was established as a stand alone company to pursue the manufacturing of filters
- Our first objective was to establish a standard for oxygen filters which would provide the basis for safe, reliable usage in 100% O2, high pressure applications.
- CFC now offers a full line of industrial hydraulic and pneumatic filters, strainers and coalescers along with a variety of interchange elements.

# **CFC Product Offerings**

- Hydraulic / Pneumatic Filter
- Strainers
- Coalescing Filters
- High Pressure Oxygen Filters
- Portable Filtration
- Custom Filters
- Interchange Elements

**CFC** Product Offerings

# **Hydraulic & Pneumatic Filters**









Spin-on Filters





250 Max PSI

120 GPM

Various Porting Options Available Various Micron Ratings Available Bypass And Visual Available

10 Series

11 Series

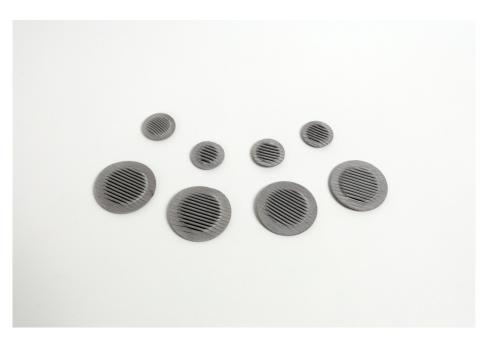
12 <u>Series</u>

13 <u>Series</u>



## Filter Discs

6,000 PSI Collapse Pressure 50 PSID 304/316 Stainless Steel Various Micron Ratings Available



15 <u>Series</u>

Mini In-line Filters 6,000 PSI Burst Pressure 24,000 PSI 4 GPM / 110 SCFM  $1/8" - \frac{3}{4}"$  MNPT or FNPT  $1/8'' - \frac{1}{2}''$  MS33656 or MS33649 **304 Stainless Steel** Carious Micron Ratings Available









In Line Filters

Up to 30,000 PSI

40 GPM / 1,750 SCFM

Available in 303, 316, and 17-4PH SS

1/8" to 3/4" MNPT or FNPT

MS33656 and MS33649-4 thru -16

High Pressure Ports

Various micron ratings available





31 <u>Series</u>

Mini Tee Filter

Up to 10,000 PSI 7.5 GPM / 210 SCFM Available in 316, and 17-4PH SS 1/8" to <sup>1</sup>⁄2" MNPT or FNPT MS33649-4 thru -8

Various micron ratings available



41 <u>Series</u>

Tee Type Filter

Up to **60,000** PSI 50 GPM / 4,000 SCFM Aluminum and Stainless Construction 1/4" to 1 1/2" FNPT MS33649-4 thru -24 <sup>1</sup>/<sub>4</sub>" to <sup>3</sup>/<sub>4</sub>" Medium Pressure Ports Various Micron Ratings Available

51 <u>Series</u> 52 <u>Series</u> 56 <u>Series</u>



CFC

## Strainers

Up to 750 PSI (Basket)

Up to 6170 PSI ("Y")

Up to 740 PSI (Duplex)

CV Up to 10,900

Multiple Materials Available

Up to 30" Flange

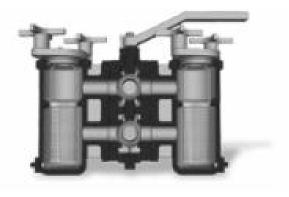
Various Micron Ratings Available

Also Available: Butterfly Valves, Ball Valves,

Check Valves and Custom Baskets







#### CFC Product Offerings – Pneumatic

## Coalescing

Up to 5,700 PSI

Flows to 4466 SCFM

Multiple Materials Available

Up to 2" Ports

Various Micron Ratings Available





#### CFC Product Offerings – High Pressure Oxygen Filters

# **Oxygen Filters**

- Innovators and leaders in the filtration of both low and high pressure oxygen.
- •After going through a third party hazard analysis on a Navy oxygen cart, it became apparent there was a need for low cost, high quality  $O_2$  filters
- Chase Filters is servicing this niche through:
  - Extensive research
  - Extensive testing
  - Brass/Bronze filters
  - Distribution



#### Technical Features – Oxygen Filters

•Inline and Tee Filters

•All oxygen filters have passed ASTM G175 Phase II testing.

•Uses safe, reliable side seal design.

•4 to 1 burst pressure ratios on all housings.

•Sintered Bronze Elements

•Utilizing a thicker, non standard element wall.

•Proprietary sintered powder material to ensure it passes ASTM fire testing and the prevention of slag from going downstream in case of an event.

•Patented , fluted design, to increase dirt holding capacity and decrease pressure drop. Pat US82411386132

### Testing – Oxygen Filters

• CFC solicited the help of Wendell Hull and Associates (WHA), who are world renowned oxygen forensics testing experts, in setting up the criteria for filter testing. WH stated that no one had requested this testing criteria before.

- Our designs were based on :
  - Prior individual material threshold testing by NASA
  - Material thickness



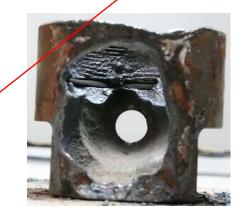
- WH decided on a modified ASTM G 175 (regulator) test
  - Chase submitted five samples of each design for testing plus a baseline stainless element
  - The brass filters were tested at 5,000 PSI  $\rm O_2$  and the stainless filters were tested at 3,000 PSI  $\rm O_2$  .

The following are the testing results.....

#### Before & After – Stainless Steel Tee Type Filter – 3,000 PSI









- Stainless Steel Element Consumed in 250 msec
- O-rings Consumed
- Outlet Port Blown Out

#### Before & After – Brass Tee Type Filter – 5,000 PSI

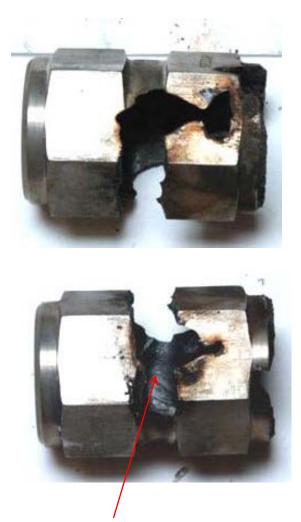




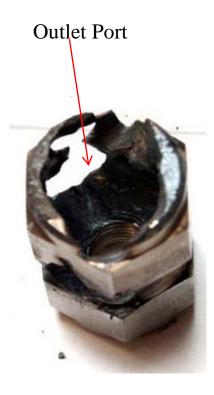
- Able to unscrew filter head from bowl
- O-rings still intact
- Minor melting on element
- Ignition event contained within the filter housing

#### Before & After – Stainless Steel Inline Filter – 3,000 PSI



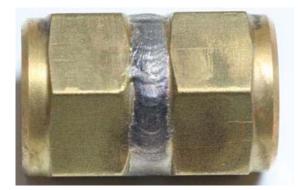


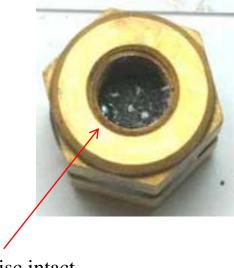
Filter disc consumed



#### Before & After – Brass Inline Filter – 5,000 PSI







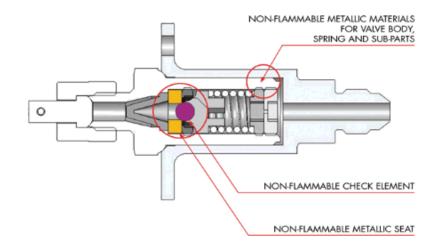
Filter disc intact

#### Chase Filter Company – Oxygen Filters



Brass <u>Filters</u>

#### Chase Filter Company – Oxycheck



The OXYCHECK system components are made entirely from materials that are non-flammable in oxygen at pressures equal to or grater than the maximum allowable working pressure. This essentially removes the Fuel Leg of the Fire Triangle and greatly reduces both the risk of a fire occurring and the consequences of an unanticipated ignition. This rigorous engineering process results in oxygen system components with an unprecedented level of fire safety.

OXYCHECK's patent-pending flow control technology enables a high-quality seal and exceptional performance without any flammable and/or non-metallic seating or sealing materials, thus providing:

- Exceptional levels of fire safety in pressurized/concentrated oxygen
- Excellent performance in extreme, corrosive and/or oxidizing environments

OXYCHECK advanced manufacturing capabilities and worldwide network of technical experts ensures the provision of first class components and service for any oxygen system application.

### Applications and Customers to Date for Oxygen Filters

#### Applications

- •Navy Diving
  - Oxygen Boosters
  - Recompression Chambers
  - Oxygen Manifold (ORCA)
  - SCBA System
- •Navy Aircraft Ground Support
  - New Oxygen Charging Cart
    - Inlet Filter
    - Combined Desiccant and Outlet Filter
- •Coast Guard
  - •Auto Cascade System
- •Commercial
  - •Laser Cutting Machines
  - •Cylinder Filling Stations
  - •Gas Analyzers
  - •Oxygen Manifolds
  - •Oxygen Delivery Systems on Commercial Airlines
- •Mining Industry
  - •Mine Rescue Chamber
  - •Portable Respirator

#### **Customers**

- US Navy
- US Coast Guard
- NEDU
- Boeing
- Department of Defense
- Ft. Bragg Special Forces
- Paragon Space Technologies
- CSE Corporation
- AVOX (Zodiac Group)
- Moog
- Carleton Technologies (Cobham)
- Lockheed
- Praxair
- Meggitt Safety Systems
- Naval Research Labs
- Wendell Hull and Associates
- Naval Surface Warfare
- Orbital Sciences
- Tescom
- Weldcoa
- Messer Cutting Systems
- Mine Shield
- Swagelok
- General Dynamics

### CFC Product Offerings – Filter Systems

## **Portable Filtration Series**

- •Dual Stage Filtration
- •Filter By-Pass
- •Customizable
- •Sample Ports
- •Multiple Micron Ratings Available
- •Easy Transfer of clean oil
- •Reduces Machine Wear, Downtime and Repair Costs



CFC Product Offerings – Custom Filters and Interchange Elements

# **Custom Filters**

• Available Upon Request



• Available Upon Request





#### CFC Hall of Fame















• CFC Hall of Fame – Where it all started



