We partner with our customers in a variety of ways to provide a customized solution where one is needed. If you have a problem application, we take it on to solve the issue at hand. Our staff engineers work with our distributors and OEMs to supply the solution they need to control the fluids in their system.

We understand the importance of having all the parts you need in working order to ensure your customer’s quality products are delivered in a timely manner. Providing high quality fluid control products on time is essential to our customer’s success. We take partnerships with OEMs seriously because we know that our customer’s brands and image depend on the equipment they make.

We utilize innovative materials in order to solve different problems experienced in the field. Whether we start from scratch on a design or utilize our large portfolio of products, we make short work of any problem. We are constantly evolving our processes to make the products we supply that much better.
APPLICATIONS & MARKETS
We Have Solenoid Valves That Are Used For...

Car Wash
Soap and wax metering, low pressure function controls such as foam brush, tire cleaner, and presoak.

Water Quality
UV, ozone, DI, RO systems. NSF-61 and “No Lead” Products from 1/8” to 2” NPT.

Misting
High pressure system components along with feed and dump valves.

Food & Beverage
Processing, preparation, dispensing: from high temperature oils and steam to blast chillers.

Energy
Fuels, gases and liquids for prime and back-up generation systems.

Health Care
Gas management, water filtration, steam, and other line fluids for sterilization and vacuum applications.

Special Effects
Air, water, gases, high pressure, CO₂, combustibles. We have the control valves to ensure the show goes on.

Process Temperature Control
Oil, steam, hot water, glycol and CO₂. We offer valves that can handle fluids from cryogenics to 400 °F.

Cryogenics
Liquid and gaseous CO₂, liquid nitrogen, argon, oxygen for cleaning operations, bakery, food processing, and special FX.

...And Much More!

gcvalves.com
800-828-0484
<table>
<thead>
<tr>
<th>Series</th>
<th>Media</th>
<th>Connection</th>
<th>Function</th>
<th>Orifice Range</th>
<th>Pressure Range</th>
<th>Max Fluid Temp</th>
<th>Cv Range</th>
<th>Approvals</th>
<th>Valve Body</th>
<th>Seal Materials</th>
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<tbody>
<tr>
<td>S20</td>
<td>3/8”-1 1/2” NPT</td>
<td>NC, NO</td>
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<td>4.3-23</td>
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<td>S31</td>
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<td>UL CE</td>
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<td>3-way</td>
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<td>UL CE</td>
<td>Nitrile, FKM, EPDM, PTFE</td>
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</table>

**KEY**

**MEDIA**
- Water
- Air & neutral gases
- Aggressive media
- Light Oil
- Steam
- Slightly Aggressive media

**FUNCTION**
- NC – 2-way Normally Closed
- NO – 2-way Normally Open
- 3-way – Normally Closed, Normally Open, Diverting, Universal, or Free Exhaust

**VALVE BODY**
- Brass
- Nylon
- Stainless Steel
- PVC
- Lead-Free Brass
<table>
<thead>
<tr>
<th>Series</th>
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<th>Cv Range</th>
<th>Approvals</th>
<th>Valve Body</th>
<th>Seal Materials</th>
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<td>7-225 PSI</td>
<td>295 ° F</td>
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<td>8-200 PSI</td>
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<td>4.5 - 12</td>
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<td>3/8&quot;</td>
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<td>FKM, PTFE</td>
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<td>4-200 PSI</td>
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<td>4.5-48</td>
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</table>
MANIFOLDS

GC Valves offers solenoid valve manifolds and assemblies for dispensing and sampling industrial and scientific gases and liquids.

**Industrial Solenoid Valve Manifolds**
- Standard body material: Brass, Stainless Steel
- Optional materials: Aluminum, PVC, other thermoplastics, plating available
- Uses proven S30 and S40 operators and valve components
- Typical pipe sizes include 1/8” to 3/4” NPT
- Reverse manifolds and normally open operator options available

**High Performance Solenoid Valve Manifolds**
- Standard body material: Brass, Stainless Steel
- Optional materials: Aluminum, PVC, other thermoplastics, plating available
- Uses proven SC4 and SC9 operators and valve components
- Typical pipe sizes include 1/8” to 3/8” NPT
- Reverse manifolds and metering options available

A complete line of general purpose solenoid manifolds intended for a wide variety of applications at standard pressures and flow rates. Our manifold valves can be rated up to 2400 PSI and can be made to withstand the harshest fluid media. Our world class designs are proven to cycle up to 5 million cycles.

<table>
<thead>
<tr>
<th>Series</th>
<th>Media</th>
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<th>Function</th>
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<th>Max Fluid Temp</th>
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<td>6.7</td>
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<td>Nitrile, FKM, EPDM</td>
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</tr>
</tbody>
</table>
CUSTOM SOLUTIONS

Our engineering and manufacturing team produces over 1.5 million solenoid valves annually. We have a history of tailoring solutions for OEMs with demanding applications. Whether you need to design around temperature, pressure, chemical compatibility, flow, or reliability, GC Valves can provide a fluid control solution to meet your needs.

Software generated fluid flow analysis showing internal pressures throughout the valve to help meet OEM design specifications

Our world-class engineering team and product portfolio allow for custom solutions in a wide variety of applications. The valves shown here are a small portion of our offering and just a hint of what we can provide with regards to custom valves. Our long history of collaborating with OEMs gives us the experience and comfort level needed to solve difficult design challenges. We pride ourselves at making cost-effective custom solutions, understanding the demands of manufacturers, and providing our products on time, tested, and of the highest quality.

We use 3-D modeling software to bring our concepts to reality and cut down on development time. Two custom pieces are shown above, one 3-D modeled the other in production form.
DECADES OF INNOVATION & EXCELLENCE

1930s
- General Controls is founded in Glendale, California by combustion controls pioneers Jack and Bill Ray.

1940s
- General Controls expands production to support the World War II manufacturing effort.

1950s
- General Controls sees sustained growth in General Purpose Solenoid Valve product lines.

1960s
- ITT acquires General Controls.

1970s
- Konan Electric becomes North American ITT-licensee for General Purpose Solenoid Valve product line. Components For Automation, Inc. (CFA) is formed to design and manufacture miniature solenoid valves and solenoid valve manifolds.

1980s
- ITT-General Controls leads solenoid valve product evolution and innovation.

1990s
- GC Valves is formed, a new facility opens in Charlotte, NC. In-house machining capability is expanded to meet growing demand for custom designs; CFA growth is fueled by unique solenoid valve manifolds.

2000s
- DEMA acquires GC Valves and Components For Automation in 2016. Manufacturing is consolidated in Charlotte, NC and the united companies become GC Valves, LLC.

DEMA Engineering Company is a leading supplier of chemical dispensing systems, fluid control devices and solenoid valves, strainers, pumps and injectors for virtually any industrial, institutional and agricultural markets. Our systems address the housekeeping, food service, food processing, warewash and laundry markets plus many other industries where precise metering of fluids is critical. DEMA industrial products answer the needs of the car wash, food & beverage, dairy, agriculture, and irrigation marketplaces. DEMA uses state of the art venturi technology, peristaltic pumps and water driven proportional pumps for superior dilution control in chemical and fluid metering.

DEMELogisticsCompany is a leading supplier of chemical dispensing systems, fluid control devices and solenoid valves, strainers, pumps and injectors for virtually any industrial, institutional and agricultural markets. Our systems address the housekeeping, food service, food processing, warewash and laundry markets plus many other industries where precise metering of fluids is critical. DEMA industrial products answer the needs of the car wash, food & beverage, dairy, agriculture, and irrigation marketplaces. DEMA uses state of the art venturi technology, peristaltic pumps and water driven proportional pumps for superior dilution control in chemical and fluid metering.