

Cavalier's passion for precision manufacturing of



Products & Services

- Manufacturing for Assembly Components
- Machining for Engineer Design Studs
- Hex, Square, Slotted, and Socket Drive Products
- Forging with Automation Accuracy
- Quick Response for Emergency Turnarounds
- Documented Quality Control
- Global Shipping
- CNC Metal Cutting
- CNC Machining
- CNC Hot Forging
- CNC Threading
- CNC Low Stress Marking
- Vibratory Finishing
- Positive Metal Identification
- Variable Thread Gage Inspection
- Digital Read-out Recording
- Documented Quality Control



Cavalier Industrial Specialties got its start in 1980 as Cavalier Virginia. It has since grown into Cavalier, the company with

By Sarah Schroer, Editor, Pump Engineer

A history of success

With the familiar "CAV" mark labelling their products, Cavalier is easily recognizable today by industry veterans as a quality detailed product manufacturer. The history of the company begins in 1980 when they were first known as Cavalier Bolt and Nut, Inc. They started out manufacturing industrial studs and supplied stud bolts for the petrochemical and oil and gas industries and quickly expanded their manufacturing of continuous thread studs for other industries and for general purpose fastener applications.

An early milestone for the company took place in 1986, when they found the need to expand beyond their already existing two warehouses. Along with the expansion to a larger facility, the company purchased additional threading and manufacturing equipment to increase their machining capabilities to manufacture threads on parts other than industrial studs and continued to grow the company with value-added services.

In the late 1990s, the company focused on new markets to serve and changed their operating name to Cavalier Industrial Specialties. The name changed reflecting the company's new focus for manufacturing more sophisticated and custom oriented customer quality level products. With these new products and services, the company has continually promoted growth through expansions in raw material

quality detailed fasteners



er Bolt and Nut, Inc. in Virginia Beach, the "Passion for Precision".



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inventories and equipment. Today, Cavalier has two service locations; one is located in Houston, Texas and the second is in Virginia Beach, Virginia.

Top quality team to deliver quality products

Cavalier believes that the heart of their company is with their people. The Cavalier Team includes both a skilled, quality-driven production staff and a management team that are dedicated to quality in action throughout the company. And with an experienced, knowledgeable, and friendly sales staff that has a total of 128 years of combined experience to boost, customers can be assured that an experienced professional will be able to help them with their needs. Everyone from management, sales, production, and shipping works as a team with a commitment to provide the best possible service, including quick delivery times. Cavalier prides itself with being able to provide their products and services for those “impossible” situations on a 24-7 basis.

Passion for precision

Since the late 1990's, all of Cavalier's products have been subject to a thorough Quality Assurance program in accordance with MIL-Q-9858A. This extra accreditation helped open doors to the military and government markets for providing services for both standard and specialty engineered fasteners. Along with military and government markets, Cavalier services the pump

and valve, power generation, turbo machinery, shipyard and marine industries, along with ASME pressure vessel and nuclear requirements.

As Cavalier identified new markets, the company increased manufacturing capabilities in Houston. The location grew with the manufacturing of machine parts, assembly components and engineered studs that are demanded by the pump and fluid controlled industries with their custom engineered and quality assurance specifications. Based on customer requirements, quality documentation and procedures were expanded from standard Certification Material Test Reports to full traceability of each line item, beginning with the melt of material through finished product testing. All testing requirements are completed at A2LA, accredited laboratories. Cavalier has also successfully achieved its ISO 9001: 2008 accreditation from the Steel Related Industries Registrar to fully service its new customer base.

QUICK FACTS: Cavalier Industrial Specialties

Name: Cavalier Industrial Specialties
Telephone Numbers: 757.427.6405 (Virginia)
 713.983.0055 (Texas)
Website: www.GoCAV.com
Locations: Virginia Beach, Virginia
 Houston, Texas



Special parts manufactured for specification satisfaction

Cavalier's production staff is skilled and quality-driven in the processes of cut threading, roll threading, and single point threading to produce industrial threads on bolts and studs as well as on parts other than fasteners. Their expertise includes parts such as castings, forgings, machined parts, pipe, and rebar. The company is accustomed to manufacturing threads on a variety of materials including alloy steels, stainless steels, nonferrous metals, and carbon steels. Additionally, Cavalier supports industry by offering its customers their secondary operations such as metal cutting, chamfering, metal marking, deburring, and vibratory finishing.

Metal cutting services

Cavalier's metal cutting service is supported by ten automated band saws and two CNC cold saws that produce precision finishes and close tolerances on cut pieces. Cavalier's shearing capabilities for supplying blank pins for manufacturing range from 1/4" to 1-1/2" in diameter. Standard rolled threads, annular forms, knurled surfaces and fins on tubes are some of the shapes that Cavalier roll forms on cylindrical surfaces. The thru-feed capacity ranges from 1/4" through 3". In-feed capacity continues through 3" diameter.

Assembly components for the extremes

Cavalier is also well-equipped to handle assembly components for the extremes. CNC lathes, CNC milling machines, and conventional lathes are used to perform drilling, grooving, milling, slotting, threading, and turning operations on metal parts and components. Cavalier produces fasteners requiring characteristics such as dog points, radius points, and machine finished ends that are suited



Cavalier Industrial Specialties offers manufactured and custom-designed studs, bolts,

for identification marking. Cavalier manufactures long length bolts from 1/4" through 3/4" diameter in lengths up to 40" long in a variety of material grades in standard or custom designed head styles.

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Thread Inspection

Cavalier has two system for thread inspection: System 21 and system 22.

System 21: In this standard system the thread Go & No Go functionality is verified by gages Go Ring/Go Plug, No Go Ring/No Go Plug, and a micrometer is used to measure the major diameter of thread. Cavalier carries a whole range of Go & No Go Ring gages for external thread inspection and Go & No Go Plug gages for internal thread inspection.



Houston, Texas.



Virginia Beach, Virginia.





ts, and fasteners across a number of industries.

System 22: This system covers all the requirements in 21 and in addition requires the threads to be measured for pitch diameter, lead, flank angle, minor diameter, and root profile using tri-rolls



and optical comparator. Cavalier is equipped with tri-rolls and optical comparator to provide the customers with System 22 requirements.

Advanced technology for measuring external threads

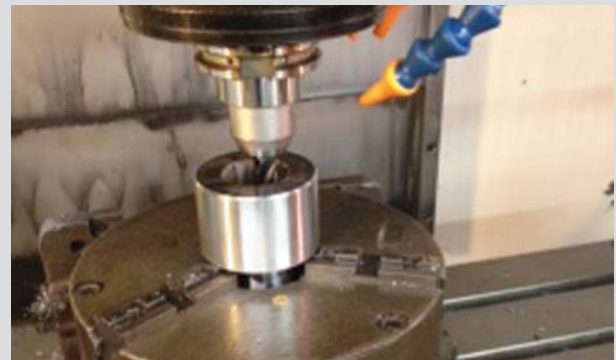
When customers require precision tolerances with precise measurements and high accuracy then Cavalier's advanced inspection system is utilized which uses laser technology as a means to measure the thread attributes such as thread count, thread pitch, pitch diameter, major diameter, functional diameter, lead deviation, root radius, flank, and angle.



Quality Assurance Program

Cavalier has a documented inspection and testing department that follows all federal and military specifications:

- Has an inspection system.
- Uses thread measurement system.
- Has a gauge calibration system.
- Inspection processes can incorporate either System 21 or System 22 inspection methods both internal and external.



Quality in Action

Cavalier believes in providing Quality Management System (QMS) the consistent improvement of processes and products. Cavalier's products boasts the following accreditations and qualifications:

- QMS to ISO 9001:2008 - ANSI/ISO/ASQ Q9001-2008 by the SRI Quality System Registrar.
- Pressure Equipment Directive (PED) 97/23/EC 7/2, Annex I, Paragraph 4.3.
- Military / Defense and Nuclear industries are manufactured under the current QMS: MIL-Q-9858, MIL-I-45208A, and MIL-C-45662A.
- DFARS requirement as it relates to Specialty Metals.
- Full material traceability to the original melting mill.
- Complete chemical and mechanical certifications.
- Testing requirements are completed at A2LA, accredited laboratories.
- Positive Material Identification (PMI) and Laser Dimension Inspections are available.

