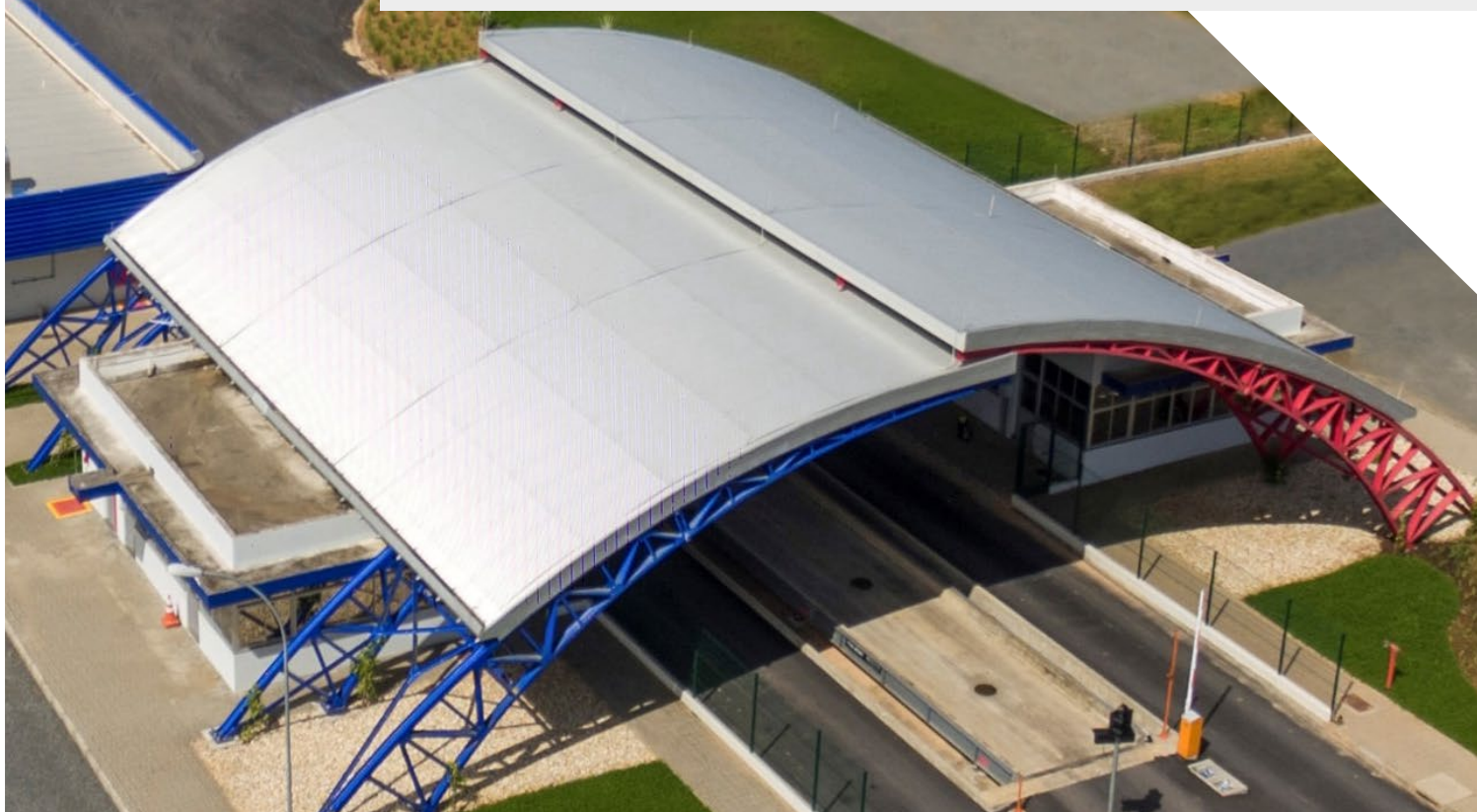




SANTA CATARINA FASTENER FACTORY

ABOUT US

FCF - Fábrica Catarinense de Fixadores, founded in 2012, is part of the H. Carlos Schneider Group and is located within Ciser's industrial park, in Araquari/SC. Specialized in manufacturing customized items according to customers and international standards, it aims to meet the most diverse application features, always seeking to innovate and offer complete solutions in fasteners.



PROCESS



**HOT
FORGING**



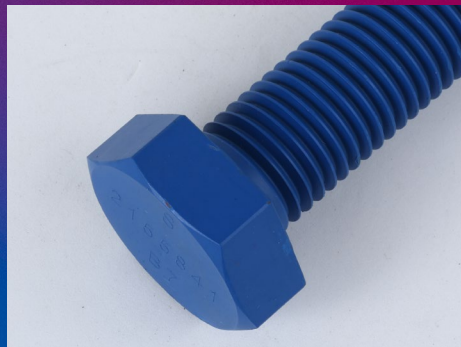
**THREAD
ROLLING**



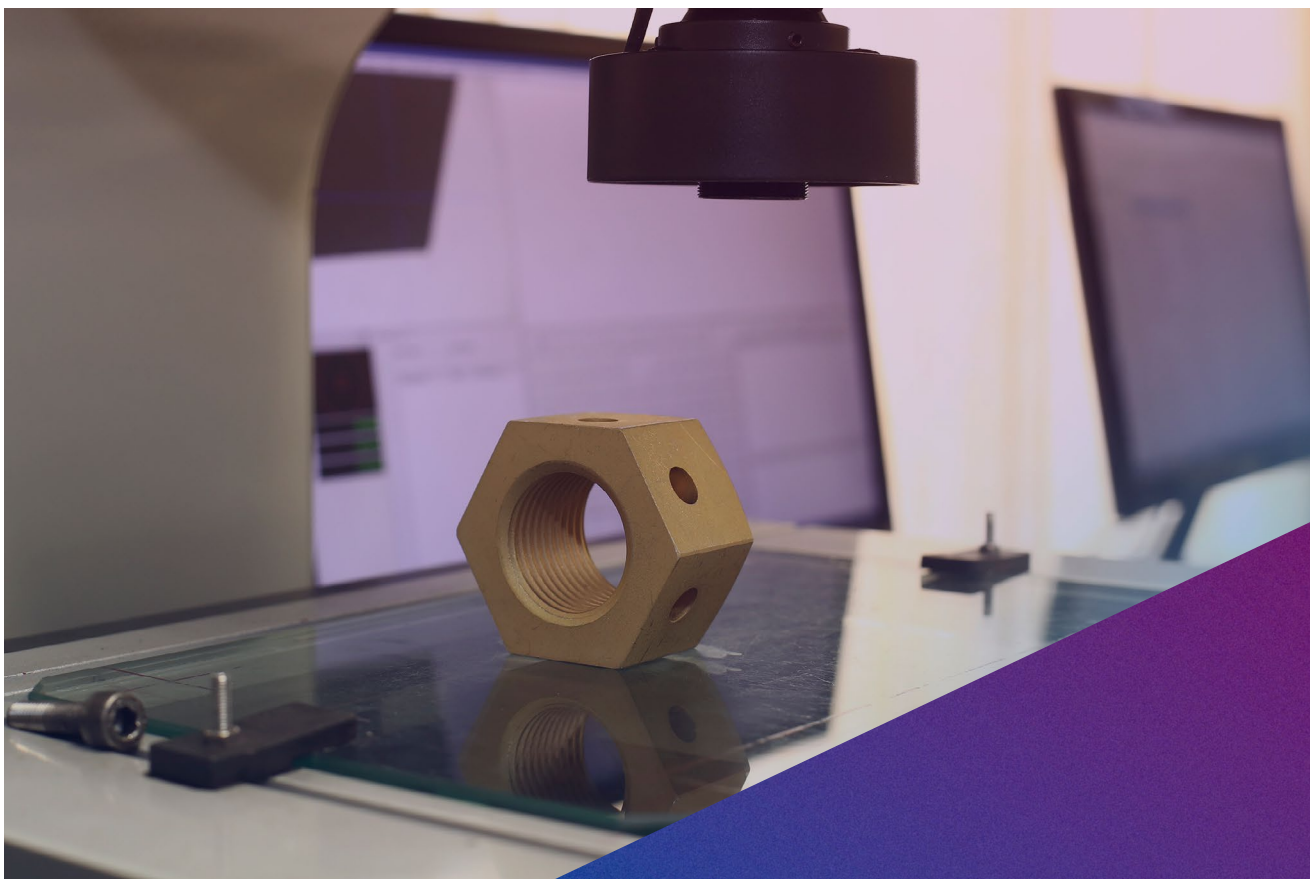
MACHINING



**HEAT
TREATMENT**



COATINGS



TESTS

Tensile, Metallography, Magnetic Particle, Micrography, Macrography, Proof Load, Surface Hardness, Microhardness, Salt Spray, Impact (Charpy), Chemical Composition and Ultrasound.

TRACEABILITY

The traceability applied by FCF comprises the entire production chain. Traceability can be carried out for each manufacturing lot by recording the Material / Resistance Class, Manufacturer and Production Order in each item of the lot. That way, we can trace it from the raw material, throughout the processes involved during manufacturing and even after delivery to the customer.

COATINGS

- Bichromated cadmium
- Yellow nickel zinc
- Xylan
- PTFE Teflon
- Zinc Flake Coating
- Zinc phosphate
- Electrolytic Zinc
- Hot-dip Galvanizing
- Other coatings upon prior request



PRODUCTS



HEX BOLTS



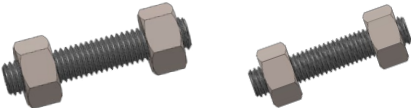
HEX SOCKET HEAD
CAP SCREWS



12 POINTS
BOLTS



NUTS



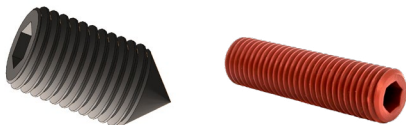
STUD BOLTS



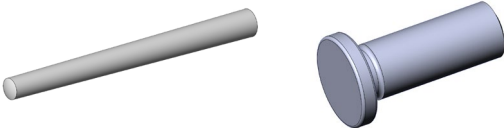
ANCHOR
BOLTS



WASHERS



SOCKET SET
SCREWS



PIN

SEGMENTS



Oil and Gas

We supply high mechanical and corrosion resistant fasteners for application in Christmas trees, manifolds, umbilicals, flexible line connectors, risers valves, metal structures, control panels among others such as: bolts, stud bolts, nuts, or fasteners according to the customer's design in different resistance classes such as, for example, L7, L43, L7M, B7, B7M, B16, 7, B8M Class 1 and 2, Inconel, Monel and Superduplex. We have the following certifications: API 20E-0069, API 20F-0034 and API Q1.

Power Generation

For the Power Generation segment, we supply fasteners according to international standards or design, in different resistance classes such as, for example, classes 10.9, 8.8, 10.

- Wind Energy: high-resistance fasteners for application in towers, blades, wind turbines, foundations among others.
- Hydropower: fasteners with high mechanical and corrosion resistance for application in turbines generators, valves, pumps, etc.
- Thermal Energy: fasteners with high mechanical and corrosion resistance for application in steam turbines, heat exchangers, thermal power plants, compressors, reducers among others.





Mining and Steel Mill

For the Mining sector, we supply high-resistance fasteners for application in ball mills, vibrating screens, crushers, reclaimers, separators, pumps, valves, etc. We manufacture bolts, stud bolts, nuts, and anchor bolts according to designs, in classes 12.9 10.9, 8.8, 10, 8, among others.



Railroad

High-resistance bolts, pins, nuts and spacers are produced to meet the various applications in locomotives, bogies, railcars among other machinery in this segment.

Civil Construction

FCF produces a range of fasteners applied in the most diverse civil construction sectors. High-resistance structural bolts and anchor bolts, with traceability and guaranteed quality.





Pulp and Paper

For the pulp and paper sector, we offer solutions in fasteners with high mechanical corrosion resistance for application in pumps, rolls, cylinders, boilers, presses, dryers among others such as: bolts, stud bolts, nuts or fasteners according to customer designs in classes 10.9, 8.8, 10, 8, A4-70, A4-80, B8M class 1 and 2, stainless steels, Superduplex, etc.

Sugar and Alcohol

High-resistance fasteners for the sugarcane ethanol industry, complete solutions for application in mill flanges, reducers, planetary gears among others such as: bolts, stud bolts, nuts, anchor bolts or according to the customer's design in classes 12.9, 10.9, 8.8, 10, 8, etc.



TECHNICAL STANDARDS FOR MATERIALS

TECHNICAL STANDARDS	TYPE AND CLASS
ASTM A 193 ASTM A 194 ASTM A 320	B7 - B7M - B16 2H - 2HM - 6 - 7 - 7M - 8 - 8M - 8T - 16 L7 - L7M - B8 - B8M - L43
ASTM A 325 ASTM A 564 ASTM A 453	TYPE 1 T630 - T631 GR.660 CLASS A, B, C E D
ASTM A 490 SAE J 429 SAE J 995	TYPE 1 GR 5 - GR 8 GR 5 - GR 8
ISO 898-1 ISO 898-2 API 20E / 20F ET-3000.00-1500-251-PEK-001 ET-3000.00-1500-251-PAZ-001	8.8 - 10.9 - 12.9 8 - 10 - 12 BSL1 - BSL2 - BSL3 Gr.7 - L7 - L43 Gr.7 - L7
COPPER AND BRASS ALUMINUM / TITANIUM DUPLEX / SUPERDUPLEX	
INCONEL / MONEL / HASTELLOY INOX 304 - 304L - 316 - 316L - 321 - 410 - 420 OTHER MATERIALS AVAILABLE UPON REQUEST	

QUALITY

Our tests are performed on all product lots, evaluating customer's specifications, applicable standards, fastener class and dimensions of the project. All items are shipped along with the quality report of all manufacturing processes and traceability.

CERTIFICATIONS

FCF offers guaranteed quality, with API certifications in manufacturing for the Oil and Gas segment and ISO 9001 in the organization's management system.



PARTNERSHIP



H. CARLOS SCHNEIDER GROUP

H. Carlos Schneider Group's history begins with the foundation of Casa do Aço, in 1881. The small business sold imported products and exported native products, especially honey, fruits and dried flowers. With only four employees and a daily production of 2,500, the company began manufacturing bolts and nuts in 1959. Acceptance of the products and the growth pace of the domestic market stimulated the creation, in December 1968, of an independent company Cia. Industrial H. Carlos Schneider, later named Ciser. Currently, the group comprises seven companies in several segments: Ciser, Ciser Automotive, Fábrica Catarinense de Fixadores S.A, Hacasa Empreendimentos Imobiliários, Intercargo Transportes, RBE Energia and Agropecuária Parati. In addition, it also has an entity that organizes and strengthens social actions developed by the ITHIO group.



CONTACT US

orcamentos@fcfixadores.com.br

+55 (47) 3441-3896

Estrada Geral Rio do Morro, 9277 - Itinga
Araquari - Santa Catarina - Brazil



www.fcfixadores.com.br