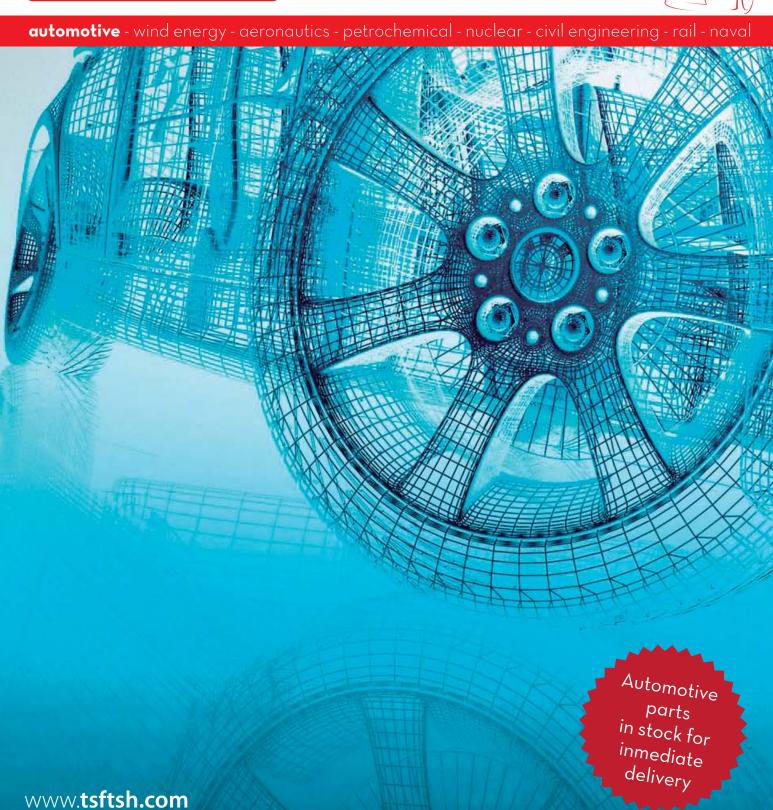




global fastening solutions **AUTOMOTIVE**





Company



History

TSF, founded in June 1996, is a company dedicated to the marketing of hardware and fasteners, as well as its engineering, calculation and integral logistics.

In the beginning, the main activity was focused on the marketing of automotive hardware.

Later in 2004, begins its journey in the renewable energy sector, combining the two activities with expertise engineering to calculate bolted joints and an effective integral logistics service for our customers materials.

At present we supply our products and services in over 20 countries within and outside the EU in diverse logistics systems.





Services

Location, sellection and follow-up of both national an international suppliers.

Management of purchases, wharehouses, security stocks...

Delivery of goods according to each customers requirement: Entrega de materiales según requerimiento del cliente JIT, Kanban, según programación.

Analysis of needs and improvement studies.

Our large level of stock enables us to give an immediate response to our customers needs.

Cold Forming



Machining
Automotive parts production under ISO TS-16949



- We supply first and second level suppliers of the Automotive sector.
- TSF has available a large and sorted range of stored items as: welded, rivet and security nuts, bushes, screws, bolts... in different sizes for all the assemblers: VW, Ford, Opel, PSA, Renault, Nissan, Seat, Volvo, Toyota, Audi, Mercedes...
- We supply under customers requirements, in different logistical systems such as JIT, Kanban, KLT, material en depósito etc.
- All our initial samples are delivered with the documentation required by each customer.
- All our items are manufactured either under standard ISO-TS/16949, o according the specific standards from each assebler: QS, VDA, EAFQ... and validated by our internal homologated laboratory A2LA o external certification.
- We comply with the REACH regulation.
- On the basis of our computer system and traceability, every product can be supplied and managed according to our customers needs.

Manufacturing

TSF has in its workshop various high end productive systems for the manufacturing of parts per revolution, mainly parts threaded by rolling. We also have metrology equipments to ensure customer requirements in process, as well as in final product.

In TSF we define stable and reliable processes to always ensure the quality of our products. We are constantly integrating new technologies in each process to be ahead of the current quality standards.



Materials

Our certified raw material comes from steelmakers recognized worldwide. This fact allow us to fulfill with our products any international material specifications as ISO, DIN, SAE, JIS, BS and many others.

Forging

In either cold or hot, we count with long time experience and wide variety of machinery, which enables us to define the most effective equipments to produce the requested items in the most efficient way.





Machining

For the manufacture of special parts or carrying out second operations of high accuracy, with this process integrated in TSF, we are capable of offering a quick response in service to our customers.

Heat treatment

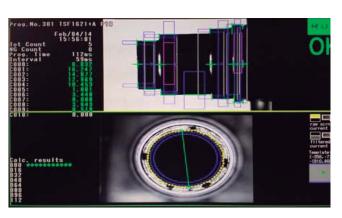
Conveyor or static systems are defined in relation to the type of items to be treated, being always aware of the criticallity of this process to ensure its correct application.





Thread rolling

We are able to provide the highest requirements on special parts by thread rolling even after heat treatment, reaching up to 100 mm of diameter under this requirement.



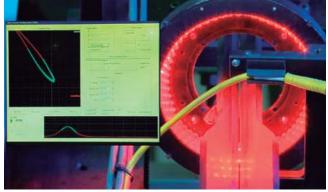
Inspection

In between our available processes, we count with diverse sorting systems to provide our customers under their request an extra assurance in the materials to be supplied. We count with optical lens inspection equipments for



Coating

Our long development in the automotive field has instructed us in the most advanced technologies for coating applications. This expertise is also applied to the different kind of finishings required by our customers in their different sectors.



dimensional check and Eddy current systems to guarantee the optimal metalographic structure on safety and high responsability products.

Logistics





Storage

TSF has its facilities fully palletized in a warehouse of 5.600m with capacity for 15,000 pallets.

Our computer system allows us to manage the stocks of our customers in an individualice way, both in our facilities and in their own due to the type of identification and traceability implemented by TSF.

Kits, preassemblies and assemblies

TSF in addition of being an expert in supply of materials according to different methods as JIT, Kanban, as scheduled, and so on. Kits can also be supplied for different chain assemblies and sub-assemblies as well as preparing Kits with other items than those provided by TSF keeping and documenting the full traceability of the various components that compose them.

Integrated materials management

We carry out needs analysis and improvement studies with the client to define and particularize the most viable solutions to specific problems.

Integrated Management of materials and suppliers, whether of TSF or indicated by the customer.

Location, selection and monitoring of providers nationally and internationally. We offer our clients extensive experience and network of contacts that give them effective and time saving in the identification of valid providers.

Management of purchases, warehouse, agreed security stock, packaging, even payment to suppliers proposed by the customer.

The preparation of materials to the needs of client companies, ensuring agreed quality standards and certification as initial samples and homologations.

Quality

TSF incorporates quality management as an essential part of its strategy and development. So in the year of its founding was certified ISO 9002:1994 and at present is certified ISO 9001:2008 and ISO TS-16949. Our practice of quality is included in the products, services, environmental policy and labor risks prevention.

Due to the implementation of quality policy we guarantee that manufacturing of our products and our value process meet the specifications of our customers.

Our environmental commitment is to reduce the impact on the environment of our products, services and operations, seeking for TSF activity as that of our suppliers and customers to be more sustainable.





Traceability





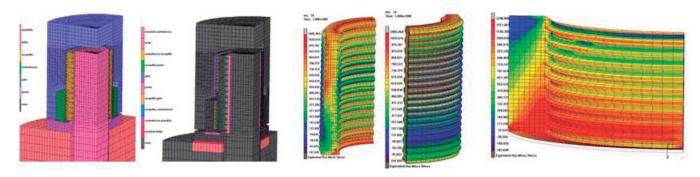
We offer our integral traceability service to companies that require high levels of quality as well as to all products under customer specification, bringing benefits from raw material to finished product.

An optimal management of integral traceability on materials provides significant cost and resources savings, locating and identifying any lot or piece when necessary.

All materials are traced and documented from raw materials, manufacturing, heat treatment, surface coatings and packed up their delivery to customers, who from in different shapes to choose from, will be given all the documentation regarding to his materials. "Link to photos of pallets and nameplates"

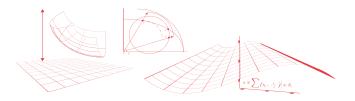
The traceability of all the different item batches to their raw material are designed on the delivery notes, invoices, packaging and labeling indistinctly.

Engineering



Calculation and development of bolted joints for automotive, aeolian, construction, equipment, etc. For the calculation of the unions, the engineering of TSF has a powerful simulation tool using finite elements. The program used is the prestigious MSC.MARC.

The customer is offered the solution with our design and geometry and the certification of such unions in government agencies.









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We supply to the following brands:





















































automotive - wind energy - aeronautics - petrochemical - nuclear - civil engineering - rail - naval