

TOSI F.lli

Produzione Minuterie Metalliche

SIRIT

AIR BRAKE FITTINGS

RAILWAY DIVISION

Production of metal turned parts

- Tosi was funded in **1964** as manufacturer of bar turned parts
- **1981** – Tosi bought MMV, production of metal turned parts
- **1990** – Transfer to the new Industrial Zone



- **2000** - Sirit (Air Brake Fittings) acquisition. Doubling of the premises
- **2002** - All the activities have moved to Varallo Sesia
- **2006** - Extension of the application field of the Quality Certification
- **2006** - Installation of photovoltaic panels



Production of metal turned parts

- **2006** – MMV additional new premises



MINUTERIA MECCANICA VALSESIANA S.R.L.



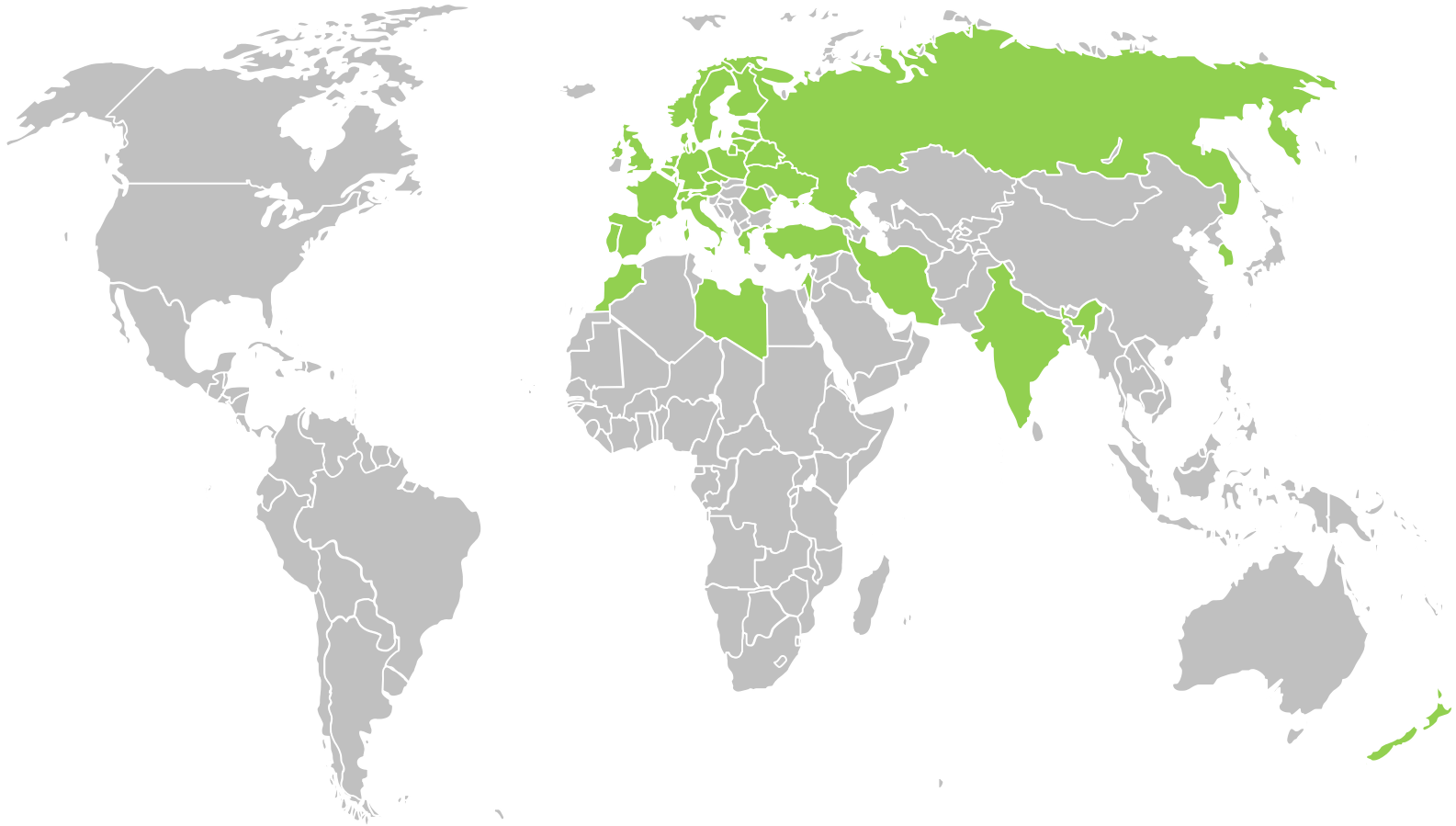
Air Brake Fittings

- **2008** Strong penetretation in the Eastern European Markets with an increase of Eastern European customers thanks also to a warehouse and assembly line facility in Poland .

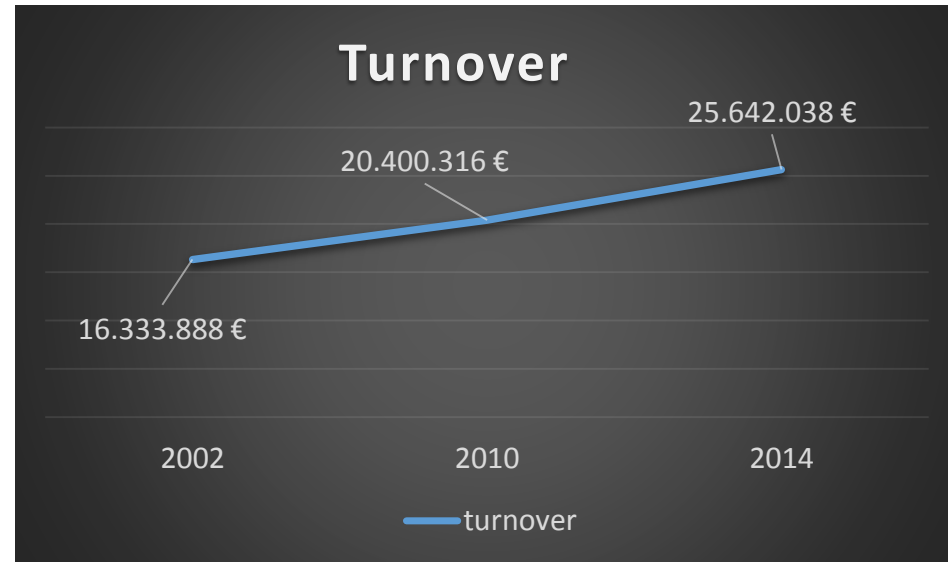


Russian and Eastern European market

- **2010** - Development of a new range of product for railway division
- **2013** - ISO/TS 16949:2009



- The company works on 2 surfaces of 12.000 sqm
- N° 122 employees (+ 38 in MMV + 3 in Poland)
- Turnover 2014 - 25.642.038 € 45,8% Italy , 54,2% Export
- 41% Automotive 59% other sectors

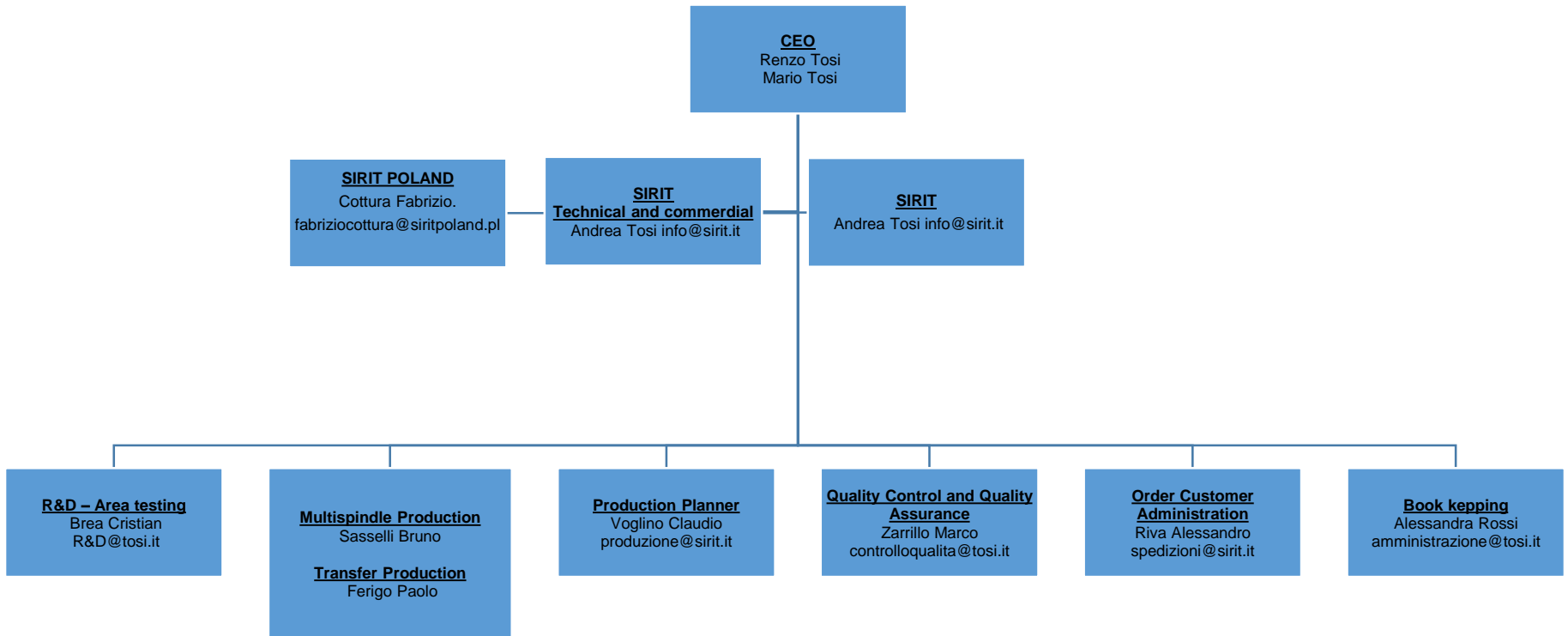


Brass consumption 2015 per day
~ 20 tons

Production per day
~ 500.000 pieces

- N° 61 machines for bar-turning from $\varnothing 6$ to $\varnothing 65$ among multi-spindle, bar-transfer and CNC lathes
- N° 3 transfer machines for the forged-part turning





- Our company has been working with a Certified Quality System since 1997
- In March 2013 our company achieved Automotive Certification ISO/TS



CERTIFICATE OF REGISTRATION

Attestato/Certificate **SGQ 26 D**

Si certifica che il Sistema di Gestione della Qualità di:
We hereby certify that the Quality Management System operated by:

TOSI F.LLI S.R.L.
Via Monte Rosa, 1 - Z.I. - Fraz. Roccapietra | 13019 VARALLO (VC) Italy

è conforme alla norma UNI EN ISO 9001:2008
is in compliance with UNI EN ISO 9001:2008 standard

Settore EA | EA Code: 17

per i seguenti tipi di prodotti – processi – servizi:
concerning the following kinds of products – processes – services:

Progettazione e fabbricazione di raccordi per impianti frenanti mediante tornitura, assemblaggi manuali e automatici per i settori industriale, ferroviario e automotive. Fabbricazione di minuteria in ottone, acciaio automatico e rame mediante tornitura per applicazioni industriali.
Design and manufacturing of pipe fittings for braking systems by means of turning, manual and automatic assembly for the industrial, rail and automotive sector. Manufacturing of brass, free cutting steel and copper turned precision parts for industrial applications.
Разработка и производство фитингов для тормозных систем посредством обточки, ручной и автоматической сборки для промышленной, железнодорожной и автомобильной отраслей. Производство высокоточных деталей из латуни, лессообрабатываемой (автоматной) стали и меди посредством обточки для промышленного использования.

Il presente certificato è soggetto al rispetto delle prescrizioni contrattuali sottoscritte dall'Organizzazione.
This certificate is subject to the Contract Conditions undersigned by the Organization.

Luogo e data emissione corrente <i>Current issue place and date</i>	Scadenza il <i>Expiration date</i>	Prima emissione <i>Originally certified</i>
Torino, 22/05/2013	21/05/2016	10/01/1997





Mario Battaglia
Regional Director – EMEA

Samer Chaouk
Head of Policy, Risk and Certification



CERTIFICATE OF REGISTRATION

Si certifica che | *This is to certify that*

TOSI F.LLI S.R.L.
Via Monte Rosa, 1 - Z.I. - Fraz. Roccapietra | 13019 VARALLO (VC) Italy

ha organizzato un SISTEMA DI GESTIONE PER LA QUALITÀ
operates a QUALITY MANAGEMENT SYSTEM

in conformità alla specifica tecnica ISO/TS 16949:2009
which complies with the requirements of ISO/TS 16949:2009

per il seguente scopo | *for the following scope*

Progettazione e fabbricazione di raccordi per impianti frenanti mediante tornitura, assemblaggi manuali e automatici. Fabbricazione di minuteria in ottone, acciaio automatico e rame mediante tornitura.
Design and manufacturing of pipe fittings for braking systems by means of turning, manual and automatic assembly. Manufacturing of brass, free cutting steel and copper turned precision parts.
Разработка и производство фитингов для тормозных систем посредством обточки, ручной и автоматической сборки. Производство высокоточных деталей из латуни, лессообрабатываемой (автоматной) стали и меди посредством обточки.

Attestato Certificate	TS 318
IATF Database No	0163239
Emissione Issued	22/05/2013
Scadenza Expires	21/05/2016






Mario Battaglia
Regional Director – EMEA

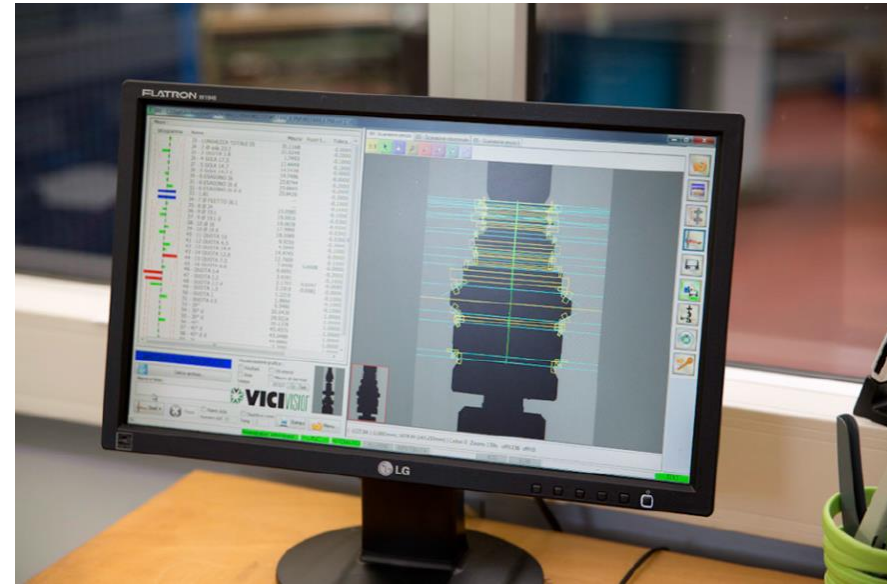
Samer Chaouk
Head of Policy, Risk and Certification

La validità del presente certificato è subordinata a sorveglianza periodica annuale ed al riesame completo del sistema con periodicità biennale. The validity of this certificate is subject to a scheduled surveillance to be carried out once a year, as well as to a complete reassessment of the system every three years.



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SIRIT

Società Italiana Raccordi Industriali Torino
Italian Company for Industrial Fittings in Turin

- 1968 - Sirit was funded in Grugliasco
- 1981 - Beginning of a sale program regarding DIN 2353 fittings
- 1985 - The design and production of the push-in fittings begins

SIRIT

Sirit product type

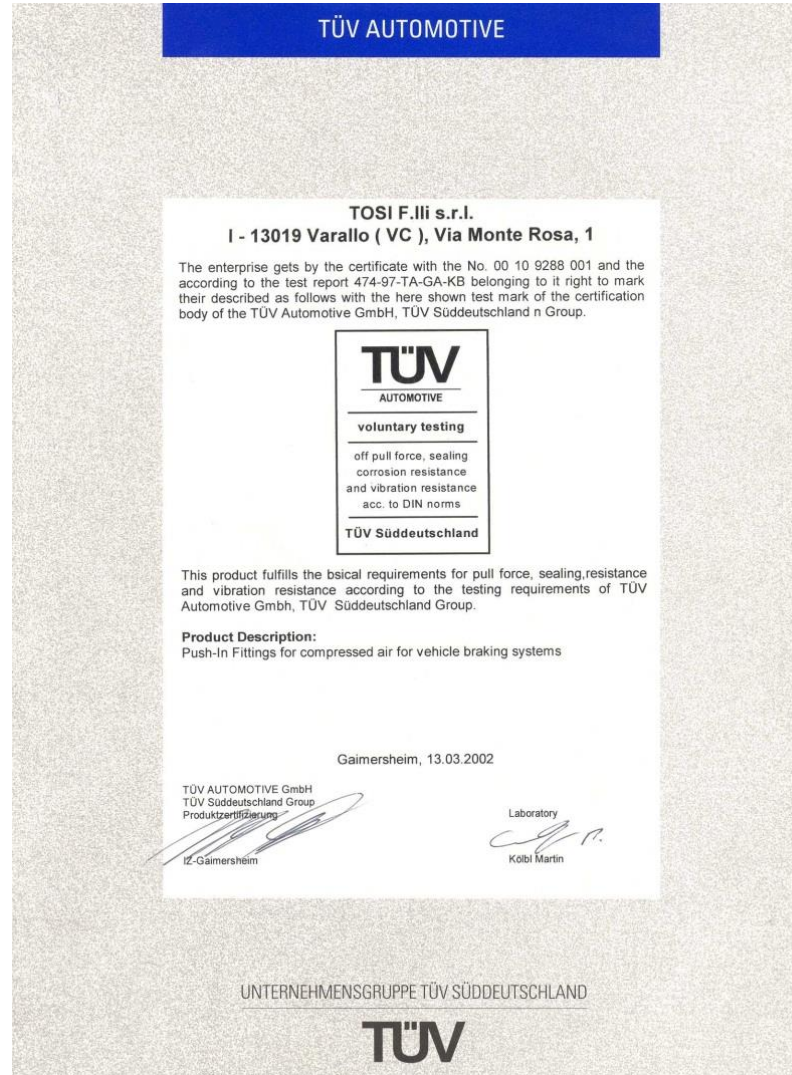
- Cutting-ring fittings



- Push-in fittings



Since 1997 Sirit fitting has had the TÜV Product Certification





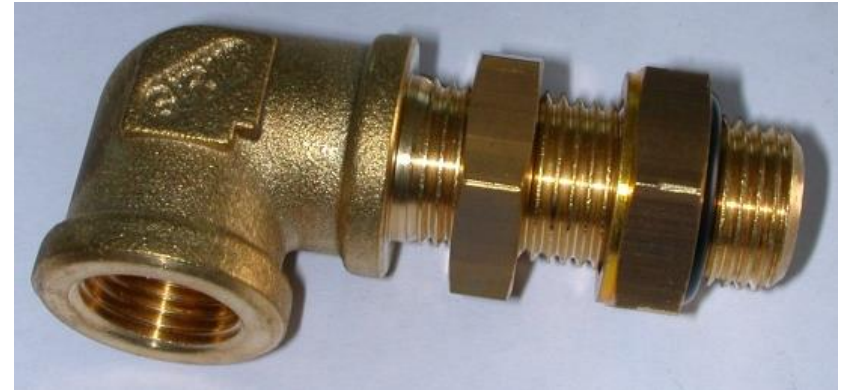
Straight terminal

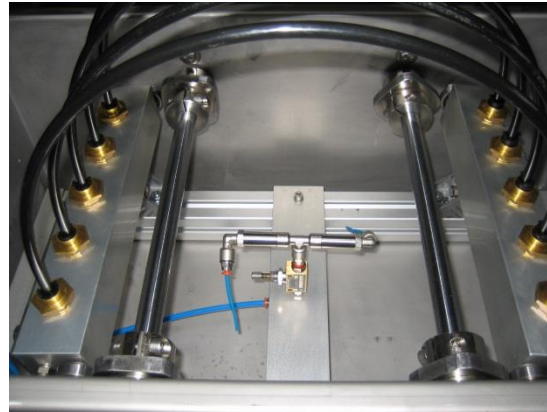
Pivoted adaptor

Swivel adaptor



- Manufacturing of special articles in small quantities according to Customer's request:

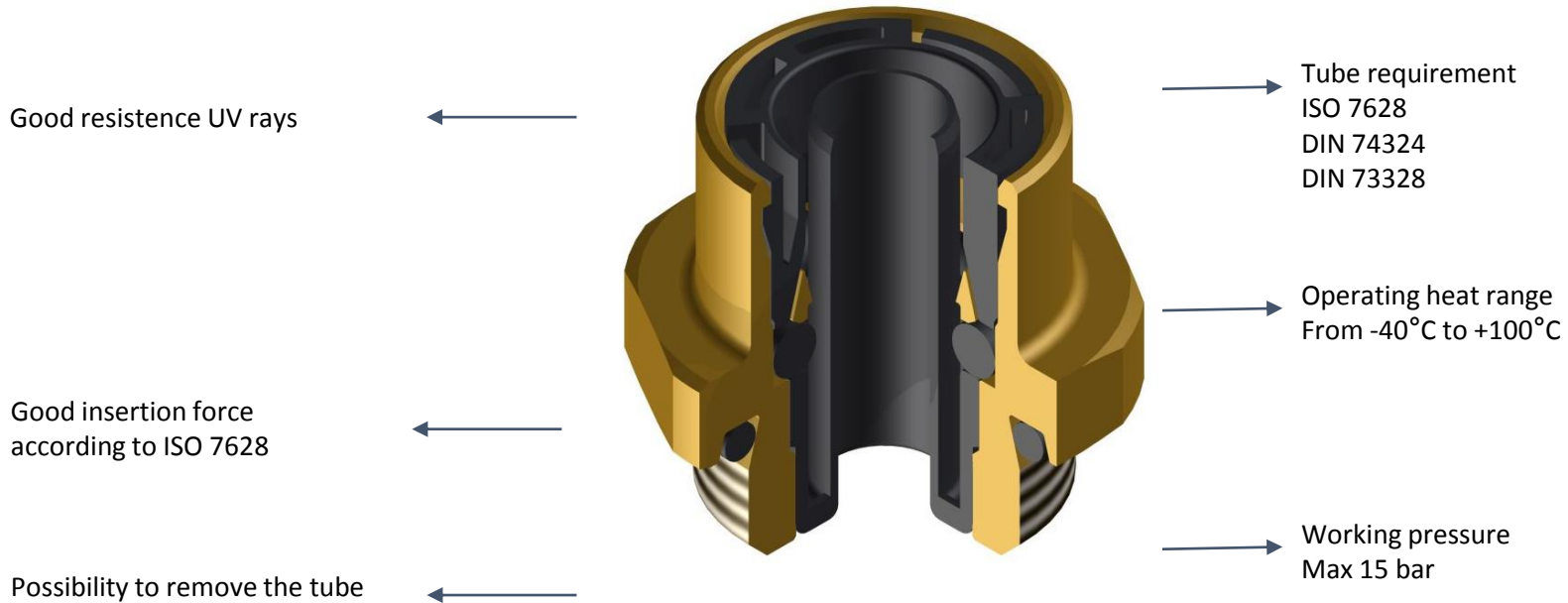




SIRIT - RTC

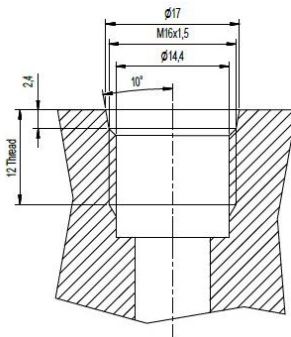




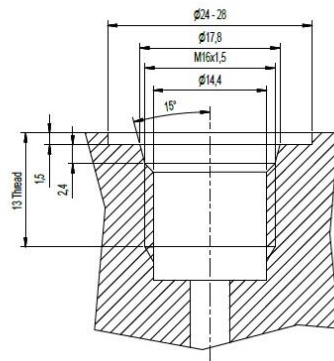




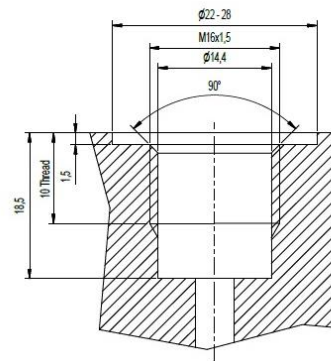
Voss seat



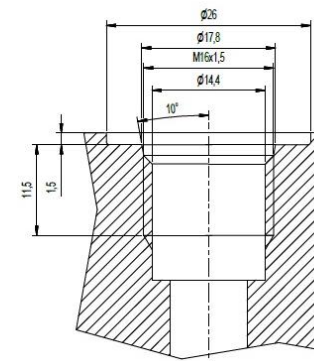
ISO 6149 seat

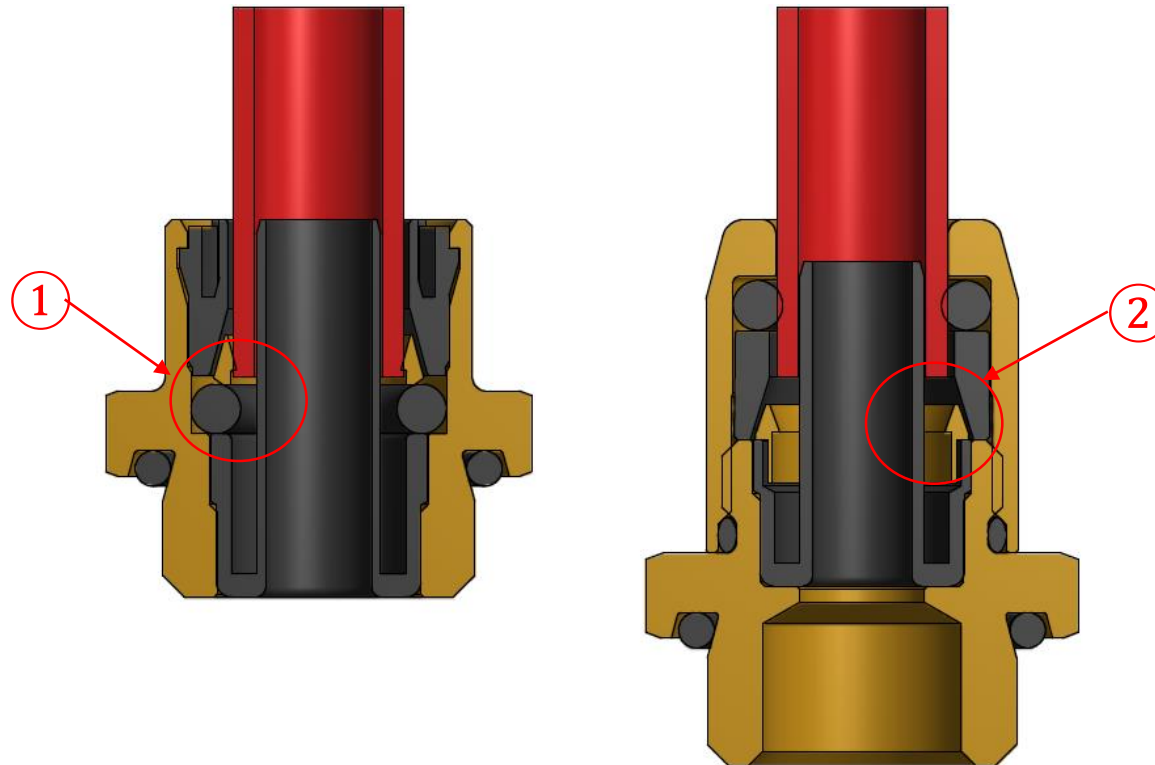


DIN 3852 seat



ISO 4039-2 seat





① → In this situation (RTC) the tube has not reached the correct depth of coupling but it is retained anyway inside the fitting. A leakage points out this situation to the operator.

② → In this situation (800) the tube has not reached the correct depth of coupling so it is not retained into the fitting.

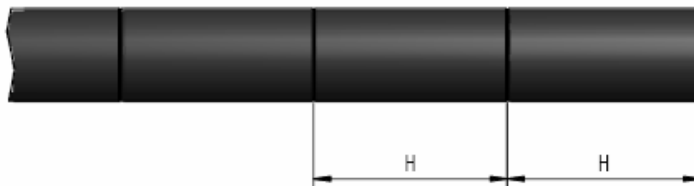
POTENTIAL DANGER SITUATION!!!

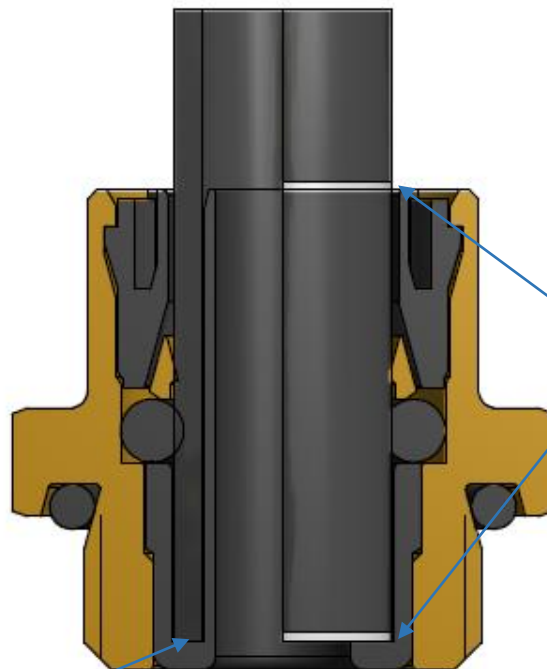


To guarantee right depth of coupling, SIRIT suggests to use marked tube with depth of coupling and follow assembling instructions.



The tube must be cut at correct angle with max. tolerance of 15° so we suggest to use the tube cutter shown in our catalogue. «H» distance between two marks is the right depth of coupling.

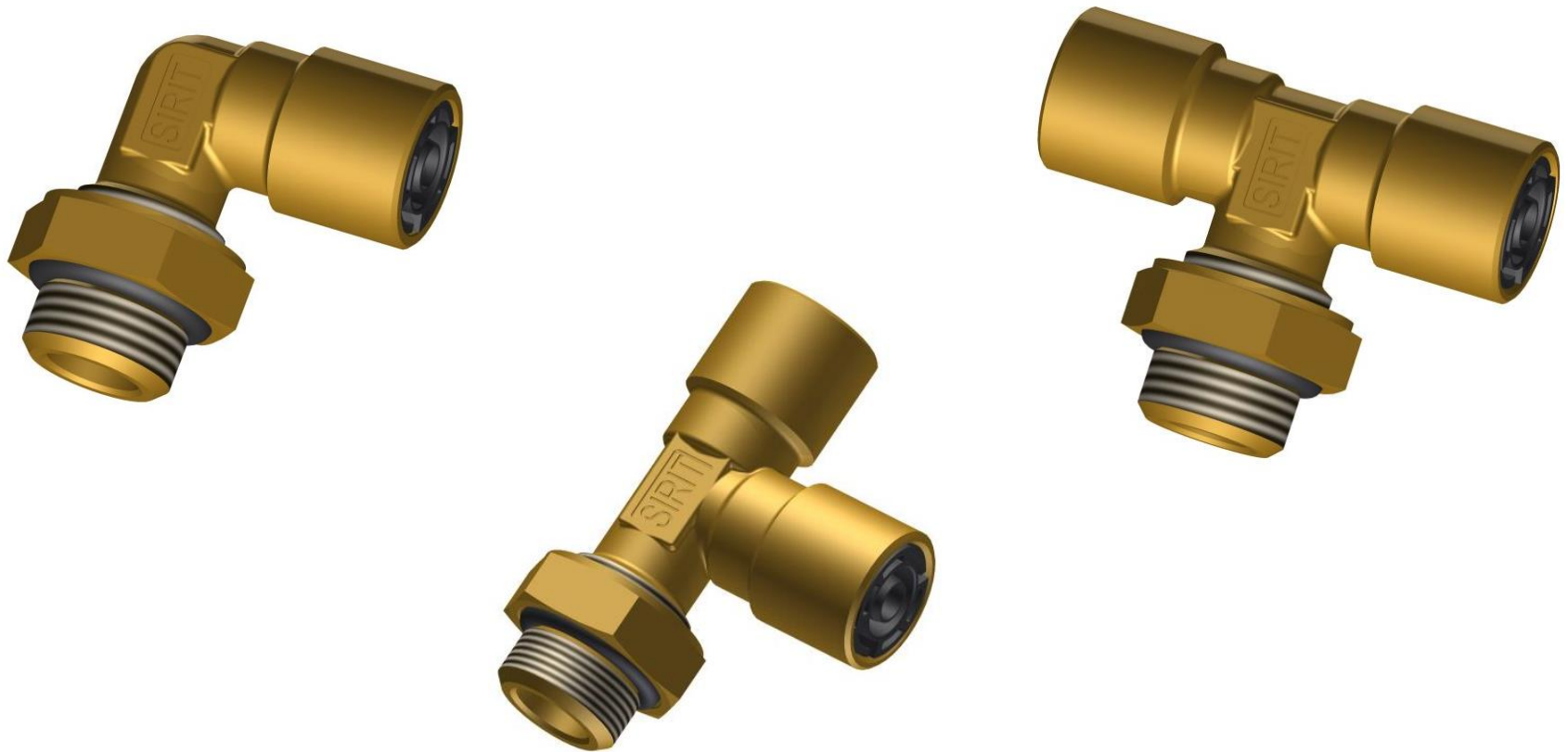




Cut the tube as close as possible to the mark. Next mark shown on the tube, after assembling, must arrive very close to the fitting as shown on presentation.

For the correct working of the fitting, it's fundamental that the tube is pushed to the depth of the connection as prescribed in the catalogue.

The RTC pivoted stud reduces the overall dimension



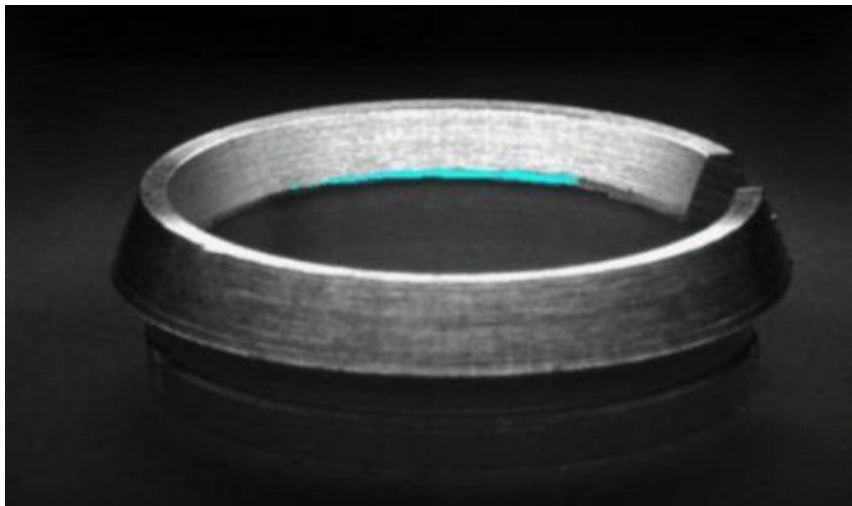
More configuration flexibility



All clamping rings are controlled 100% by DOSS machine.

The controls are:

- Internal diameter
- External diameter of the clamp
- Total length of the clamp
- Size of clamping ring
- Presence of tooth on all diameter

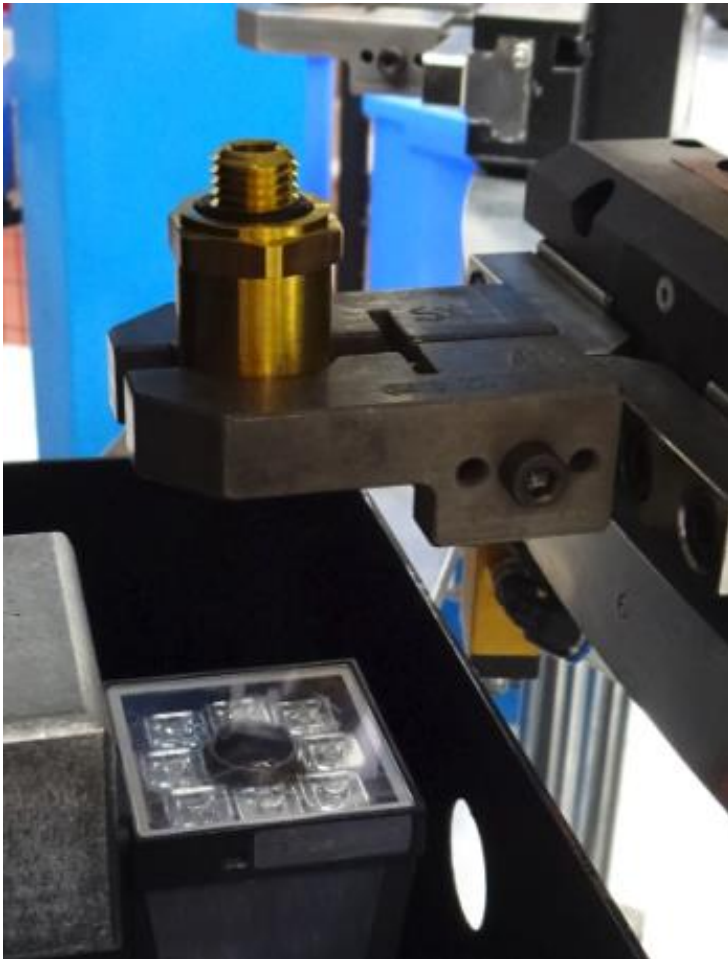


For the new product RTC we have installed a new assembly machine



100% Inspection of presence
Components and test

Camera control to verify if the upper-ring is in the correct position and clamping ring presence.



Verify if the external o-ring is present



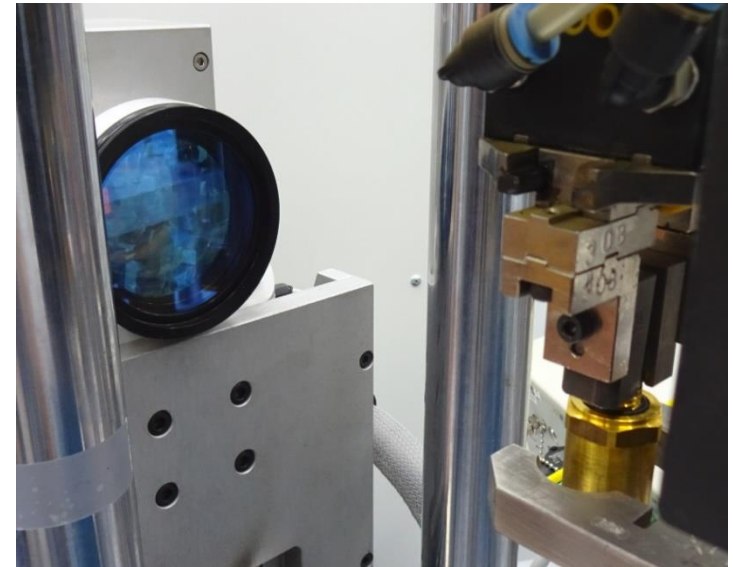
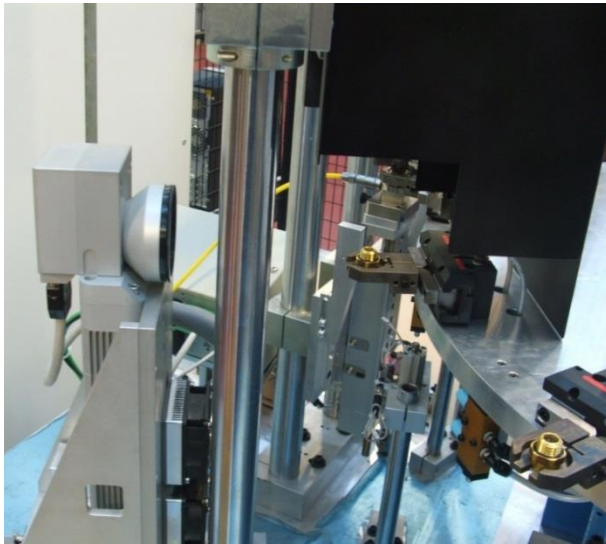
All fittings assembled are controlled and tested to 100%

- Leak test at 1,3bar



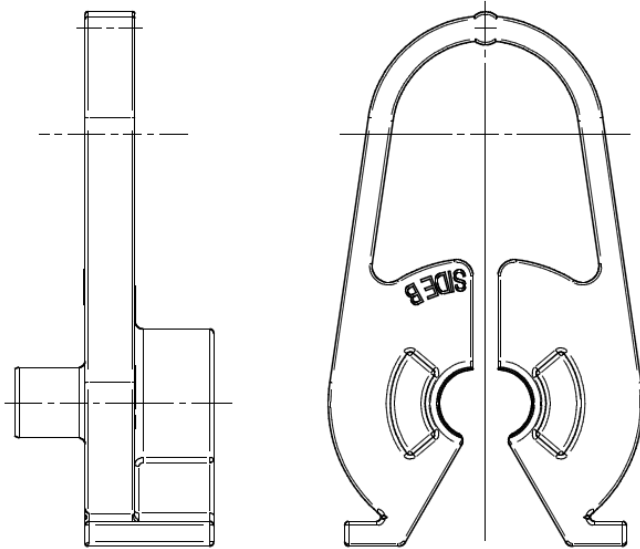
All fittings assembled are controlled and tested to 100%

- Complete traceability of every fitting component Laser marking



*** 100 % ***

Flexibility and double functions



*Each dimension of tube one specific tool

- ❑ Before recovering the tube to pump down the air brake system

- ❑ Verify if the tool is of the correct dimension for the tube you need to recover

- ❑ Verify if the tool is damaged



- ❑ Pull the tube to avoid that the clamping ring inside the fitting blocks

- ❑ Clean the surface where the tube enter into the fitting

- ❑ Plastic tool is safer for fittings integrity



1



Position the RTC TOOL with SIDE B oriented towards the upper-ring and then join together the two semi-spheres around the tube.

2



Put pressure on the sides of the two semi-spheres to join them together around the tube.

3



Press strongly on the two semi-spheres inside the upper-ring and pull out the tube.

SIRIT

Sirit customers



IVECO







WABCO

KNORR-BREMSE







ISUZU

Otokar





- ZINC-PLATED BRASS FITTING WITH O-RING SEALING
- TUV functional test and AQM corrosion test
- Safety Collar RTAU Anti-Unscrewing and Anti-Unthreading





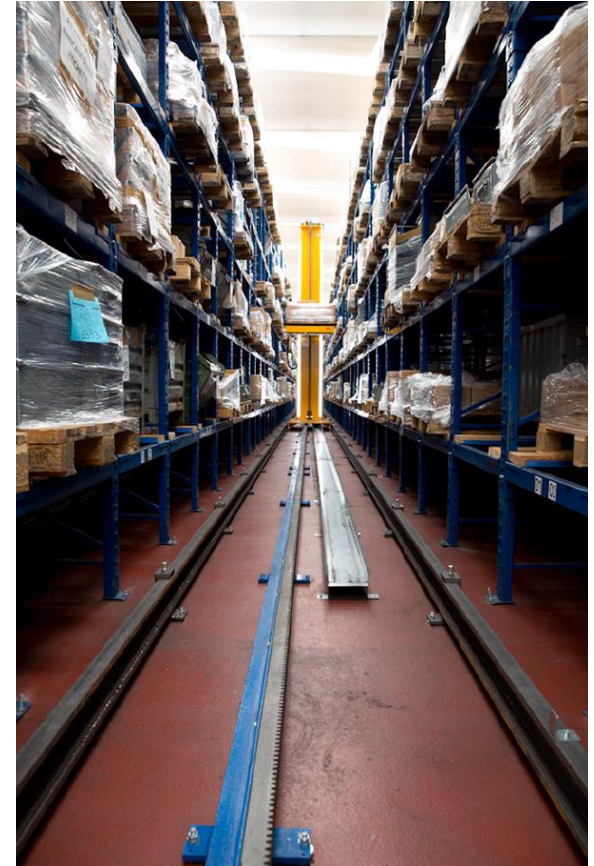
AnsaldoBreda

A Finmeccanica Company



ZOS Zvolen, s.r.o.

- Vast stock of the products in catalogue



Thank you!!!

TOSI F.lli
Produzione Minuterie Metalliche

SIRIT
AIR BRAKE FITTINGS
RAILWAY DIVISION

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www.sirit.it

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