Company History

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

02/11/2015
Company History

- **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
Company History

Production of metal turned parts

- **2006** – MMV additional new premises
Company History

Air Brake Fittings

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

• **2010** - Development of a new range of product for railway division

• **2013** - ISO/TS 16949:2009
International market presence
• 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
Production facilities

- N° 61 machines for bar-turning from Ø 6 to Ø 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
Product control: Optical machine
Some TOSI Customers
Some TOSI Customers
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 product type
SIRIT product types

- Cutting-ring fittings

- Push-in fittings
Since 1997 Sirit fitting has had the TÜV Product Certification
SIRIT Straight terminal

- Straight terminal
- Pivoted adaptor
- Swivel adaptor
Assembly and testing processes

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

02/11/2015
Product laboratory tests
SIRIT - RTC
NEW RTC - Components

Upper-Ring - PA 6.10 GF30

Clamping ring – CW614 N

O-Ring - EPDM

Sleeve – PA6.6 GF 30

Body - CW614 N

O-Ring - NBR
NEW RTC – Technical requirement

- Good resistance UV rays
- Good insertion force according to ISO 7628
- Possibility to remove the tube

- Tube requirement
  - ISO 7628
  - DIN 74324
  - DIN 73328

- Operating heat range
  - From -40°C to +100°C

- Working pressure
  - Max 15 bar

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NEW RTC – Operation seat

- 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.
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.

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.
The RTC pivoted stud reduces the overall dimension
Assembled adaptor

More configuration flexibility
New assembly line

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
New assembly line

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

Verify if the external o-ring is present
All fittings assembled are controlled and tested to 100%

- Leak test at 1.3 bar
New assembly line

All fittings assembled are controlled and tested to 100%

- Complete traceability of every fitting component Laser marking

*100 %*
RTC Tool

Flexibility and double functions

*Each dimension of tube one specific tool

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RTC Tool - Precautions

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

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

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

IVECO
SIRIT trucks Customers

KAMAZ

TERBERG BENSCHOP

TATRA
SIRIT Valves customers

Haldex

WABCO

KNORR-BREMSE
SIRIT trailers customers

- Benalu
- Rolfo
- Fliegl
- Tirsan
- Berger
- Wielton
- Don-Bur
- M+G Trailers
SIRIT Buses customers

- LAZ
- KARSAN
- Breda Menarinibus
- ISUZU
- Otokar
- VOLGABUS

02/11/2015
Customers that produce Air brake fittings
Sirit Railway Division

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

AnsaldoBreda
A Finmeccanica Company

ZOS Zvolen, s.r.o.
• Vast stock of the products in catalogue
Thank you!!!

Website: www.tosi.it
          www.sirit.it

Contact: info@sirit.it