



THERMOPLASTIC TUBING AND HOSES



## PROFILO AZIENDALE / COMPANY PROFILE

Tubi Termoplastici per applicazioni industriali  
*Thermoplastic tubing and hoses for industrial applications*



AUTOMOTIVE



FLUID POWER



FOOD INDUSTRY



GENERAL INDUSTRY



LUBRICATION



MARINE



OIL & GAS



PNEUMATICS



REFRIGERATION



WATER HANDLING

## Indice / Index



Storia / History .....	4
Chi siamo / About us .....	6
Presenza nel mondo / World Presence .....	10
Mission / Mission .....	12
Valori e strategia / Values and Strategy .....	14
Qualità / Quality .....	16
Certificazioni / Certifications .....	18

Gamma prodotti / Products Special Selection .....	20
---	----

## Storia / History

1961	1975	1999	2011	
Nasce a Colorno (PR) <b>ZEC Spa</b> .  <b>ZEC Spa</b> was founded in Colorno (PR), Italy	Produzione tubi per il grassaggio. ZEC è la prima in Italia a realizzare tubo SAE100 R7.  <i>Production of grease hoses. ZEC is the first in Italy to manufacture SAE100 R7 hoses.</i>	Certificazione ISO9001.  <b>ISO9001 Certification</b>	<b>50 anni.</b> Espansione su nuovi mercati ed inaugurazione nuovi uffici e magazzini.  <b>50 years.</b> Expansion into new markets and inauguration of new offices and warehouses.	
Investimenti su tubi termoplastici per il settore della pneumatica.  <i>Investments in thermoplastic tubing for pneumatic applications.</i>	Prime vendite internazionali.	Consolidamento vendite in Europa e costruzione 2°unità produttiva.	Vendita in 90 paesi nel mondo ed inizio costruzione 3° unità produttiva.	
1970	1990	2000	2018	



## Chi siamo / About us

Eugenio Zantelli, President.  
Dino Zantelli, Managing Director.

**ZEC: esperienza produttiva, qualità e performance**

Siamo **operativi dal 1961**, anno in cui **Eugenio Zantelli**, il **fondatore**, ha iniziato le attività a Colorno, in provincia di Parma, Italia.

Già dal 1970 si svolgevano ricerche e studi per la realizzazione di una gamma completa di tubi termoplastici ad alta pressione, nel totale rispetto delle principali normative internazionali di riferimento; **ZEC è stata la prima azienda italiana a produrre tubi SAE J517 100 R7**.

Oggi ZEC S.p.A. è tra le prime aziende a livello mondiale nel settore e dispone di una vastissima gamma di tubi termoplastici per una moltitudine di settori applicativi.

**ZEC: productive experience, quality and performance**

We are in thermoplastic business since 1961, the year in which Eugenio Zantelli founded the company in Colorno, in the province of Parma, Italy.

Starting from 1970 research and studies were being undertaken to provide a complete range of high pressure thermoplastic hoses in full compliance with the major international standards; ZEC was the first italian manufacturer of SAE100 R7 Hoses.

Today, ZEC S.p.A. is one of the industry leaders on the world's markets and supplies a wide range of thermoplastic tubing and hoses for a multitude of application fields.



## Chi siamo / About us

### Prodotti Products



Tubi termoplastici alta pressione  
High pressure thermoplastic hoses



Tubi termoplastici bassa pressione  
Low pressure thermoplastic hoses



Raccordi e accessori  
Fittings and accessories



### Settori applicativi Applications



FLUID POWER



PNEUMATICS



OIL & GAS



LUBRICATION



GENERAL INDUSTRY



AUTOMOTIVE



FOOD INDUSTRY



MARINE

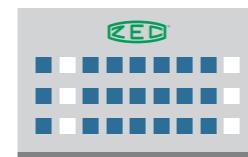


REFRIGERATION



WATER HANDLING

## ZEC oggi / ZEC today



**110**

Dipendenti  
Employees

**3**

Unità operative, tutte situate a Colorno, Italy  
Business units, all based in Colorno, Italy

**20.000 mq**

di superficie complessiva, tra produzione e magazzino  
between production and stock



oltre / over  
**80.000 mq**

di area scoperta per nuovi investimenti  
of open area for new investments



**3.500**

pallets di prodotto finito disponibili a magazzino  
pallets of finished product on stock

**13.000**

spedizioni/anno  
shipments/year

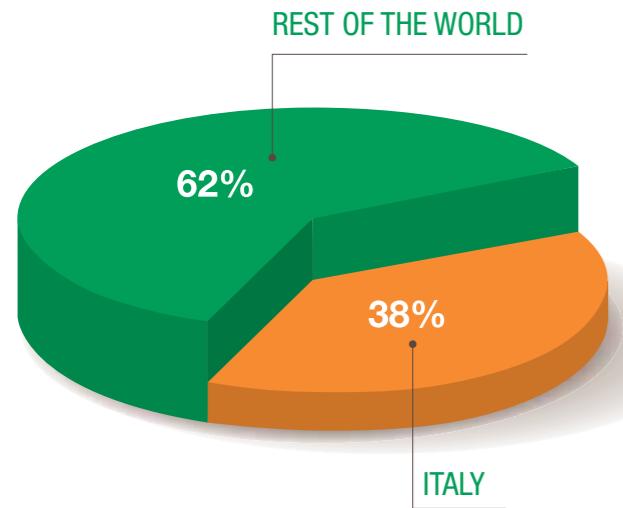


**41** Milioni di metri di tubi  
Mio meters of tubing and hoses

Questi numeri fanno di ZEC uno dei maggiori  
produttori europei su uno specifico range di  
prodotti, movimentando **oltre 3.000 tonnellate**  
**di materie prime vergini.**

These numbers make ZEC one of the major EU  
manufacturers on specific product range, moving  
**over 3.000 tons of virgin raw material.**

## Fatturato / Turnover



Nel corso degli ultimi 5 anni si è consolidata la presenza dell'azienda nel mercato mondiale.

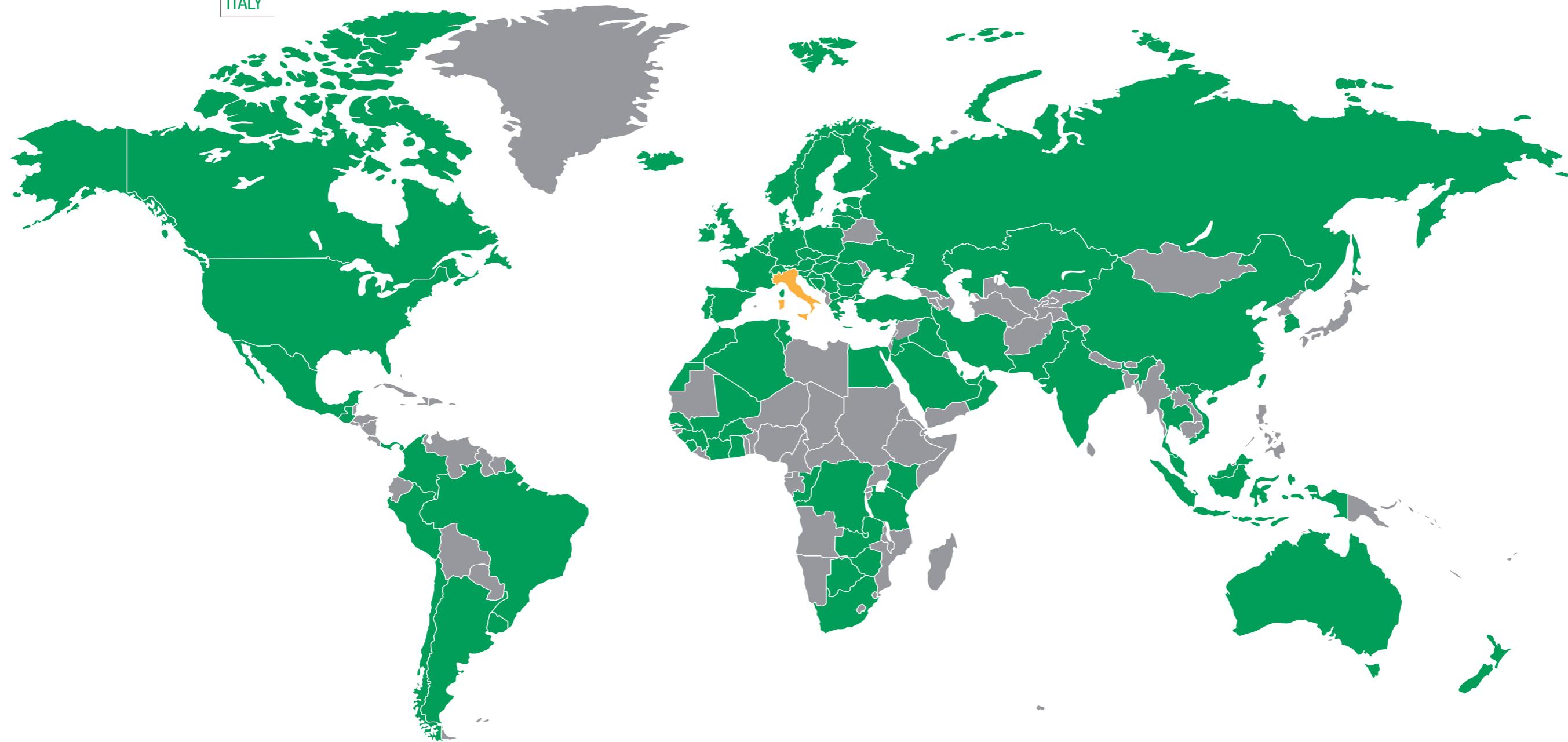
Oggi ZEC può contare su una forza vendite attiva in oltre **90 paesi**, attraverso:

- 9 Rappresentati commerciali locali
- oltre 50 distributori ufficiali nel mondo
- Accordi con gruppi multinazionali
- Supporto logistico in Uruguay

*During last 5 years there has been a worldwide market presence consolidation.*

*Today ZEC can count on sales in over 90 countries, throw:*

- 9 Local Sales Representatives
- Over 50 official distributors around the world
- Multinational group agreements
- Logistic support in Uruguay



## Mission

**“Un modello di impresa adeguato alle nuove tendenze di mercato”**

**“A business model tailored to the new market trends”**

**“ZEC: la tenuta a tutte le pressioni”**

Vogliamo essere partner solidi ed affidabili per i nostri clienti, offrendo loro le soluzioni adeguate per rispondere ad applicazioni sempre più esigenti.

Obiettivo di ZEC è fornire un prodotto tecnicamente evoluto, di qualità impeccabile e costante nel tempo, garantendo un supporto tecnico e commerciale sempre più orientato e vicino al mercato.

We want to be a solid and reliable partner for our customers, offering them the right solutions to respond to increasingly demanding applications.

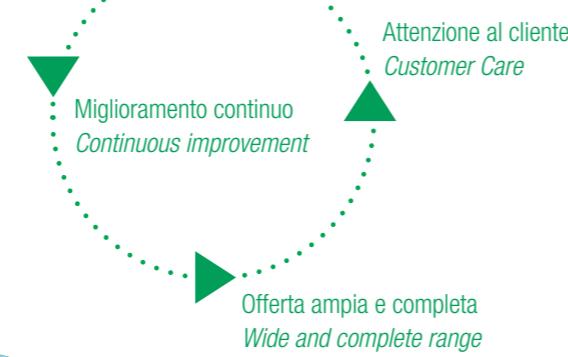
ZEC purpose is to provide a technically advanced product, of impeccable and constant quality over the time, guaranteeing a technical and commercial support that is increasingly oriented and close to the market.

**“ZEC: tightness at all pressures”**



## Valori e Strategia / Values and Strategy

**“Qualità, ricerca e attenzione al cliente sono i nostri valori”**



La nostra strategia di impresa in tre concetti chiave:

### Miglioramento continuo

Investiamo da sempre in qualità e ricerca per migliorare i nostri prodotti e i processi produttivi.

### Attenzione al cliente

Il nostro obiettivo è interpretare in modo sempre più efficace le necessità dei clienti e le esigenze del mercato per ogni specifica applicazione.

### Offerta ampia e completa

ZEC ha sviluppato una gamma completa di prodotti, testati e garantiti nel tempo grazie a controlli qualitativi accurati. Il valore aggiunto è la piena integrazione dei processi: tutte le fasi produttive vengono gestite internamente, dalla selezione delle materie prime al prodotto finito.

Our business strategy in three key concepts:

### Continuous improvement

We have always invested in quality and research to improve our products and production processes.

### Customer Care

Our goal is to increasingly know customer and market needs for each specific application.

### Wide and complete offer

ZEC has developed a complete range of products, tested and guaranteed over time thanks to accurate quality controls. The added value is the full integration of the processes: all the production phases are managed internally, from the selection of raw materials to the finished product.

**“Quality, Research and Customer Care are our values”**



### Qualità / Quality

Grazie a rigorosi controlli qualitativi possiamo garantire notevoli vantaggi tecnici: pesi, ingombri e raggi di curvatura limitati, resistenza alle sollecitazioni, superfici interne speculari e resistenza all'invecchiamento.

Thanks to strict controls we can guarantee considerable technical advantages: reduced weight, size and bend radius, resistance to fatigue stress, specular internal surfaces, anti-ageing qualities.

### “La qualità per noi è uno standard che ci differenzia”

Una delle caratteristiche principali di ZEC S.p.A. è la costante attenzione rivolta all'ottenimento di standard qualitativi sempre più elevati, sia tramite l'adozione di moderne tecnologie produttive, sia attraverso un'attenta selezione dei fornitori delle materie prime, leader di fama internazionale, selezionati tra i migliori del mondo.

Le materie prime che entrano nei reparti produttivi sono verificate e testate con l'utilizzo di sofisticati ed avanzati strumenti di controllo, seguendo severe procedure del sistema qualità aziendale, certificato in base alla normativa UNI EN ISO 9001.

Tutti i prodotti a catalogo, oltre **1500 articoli**, sono conformi alle normative internazionali dei rispettivi settori di applicazione: **SAE, EN, DIN, ISO** e alle direttive europee **REACH (2006/1907/EC)** e **RoHS 2 (2011/65/EU)**.

### “Quality is a standard that makes us different”

One of ZEC S.p.A.'s major features is its constant attention in satisfying ever-higher quality standards, both through the adoption of modern production technologies and through the careful selection of raw materials suppliers, who are internationally renowned leading companies, selected among the best in the world.

The raw materials entering our production departments are inspected and tested by means of sophisticated and advanced control methods, complying with strict company quality system procedures, certified in accordance with **UNI EN ISO 9001**.

All the products in our catalogue, over 1500 articles, are compliant with the international standards applicable to the respective industries in which they are used: **SAE, EN, DIN, ISO, REACH Regulation (2006/1907/EC)** and **RoHS 2 (2011/65/EU) European Directive**.



## Certificazioni / Certifications



## ZEC: prodotti certificati

ZEC S.p.A. ha investito molto nell'acquisizione delle certificazioni perché consapevole che anche se dichiarata, la qualità dei prodotti deve essere confermata da Enti terzi accreditati.

La certificazione **ISO9001:2008** è una garanzia per i clienti ZEC S.p.A. in quanto assevera delle caratteristiche aziendali ben precise:

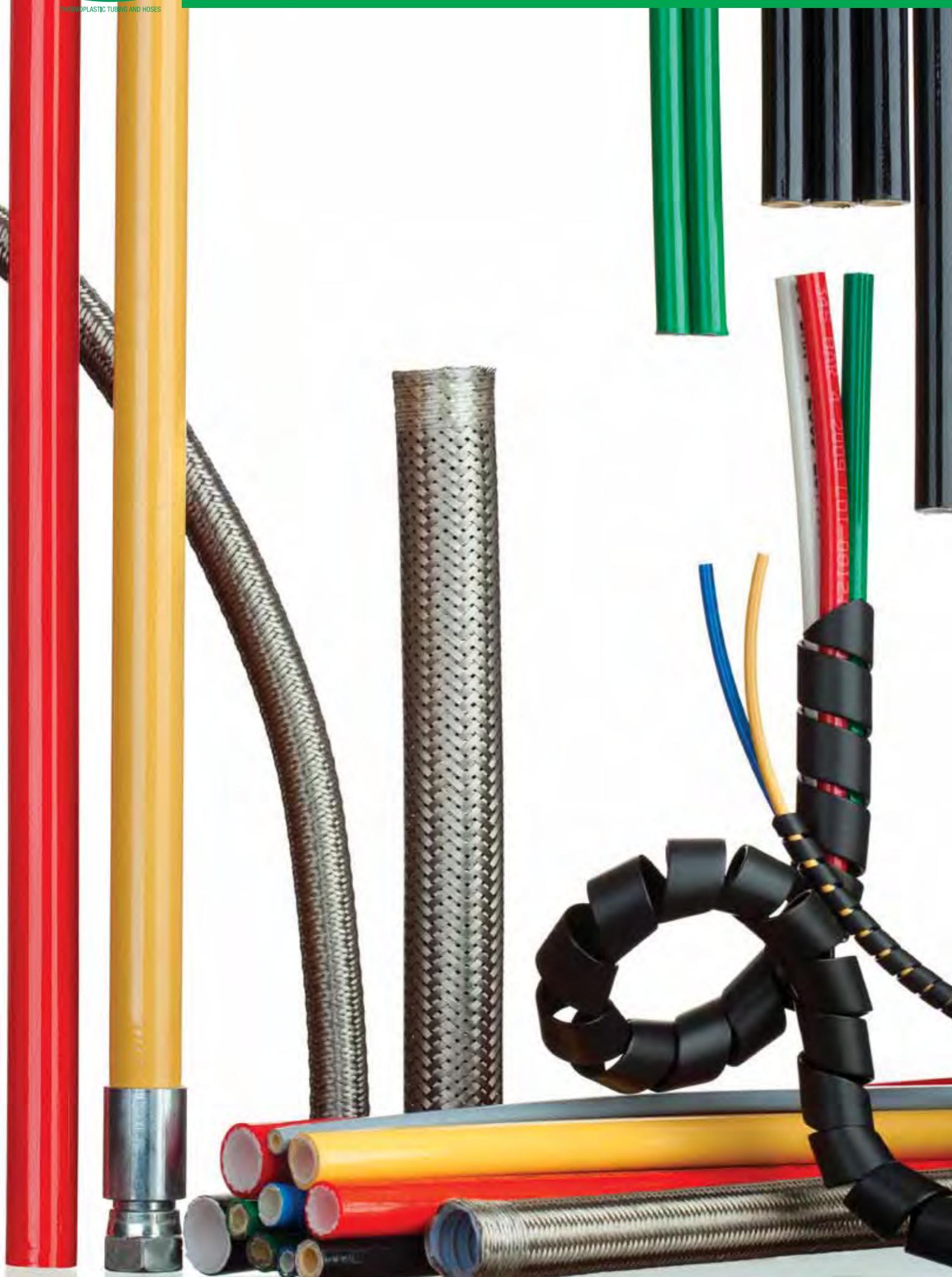
- che l'efficienza e l'efficacia dei sistemi produttivi interni è qualitativamente conforme e documentata
- che i processi produttivi sono organizzati per ridurre i costi aziendali a tutto vantaggio del prezzo dei prodotti
- che i processi produttivi sono rispettosi della sicurezza e della salute dei lavoratori

## ZEC: certified products

At ZEC S.p.A. we have invested much into certification processes because we are aware that, even if declared, the quality of our products must be confirmed by third party accreditation bodies.

The **ISO9001:2008** certification is a guarantee for ZEC S.p.A.'s customers, owing to the fact that it asseverates very specific business characteristics:

- that the efficiency and effectiveness of its in-house production systems are qualitatively compliant and documented
- that the production processes are structured to keep down company costs, which benefits the final cost of the product
- that the production processes are respectful of the health and safety of the workforce.



Fluid Power

Pneumatics



Oil &amp; Gas



Lubrication



Automotive



General Industry



Food Industry



Marine



Refrigeration



Water Handling





## FLUID POWER

- Agricultural Machinery
- Bicycle hydraulic brakes
- Construction machinery
- Cranes / booms / forklifts
- High pressure tools
- Machine tools
- Tests / couplings
- Non-conductive systems
- Rescue tools
- Servo controls
- Solar power generation
- Tail lifts/ hydraulic lifts
- Wind turbines



MTH1 MARINE SERIES	MTH1FLST SERIES	TS8 SERIES
<b>OL7GSR SERIES</b> WORKING PRESSURE FROM 70 TO 325 BAR ISOBARIC SERIES CONSTANT PRESSURE AT 210 BAR	<b>OL7 SERIES</b> WORKING PRESSURE FROM 160 TO 250 BAR	<b>OL5 SERIES</b> WORKING PRESSURE FROM 560 TO 630 BAR
<b>OL7 MARINE SERIES</b> WORKING PRESSURE FROM 70 TO 250 BAR	<b>NON-CONDUCTIVE OL7 SERIES</b> WORKING PRESSURE FROM 70 TO 250 BAR	<b>JACK HOSE SERIES</b>
<b>MTHK SERIES</b> WORKING PRESSURE FROM 200 TO 700 BAR	<b>NON-CONDUCTIVE OL8 SERIES</b> WORKING PRESSURE FROM 145 TO 420 BAR	<b>PILOT SERIES</b> STATIC PRESSURE 700 BAR FOR ALL DIAMETERS
<b>OL7MP SERIES</b> WORKING PRESSURE FROM 210 TO 250 BAR	<b>NON-CONDUCTIVE OL8M SERIES</b> WORKING PRESSURE FROM 250 TO 700 BAR	<b>MTH1P SERIES</b> DYNAMIC PRESSURE UP TO 700 BAR



## WATER HANDLING

- High pressure cleaning
- Misting systems
- Potable water
- High pressure cleaning machines
- Sewer Jetting – road network
- Sewer Jetting – minor networks
- Steam



PTFE TUBE SERIES	JC7 PRO SERIES	JETTER HOSE JCL SERIES
<b>JET POWER SERIES</b> WORKING PRESSURE FROM 800 TO 1280 BAR	<b>JC8 PRO SERIES</b> TOP-CLASS FLEXIBILITY WORKING PRESSURE FROM 200 BAR/3.000 PSI TO 275 BAR/4.000 PSI	<b>JC8 SERIES</b> ISOBARIC SERIES CONSTANT WORKING PRESSURE 345 BAR/5.000 PSI
<b>JC7 SERIES</b> WORKING PRESSURE FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI	<b>JET WASH SERIES</b> WORKING PRESSURE FROM 200 BAR/3.000 PSI TO 275 BAR/4.000 PSI	<b>JC5 SERIES</b> CONSTANT WORKING PRESSURE AT 175 BAR/2.500 PSI
<b>MT1 SERIES</b> WORKING PRESSURE FROM 70 TO 375 BAR - SAFETY RATIO 1:4 FROM 94 TO 500 BAR - SAFETY RATIO 1:3	<b>MT1 FLST SERIES</b> ISOBARIC SERIES CONSTANT WORKING PRESSURE AT 97 BAR / 1.400 PSI	



## AUTOMOTIVE

- Trailer braking systems
- CNG
- Fuel handling
- LPG systems
- Trailer connectors
- Truck drawbars



HTR AB TUBES	GAS5 - 110 R SERIES
<b>RILSAN® PA11- PHL</b> ISO 7628 STANDARD WORKING PRESSURE AT 10 AND 12,5 BAR	<b>PA12 PHL SPIRALS</b> CONSTANT WORKING PRESSURE AT 30 BAR
<b>CNG SERIES</b> LOW PRESSURE POLYAMIDE TUBING DIN 74324-73378 STANDARDS WORKING PRESSURE FROM 7 TO 68 BAR	<b>AIR BRAKE - SCAR NPT SPIRALS</b> FOR TRAILER BRAKING SYSTEM DIN 74323 MIN. BURST PRESSURE 60 BAR
<b>PA12 - HIPHL TUBING</b> CONSTANT WORKING PRESSURE AT 345 BAR	<b>SCAR PA12 PHL SPIRALS</b> FOR TRAILER BRAKING SYSTEM DIN 74323 MIN. BURST PRESSURE 60 BAR
<b>PA11 - PHL</b> LOW TEMPERATURE WORKING PRESSURE FROM 10 TO 49 BAR	<b>PA11 - PHL</b> LOW PRESSURE POLYAMIDE TUBING DIN 74324-73378 STANDARDS WORKING PRESSURE FROM 21 TO 68 BAR
<b>AIR BRAKE TUBING</b>	<b>WORKING PRESSURE FROM 16 TO 28 BAR</b>



## PNEUMATICS

- Industrial automation
- Compressors
- Trailer connectors
- Truck drawbars
- Self-extinguishing and spark-proof
- ATEX systems
- Trailer braking system

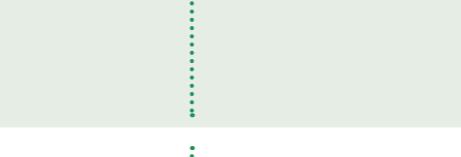


PA12 - HIPHL TUBING	PU SH98 TUBING
<b>PA12 SUPERFLEXIBLE</b> LOW TEMPERATURE WORKING PRESSURE FROM 10 TO 49 BAR	<b>PU TWIN TUBING</b> WORKING PRESSURE FROM 4 TO 19 BAR
<b>PA12 RIV VO SERIES</b> WORKING PRESSURE FROM 9 TO 27 BAR	<b>PUAS SERIES</b> WORKING PRESSURE FROM 7 TO 13 BAR
<b>MULTI-TUBING PA12-PHL</b> SELF-EXTINQUISHING GRADE VOUL94 WORKING PRESSURE FROM 12 TO 44 BAR	<b>PUX SERIES</b> WORKING PRESSURE FROM 7 TO 19 BAR
<b>TA...V2 SERIES</b> WORKING PRESSURE FROM 10 TO 44 BAR	<b>SCAR PA12 PHL SPIRAL</b> SELF-EXTINQUISHING UL94 STANDARD V2 GRADE WORKING PRESSURE FROM 16 TO 28 BAR
<b>RILSAN® PA11 - PHL</b> DIN 74324 AND 73378 STANDARDS WORKING PRESSURE FROM 7 TO 68 BAR	<b>WORKING PRESSURE FROM 16 TO 28 BAR</b>
<b>ATEX PA12 - TACO SERIES</b> DIN 74324 AND 73378 STANDARDS WORKING PRESSURE FROM 11 TO 44 BAR	



## GENERAL INDUSTRY

- Natural Gas Handling
- LPG Filling Stations
- Detergent Solutions
- Fuels
- Various gases
- Standard paint
- Antistatic paint
- Polyurethane injection
- High temperature – up to 130°C
- High temperature – up to 260°C
- Self-extinguishing and spark-proof
- Solvents

	<b>CONDUCTIVE GAS5 SERIES</b>		<b>CONDUCTIVE AS7 SERIES</b> SAE 100R7, ISO 3949 STANDARDS PATENT NO. IT-1328746		<b>CONDUCTIVE MT2 SERIES</b>
	<b>MT1-PA SERIES</b> LPG CONSTANT WORKING PRESSURE AT 30 BAR		<b>PTFE I2T SERIES</b> WORKING PRESSURE FROM 70 TO 250 BAR SAFETY RATIO 1:4		<b>VE5P-PA SERIES</b> WORKING PRESSURE FROM 150 TO 365 BAR
	<b>MT1E SERIES</b> WORKING PRESSURE FROM 70 TO 375 BAR - SAFETY RATIO 1:4 94 TO 500 BAR - SAFETY RATIO 1:3		<b>MTK MARINE SERIES</b> WORKING PRESSURE FROM 245 TO 350 BAR SAFETY RATIO 1:4		<b>CNG SERIES</b> WORKING PRESSURE FROM 200 TO 700 BAR
	<b>MT1HT-PTFE SERIES</b> WORKING PRESSURE FROM 190 TO 350 BAR - SAFETY RATIO 1:4 254 TO 467 BAR - SAFETY RATIO 1:3		<b>MTKM MARINE SERIES</b> WORKING PRESSURE FROM 327 TO 467 BAR SAFETY RATIO 1:3		<b>JET POWER SERIES</b> CONSTANT WORKING PRESSURE AT 85 BAR - SAFETY RATIO 1:4
	<b>AT7 MARINE SERIES</b> WORKING PRESSURE FROM 70 TO 250 BAR		<b>JCL SERIES</b> WORKING PRESSURE FROM 275 TO 800 BAR		<b>JC8 SERIES</b> WORKING PRESSURE FROM 800 TO 1280 BAR
	<b>AT8S SERIES</b> BREATHING AIR CONSTANT WORKING PRESSURE AT 413 BAR / 6.000 PSI		<b>HOG SERIES</b> WORKING PRESSURE FROM 250 TO 700 BAR		<b>PTFEIG SERIES</b> WORKING PRESSURE FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI
	<b>CNG SERIES</b> CONSTANT WORKING PRESSURE 345 BAR		<b>JC8 SERIES</b> WORKING PRESSURE FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI		<b>TLP SERIES</b> WORKING PRESSURE AT 60 BAR
	<b>PTFE TUBES IC SERIES</b> WORKING PRESSURE FROM 36 TO 120 BAR		<b>PTFEIG SERIES</b> WORKING PRESSURE FROM 65 TO 275 BAR		<b>TLP SERIES</b> WORKING PRESSURE AT 60 BAR



## OIL&GAS

- Blow out preventer (bop) systems
- Gas handling
- Breathing air
- High pressure hydraulics
- Umbilical systems
- Water and chemicals injection
- High pressure cleaning

	<b>AT7 MARINE SERIES</b> WORKING PRESSURE FROM 70 TO 250 BAR		<b>MTKM MARINE SERIES</b> WORKING PRESSURE FROM 275 TO 800 BAR		<b>JET POWER SERIES</b> WORKING PRESSURE FROM 800 TO 1280 BAR
	<b>AT8S SERIES</b> BREATHING AIR CONSTANT WORKING PRESSURE AT 413 BAR / 6.000 PSI		<b>JCL SERIES</b> WORKING PRESSURE FROM 275 TO 345 BAR		<b>JC8 SERIES</b> WORKING PRESSURE FROM 800 TO 1280 BAR
	<b>CNG SERIES</b> CONSTANT WORKING PRESSURE 345 BAR		<b>HOG SERIES</b> WORKING PRESSURE FROM 250 TO 700 BAR		<b>JC8 SERIES</b> WORKING PRESSURE FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI
	<b>PTFE TUBES IC SERIES</b> WORKING PRESSURE FROM 36 TO 120 BAR		<b>PTFEIG SERIES</b> WORKING PRESSURE FROM 65 TO 275 BAR		<b>TLP SERIES</b> WORKING PRESSURE AT 60 BAR

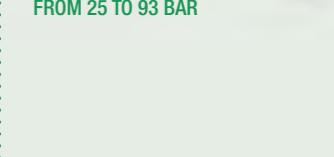


## LUBRICATION

- Greasing
- Oil lubrication
- Lubro-refrigeration



## MARINE

	<b>GR7 SERIES</b> WORKING PRESSURE FROM 150 TO 400 BAR		<b>PA12 HL SERIES</b> WORKING PRESSURE FROM 25 TO 93 BAR
	<b>OL5 MARINE SERIES</b> WORKING PRESSURE FROM 80 TO 210 BAR		<b>CO2 SERIES</b> WORKING PRESSURE FROM 105 TO 210 BAR
	<b>MARINE STEERING OL5P SERIES</b> WORKING PRESSURE FROM 70 TO 104 BAR		<b>AT7- PE SERIES</b> WORKING PRESSURE FROM 90 TO 200 BAR



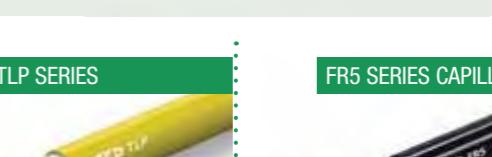
## FOOD INDUSTRY

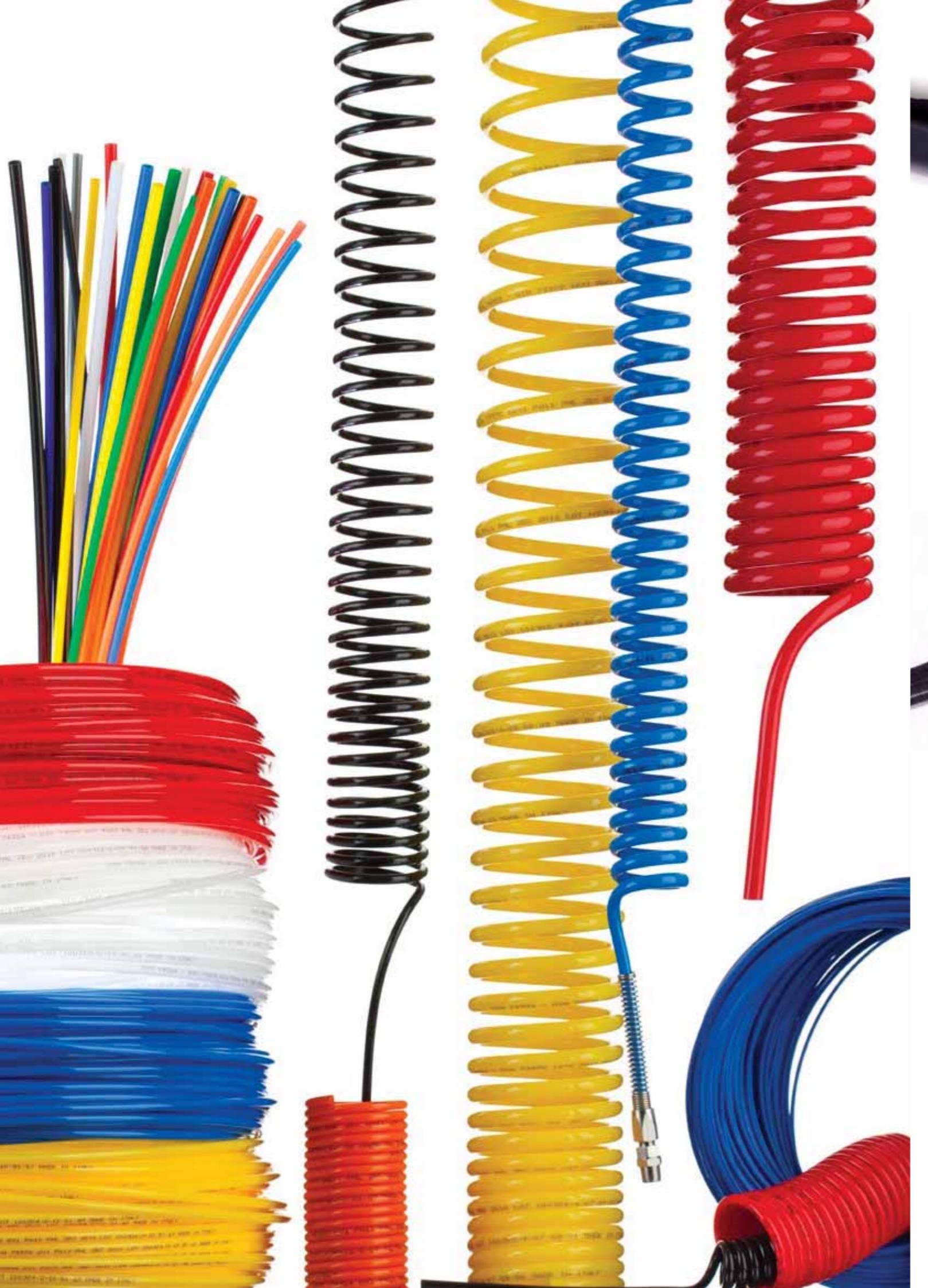
- CO2 Injection
- Low pressure food hoses
- High pressure food hoses
- High temperatures



## REFRIGERATION

- Commercial - industrial
- Compressor recharging

	<b>HTR-FG TUBING</b> WORKING PRESSURE FROM 10 TO 36 BAR		<b>AT7- PE SERIES</b> WORKING PRESSURE FROM 90 TO 200 BAR
	<b>PE LD POLYETHYLENE TUBING</b> FDA 21 CFR, REG EU 1395/2004, REG EU 10/2001 WORKING PRESSURE FROM 4 TO 21 BAR		<b>FR5 SERIES CAPILLARY HOSES</b> WORKING PRESSURE UP TO 120 BAR
	<b>TLP SERIES</b> WORKING PRESSURE AT 60 BAR		<b>TLP SERIES</b> WORKING PRESSURE AT 60 BAR
	<b>FREON FR5 SERIES</b> WORKING PRESSURE FROM 45 TO 60 BAR		<b>TLP SERIES</b> WORKING PRESSURE AT 60 BAR





ZEC S.p.A.  
Via Lungolorno 11, 43052 Colorno (PR) - Italy  
Tel. +39 0521 816631 - Fax +039 0521 816772

[www.zecspa.com](http://www.zecspa.com)  
[info@zecspa.com](mailto:info@zecspa.com)  
[linkedin.com/in/zecspa](https://www.linkedin.com/in/zecspa)



THERMOPLASTIC TUBING AND HOSES

