



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



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## Storia / History

**1961**

Nasce a Colorno (PR)  
**ZEC S.p.A.**

**ZEC S.p.A.**  
was founded in Colorno (PR), Italy.

**1975**

Produzione tubi per il grassaggio.  
ZEC è la prima in Italia a realizzare tubo SAE100 R7.

*Production of grease hoses.  
ZEC is the first in Italy to manufacture SAE100 R7 hoses.*

**1999**

Certificazione ISO9001.

**ISO9001**  
Certification.

**2011**

**50 anni.**  
Espansione su nuovi mercati ed inaugurazione nuovi uffici e magazzini.

**50 years.**  
Expansion into new markets and inauguration of new offices and warehouses.



Investimenti su tubi termoplastici per il settore della pneumatica.

*Investments in thermoplastic tubing for pneumatic applications.*

Prime vendite internazionali.

*First international sales.*

Consolidamento vendite in Europa e costruzione 2° unità produttiva.

*Sales consolidation in Europe and construction of the 2° production unit.*

Vendita in 90 paesi nel mondo e costruzione 3° unità produttiva.

*Sales in 90 countries worldwide and construction of the 3° production unit.*

**1970**
**1990**
**2000**
**2019**

# *Company Profile*



## Chi siamo / About us

Eugenio Zantelli, President.  
Dino Zantelli, Managing Director.



ZEC 3



## 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.**

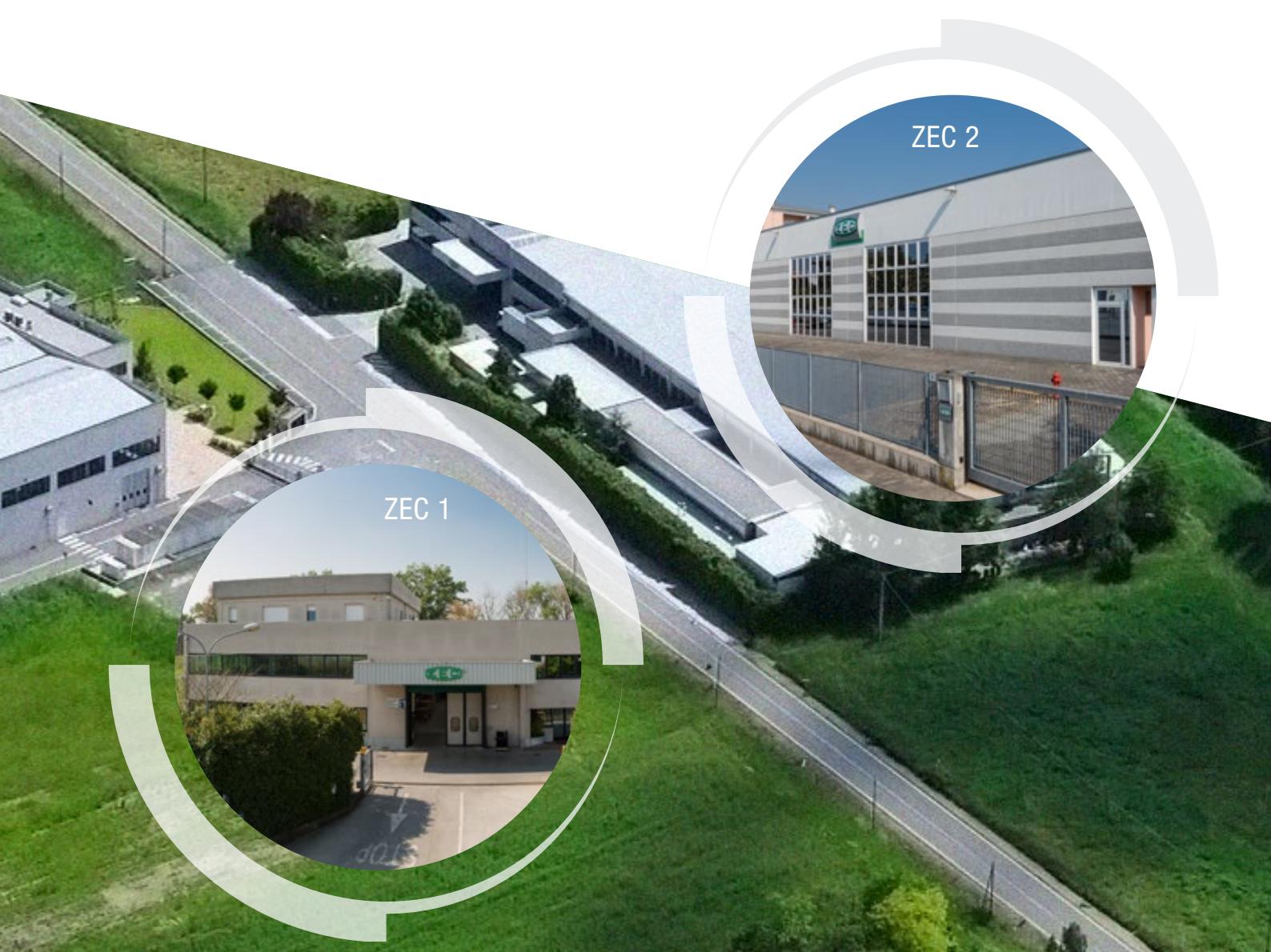
Oggi ZEC S.p.A. è tra le prime aziende a livello mondiale nel settore e dispone di una vastissima gamma di tubi termoplastici per una moltitudine di settori applicativi.

## ZEC: productive experience, quality and performance

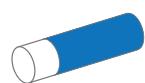
*We are in thermoplastic business since 1961, the year in which Eugenio Zantelli founded the company in Colorno, in the province of Parma, Italy.*

*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.*

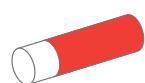
*Today, ZEC S.p.A. is one of the industry leaders on the world's markets and supplies a wide range of thermoplastic tubing and hoses for a multitude of application fields.*



## Chi siamo / About us

Prodotti  
*Products*

Tubi termoplastici bassa pressione  
*Low pressure thermoplastic hoses*



Tubi termoplastici alta pressione  
*High pressure thermoplastic hoses*



Raccordi e accessori  
*Fittings and accessories*

Settori applicativi  
*Applications*

FLUID POWER



PNEUMATICS



OIL &amp; GAS



LUBRICATION



GENERAL INDUSTRY



AUTOMOTIVE



FOOD INDUSTRY



MARINE



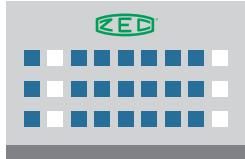
REFRIGERATION



WATER HANDLING



## ZEC oggi / ZEC today

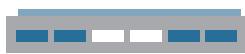


**120** Dipendenti  
*Employees*



**20.000 mq**

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



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



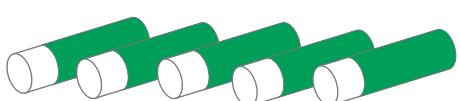
**25** Linee di estrusione  
*Extrusion lines*

**150** Trecciatrici  
*Braiding /Spiral machines*

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*

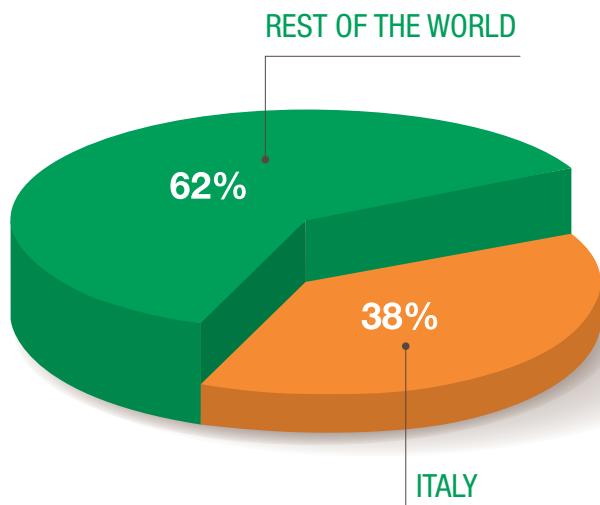
**13.000** spedizioni/anno  
*shipments/year*



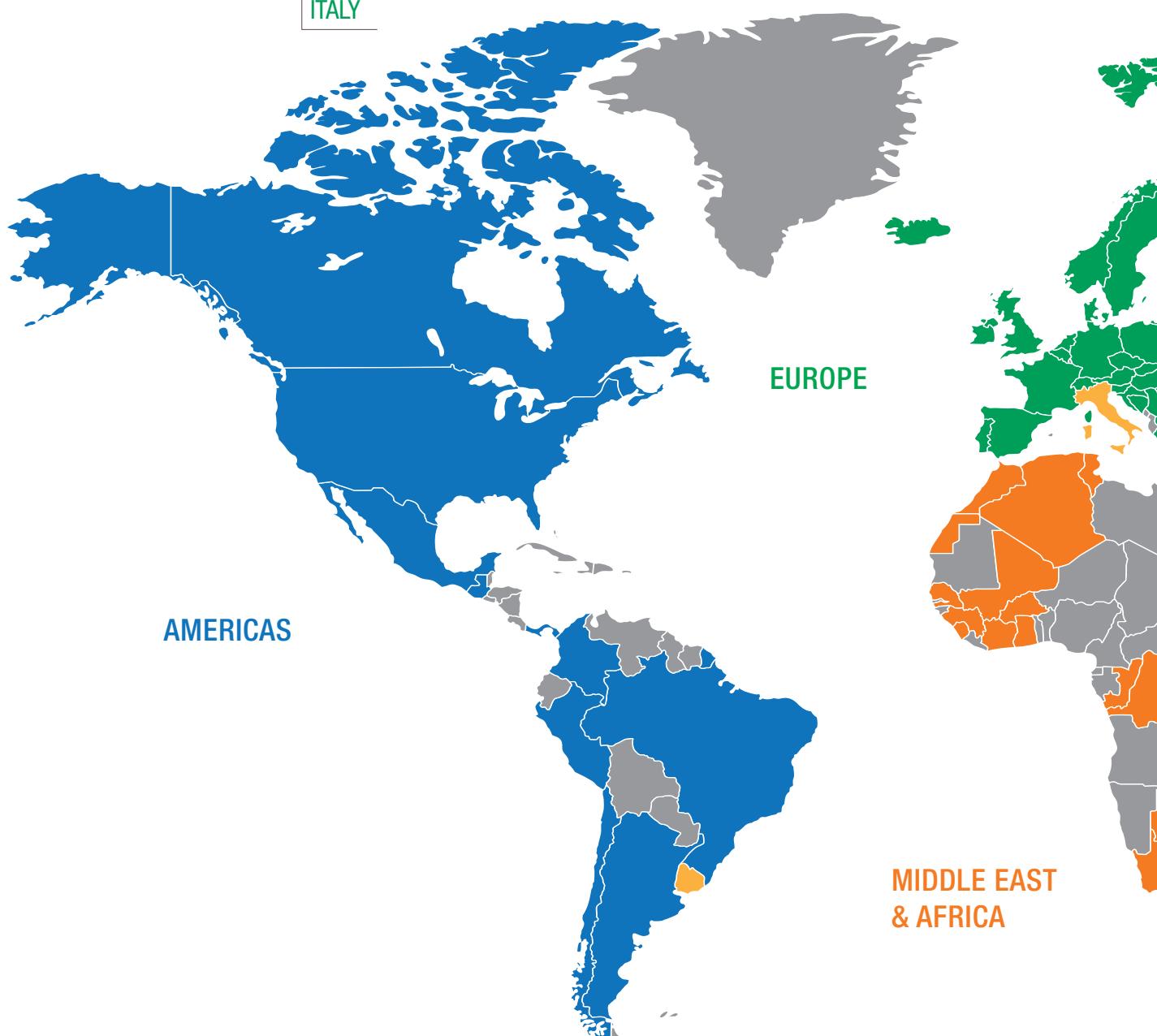
**41** Milioni di metri di tubi  
*Mio meters of tubing and hoses*

Questi numeri fanno di ZEC uno dei maggiori produttori europei su uno specifico range di prodotti, movimentando **oltre 2.000 tonnellate di materie prime vergini**.

*These numbers make ZEC one of the major EU manufacturers on specific product range, moving over 2.000 tons of virgin raw material.*

Presenza nel mondo / *World presence*

Distribuzione diretta sul mercato  
*Direct market distribution*



Nel corso degli ultimi 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:

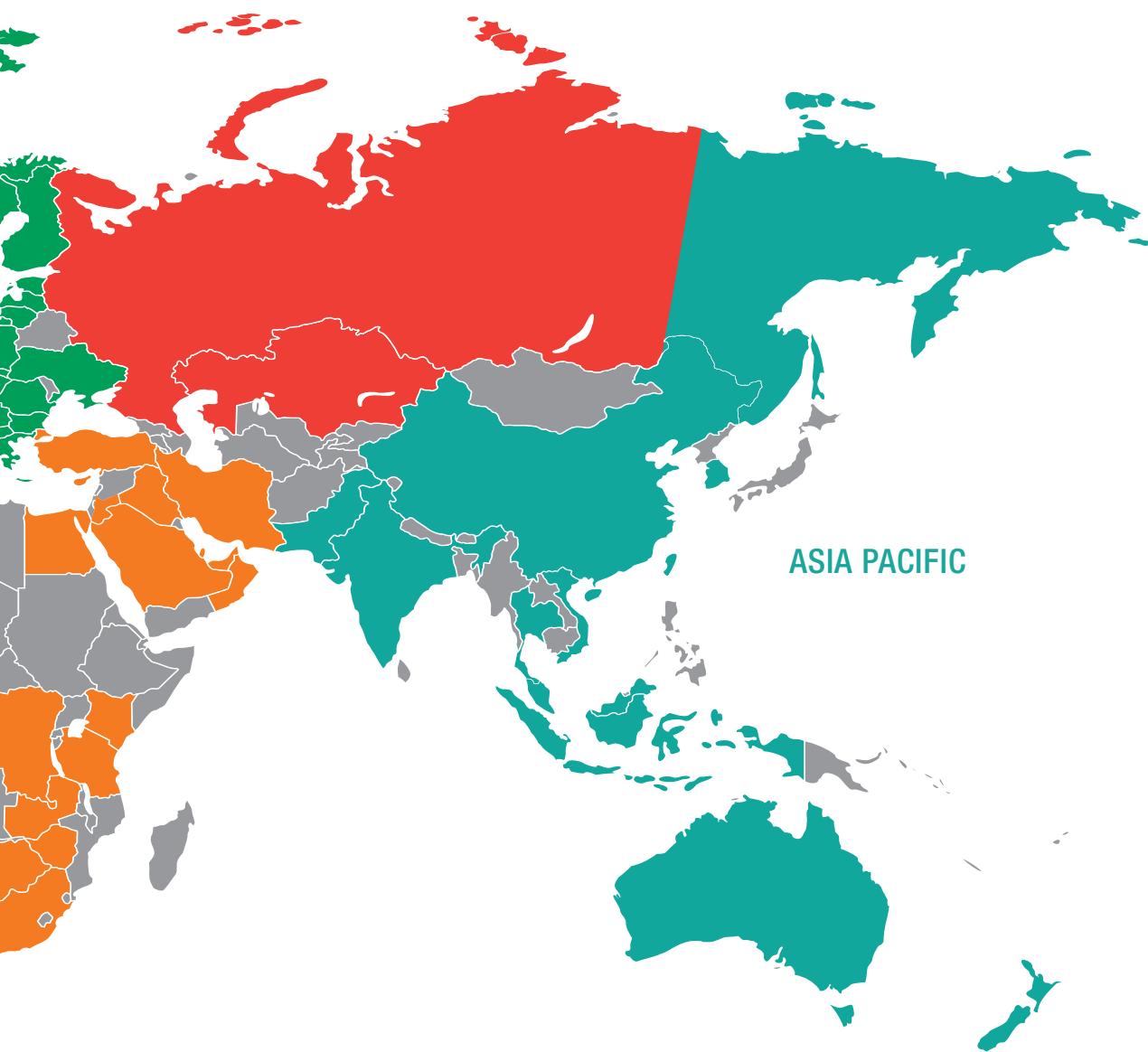
- 12 rappresentati commerciali locali
- oltre 50 paesi con distributori ufficiali ZEC
- Accordi con gruppi multinazionali
- Supporto logistico in Uruguay

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

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

- *12 local sales representatives*
- *over 50 countries with ZEC official distributors*
- *Multinational group agreements*
- *Logistic support in Uruguay*

## EAST EU & CIS



## ASIA PACIFIC

Mission

*“ZEC: flessibilità  
per scelta”*



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

Vogliamo essere un partner solido ed affidabile 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.

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

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

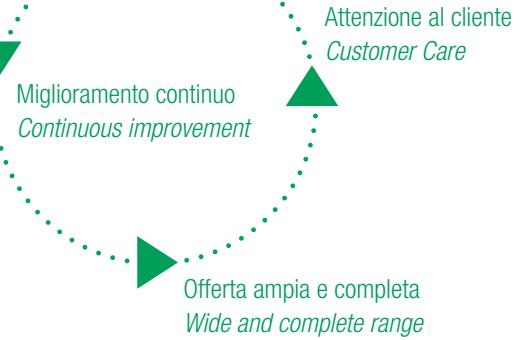
*ZEC purpose is to provide a technically advanced product, of impeccable and constant quality over the time, guaranteeing a technical and commercial support that is increasingly oriented and close to the market.*



## ***“ZEC: flexibility for Choice”***

## 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 al lavoro del reparto R&D ed a rigorosi controlli qualitativi possiamo garantire notevoli vantaggi tecnici: pesi, ingombri e raggi di curvatura limitati, resistenza all'abrasione ed altro ancora. Inoltre il nostro laboratorio interno ci permette di sviluppare e testare soluzioni adeguate alle esigenze dei clienti.

Thanks to internal R&D work and to the strict quality controls we can guarantee considerable technical advantages: reduced weight, limited OD size and bending radius, abrasion resistance and so on. Our internal laboratory enables us to develop and test specific solutions in order to meet customer's needs.



## “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 9001:2015**.

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 9001:2015**.*

*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



THERMOPLASTIC TUBING AND HOSES



FDA



## 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 **ISO9001:2015** è una garanzia per i clienti ZEC S.p.A. in quanto assevera delle caratteristiche aziendali ben precise:

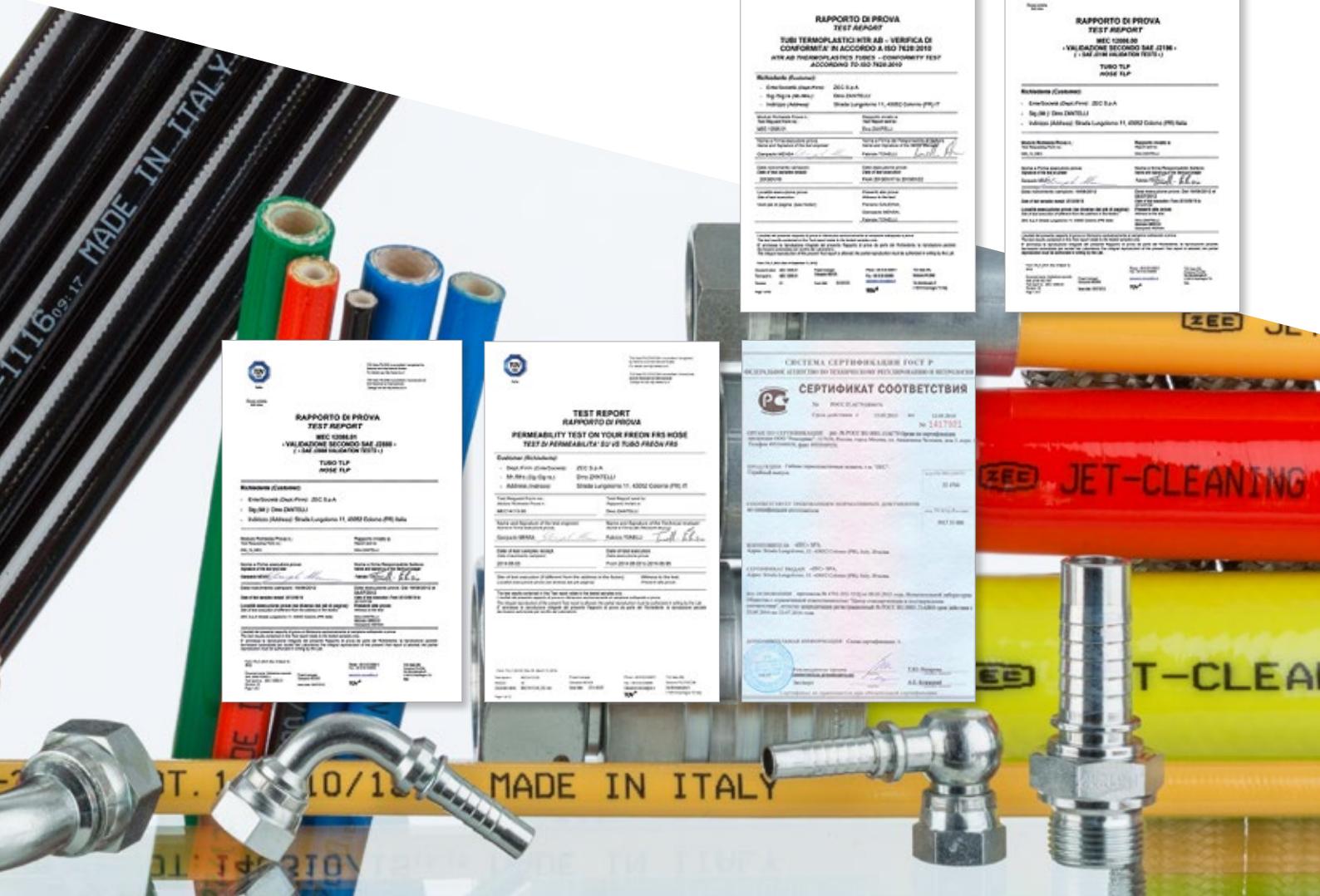
- che l'efficienza e l'efficacia dei sistemi produttivi interni è qualitativamente conforme e documentata
- che i processi produttivi sono organizzati per ridurre i costi aziendali a tutto vantaggio del prezzo dei prodotti
- che i processi produttivi sono rispettosi della sicurezza e della salute dei 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 ISO9001:2015 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.*





# PRODUCT SELECTION



Fluid Power



Pneumatics



Oil & Gas



Lubrication



Automotive



General Industry



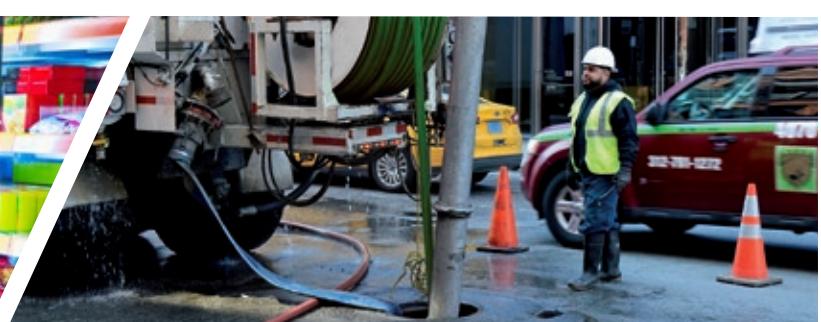
Food Industry



Marine



Refrigeration



Water Handling



## FLUID POWER

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

<b>MTH1 MARINE SERIES</b> LOW TEMP. -54°C FROM 70 TO 325 BAR	<b>OL7GSR SERIES</b> ISOBARIC 210 BAR LOW FRICTION	<b>OL7PL PRO-LIFTECH</b> CONSTANT PRESSURE 210 BAR (SF 1:4) 280 BAR (SF 1:3) ACCORDING TO EN ISO 3691	<b>TS8 SERIES</b> DIAGNOSTICS HOSE UP TO 630 BAR
<b>OL7 MARINE SERIES</b> LOW TEMP -54°C FROM 70 TO 250 BAR	<b>NON-CONDUCTIVE OL7 SERIES</b> ANSI HOSE - LOW TEMP. FROM 70 TO 250 BAR	<b>OL5 SERIES</b> WORKING PRESSURE FROM 80 TO 210 BAR	<b>JACK HOSE SERIES</b> STATIC PRESSURE 700 BAR FOR ALL DIAMETERS
<b>MTKH SERIES</b> WORKING PRESSURE FROM 200 TO 700 BAR	<b>NON-CONDUCTIVE OL8 SERIES</b> ANSI HOSE - LOW TEMP. FROM 145 TO 420 BAR	<b>PILOT SERIES</b> CONSTANT PRESSURE AT 120 BAR	<b>JACK HOSE SERIES</b> DYNAMIC PRESSURE UP TO 700 BAR
<b>OL7MP SERIES</b> ISOBARIC 250 BAR LOW FRICTION	<b>FLEX-FLOW OL5FL FLEX-FLOW</b> RETURN LINES 20 BAR	<b>JC5 SERIES</b> ISOBARIC SERIES 175 BAR/2.500 PSI	<b>PTFEIP</b> FROM 65 TO 200 BAR
		<b>JC7 PRO SERIES</b> TOP-CLASS FLEXIBILITY FROM 200 BAR/3.000 PSI TO 275 BAR/4.000 PSI	<b>PTFEIM</b> FROM 65 TO 275 BAR
	<b>JC8 PRO SERIES</b> TOP-CLASS FLEXIBILITY FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI	<b>JC8 SERIES</b> FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI	<b>PTFEIG</b> FROM 65 TO 275 BAR
		<b>JET POWER SERIES</b> WORKING PRESSURE FROM 800 TO 1280 BAR	<b>JC8M</b> WORKING PRESSURE 400BAR



## WATER HANDLING

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

<b>JC5 SERIES</b> ISOBARIC SERIES 175 BAR/2.500 PSI	<b>JC7 PRO SERIES</b> TOP-CLASS FLEXIBILITY FROM 200 BAR/3.000 PSI TO 275 BAR/4.000 PSI	<b>PTFEIP</b> FROM 65 TO 200 BAR
<b>JET POWER SERIES</b> WORKING PRESSURE FROM 800 TO 1280 BAR	<b>JC8 PRO SERIES</b> TOP-CLASS FLEXIBILITY FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI	<b>PTFEIM</b> FROM 65 TO 275 BAR
<b>JC7 SERIES</b> FROM 200 BAR/3.000 PSI TO 275 BAR/4.000 PSI	<b>JC8 SERIES</b> FROM 250 BAR/3.600 PSI TO 345 BAR/5.000 PSI	<b>PTFEIG</b> FROM 65 TO 275 BAR
<b>MT1E SERIES</b> PRESSURE WASHERS FROM 300 TO 500 BAR	<b>JETTER HOSE JCL SERIES</b> ISOBARIC SERIES 345 BAR/5.000 PSI	<b>JC8M</b> ISOBARIC SERIES CONSTANT WORKING PRESSURE AT 97 BAR / 1.400 PSI
		<b>JC8M</b> WORKING PRESSURE 400BAR



#### HTR AB TUBES



ISO 7628 STANDARD  
WORKING PRESSURE  
AT 10 AND 12,5 BAR

## AUTOMOTIVE

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

#### RILSAN® PA11- PHL



POLYAMIDE TUBING  
DIN 74324-73378 STANDARDS  
FROM 7 TO 68 BAR

#### AIR BRAKE TUBING



SAE J844 TYPE A STANDARD  
SAE J844 TYPE B STANDARDS

#### GAS5 - 110 R SERIES



ISOBARIC 30 BAR  
CNG SYSTEMS

#### PTFE TUBE SERIES



WORKING PRESSURE  
FROM 3 TO 56 BAR

#### GAS5 - 67R SERIES



ISOBARIC 30BAR  
LPG SYSTEMS

#### PA12 PHL SPIRALS



FOR TRUCKS  
DIN 74323 STANDARD

#### PA12 HL SERIES



DIN 74324-73378

#### CNG SERIES



ISOBARIC PRESSURE  
345 BAR



#### PA12 – HIPHL TUBING



LOW TEMPERATURE  
FROM 10 TO 49 BAR

#### PU SH98 TUBING



FROM 4 TO 19 BAR



WORKING PRESSURE  
FROM 9 TO 19 BAR

#### PA12 SUPERFLEXIBLE



FROM 9 TO 27 BAR

#### PUAS SERIES



SELF-EXTINGUISHING  
UL94 - VO  
FROM 7 TO 13 BAR

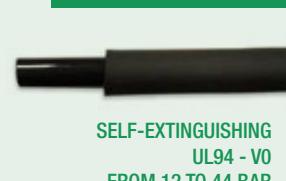


#### PUX SERIES



#### CRYSTAL PU

#### PA12 RIV VO SERIES



SELF-EXTINGUISHING  
UL94 - VO  
FROM 12 TO 44 BAR

#### MULTI-TUBING PA12-PHL



UP TO 12 TUBINGS



SELF-EXTINGUISHING  
UL94 - VO  
FROM 7 TO 13 BAR

#### TA...V2 SERIES



SELF-EXTINGUISHING  
UL94 - V2  
FROM 11 TO 44 BAR



#### SCAR PA12 PHL SPIRAL



STRAIGHT  
TERMINALS AND  
FITTING

#### PU-SH98 SPIRALS



WITH STRAIGHT TERMINALS  
AND FITTINGS

#### ATEX PA12 - TACO SERIES



FROM 15 TO 51 BAR



## GENERAL INDUSTRY

- Natural Gas Handling
- Detergent Solutions
- Fuels
- Various gases
- Airless paint spray
- Polyurethane injection
- High temperature – up to 130°C
- High temperature – up to 260°C
- Solvents

MT1-PA SERIES



NYLON COVER SOLUTION

CONDUCTIVE AS7 SERIES

PATENT NO. IT-1328746  
FROM 70 TO 250 BAR

CONDUCTIVE MT2 SERIES

FROM 165 TO 400 BAR  
SAFETY RATIO 1:4  
FROM 220 TO 534 BAR  
SAFETY RATIO 1:3

MT1E SERIES

190 TO 350 BAR - SAFETY RATIO 1:4  
254 TO 467 BAR - SAFETY RATIO 1:3

PTFE I2T SERIES

WORKING PRESSURE  
FROM 150 TO 365 BAR

VE5P-PA SERIES

ISOBARIC 85BAR  
NYLON COVER

MT1HT-PTFE SERIES

UP TO 130°C  
FROM 280 TO 1.500 BAR

MTK MARINE SERIES



FROM 200 TO 700 BAR

PTFE TUBES IC SERIES



FROM 36 TO 120 BAR

AT7 MARINE SERIES



FROM 70 TO 250 BAR

MTKM MARINE SERIES



FROM 275 TO 800 BAR

JET POWER SERIES



FROM 800 TO 1280 BAR

AT8S SERIES

BREATHING AIR  
ISOBARIC PRESSURE  
AT 413 BAR / 6.000 PSI

JCL SERIES



FROM 275 TO 345 BAR

VE8M MARINE SERIES



FROM 250 TO 700 BAR

JC8 PRO SERIES

FROM 250 BAR/3.600 PSI  
TO 345 BAR/5.000 PSI

CNG SERIES

ISOBARIC PRESSURE  
345 BAR

HOG SERIES

FROM 345 BAR / 5.000 PSI  
TO 1034 BAR / 15.000 PSI

PTFEIG SERIES



FROM 65 TO 275 BAR

JC8M

WORKING PRESSURE  
400BAR

## OIL&GAS

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

AT7 MARINE SERIES



FROM 70 TO 250 BAR

MTKM MARINE SERIES



FROM 275 TO 800 BAR

JET POWER SERIES



FROM 800 TO 1280 BAR

AT8S SERIES

BREATHING AIR  
ISOBARIC PRESSURE  
AT 413 BAR / 6.000 PSI

JCL SERIES



FROM 275 TO 345 BAR

VE8M MARINE SERIES



FROM 250 TO 700 BAR

JC8 PRO SERIES

FROM 250 BAR/3.600 PSI  
TO 345 BAR/5.000 PSI

CNG SERIES

ISOBARIC PRESSURE  
345 BAR

HOG SERIES

FROM 345 BAR / 5.000 PSI  
TO 1034 BAR / 15.000 PSI

PTFEIG SERIES



FROM 65 TO 275 BAR

JC8M

WORKING PRESSURE  
400BAR



## LUBRICATION

- Centralized Greasing lines
- Oil lubrication



## MARINE



- Air - O2 - Nitrox
- Fire extinguishing systems (CO2)
- Breathing air
- Underdeck hydraulic circuits
- Pressure gauges
- Steering hydraulics
- Underdeck hydraulic systems



FROM 150 TO 400 BAR



HIGH PRESSURE  
SOLUTION  
FROM 25 TO 93 BAR



FROM 105 TO 210 BAR



BREATHING AIR  
ISOBARIC PRESSURE  
AT 413 BAR / 6.000 PSI



ISOBARIC 250 BAR  
LOW FRICTION



FROM 250 TO 700 BAR



MTK MARINE SERIES



MTKM MARINE SERIES



MARINE STEERING OL5P SERIES



FROM 70 TO 104 BAR

HOG SERIES



FROM 345 BAR / 5.000 PSI  
TO 1034 BAR / 15.000 PSI



## FOOD INDUSTRY

FDA

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



WORKING PRESSURE  
FROM 10 TO 36 BAR



FDA 21 CFR, REG EU  
1395/2004, REG EU 10/2001  
WORKING PRESSURE  
FROM 4 TO 21 BAR



FROM 4 TO 19 BAR



AT7



AT7 - PE SERIES



MTHAT1



## REFRIGERATION

- Commercial - industrial
- Compressor recharging



UP TO 120 BAR



WORKING  
PRESSURE AT 60 BAR



WORKING PRESSURE  
UP TO 120 BAR



MT1 CO2 RECHARGING



PRESSURE AT 300 BAR



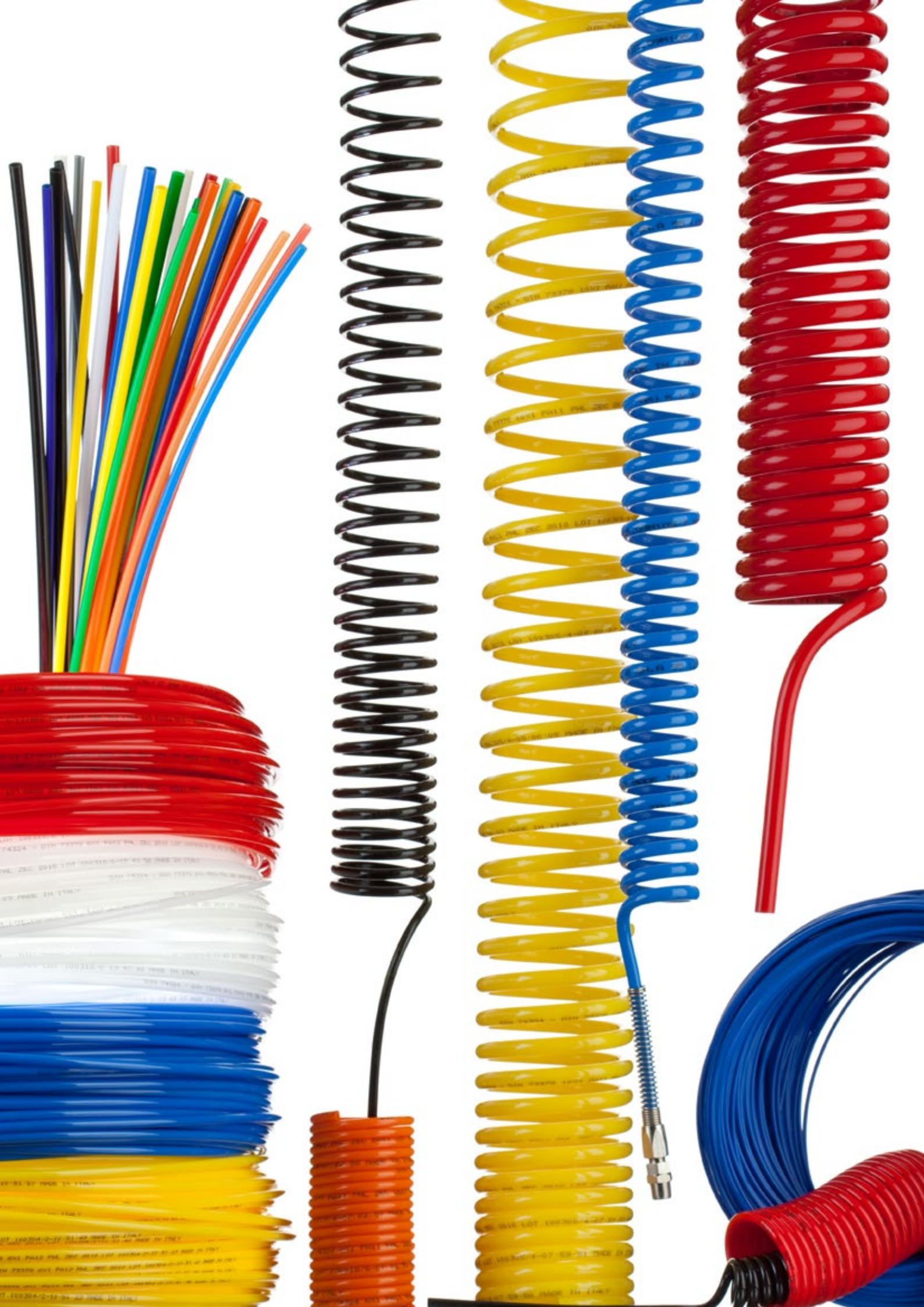
WORKING PRESSURE  
FROM 45 TO 60 BAR



HT FREON



CONNECTION TO  
COMPRESSORS







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

