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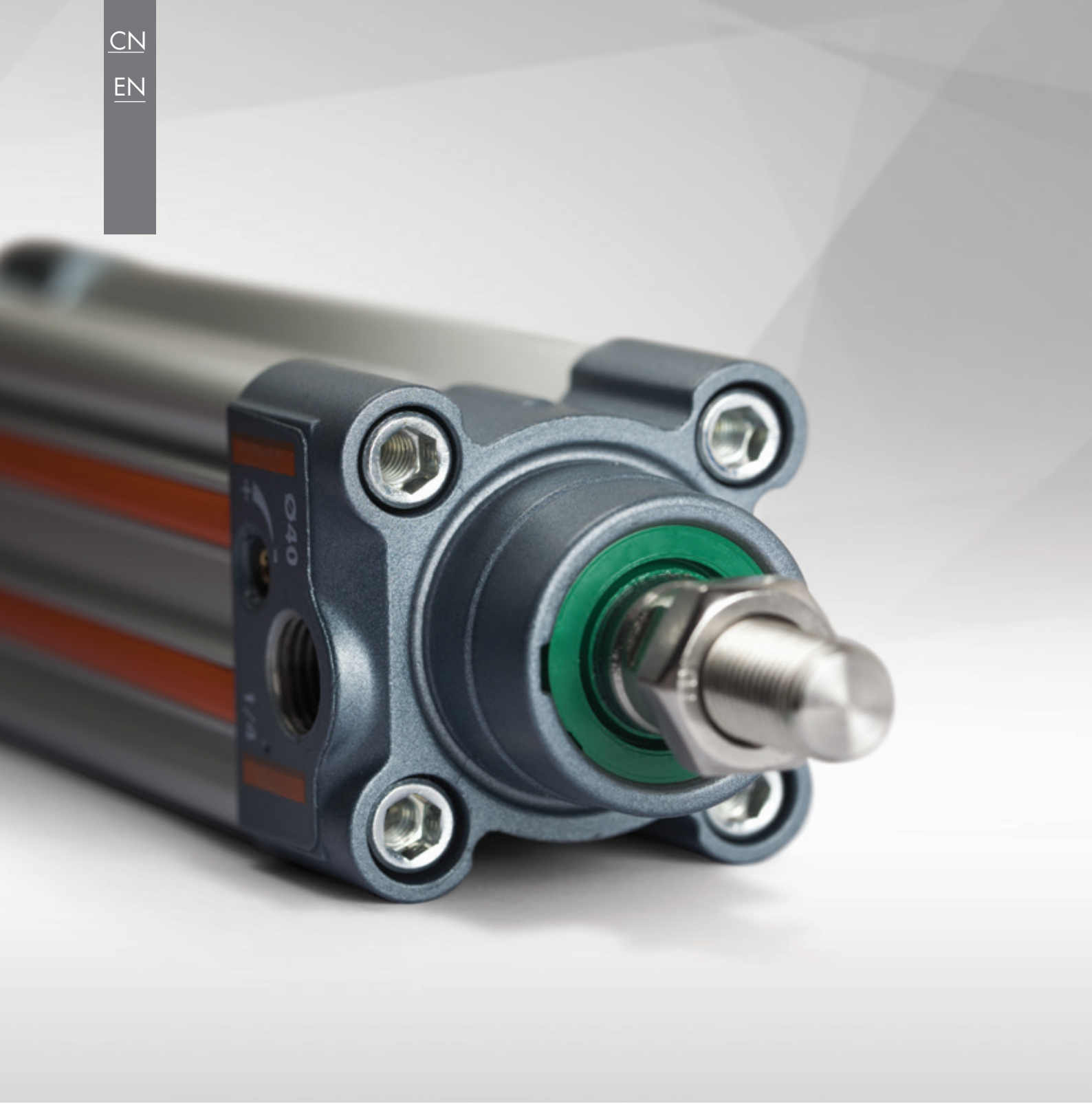


ISO 15552 - 极具产品多样性的气缸系列

ISO 15552 - A very versatile family

METAL WORK® PNEUMATIC

Metal Work.

气动自动化领域的引领者。

Leader in pneumatic automation.

Metal Work 始创于1967年，最初以生产气源接头为主，随着生产和销售体系的逐步扩大，最终成为了气动自动化领域的头部企业之一。

如今，我们在Concesio(BS)的生产基地已拥有600多名员工，意大利境内及国际销售团队的规模也已达到了800人。

1992年，Metal Work获得ISO 9001质量管理体系认证。2000 年，公司进一步取得ISO 14001环境管理体系认证。

2007年，公司实施OHSAS 18001标准，并于2018年升级至ISO 45001标准，以确保职业健康安全管理体系的完善运行。

上述所有认证均由德国认证机构DEKRA ITS颁发，并获得TGA的认可。产品通过遍布意大利及海外的61家分支机构进行分销，形成高效的销售网络，并提供完善的售前与售后服务。

卓越的产品品质与高效的销售体系构成了Metal Work的坚实基础，使公司能够满足自动化领域气动系统的一切需求。

Metal Work was set up in 1967 for the production of push-in fittings for compressed air systems. The company gradually extended its production and sales structure to become a leader in pneumatic systems for automation.

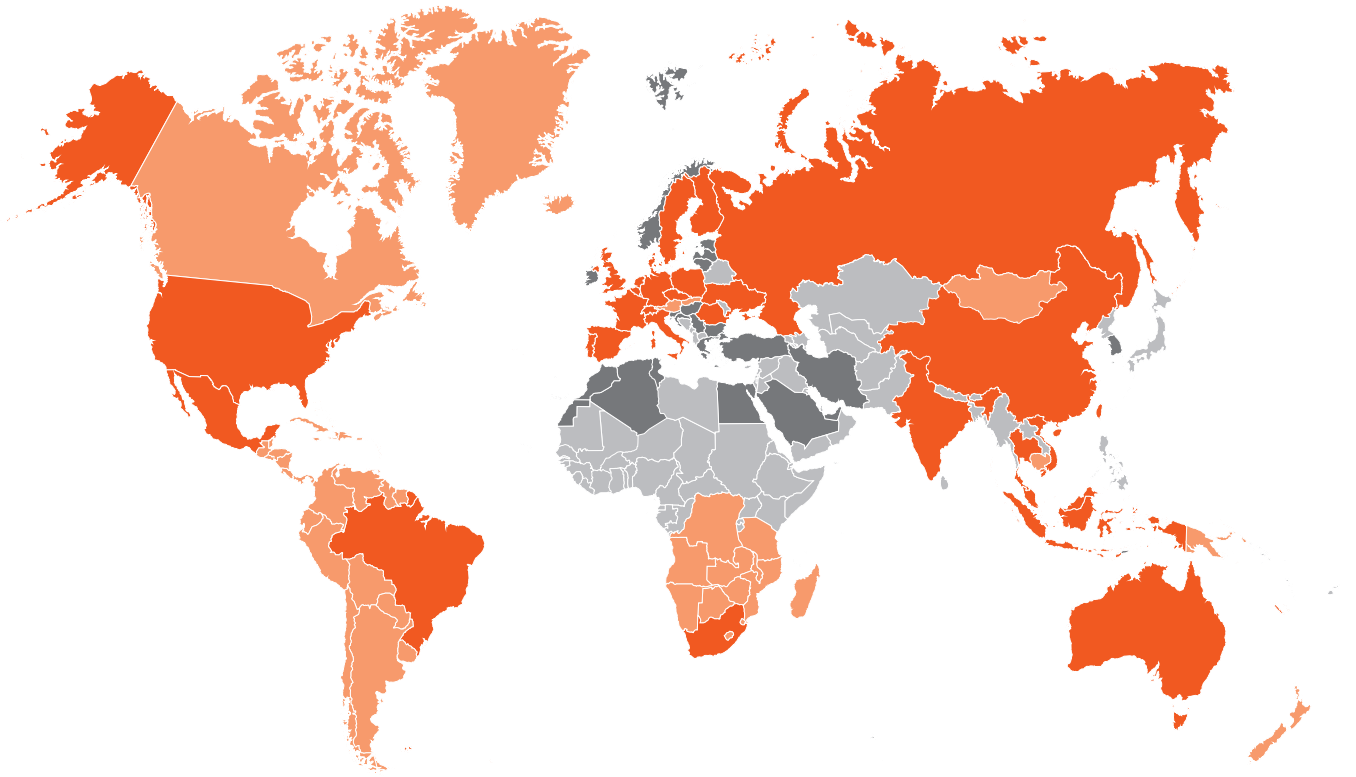
Now the production unit in Concesio has a staff of about 600 people, while the national and international sales organisation staff number is around 800.

In 1992 Metal Work obtained the ISO 9001 certification. To the quality system certification, in 2000 we added the one related to the enviromental management according to the ISO 14001.

To these in 2007 METAL WORK S.p.A. applied the OHSAS 18001 standard then moving to ISO 45001 in 2018 to guarantee a Management System of Occupational Safety and Health.

All the certifications above mentioned have been released by the German certification body DEKRA ITS, accredited by TGA. Products are distributed through 50 branches in Italy and abroad, which offer an efficient capillary before- and after-sales service.

The product quality and an efficient sales organisation are the basis on which Metal Work firmly stands and enable the company to meet all possible requirements in pneumatic systems for automation.



ISO 15552 气缸
ISO 15552 cylinder

材质
端盖：压铸铝，涂漆
活塞杆：C45钢或不锈钢，镀鉻
缸筒：阳极氧化铝

Materials
Heads: *Die casted painted aluminium*
Piston rod: *C45 steel or stainless steel, chromed*
Barrel: *Anodized aluminium*

标准工业应用
Standard industrial application

① 通用型
标准应用，也适用于潮湿的环境。
密封件: **NBR -10 +80°C**

GENERAL USE
Standard applications, also with humidity.
Gaskets: NBR -10 +80°C

② 长寿命型
针对行程较长或动作频率较高的应用。
密封件: **PU -25 +80°C**

LONG LIFE
Applications with long strokes or high number of cycles.
Gaskets: PU -25 +80°C

③ 化学 – 高温
工业应用，要求在化工厂等存在化学品和高温的环境中使用。
密封件: **FKM/FPM -10 +150°C**

CHEMICALS - HIGH TEMPERATURES
Industrial applications, in presence of chemicals and high temperatures requested, such as in chemical plants.
Gaskets: FKM/FPM -10 +150°C

④ 低温
针对低温应用，例如：在寒冷环境中。
密封件: **NBR -40 +80°C**

LOW TEMPERATURES
Applications in presence of low temperature such as in cold environments.
Gaskets: NBR -40 +80°C

⑤ 超低摩擦系数
针对纺织行业或抬升设备；同样适合用作气动弹簧的场合。
密封件: **NBR -10 +80°C**

ULTRA LOW FRICTION
Textile industry or for lifting devices; used also as pneumatic springs.
Gaskets: NBR -10 +80°C

防尘圈，用于特殊应用
Special scrapers automation

Su richiesta
On request

⑥ 自带润滑的密封圈
针对那些气缸中的润滑剂容易被冲刷掉的应用，例如：汽车清洗车间。
防尘圈:
自润滑型高分子材料 **-30 +80°C**

SELF LUBRICATED GASKETS
Applications where the lubricants in the cylinder could be removed, such as in car washing plants.
Scraper: self lubricated TECHNOPOLYMER -30 +80°C

⑦ 脏污和灰尘
适用于污浊和多粉尘的环境。
防尘圈: **NBR** 和高分子材料 **-10 +80°C**

DIRT AND DUST
Applications in presence of dirt, such as dusty applications.
Scraper: NBR and TECHNOPOLYMER -10 +80°C

⑧ 脏污和低温（中等使用强度）
针对中等负荷强度且有低温和脏污存在的应用，例如：农业和运输业。
密封件: 硬质高分子材料 **-25 +80°C**

DIRT AND LOW TEMPERATURES (MEDIUM USE)
Medium-Heavy duty applications, with presence of dirt and low temperatures, such as in agricolture or in transport sector.
Gaskets: hard TECHNOPOLYMER -25 +80°C

⑨ 脏污和高温（高强度使用）
高强度应用，脏污情况严重，有高温环境。例如：浇铸车间，水泥厂或运输行业。
密封件: **FKM/FPM** 和金属 **-10 +150°C**

DIRT AND HIGH TEMPERATURE (HEAVY USE)
Heavy duty applications, in presence of hard dirt and high temperatures, like in foundries, cement plants or in transport sector.
Gaskets: FKM/FPM and METAL -10 +150°C

ISO 15552 气缸- MCR 系列
ISO 15552 cylinder - MCR series

材质
端盖: 压铸铝，阳极氧化处理
活塞杆: 不锈钢，镀鉻
缸筒: 阳极氧化铝

Materials
Heads: *Die casted anodized aluminium*
Piston rod: *Stainless steel, chromed*
Barrel: *Anodized aluminium*

标准工业应用
Standard industrial application

① 通用型
标准应用，也适用于潮湿的环境。
密封件: **NBR -10 +80°C**

GENERAL USE
Standard applications, also with humidity.
Gaskets: NBR -10 +80°C

② 长寿命型
针对行程较长或动作频率较高的应用。
密封件: **PU -25 +80°C**

LONG LIFE
Applications with long strokes or high number of cycles.
Gaskets: PU -25 +80°C

③ 化学 – 高温
工业应用，要求在化工厂等存在化学品和高温的环境中使用。
密封件: **FKM/FPM -10 +150°C**

CHEMICALS - HIGH TEMPERATURES
Industrial applications, in presence of chemicals and high temperatures requested, such as in chemical plants.
Gaskets: FKM/FPM -10 +150°C

④ 低温
针对低温应用，例如：在寒冷环境中。
密封件: **NBR -40 +80°C**

LOW TEMPERATURES
Applications in presence of low temperature such as in cold environments.
Gaskets: NBR -40 +80°C

防尘圈，用于特殊应用
Special scrapers automation

⑦ 脏污和灰尘
适用于污浊和多粉尘的环境。
防尘圈: **NBR** 和高分子材料 **-10 +80°C**

DIRT AND DUST
Applications in presence of dirt, such as dusty applications.
Scraper: NBR and TECHNOPOLYMER -10 +80°C

⑧ 脏污和低温（中等使用强度）
针对中等负荷强度且有低温和脏污存在的应用，例如：农业和运输业。
密封件: 硬质高分子材料 **-25 +80°C**

DIRT AND LOW TEMPERATURES (MEDIUM USE)
Medium-Heavy duty applications, with presence of dirt and low temperatures, such as in agricolture or in transport sector.
Gaskets: hard TECHNOPOLYMER -25 +80°C

ISO 15552 气缸 - HCR 系列
ISO 15552 cylinder - HCR Series

材质
端盖: 压铸铝, 阳极氧化和喷漆
活塞杆: AISI 316
缸筒: 阳极氧化铝

Materials
Heads: *Die casted aluminium, anodized and coated*
Piston rod: *AISI 316*
Barrel: *Anodized aluminium*

⑩ 防滞留
食品饮料行业，例如：乳制品生产厂
防尘圈: 特殊 **PU -10 +60°C**

ANTI-STAGNATION
Food and Beverage sector, such as dairy industry.
Scraper: special PU -10 +60°C

ISO 15552 不锈钢气缸
Stainless steel ISO 15552 cylinder

材质
端盖: AISI 304 (AISI 316 应要求)
活塞杆: AISI 316
缸筒: AISI 304 (AISI 316 应要求)

Materials
Heads: *AISI 304 (AISI 316 on request)*
Piston rod: *AISI 316*
Barrel: *AISI 304 (AISI 316 on request)*

② 化学 – 长寿命
行业应用，要求密封件同时具有抗化学特性和较长的使用寿命。
密封件: **PU -20 +80°C**

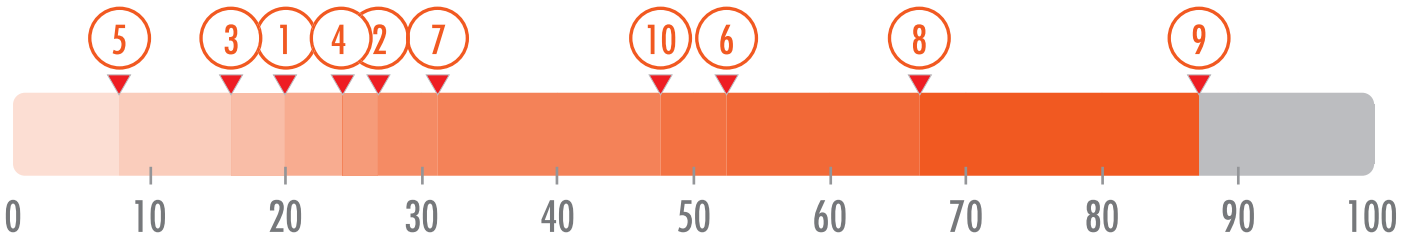
CHEMICALS - LONG LIFE
Industrial applications, in presence of chemicals and long life of the gaskets is required.
Gaskets: PU -20 +80°C

③ 化学 – 高温
行业应用，有化学品和高温存在的场合，例如：化工厂。
密封件: **FKM/FPM -10 +150°C**

CHEMICALS - HIGH TEMPERATURES
Industrial applications, in presence of chemicals and high temperatures requested, such as in chemical plants.
Gaskets: FKM/FPM -10 +150°C

ISO 15552 气缸耐腐蚀等级一览
Overview degree of resistance to corrosion of ISO 15552 cylinders

等级 *Degree*		产品系列 *Family*	
MW S	标准		ISO 15552 气缸 (STD, A 型, 3 系列) *ISO 15552 cylinder (STD, type A, series 3)*
MW M	中等		ISO 15552 气缸 MCR 系列 *ISO 15552 cylinder - series MCR*
MW H	较强		ISO 15552 气缸 HCR 系列 *ISO 15552 cylinder - series HCR*
MW X	超强		ISO 15552 气缸INOX 不锈钢系列 *Stainless steel ISO 15552 cylinder*

抗污染效果指标
对于每种应用，我们以 1 到 100 的等级显示抗污染效果。

Anti-contamination Effect Indicators
For each application we show the anticontamination effect on a scale from 1 to 100.