

# Noyfar

**SENSOR & HYDRAULIC CYLINDERS**

## HYDRAULIC CYLINDERS

AGRICULTURAL, CIVIL AND INDUSTRIAL AREA



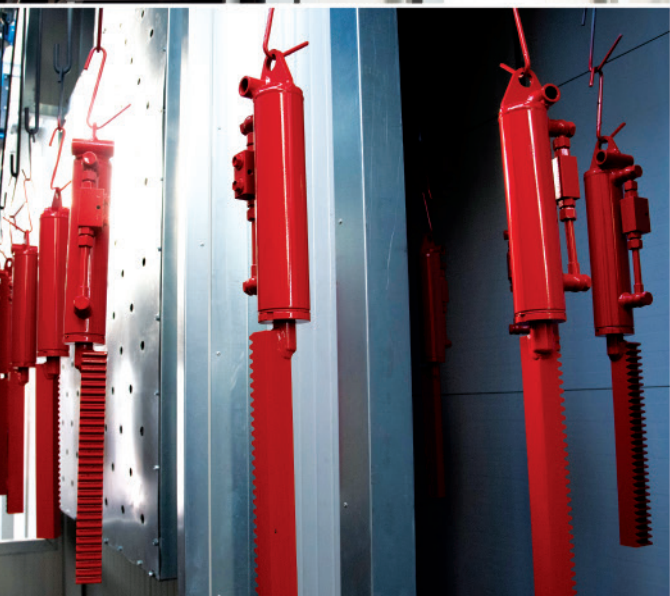
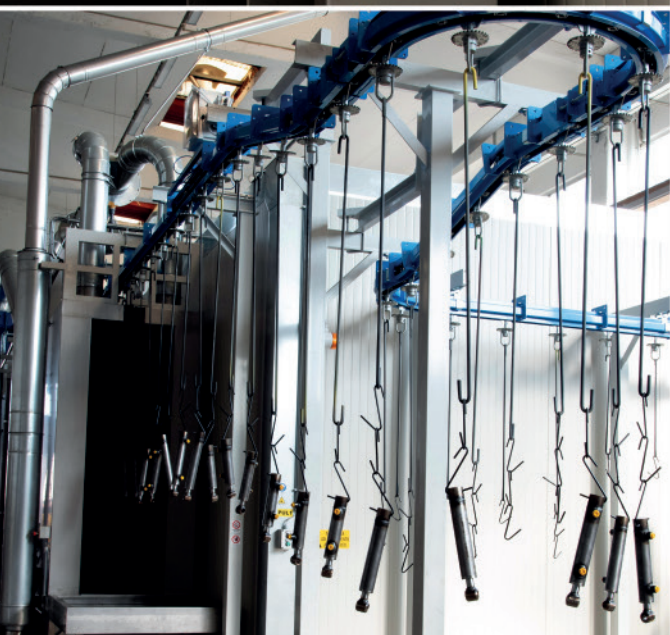
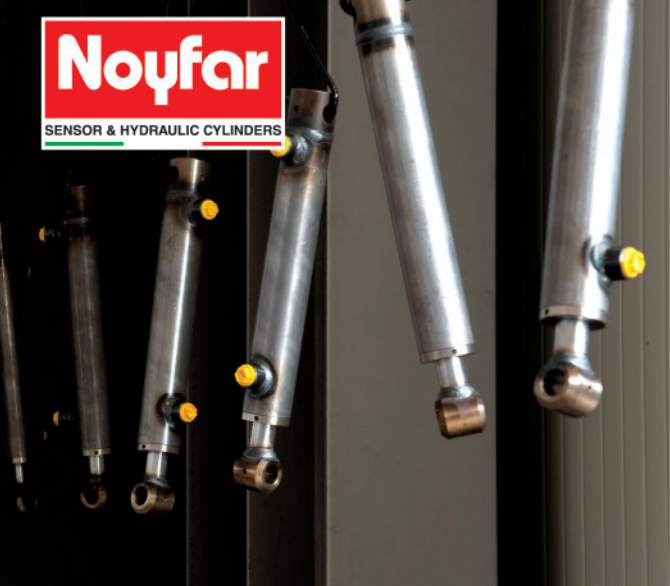
### OUR BRANDS

ICE CYL - SENSOR CYL - SUZZARA CYL  
D-TELESCOPIC CYL - ROTAX CYL - AISI CYL



# Noyfar

SENSOR & HYDRAULIC CYLINDERS

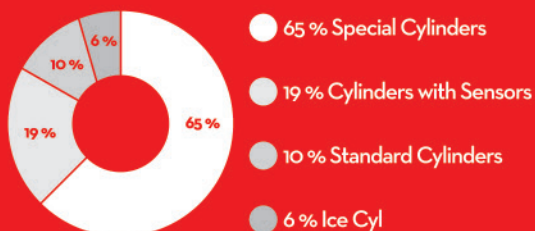


## PAINTING AREA

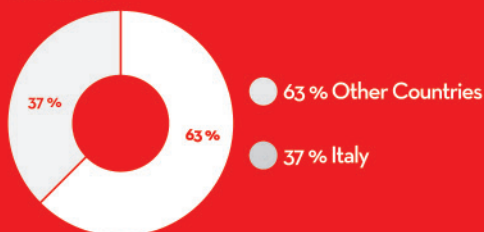
According to the innovative installation, Noyfar is able to supply painted cylinders. The epoxides non-toxic polyurethanes varnishes and zero environmental impact, reduce the waste material. In the new painting area, cylinders are painted in line with high levels of personalization, equipped with new technologies. The research and the development of water-based green products which give production and application cycles with a constantly lower impact on environment, are the main sectors Noyfar has addressed to and investing on. We use water-based products which are cutting-edge and highly performing, with an easy application and innovative technical features.

## TURNOVER

### PRODUCTS



### COUNTRY



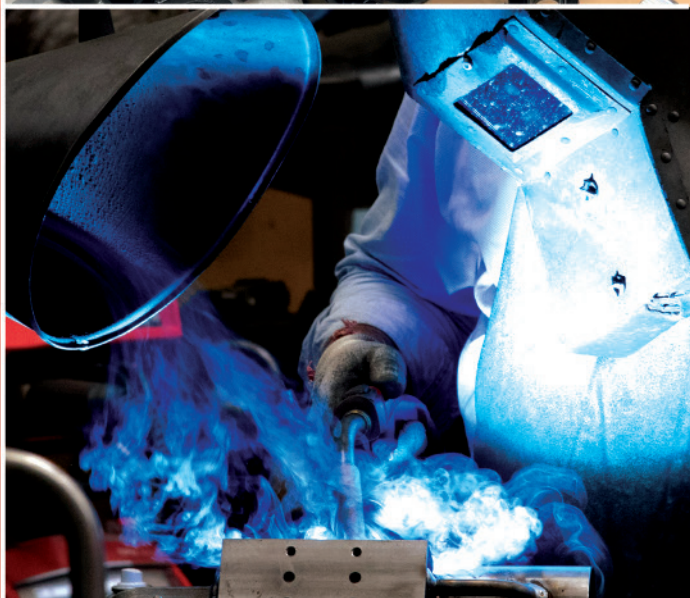


# COMPANY

Since the beginning, Noyfar hydraulics cylinders are Made in Italy. The customization of the product brings Noyfar into national and international markets. The company applies to a wide range of customers and areas of applications too.

# QUALITY

Noyfar, ISO 9001 - 2015 certified company, working in full compliance with all the directives of the ISO 9001 - 2015 rules submitting their products a rigid quality control. The salt test results, roughness and hardness are evaluated by Certified Laboratories. The painting cycle features following customer's preferences of the RAL range of colour. All the tubes are cleaned before assembling the cylinders. All welding operations on tubes and rods are carried out in compliance with UNI EN ISO 3834 standards. All cylinders are tested following Quality Management System. All the material is supplied with Quality Certificates.

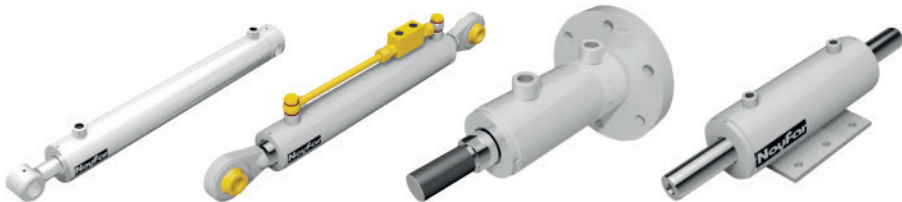


# OUR CYLINDERS

## SPECIAL CYLINDERS



## STANDARD CYLINDERS



## FEATURES

### PISTON ROD

MATERIAL	CK 45, 20 Mn V6, 42 CrMo4 NiKrom, Others
CERTIFICATE	EN 10204 3.1
RANGE	min. 12 mm - max. 110 mm
STRAIGHTNESS	ISO 1101 0,2 mm / 1000 mm
CHROME THICKNESS	25 µm - 40 µm
CHROME HARDNESS	900 HV 0,1
ROUGHNESS	Ra < 0,2 µm
TOLERANCE	EN 20286 - 1 f7
CORROSION TEST	Rating 10 (96h) ISO 4540 (- RATING 9 (500h))

### CYLINDER TUBE

MATERIAL	E355 EN 10305 - 2
CERTIFICATE	EN 10204 3.1
BORE	min. 25 mm - max. 160 mm
TOLERANCE	EN 20286 - 1 H9, (H8)
ROUGHNESS	Ra 0,4 µm - 0,8 µm

### PISTON SEALS

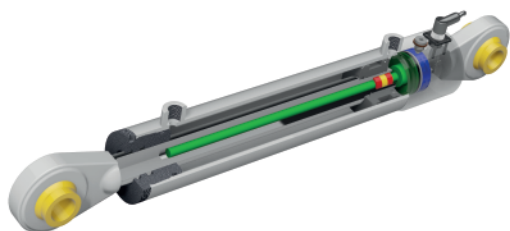
MATERIAL	NBR
SPEED	0,5 m/s
PRESSURE	400 bar
TEMPERATURE	-30 °C + 90 °C

### ROD SEALS

MATERIAL	Polyurethane
SPEED	0,5 m/s
PRESSURE	400 bar
TEMPERATURE	-30 °C + 90 °C



# SENSOR CYL



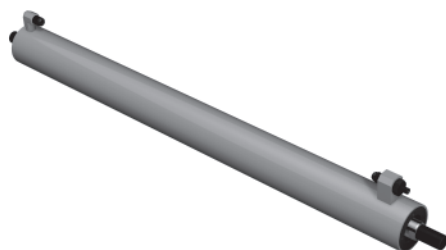
THE **SENSOR CYL** SERIES ALLOWS THE "EARTHMOVING MACHINES" MANUFACTURERS TO USE A PARTICULAR CYLINDER THAT ALLOWS TO CHECK THE POSITION INSTANTLY.

This simplifies various machines where the parallelism control of a structure and the end of stroke control are fundamental. These systems are mainly used on aerial platforms and on fork lifting systems; they can also be used in steering systems of machines that need to adapt their balance to the ground during application as in the agricultural sector. The digital system allows carrying out the tests both in the manual and automatic modalities.

## FEATURES

RESOLUTION	$\pm 0.1$ mm
LINEARITY	$\pm 0.04$ F.S.
ELECTRIC WORKING STROKE	50 mm - 2500 mm
TEMPERATURE	from $-30^{\circ}\text{C}$ to $+90^{\circ}$
ELECTRIC CONNECTION	4 - wire (optional M12 connector)
FEED	12/24 Vdc (4...20 mA)
WORKING PRESSURE	450 bar
VIBRATION	25 g
SHOCK	100 g
EMC UP TO	200 V/m
INTERFACE	Analogical, PWM, CANopen, J1939
SAFETY INTEGRATION LEVEL 2	Available in certified version SIL2 according to IEC 61508 standard

# ICE CYL



**ICE CYL** IS A CYLINDER USED BY MANUFACTURERS OF MACHINES WHICH WORK INTO THE COOLER ENVIRONMENT WITH THE LOWER TEMPERATURE.

ICE CYL is assembled with a special sealing kit called "Artico" which allows the cylinder to operate up to temperatures as  $-50^{\circ}\text{C}$ . It guarantees the right operation and a long service life especially when it is subjected to sudden changes in temperature and humidity levels high. The bronze wiper removes and destroys all the ice lying on the piston rod. The stainless steel materials and Marine Coating Cycle allow to delete any causes of damage even if the cylinder is subjected to highly corrosive agents. ICE CYL has the highest quality standards on the market. All cylinders can be quickly converted into ICE CYL without changing any external dimensions, sizes and the stroke.

## FEATURES

SEAL	Kit "Artico"
ROD MATERIAL	Aisi 304 / 316 / 329 / 431
TUBE MATERIAL	E355 EN 10305
PAINTING	Marine



# ROTAX CYL



**ROTAX CYL** EXPRESSES THE BEST IN TERMS OF PRODUCT ENGINEERING, COMBINING AXIAL AND ROTATING MOVEMENT.

This technology is used by the main manufacturers of agricultural machineries for harvesting. It can combine the characteristics of the other lines, especially the ICE CYL one, using materials suitable for lowest temperatures.

## FEATURES

ROTATION ANGLE	standard 270°
MAX ACTIVE BRACE AT 210 BAR	528 Nm
MAX PASSIVE BRACE AT 210 BAR	830 Nm
MAX PRESSURE	210 bar
TESTING PRESSURE	320 bar
MAX AXIAL LOAD	12500 N
RADIAL LOAD	12500 N



# AISI CYL



**AISI CYL** LINE HAS BEEN DEVELOPED TO SATISFY THE MOST DEMANDING REQUESTS IN PARTICULARLY AGGRESSIVE FIELDS OF APPLICATION WHERE CLIMATIC EXTERNAL AGENTS COMPROMISE THE DURATION OF STANDARD HYDRAULIC CYLINDERS.

The high level technology, is supported by the focus on the choice of material and seals. It is also powered by the reliability and the protection against the corrosion.

## FEATURES

ROD MATERIAL	AISI 304 / 316 / 329 / 431
TUBE MATERIAL	AISI 304 / 316 / 329 / 431
PAINTING	Marine Cycle





# SUZZARA CYL



**SUZZARA CYL** LINE ENSURES A GOOD FIT, WHICH ALWAYS ALLOWS A PERFECT WORKING POSITION.

The products are available in different classes tailored to the different needs of agricultural businesses. The technology used in the line **SUZZARA CYL** is based on a double-acting cylinder complete with special bottom with double valves integrated that prevents any impact transferred from the hydraulic system of the tractor, and maintains the ideal performance even during extended periods of inactivity. Through the system of integrated valves on special bottom, this system assures the best power and flexibility with a more compact size.

## FEATURES

PULLING FORCE	$p = 300 \text{ bar } F = 200 \text{ kN}$
PUSHING FORCE	$p = 300 \text{ bar } F = 150 \text{ kN}$
SAFETY FACTOR	$S = 3$



