

# **QUALITY**

NOYFAR ISO 9001 CERTIFIED COMPANY, WORK-ING IN FULL COMPLIANCE WITH ALL THE DI-RECTIVES OF THE ISO 9001 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 or the RAL range of colour. All the tubes are cleaned before assembling the cylinder. 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.

### **WASHING SYSTEM**

All cylinders are cleaned following the NAS scale; the minimum level is NAS9.

### WELDING

The welder are certificated as requested by ISO.

### **PAINTING**

The goods can be supplied in the RAL colour or in their own Colour









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### **NOYFAR S.r.l.**

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**HYDRAULIC** 

**CYLINDERS** 

Agricultural, Civil and Industrial Area

# OUR BRANDS

in a a a a

Sensor & Hydraulic Cylind

Aisi Cyl Lift Cyl Suzzara Cyl Rotax Cyl Telescopic Cyl







### **COMPANY**

NOYFAR IS A REALITY THAT DEVELOPED IN THE AGRICULTURAL AND INDUSTRIAL AREA BASED ON THE PRODUCTION OF HYDRAULIC CYLINDERS, WHICH HAVE BEEN ESPECIALLY STUDIED TO TRANSMIT ENERGY THROUGH THE PRESSURE OF FLUIDS.

The Company "Plus" is mainly based on the ability to personalise the product supported by a great technical knowledge and experience in the area.

To guarantee high quality products, Noyfar submits its raw and processed materials to a very rigorous control supported by external certified laboratories and structures. The constant investments in machines and new technologies allow competing in more and more complex markets both in the construction area and in the automotive. Furthermore the personalisation of the products over the years has allowed reaching higher and higher levels with the new series "Sensor Cyl" and "Ice Cyl".

# Sensor Cyl

Allows to simplify the hydraulic components of electronic controls in lieu of position.

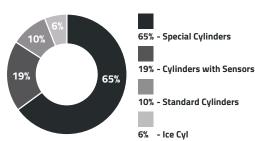
ice Cyl

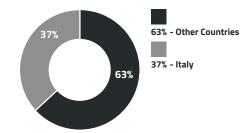
To have excellent returns schemes temperatures down to -50 °C.





Products





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THE SENSOR CYL SERIES ALLOWS THE "EARTH MOVING MACHINES" MANUFACTURES TO USE A PARTICULAR CYLINDER THAT ALLOWS TO CHECK ENVIRONMENT WITH THE LOWER TEMPERATURE. 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	± 0.1 mm
LINEARITY	< ± 0.04 F.S.
ELECTRIC WORKING STROKE	50 mm – 2500 mm
TEMPERATURE	from -30° C to +90° C
ELECTRIC CONNECTION	4-wire (optional M12 connector)
FEED	12/24 Vdc (420mA)
WORKING PRESSURE	450 bar
VIBRATION	25g
SHOCK	100g
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** IS A CYLINDER USED BY MANUFACTURERS OF MACHINES WHICH WORK INTO THE COOLER

**ICE CYL** is assembled with a special sealing kit called "Artico" which allows the cylinder to operate up to temperatures as -50° 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 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 valve 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 valve on special bottom this system assures the best power and flexibility with a more compact size.

### **FEATURES**

PULLING FORCE	p=300bar F=200kN
PUSHING FORCE	p=300bar F=150kN
SAFETY FACTOR	S=3



AISI CYL LINE HAS BEEN DEVELOPED TO SATIS-FY THE MOST DEMANDING REQUESTS IN PAR-TICULARLY AGGRESSIVE FIELDS OF APPLICATION WHERE CLIMATIC EXTERNAL AGENTS COMPRO-MISE THE DURATION OF STANDARD HYDRAULIC CYLINDERS.

A severe final testing reproduces the normal working conditions of cylinders and the care taken in the choice of materials and seals used provide maximum technology in the field which the hydraulic cylinder are required reliable and resistant to any type of wear.

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

**FEATURES** 

## **OUR CYLINDERS**

### FEATURES

### **PISTON ROD**

MATERIAL	CK45, 20MnV6, 42CrMo4, NiKrom, Others
CERTIFICATE	EN 10204 3.1
RANGE	min.12mm-max110mm
STRAIGHTNESS	ISO 1101 0,2mm/1000mm
CHROME THICKNESS	25µm - 40µm
CHROME HARDNESS	900HV 0,1
ROUGHNESS	Ra < 0,2µm
TOLERANCE	EN 20286-1 f7
CORROSION TEST	Rating 10 (96h) ISO4540 (~RATING 9 (500h))

SPECIAL CYLINDERS

### **CYLINDER TUBE**

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

### **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

# Rotax Cyl

ROTATING MOVEMENT.

ROTAX CYL EXPRESSES THE BEST IN TERMS OF This technology is used by the main manufacturers of PRODUCT ENGINEERING, COMBINING AXIAL AND agricultural machinery for harvesting. It can combine the characteristics of the other lines, especially the line ICE **CYL** using materials suitable for lowest temperatures.



### STANDARD CYLINDERS



