



# TETRYX

# **Automatic material sorting station**

**TETRYX** is an automatic material sorting control unit that allows multiple utilities (hoppers, bins, etc.) to be connected to multiple collection points (silos, day bins, etc.) up to a total of 24 points, both at the inlet and outlet, completely automating the material conveying. The machine consists of an input section (many to one) and a similar mirrored output section (one to many).

#### **OPERATING PRINCIPLE**

The central pipe of the inlet station rotates and is quickly and precisely positioned at one of the inlet pipes regularly arranged around the machine's axis of rotation and then hermetically connected to it. Simultaneously and in a similar manner, the central pipe of the outlet station is hermetically connected to the selected outlet pipe. The two central pipes too, which are free to rotate relative to each other, guarantee a hermetic vacuum seal.



#### **MAIN FEATURES**

#### **TOTAL CONFIGURABILITY**

TetrYx has been designed to make the distribution of materials within production plants completely flexible and modular: the number of inputs and outputs, determined by the configuration of the system, can be configured with total freedom thanks to the possibility of having multiple stations in series. According to requirements, the machine can be configured with horizontal or vertical element layout, and versions are available for connecting multiple utilities to a single utility and vice versa.

#### **HIGH EFFICIENCY**

Equipped with a low-consumption and high-efficiency 0.75 kW brushless motor, it guarantees a positioning time for connection to the selected tubes of less than 2 seconds without vacuum loss.

#### **POSITIONING ACCURACY**

TetrYx can position the central connecting tube with extreme positional accuracy thanks to a high-precision optical encoder.

#### **RELIABILITY**

The high-precision construction of mechanical parts, the control with PLC and the related commercial sensor technology guarantee absolute reliability.

#### **ACCESSIBILITY**

Thanks to its design, access to all its main parts is quick and easy, facilitating maintenance procedures.

#### **SAFETY**

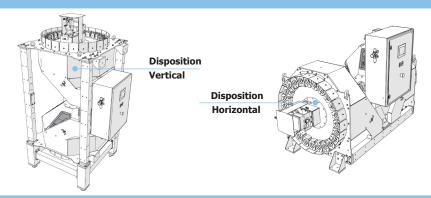
No risk for the operator. Moving parts are not accessible without the use of dedicated tools to dismantle the machine.

#### **INDUSTRY 5.0 & IoT**

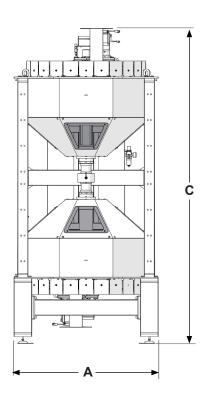
All SYncro machines are ready to be integrated with third party supervisory controls and ERP systems using the latest generation of OPC-UA protocols as standard.

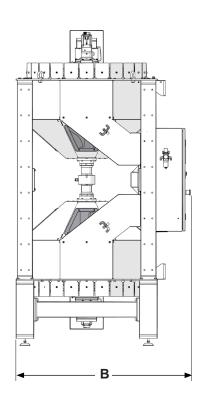


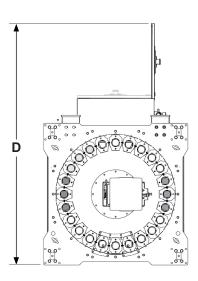
## **CONFIGURATIONS**



## **TECHNICAL DATA**







TETRYX Vertical	TETRYX Horizontal
1125 mm	2320 mm
1360 mm	1225 mm
2450 mm	1445 mm
1890 mm	1755 mm
16 - 20 - 24*	
max 76 mm	
max 76 mm	
400 V / 50-60 Hz	
0.2 KW	
360 Kg	
5°C - 40°C (41°F - 104°F)	
	1125 mm  1360 mm  2450 mm  1890 mm  16 - 20  max 7  400 V /  0.2

