

# SIDEROS<sup>®</sup>

 **ENGINEERING**



**AHB** Tooling & Machinery, Inc.  
Complete Metalworking Solutions  
Roseville Saginaw & Jackson, MI

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**AROUND THE STEEL PLATE**



**SIDEROS ENGINEERING** has been operating for over 30 years worldwide in the field of machinery for sheet metal manufacturing, and owes its success particularly to the high quality of its own products and to its constant commitment to the development, creation and industrialization of new projects.

Founded in 1981, it has a peculiarity: the possibility of testing all new prototypes and the new technologies developed, during a period of at least one year at BELLONI LAMIERE, a firm operating since 1958 on the Italian market and belonging to the same Industrial Group; this combination enables SIDEROS ENGINEERING to constantly monitor the plants installed, thus allowing the optimization of products before their launch on the market and their subsequent industrialization.

It is important to emphasize that Sideros Engineering is the only firm in the world able to propose a wide range of plants complementary to sheet metal cutting machines.

This feature enables our customers to make use of a concept of integrated design as well as of a construction that follows a common philosophy, the values of which are efficiency, safety, cost-performance and long life.



 **made  
in  
Italy**





**BELLONI LAMIERE**, founded by Vincenzo Belloni in 1958, has been among the first firms in Italy supplying high quality oxy-fuel cut pieces. Today, after over "half a century" is among the few firms in Italy that can be proud of such a long presence and experience in metal plates processing industry.

The quality of the products supplied, the accurate inspections during processing steps and delivery punctuality make BELLONI LAMIERE a reliable benchmark at national level.

Over the years they have more and more specialized in the following processes:

- Oxy-fuel cutting: metal plates of several thicknesses are cut by means of high performance cutting machines
- Straightening: the plant is equipped with 3 Hydraulic Presses with movable vertical rods, movable cylinders and rotating hubs
- Milling: it is performed by means of CNC control machines on work-pieces having a length up to 39 ft.
- Sandblasting, deburring, heat treatments and machining



Today BELLONI LAMIERE has become the main Test Center of Sideros Engineering. Every year, Sideros tests and develops dozens of new products and technologies directly on-site. This great experience has let Sideros be able to design and manufacture reliable and technological advanced products over the past 30 years.

[www.bellonilamiere.com](http://www.bellonilamiere.com)

## LOTUS

**LOTUS** was founded in 1980 and has soon specialized in aluminium and stainless steel processing.

The products manufactured by Lotus are distributed and appreciated all over Europe thanks to their high quality standard.

Production includes:

- Aluminium alloy loading ramps
- Aluminium and stainless steel walkways and stairs
- Aluminium electrowelded structures



[www.lotusalluminio.com](http://www.lotusalluminio.com)

## GLOBAL HOME

**GLOBAL HOME** has specialized in the last years in the designing and manufacturing of plants for:

- Air treatment and filtration (heating and conditioning).
- Building automation
- Conception and manufacture of lighting systems
- Designs to manufacture active and passive safety systems
- Heat and sound insulation

The added value offered by Global Home to the market is to be the only contact at customer's service.



[www.globalhomesrl.com](http://www.globalhomesrl.com)



## DOWNDRAFT TABLES FOR THERMAL CUTTING



ECOTAB

Since the '70s, the steel service center **Belloni Lamiere**, part of the Sideros Engineering industrial group, has tested and been using the first down draft tables produced and developed by Sideros Engineering.

Over the decades, Sideros Engineering down draft tables have been further **optimized**, automatized, and therefore produced on industrial scale for being more competitive on the local and the export market.

Today, Sideros Engineering exports to more than 52 countries worldwide.

Sideros Engineering down draft tables feature a **solid frame**, able to support heavy-duty metal plates mainly used in applications such as oxy-fuel cutting.

Modularly designed, Sideros down draft tables are provided with an integrated suction system equipped with either one or more suction channels, depending on cutting width and application, in order to ensure the **highest performances**.

Sideros Engineering offers 76 **down draft tables configurations**, all industrialized and continuously monitored at Customers locations in order to receive constant performance feedback.







STANDARD MODELS

- ORION TABLE** Simple and sturdy, it ensures good suction either for plasma and oxy-fuel applications
- SUPER ORION TABLE** Reinforced and heavy duty version of the Orion table. Mainly designed for Oxy-fuel cutting
- SIRIUS TABLE** It ensures excellent suction on either straight and bevel torch plasma cutting
- SIRION TABLE** Sirius' design and performance features, for smaller plate formats
- POLARIS TABLE** Specifically designed for heavy oxy-fuel, to support high temperature and thick metal plates
- LASER TAB** High performances for Co<sub>2</sub> and Fiber laser cutting machines

AUTOMATIC MODELS

- RAPID CLEAN** Automatic system for the extraction of slag and scraps produced during cutting processes
- SPRINTER** Automatic system for pallet changing in plasma and Co<sub>2</sub> and Fiber laser cutting machines
- SYNCROMATIC** Automatic movable suction trolley for slag collection and fume extraction
- ACQUAMATIC** Conceived to be integrated into underwater arc plasma cutting machines

SLATS AND SUPPORTING FRAMES

All down draft tables are provided with removable supporting frames endowed with cutting slats; these are transversally placed with regard to cutting direction.

TYPES:

- parallel
- fish-bone
- serpentine
- grid
- with cast iron cones
- saw-tooth
- copper or steel made

DIMENSIONS:

- 2 X 0.12 in, spacing 2 in
- 4 X 0.24 in, spacing 4 in
- 6 X 0.30 in, spacing 8 in
- 6 X 0.50 in, spacing 8 in
- 8 X 0.40 in, spacing 8 in



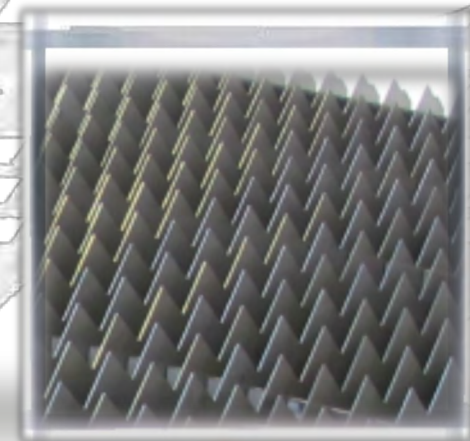
WITH CAST IRON CONES



IN COPPER, SERPENTINE



PARALLEL



SAW-TOOTH



# AUTOMATION DOWNDRAFT TABLES

## RAPIDCLEAN

### AUTOMATIC SLAG REMOVAL SYSTEM

Perfectly integrated in ORION and POLARIS downdraft tables, Rapidclean has been conceived to be installed in order to replace the old slag containers and enables the **automatic extraction** of slag produced during cutting operations.

#### ADVANTAGES

- Automatic extraction of slag during sheet metal plate cutting
- It avoids expensive machine downtimes to remove and empty the collection tanks, thus increasing safety
- Emptying of only one slag container with high collection capacity
- Abatement of maintenance costs
- Suitable for heavy applications too and on several work shifts
- SMOKE FREE table
- Suitable for Plasma, Laser and Oxy-fuel applications
- Single or double RAPIDCLEAN available according to table width



### MOVABLE SUCTION TROLLEY

## SYNCROMATIC

The latest born in the family of SYNCROMATIC downdraft tables, it is a **revolutionary suction system** provided with movable shuttle on wheels, which carries out fumes and dust suction as well as cutting-slag collection at the same time. These operations occur automatically by means of their **synchronization with the cutting machine**.

SYNCROMATIC is a simple, sturdy and efficient plant.

#### ADVANTAGES

- Very high suction efficiency
- Slag collection in only one tank
- Very short slag emptying times
- Perfect integration into the cutting machine
- The total absence of wear parts (cylinders, valves and pneumatic pipes) decrease drastically any type of plant downtime caused by maintenance interventions
- Integrable with any kind of cutting technology (Plasma, Laser and Oxy-fuel)



Standard table



Rapidclean



Syncromatic



■ Purchase    
 ■ Tank emptying    
 ■ Extraordinary maintenance

High **labour saving** allows short-term investment return.



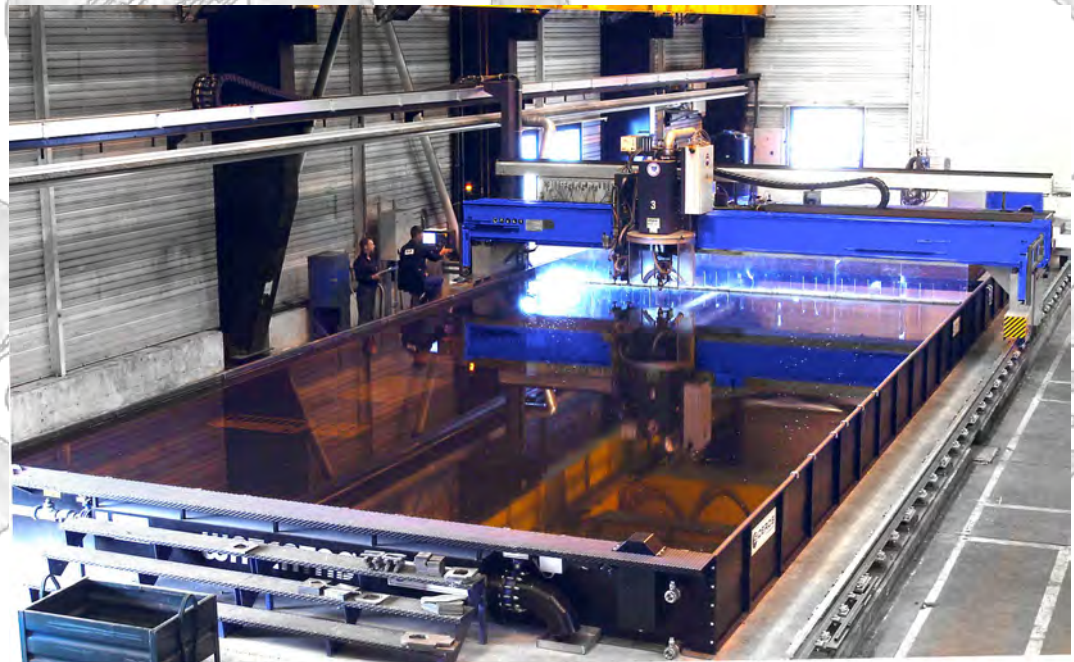
## ACQUAMATIC

### TABLE FOR UNDERWATER PLASMA

ACQUAMATIC is a water containment table with **adjustable level**, conceived for the application of heavy-duty underwater plasma cutting and mainly used by shipyards and large plant constructors.

#### ADVANTAGES

- Total abatement of the fumes and dusts produced during sheet metal plate cutting
- Elimination of the luminous effect produced by plasma arc
- Considerable reduction of the noise caused by plasma cutting process



## SPRINTER

### AUTOMATIC PALLET CHANGING SYSTEM

SPRINTER PALLET CHANGING SYSTEM has been conceived to be integrated into any machine requiring **automation** to transfer the sheet metal plate from the loading and unloading area to the cutting area. SPRINTER is supplied complete with downdraft table. Minimum format 5 X 10 ft, maximum format 10 X 50 ft.

It is mainly installed on laser and plasma cutting plants.

#### ADVANTAGES

- Extremely reduced times to carry out sheet metal plate changing
- Easy integration with cutting Machine functions
- It enables access to machines provided with ecological cabin
- It enables to carry sheet metal plates into areas where no lifting equipment is available





# CARTRIDGE DUST COLLECTORS



**ECOLINE dust collectors** have marked a **significant turn** in the industrial filtration field thanks to their **very high performances**.

SIDEROS ENGINEERING has been the first firm worldwide to introduce a new philosophy on the market : **compact filters integrated** for thermal cutting.

ECOLINE cartridge dust collectors belong to the category of **absolute filters**, because they always guarantee a post-filtration level of dust emissions  $<1\text{mg}/\text{m}^3$ , even in the presence of extremely fine particles. Once the air has been filtered, it results to be so purified that it can be released directly into the workplace.

The best results are attained in the filtration of dusts and fumes generated by: thermal cutting, welding, smoothing and grinding, and ensure a **long life** even on continuous work shifts.

## MODELS

### ECO 2C ECO 2V ECO 4 ECO 6 ECO 9 ECO 12 ECO 16 ECO 24

		ECO 2C	ECO 2V	ECO 4	ECO 6	ECO 9	ECO 12	ECO 16	ECO 24
CARTRIDGES	n°	2	2	4	6	9	12	16	24
SURFACE	ft²	452	430 730	904	1,356	2,034	2,712	3,616	5,420
AIRFLOW	ft³/ min	1,100	915/1,340 1530/2100	1,450/2,200	2,200/3,300	3,300/4,950	4,400/6100	5,850/8,555	7,300/11,000
VALVES	n°	2	2	4	6	9	12	16	12
HEIGHT	ft	3.9	6.9	7.2	8.5	10.7	12.1	12.5	13.1
DEPTH	ft	4.9	3.6	4.3	4.7	5.3	5.3	5.9	7.9
WIDTH	ft	2.6	2.5	4.1	4.3	6.4	6.4	7.6	8.2
WEIGHT	lb	705	990	1,340	1,650	2,870	3,300	3,750	5,250







ADVANTAGES



- High performances and efficiency
- Sturdiness
- Compact dimensions
- Automatic cleaning
- Low energy consumptions
- Filtration class: M
- Abatement of maintenance costs
- Fire risk protection
- Product customization
- Integrated solutions
- Long life
- Filtration efficiency: 99,997%

ECO 2 VERTICAL

To complete ECOLINE dust collector range, we present ECO 2 VERTICAL, an **efficient and compact** unit suitable to be installed on welding, smoothing, grinding and cutting plants.

Thanks to the mechanical pre-separation effect created by **cartridge vertical positioning**, the unit can accept also larger quantities of heavy dry dusts, thus ensuring a larger air flow.

**Installed power:** 1.5 – 2.2 - 3 - 4 kw

**Air flow:** 920 - 1,220 - 1,530 - 2,140 ft<sup>3</sup>/min.



ADVANTAGES

- Reduced surface on the ground as it develops vertically
- High performances
- Low noise level
- Easy installation
- Reduced energy consumptions
- Accurate design and finishes



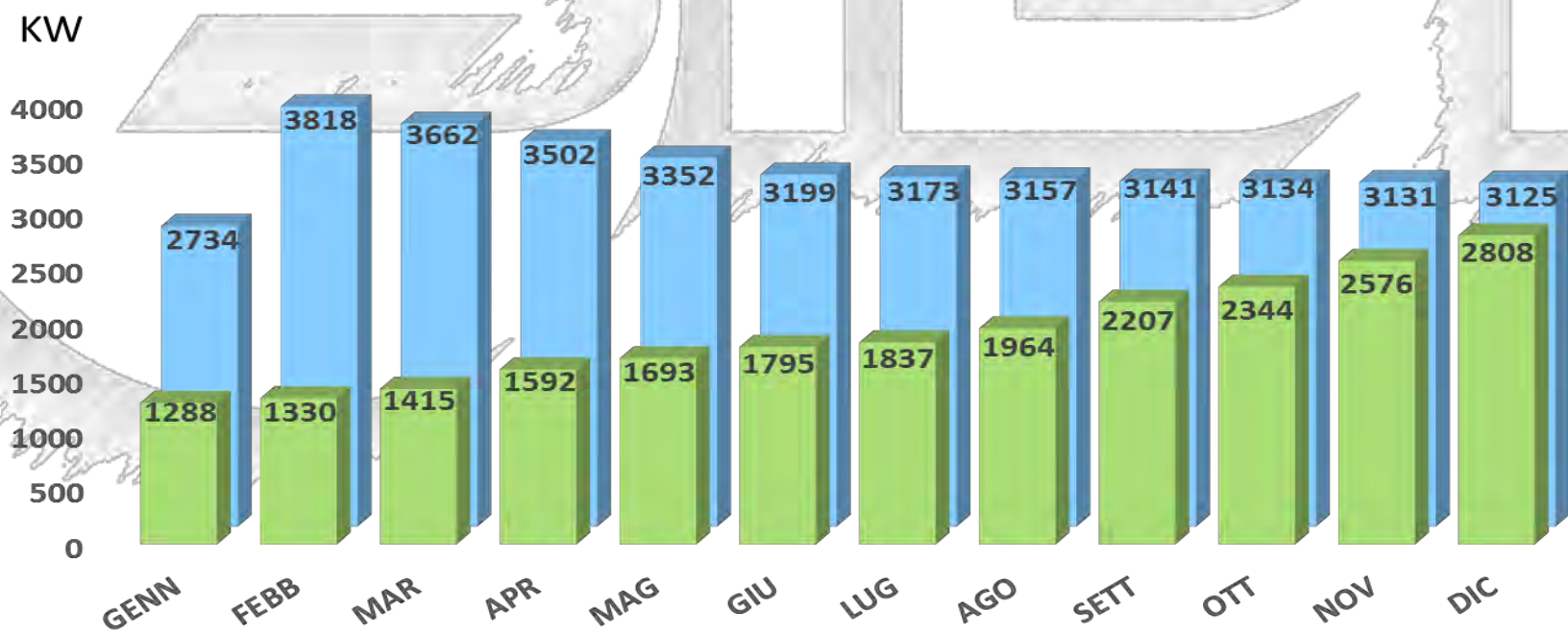
Quick release dust collection drawer provided with wheels.



To meet the increasing demand of machines with low consumption and reduced environmental impact, Sideros Engineering proposes ECOTECH, a control board with high technological contents, complete with PLC, inverter and touch-screen panel for operation interface.

This system enables to continuously adjust and control the number of revolutions of the fan motor as well as to monitor the general operation state of the filter, even remotely.

**POWER INPUT - Analysis carried out on ECO 6 HC/S with 7,5 kw motorization**












**CONSUMO ANNUO:** ■ ECOTECH kw 22.849 ■ STANDARD kw 39.128

**Return on investment (ROI) : 7 months**



**FEATURES AND ADVANTAGES**

-  Electric energy saving up to 60%
-  Noise reduction up to 40%
-  Longer life of filtering cartridges
-  Mechanical wear reduction up to 40%
-  Heating costs reduction
-  Capacity self-regulation
-  On-board control through colour LCD Touch panel
-  Remote monitoring in real time through supervision
-  Wi-Fi connectivity



## DUST COLLECTORS FOR ALUMINIUM

Aluminium alloys and titanium processing brings about magnesium dusts and oxides.

Such dusts in a particular concentration, if in contact with an ignition source (e.g.: spark, flame or electric discharge) can give rise to a deflagration with variable power depending on the quantity of dust.

**Series R** filtering units for aluminium alloys are suitable for this type of application, as they are provided with a **reinforced structure** as well as with calibrated venting systems for the overpressure caused by a possible deflagration.

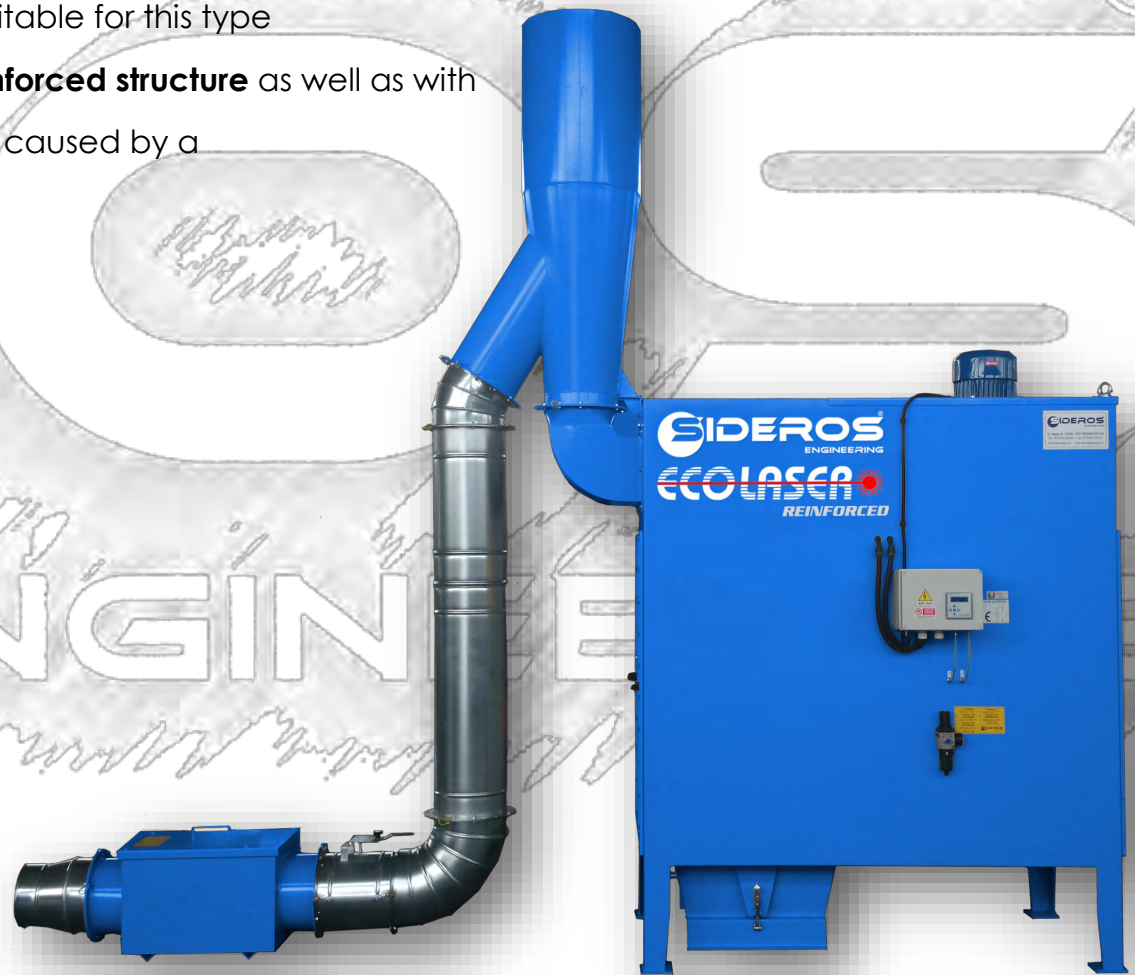
### APPLICATIONS:

Aluminium alloys and titanium processing

- Laser cutting
- Plasma cutting
- Grinding
- Welding
- Smoothing
- Deburring

### ADVANTAGES:

- Workplace safety
- Tailored scheduling
- Reinforced structure
- Rupture relief membranes positioned one on the main body and the other on the diverter



## CaCO<sub>3</sub> GRAVIMETRIC FEEDER

The calcium carbonate gravimetric dispenser has been conceived to get a **significant reduction of the probabilities of explosions** inside the filter or in the pipes connecting the exhaustor and the machine, due to the accumulation of the magnesium oxide arising from thermal cutting or aluminium processing. The GRAVIMETRIC DISPENSER is installed on the pipe upstream the filter.

### APPLICATIONS:

- Laser cutting
- Plasma cutting
- Welding
- Deburring

### ADVANTAGES:

- Workplace safety
- Rapidity of installation
- No maintenance costs
- Applicable to any type of dust collector
- Tailored scheduling
- Minimum overall dimensions





## PORTABLE DUST COLLECTORS

### ECO 2C

Thanks to its compact and handy structure, the ECO 2C movable unit, provided with **Top Grade cartridges**, can ensure **maximum efficiency** even in continuous working conditions (3 work shifts) and in the presence of large quantities of both fine and heavy dusts.

Provided with automatic cleaning system, it does not require any maintenance nor replacement of filtering means, except after many years.

It is available with 1 or 2 suction arms to exhaust up to 2 welding places contemporary or with side air intake for flexible hose.



#### TECNICAL DATA

- Fan motor capacity: : 1,800 ft<sup>3</sup>/min
- Airflow: 1,100 ft<sup>3</sup>/min
- Noise level: 72 dB
- Fan motor: 2.2 kW

### ECO T

For non continuous work conditions SIDEROS ENGINEERING proposes the ECO T movable unit, a **simple and compact** machine suitable for welding and grinding processes.

Filtration occurs through a high efficiency polyester rigid pocket filter; to improve the filtration degree, the unit is endowed with HEPA panel in Class H12. ECO T is equipped with suction arm Ø 6.3 in, allows the utmost flexibility, as it replaces the traditional centralized suction plants with fixed arms.

#### TECNICAL DATA

- Fan motor capacity: 1,500 ft<sup>3</sup>/min
- Airflow: 800 ft<sup>3</sup>/min
- Noise level: 70 dB
- Fan motor: 1.1 kW





## CENTRALIZED PLANTS

Centralized suction plants are dimensioned, according to existing regulatory requirements, on welding, grinding and scarfing applications.

Their configuration (plant capacity and number of positions) is tailored according to Customer's requirements as well as to the production lay-out.

Collection systems can be integrated, such as:

- Fixed suction arms from 10 up to 23 ft
- Movable suction arms on conduits
- Reeling drums
- Suction hoods
- Fixed welding and deburring benches
- Robot cells

Automatic detectors allow optimizing the electric and pneumatic consumptions of the plant according to actual working requirements.

Sideros Engineering proposes a specific advisory service to analyse requirements and to develop the best solution.



## DOWNDRAFT BENCHES

The ETA BENCH guarantees the compliance of workstations with worker protection standards.

Besides being a solid support for workpieces, by means of a motor fan it can suction the dusts and fumes arising during processing steps. Connected to an ECOLINE series filtering unit, it also allows perfectly purifying the suctioned air before releasing it into the atmosphere.

The technical features of ETA benches make them suitable for welding, grinding, smoothing as well as manual plasma cutting operations.

### ADVANTAGES

- Reduced pollution of the workplace as well as of the whole department
- Its vertical wall performs the function of a barrier against sparks, splinters and violent light flashes
- No maintenance nor additional costs for spare parts
- Flexibility of use: side walls are movable, hence the possibility of placing workpieces with dimensions larger than those of the bench
- Dusts are collected in specific drawers situated at the base of the bench





**FASTCLEAN: DUST EXTRACTION SYSTEM**

FASTCLEAN is a transport system enabling **the automatic extraction of dusts** from the filter discharge hopper and conveying them automatically to a container for their disposal.



FLEXIBLE SCREW CONVEYOR WITH COLLECTING DRUM



FLEXIBLE SCREW CONVEYOR WITH BIG BAG

**HIGH CAPACITY DISCHARGING SYSTEMS**



DRUM STYLE  
DISCHARGING  
SYSTEMS

The structure allows the housing of containers with capacities ranging from 53 to 265 gal. (for instance, metallic drums or big bags)



BIG BAG  
DISCHARGING  
SYSTEMS

**ACTIVE CARBON BOX**



Recommended for applications with the presence of oxides, gas and odorous substances

**LARGER BIN**

with wheels, applicable to all models and versions



**SPARK TRAP**

supplementary, situated outside the filtering unit



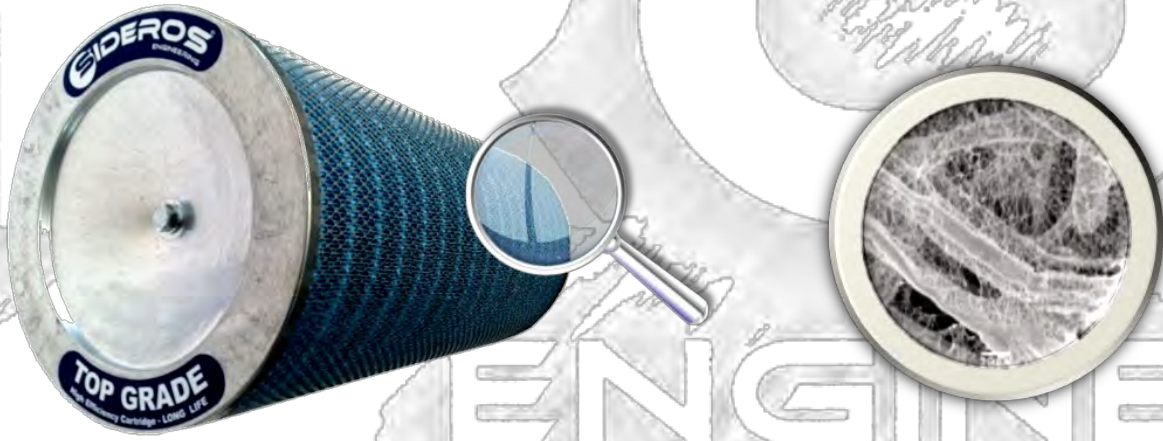


**TOP GRADE**

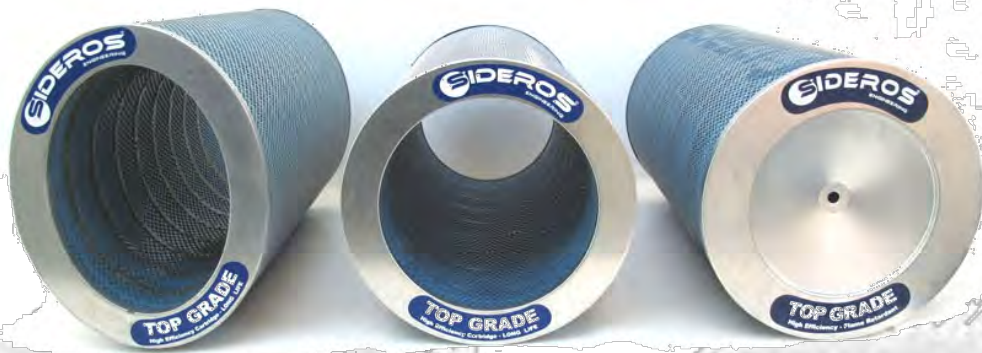
TOP GRADE cartridge technology has been used for over 20 year and such cartridges are assembled on all SIDEROS ENGINEERING filtering units, from the movable one, ECO 2C, to the one with 24 cartridges, ECO 24 CT.

**ADVANTAGES**

**FILTER MEDIA ENLARGEMENT ZOOM 600X**



- Reduced losses of load
- Flame retardant (FLAME PROOF)
- Longer life
- Less energy consumption
- Higher filtering quality
- Possibility of releasing the air into the workplace
- Constant performances in time



**Mod. PP23 - PP15**

**Mod. PP26**

FILTERING SURFACE	226 ft <sup>2</sup>	253 ft <sup>2</sup>
SIZES (ext. Ø X l.)	12.7 X 25.9 in	13.8 X 25.9 in
FILTRATION EFFICIENCY	Particulate 0.5 micron at 99.9999% Particulate 0.3 micron at 99.997%	
FILTRATION CLASS	EN 779 - F7 - BIA - M	
MAX. TEMPERATURE	65° C continuous, 80°C max. peak	
COMPOSITION	Synthetic nano-fibres on cellulose substrate	



# WELDING POSITIONERS

## ROTOLIFT

ROTOLIFT is a **three-axis** hydraulic positioner and handler specifically designed for assembling and welding operations. Thanks to its functional features, the machine considerably reduces the moving of the workpiece and therefore the use of traditional lifting systems.

ROTOLIFT is an ergonomic machine featuring great flexibility. Its innovative feature is the possibility not only to **tilt** and **rotate** the workpiece, but also to **lift** and **lower** it.

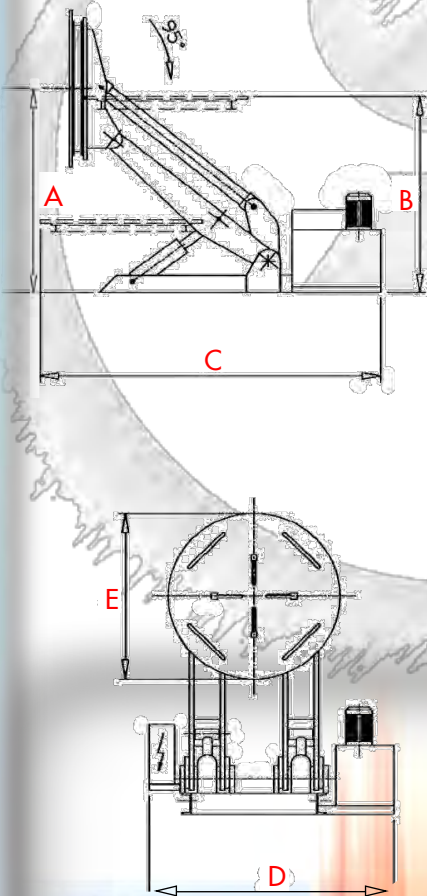
Positioners with loading capacity up to 220,500 lb available upon request.



### ADVANTAGES

- Reduction of weldments handling time
- Minor use of traditional lifting equipment
- Safer and more ergonomic working environment
- Lifting, tilting and rotation of a weldment on a single machine
- Improvement of welding quality
- Fast return on investment (ROI)
- Simplified welding procedure specifications (WPS)
- 3 axis: elevation, rotation, tilting

### TECHNICAL FEATURES



		RL 1250	RL 2000	RL 3000	RL 4500	RL 6500	RL 8500	RL 11000	RL 13000
Max. capacity	lb	2,750	4,410	6,610	9,920	14,330	18,730	24,240	28,600
Max. table tilting		95°	95° 140°	95° 140°	95° 140°	95° 140°	95° 140°	95° 140°	95° 140°
Tilt torque	Nm	4900	7850	11750	21200	31900	41700	53950	63750
Rotation torque	Nm	490	1250	1960	5300	7650	8100	10790	15600
Rotation time	Olehydr. sec/ Electr. round	2	1.75	1.50	0.90	0,60	-	-	-
A Height with Vertical table	Min	1.8	1.8	2.4	2.7	3.0	3.2	3.6	3.2
	Max	3.7	4.3	5.3	6.8	7.8	9.0	9.5	8.9
B Height with Horiz. table	Min	2.3	2.1	2.4	2.8	3.1	3.9	4.3	4.1
	Max	4.2	4.6	5.2	7.0	7.9	9.6	10.3	
C Length overall dimension	ft	5.8	6.1	8.4	8.5	11.8	14.6	16.1	14.8
D Width overall dimension	ft	5.3	5.4	6.0	7.4	7.9	8.1	7.9	8.2
Machine weight	lb	1,600	2,460	3,260	5,790	7,550	10,110	11,200	12,050
E Table dimension	ft	Ø2.6	Ø2.6	3.6X3.6	4.9X4.9	4.9X4.9	4.9X4.9	5.9X5.9	5.9X5.9



**ROTO LIFT**

**VERSIONS:**

**HYDRAULIC:** hydraulic lifting, tilting and rotation

**ELECTRIC:** hydraulic lifting and tilting  
Electric rotation with VFD for speed control.

**LOAD CAPACITIES**

- lb 2,750      - lb 14,500
- lb 4,400      - lb 19,000
- lb 6,600      - lb 24,500
- lb 10,000     - lb 29,000

**AVAILABLE ACCESSORIES**

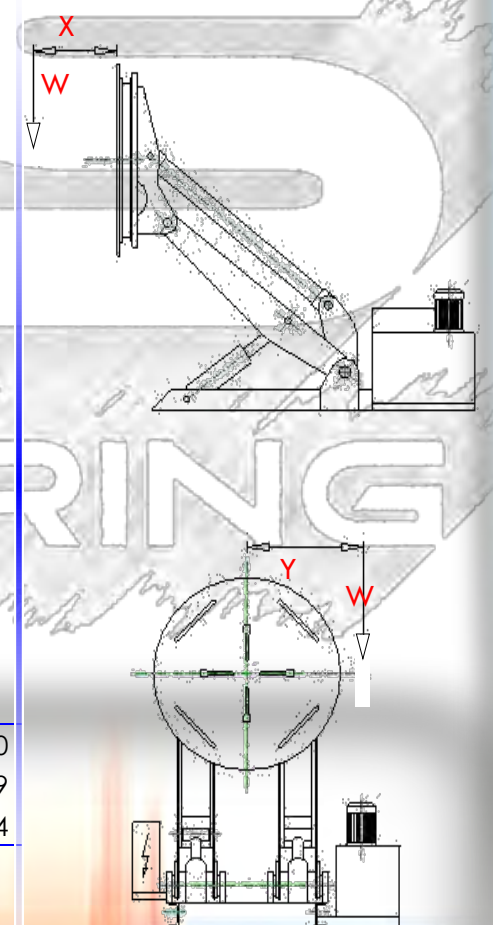
- Rotary ground from 600 to 1500 Amp.
- Foot pedal control for L/R rotation
- Customized rotary table
- Tilting up to 140°
- Teaching System
- Increased rotation torque
- Customized color
- Detachable hydraulic power unit and electric board
- Oversized positioners up to 220,500 lb load capacity



High **labour saving** allows short-term investment return.

**ALLOWED LOADS**

<b>RL 1250</b>	C - lbs	2,750	2,200	1,760	1,320	880							
	FL - in	15.7	19.3	23.6	31.1	45.7							
	SL - in	1.6	2.0	2.4	3.1	4.7							
<b>RL 2000</b>	C - lbs	4,410	3,750	3,090	2,430	1,760	1,320	880					
	FL - in	15.7	18.1	21.7	27.6	37.4	49.6	70.9					
	SL - in	3.1	3.5	3.9	4.7	6.3	8.3	11.8					
<b>RL 3000</b>	C - lbs	6,610	5,510	4,630	3,750	2,870	1,980	1,100	660				
	FL - in	15.7	20.9	25.2	32.3	45.3	78.7	129.9	153.5				
	SL - in	3.1	3.9	4.7	6.3	9.1	16.5	26.4	31.1				
<b>RL 4500</b>	C - lbs	9,920	8,600	7,270	5,950	4,630	3,310	2,640	1,980	1,320	660		
	FL - in	18.9	21.3	24.4	29.1	37.4	50.4	63.0	82.7	122.0	240.2		
	SL - in	4.7	5.5	6.3	7.5	9.4	13.0	16.1	21.3	31.10	59.0		
<b>RL 6500</b>	C - lbs	14,330	12,560	10,800	9,040	7,270	5,510	4,630	3,740	2,870	1,980	1,100	
	FL - in	19.7	22.0	25.2	29.5	36.2	47.3	55.1	66.9	86.6	122.0	219.7	
	SL - in	4.7	5.5	6.3	7.1	8.7	11.4	13.4	16.5	21.6	24.8	28.7	
<b>RL 8500</b>	C - lbs	18,730	16,530	14,330	12,120	9,920	7,710	6,610	5,510	4,410	3,310	2,200	
	FL - in	19.7	22.0	25.2	29.5	35.4	44.9	51.2	61.0	76.0	100.4	147.6	
	SL - in	3.7	4.3	5.1	5.9	7.5	9.4	11.0	13.4	15.7	21.6	32.3	
<b>RL 11000</b>	C - lbs	24,240	21,600	18,180	15,710	12,890	10,030	8,710	6,940	5,510	3,970	2,670	1,980
	FL - in	19.7	21.6	25.6	29.5	35.4	45.3	51.2	61.0	76.8	102.4	145.7	192.9
	SL - in	3.5	4.3	5.1	5.9	7.9	9.8	11.4	13.8	17.3	23.2	33.1	35.4
<b>RL 13000</b>	C - lbs	28,660	24,250	19,842	16,539	13,227	9,920	7,716	6,613	5,511	3,968	2,645	
	FL - in	19.7	23	27.9	33.1	39.4	51.2	64.9	74.8	88.6	122	181.1	
	SL - in	4.7	5.5	6.5	7.5	9	11.8	14.7	16.9	19.6	26.9	39.3	





# WELDING POSITIONERS HEAD and TAILSTOCK

## SYNCROLIFT

Sideros Engineering Head & Tailstock Positioners are used to weld and assembly **long and large** weldments in many different application fields.

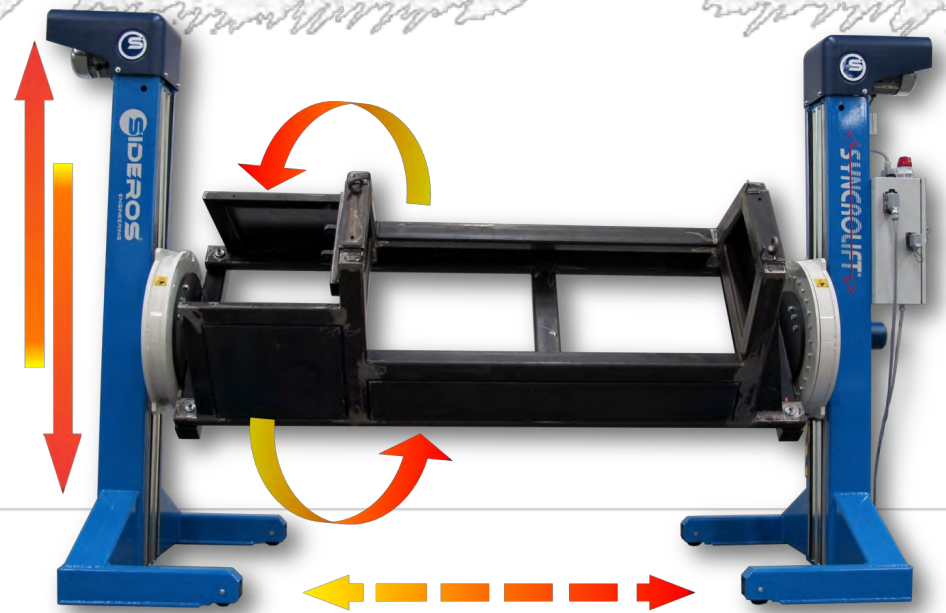
Syncrolift features two main axis: Electrical elevation/descent, and Electrical 360° left/right rotation.

A typical configuration is composed of a **motorized** headstock positioner with an **idler** tailstock.



### ADVANTAGES

- Improved Safety
- Proper Ergonomics
- Improved weld quality
- Cost savings and profit increase
- Welding/Assembly procedures repeatability



High **labour saving** allows short-term investment return.

### OPTIONALS

- Footswitch for L/R rotation control
- Idler column on rails
- 400/800/1200/1600 Amp rotary ground
- Double rotation torque
- Customized column height
- Oversized load capacity (over 55000 lb.)
- Remote pushbutton pendant
- Arrangement for track
- Customized color
- Teaching system
- Hydraulic jack
- Syncrolift Mono

### MODELS

MODELS	LOADING CAPACITY lb	MAX TORQUE lbf.in	MIN TABLE HEIGHT in	MAX TABLE HEIGHT in
SLC 20	4400	25800	14	75
SLC 40	8800	30100	14	75
SLC 50	11000	35500	16	77
SLC 60	13300	35500	16	77
SLC 100	22000	66300	19.7	77
SLC 120	26500	88400	21.6	77
SLC 150	33000	88400	21.6	79
SLC 200	44000	195000	21.6	73
SLC 250	55000	221500	27.5	73



ROTOCLEAN



**Compact, safe and efficient**, ROTO CLEAN allows a rapid and cheap removal of slag, burr, calamine and rust from oxycut or plasma cut workpieces in full safety and autonomy.

Rotoclean replaces traditional and expensive manual grinding operations, which, besides being the cause of lesions to eyes and hands, give rise to air and noise pollution.

Equipped with a safety protection, which totally embeds the rotary drum, it preserves the operator from any hazardous contact with the machine.

The **vulcanized rubber** applied inside the drum and the safety apron protection contributes to considerably reduce the noise produced during the processing of workpieces.

The access door to the drum is equipped with **hydro-pneumatic cylinders**, which make its opening and closure easier.

ENGINEERING

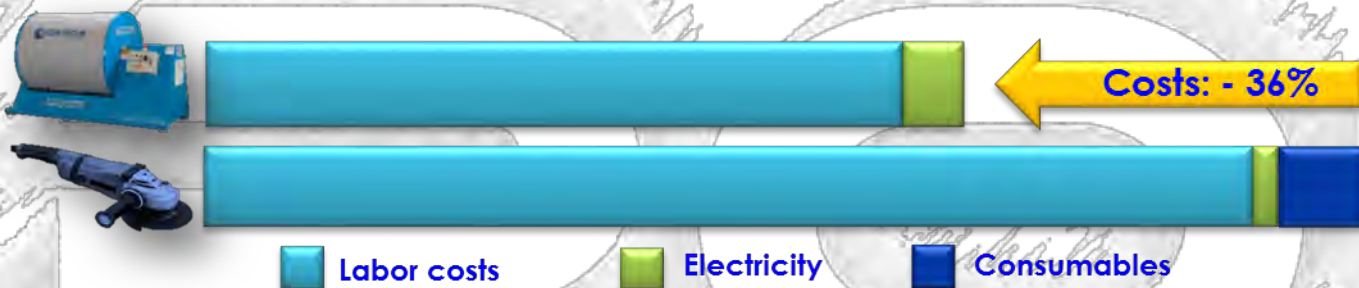
ACCESSORIES

ADVANTAGES

- **Sound absorbing cabin**, for a further reduction of noise level.
- **Suction and filtration unit** able to treat the dusts produced during processes.



- High productivity
- Low operation costs
- Utmost noise reduction
- High sturdiness
- Safe use
- No maintenance
- Certified quality



High **labour saving** allows short-term investment return.

MODELS

		WITHOUT CABIN	WITH CABIN
<b>ROTO CLEAN 550</b>			
ALTEZZA	ft	5,240	6,560
LARGHEZZA	ft	9,180	10,160
PROFONDITA'	ft	4,360	5,915
POTENZA	kw	3	3
PESO ROTO CLEAN	lb	3,630	5,280
PORTATA MAX.	lb	2,200	2,200
DIMENSIONE MAX PEZZI	ft	3,280X1,150	3,280X1,150



Featuring an extremely sturdy frame, the hydraulic press with movable **vertical rod and cylinder**, PME range, guarantees excellent reliability even on very heavy work shifts. This machine is suitable for the **straightening** of: sheet metal plates, workpieces processed through oxy or plasma cutting, round bars, pipes and carpentry workpieces.

Its primary feature is that the workpiece is not moved and operations are carried out thanks to the **moving of the vertical rod and cylinder**.

**MAIN COMPONENTS**

**Structure:**

in high quality steel, electrowelded, composed of movable vertical rod and table

**Hydraulic cylinder:**

made of highly resistant and very thick steel

**Cylinder supporting shuttle:**

applied to the vertical rod beam, it enables the transversal movement of the cylinder

**Movable vertical rod:**

the movement of the movable vertical rod is driven by two sturdy self-blocking motor-reducers with a gradual setting in action

**Hydraulic system:**

it consists of components carefully selected among the best international brands

**Control panel:**

suitably positioned, it controls all press functions



**WORK POWER:**

220 US ton - 500 US ton

**WORKING AREA:**

ft 13 X 6.5 / ft 19 X 8 / ft 26 X 10

**AVAILABLE ACCESSORIES:**

- Lifting pellets to be inserted on the working surface of the bed
- Ram to be assembled on the roller bearing for manual or electric rotation.

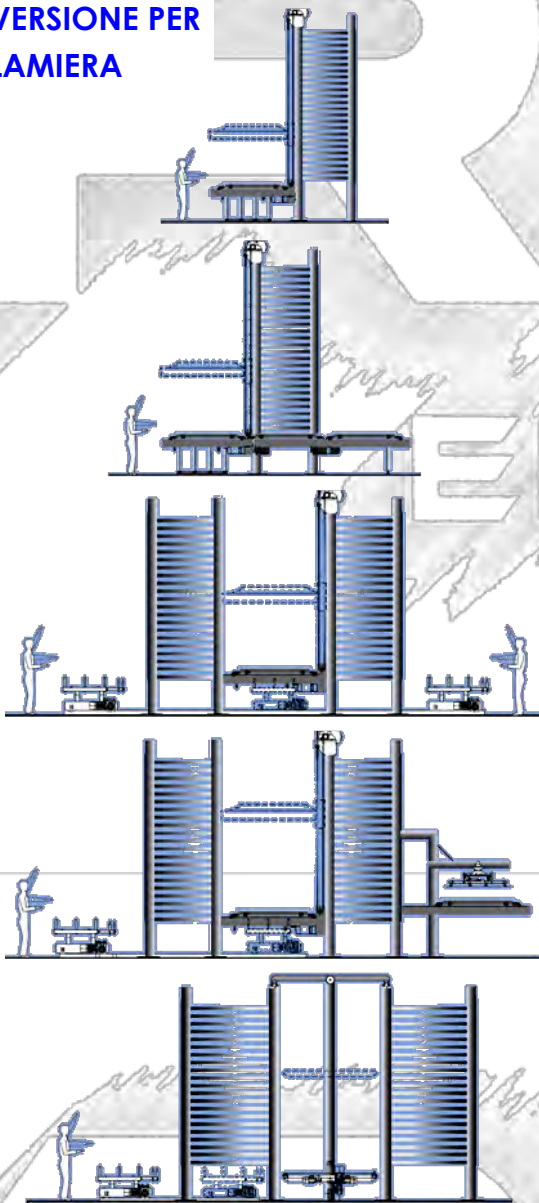


**SPAZIOMATIC**

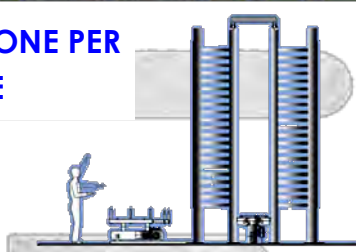
The range of vertical storage systems SPAZIOMATIC is indispensable to organize and **optimize the storage of sheet metal plates and long profiles**, to reduce manufacturing times and to handle material with the utmost safety.

**MODELS**

**VERSIONE PER  
LAMIERA**



**VERSIONE PER  
BARRE**



**SPAZIOMATIC "SHEET METAL"** with a single or double tower. It is used to store packs of sheet metal plates. With the aid of an elevator actuated by gearmotor and chains, the pack is quickly handled from the inside of the structure to the inlet/outlet of the storage system and vice versa.

**SPAZIOMATIC "BAR"**, automatic vertical storage system for long material such as bars, profiles and pipes. It enables the automatic storage and picking up of material both in bundles and in single pieces, raw or processed and in different lengths and weights.

SPAZIOMATIC is proposed in the following standard formats:

**SHEET FORMATS:**

- 4.1 X 8.2 ft
- 4.9 x 9.8 ft
- 4.9 x 13.1 ft
- 4.9 x 19.7 ft
- 6.6 x 13.1 ft
- 6.6 x 19.7 ft

**BAR FORMATS:**

- 2.3 X 13.1 ft
- 2.9 x 13.1 ft
- 2.3 x 19.7 ft
- 2.9 x 19.7 ft
- 2.3 x 23 ft
- 2.9 x 23 ft

**MAXIMUM WEIGHT CAPACITY PER DRAWER**

- 3,300 lb
- 6,600 lb
- 11,000 lb





REFERENCES





The added value of our products includes a **full and efficient after-sale technical support** supplied by highly qualified internal personnel able to propose the best solutions even for the most exigent customers.

- **On line support:** for management of failures, verifying of specific requirements and troubleshooting;
- **Remote Diagnostics:** Tele-assistance support can considerably reduce intervention times in the event of failures or malfunctioning
- **Software Upgrade:** to always allow the utmost performances of our machines



# ENGINEERING

## SCHEDULED MAINTENANCE

Carried out by our technicians according to customer's working needs. Preventive maintenance is carried out according either to a defined schedule or to actual working hours, with the aim at maintaining the plant in the best operative conditions.

## SPARE PARTS STOCK

Our spare parts stock for just in time delivery is always completely available. This department carries out the preparation and shipment of the material necessary for ordinary and extraordinary maintenance interventions. All items are associated to a bill of materials corresponding to the series number of the machine produced.

## TRAINING COURSES

Assisted by interactive video and digital supports. Our training courses, dedicated to plant operators and maintainers, are performed by specialized technicians assisted by means of interactive material and teaching methods of different kinds, in order to offer a service of great value.

Training courses help to:

- Minimize plant downtime
- Identify malfunctioning quicker
- Increase production yield
- Optimize investments yield
- Ensure a longer life of machines
- Reduce production costs
- Increase the quality of products



# ENGINEERING





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