

SANT-TECH[®]
Abrasive Blasting Machines Manufacturer



SANDBLASTING CABINETS
High-quality

PREMIUM HD series



**DOOR TO DOOR
WARRANTY**
UP TO 5 YEARS OF WARRANTY

100% MADE IN EU

About SANT-TECH

Our motto:

„Progress is a shift from impossible to possible, and from possible to real”

Zdzisław Dolatowski



Management board accepting the award at Warsaw Stock Exchange (GPW)

SANT-TECH company is a renowned Polish producer of advanced abrasive blasting machines as well as filter and ventilation systems for the industry. We specialize in complex production of abrasive blasting machines and technological devices, created with clients' individual needs in mind. Our customers are medium-sized and big enterprises as well as small family businesses.

The achievements of Sant-Tech have been noticed and rewarded on multiple occasions. SANT-TECH has been recognised i.a. by the Kronenberg Foundation, who have awarded us with the title of Best Micro-Entrepreneur in 2014. The Foundation for Development of Education has granted us a prestige title of 'Enterprise of the Future' and awarded us with their 'Gold Prize' in 2015.

Corporate Social Responsibility (CSR). This approach is realized by the 'Sant-Tech Pro bono maiore' foundation (www.fundacja-sant-tech.eu), which is involved in multiple projects in the social, economic and environmental spheres.

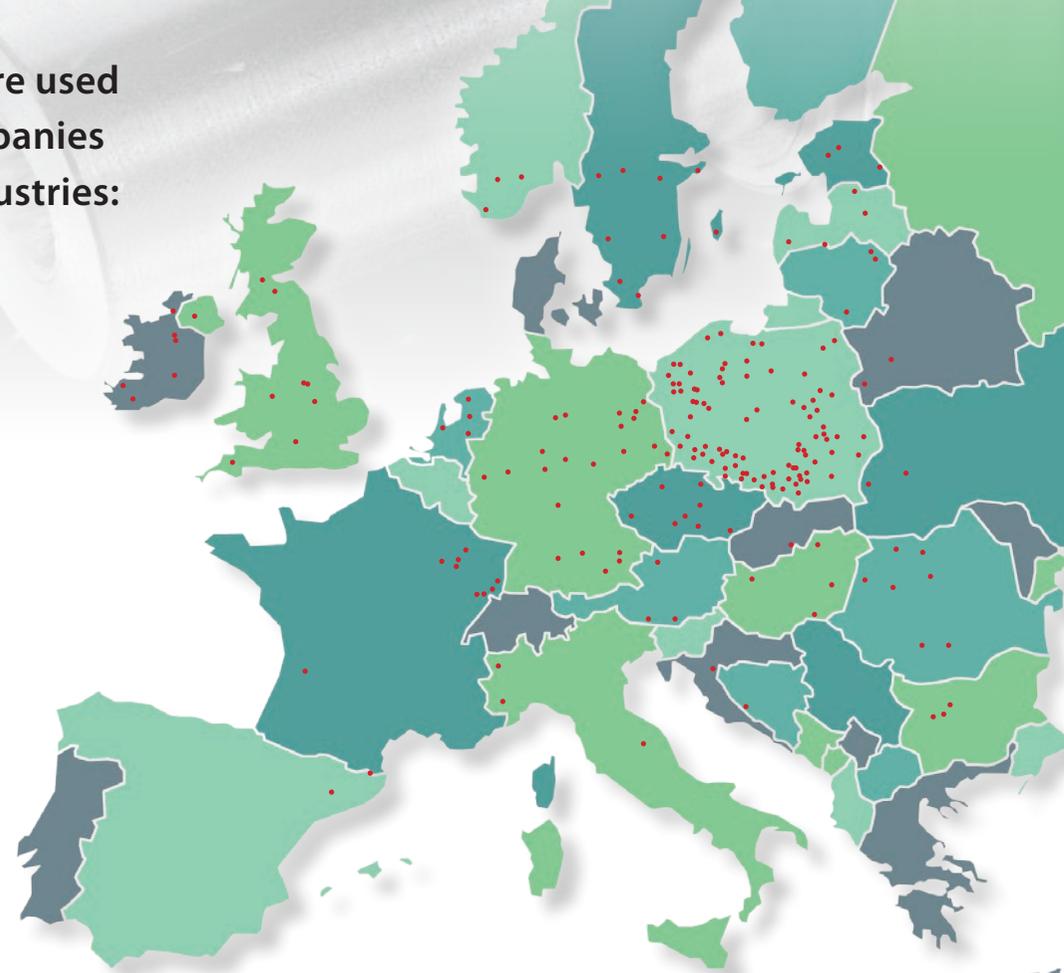
The future of our company is founded on clearly defined values. We take responsibility for the social mission that businesses all around the world should perform.



Sant-Tech CEO on a mission in West Africa

Our devices are used by many companies in diverse industries:

-  automotive
-  aerospace
-  spaceflight
-  military
-  railway
-  medicine
-  energy
-  tool
-  machine
-  ship-building
-  metalurgy
-  construction
-  mining
-  other



Our devices are used i.a. in the following companies:



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SANDLASTING CABINETS: **PREMIUM HD series**



PREMIUM HD is a series of abrasive blasting machines for the most demanding customers, which is available in the offer of the **SANT-TECH®** company. Premium Heavy Duty is a higher standard and full customer satisfaction.

We leave no room for half measures here.

PREMIUM HD are the highest class of commercially available sandblasting cabinets. Thanks to our engineering team's long-time experience in machine manufacture, the work results of our research-and-development division as well as suggestions from our clients we have developed a series of surface-treatment devices which ensure the highest work comfort and excellent quality. Exceptional durability is the result of care for every detail during the production process, as well as the application of components produced by renowned companies such as **CLEMCO**, **CONTRACOR**, **SCHMIDT**, **SMC** and many others. Each set can be configured at will to best suit the client's needs. We offer basic sets of cabinet + dust extraction unit as well as extended versions with e.g. abradant separators, retractable turntables or supporting systems, e.g. PWR5.

In our **PREMIUM HD** line we have used solutions which are not readily available in other devices of this kind offered on the market.

We use components by renowned companies in our PREMIUM HD sandblasting cabinets:



Each **PREMIUM HD** device comes along with:



Full compliance with the Bureau of Technical Inspection (required certificates, passports and attestations),



DTR User's manual + technical and engineering documentation,



CE certificates of compliance,



Up to 5 years of warranty - 3 basic years and 2-year additional warranty (premium option),



DOOR to DOOR service during the warranty period (free of charge transport to and from Sant-Tech),



Spare parts and consumables are available within 24 hours 24HSER (working days) – applies to both the warranty and post-warranty period,



List of most often replaced consumables, so that the client can make provisions and avoid downtime of the sandblasting cabinet,



Professional customer service (consulting), quick handling of service orders, both guarantee and post-guarantee.



Devices are designed for constant, intense work.



Circulation of abradant takes place in a close circuit, which prevents dusting on the outside of the sandblasting cabinet (EHS regulations regarding dusting are fulfilled).



All our devices are made solely from brand-new and tested components.



Devices are designed and produced in EU.



PREMIUM HD sandblasting cabinets are delivered in sets (PREMIUM HD cabinet, pressure or injector set dedicated for Premium series, dedusting set dedicated for Premium series, cyclonic abradant separator) along with all the necessary accessories.

All you need to do is provide compressed air and power supply, add the abradant and the set is fully ready for intense work.



We invite you to test our PREMIUM HD series cabinet in the production hall. We conduct tests on our own materials or, should you wish so, on your materials.



For people who do not want to engage their cash, we offer leasing in SANT-TECH Business SmartPlan.

PREMIUM HD standard series sandblasting cabinets are produced in sizes: PK 100, PK 140, PK 160, PK 180, two-station PK 140 DUO, PKW 500 AND PKW 1000. PREMIUM HD CABINET + injector (suction) or pressure set = SANDBLASTING CABINET (injector or pressure).



PK 140 **PREMIUM** SANDBLASTING CABINET



PK 140 DUO **PREMIUM** SANDBLASTING CABINET



PK 180 **PREMIUM** SANDBLASTING CABINET

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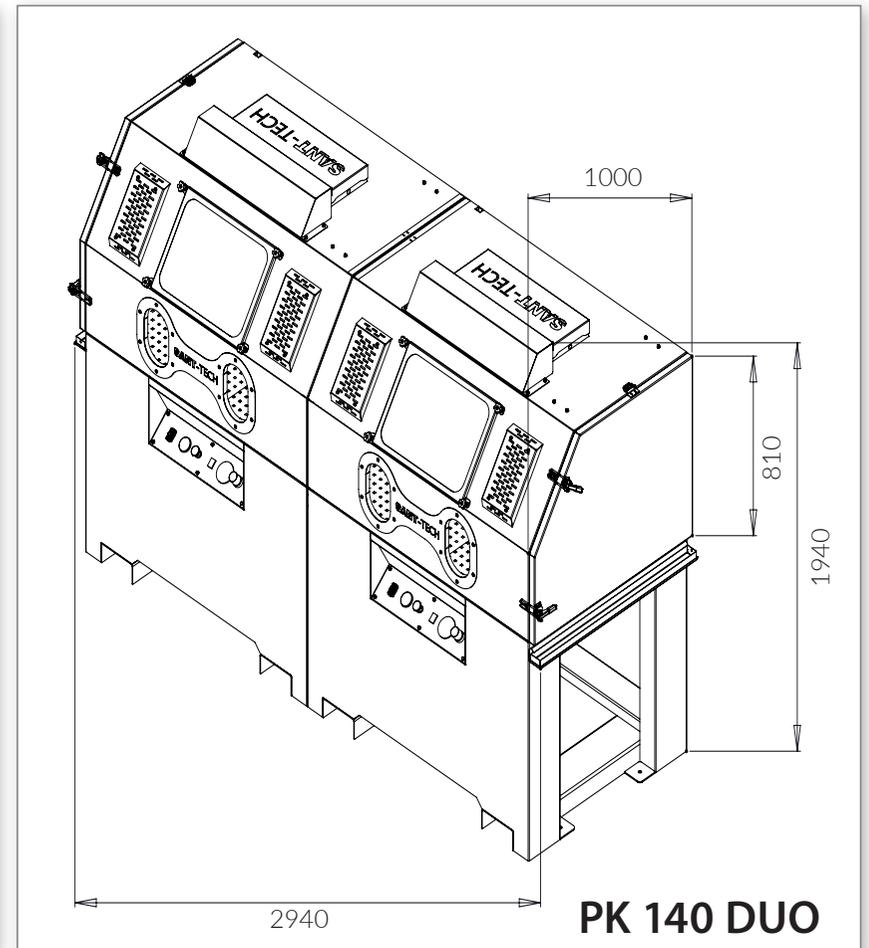
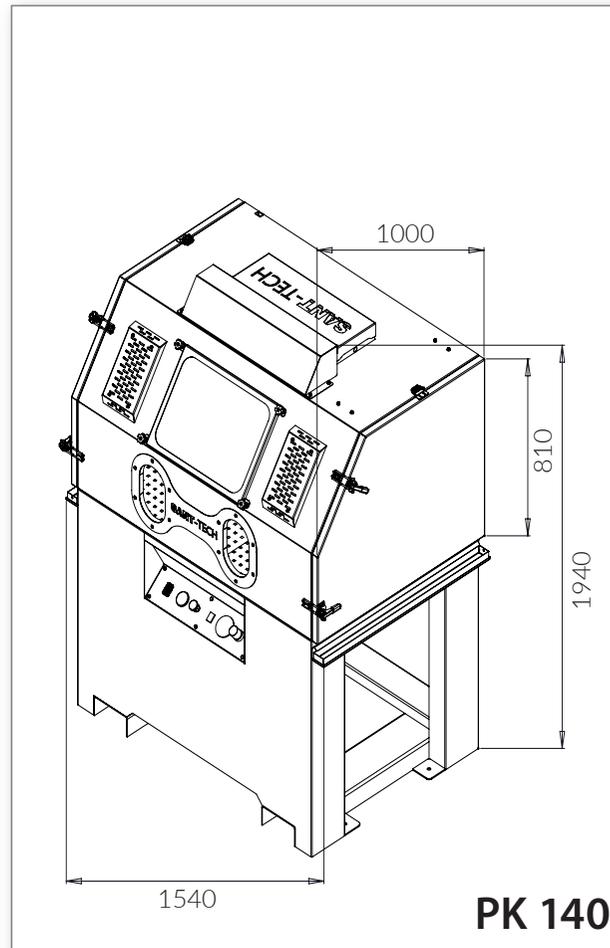
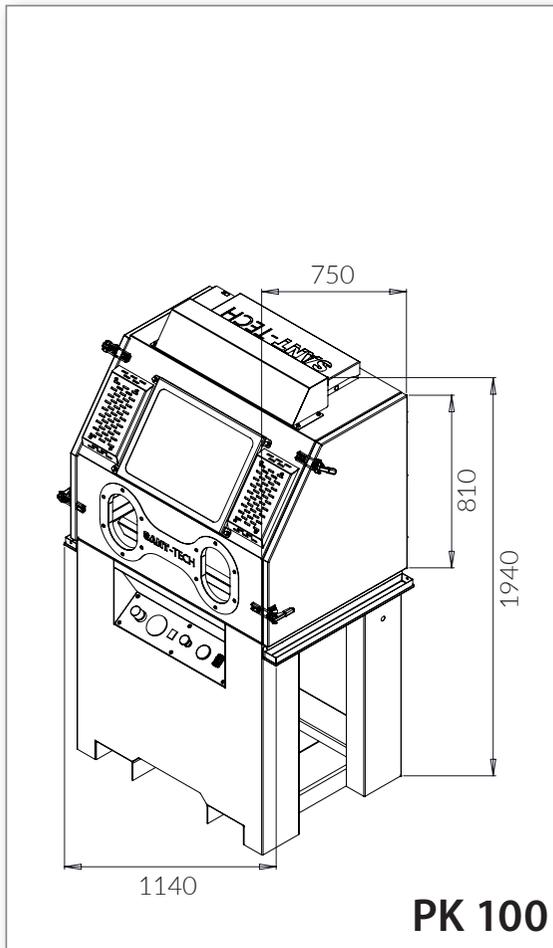


PK 180 **PREMIUM** SANDBLASTING CABINET

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Cabinet sizes **PREMIUM HD**

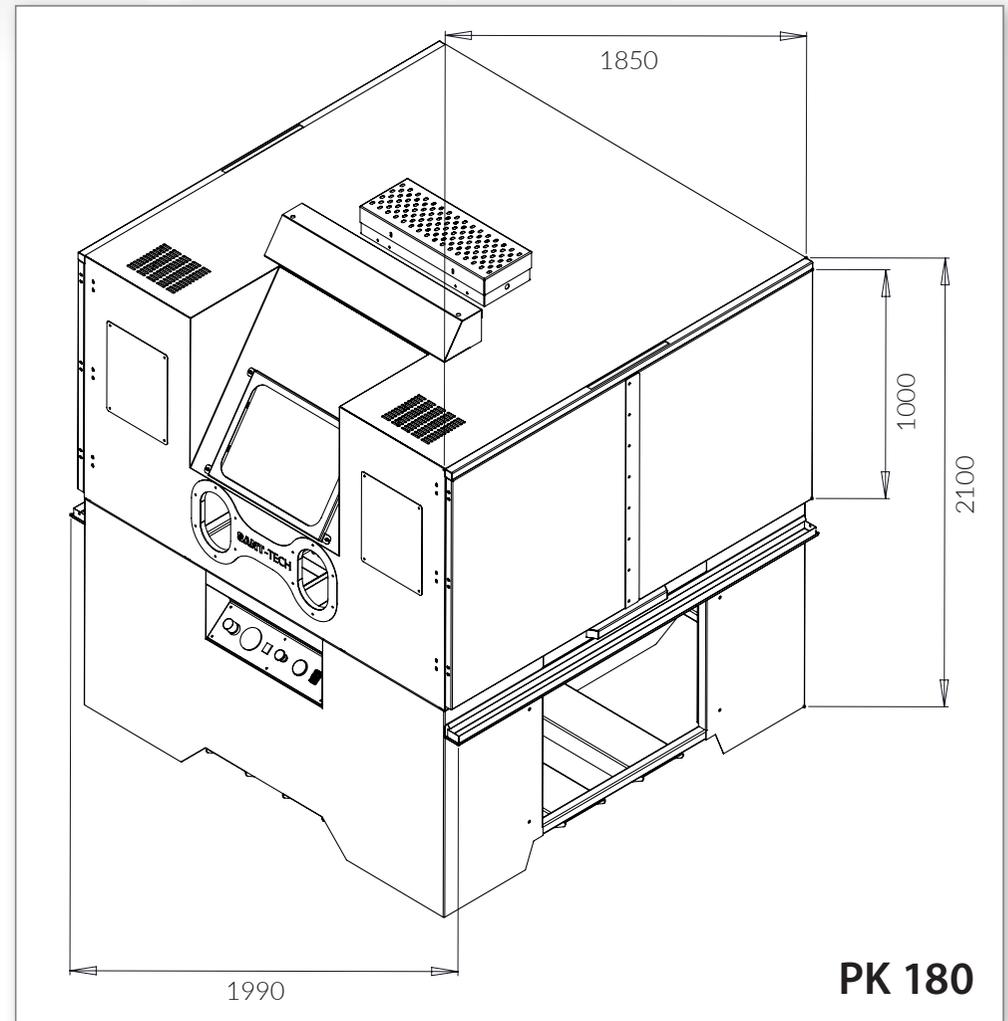
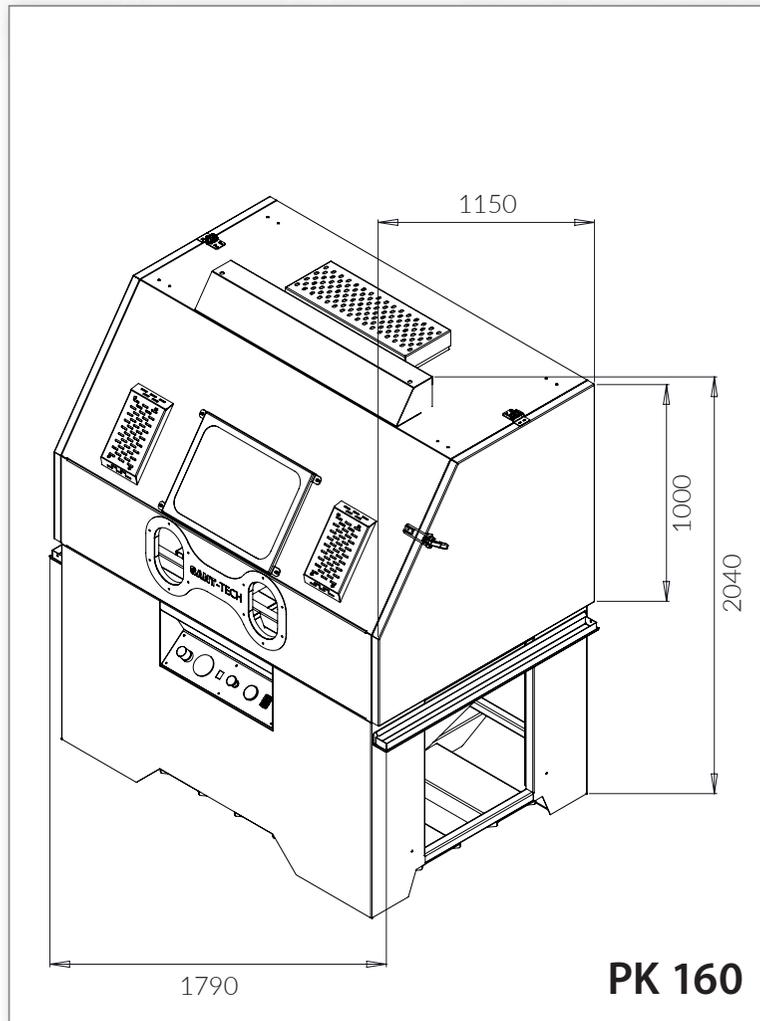
PK 100, PK 140, PK 140 DUO



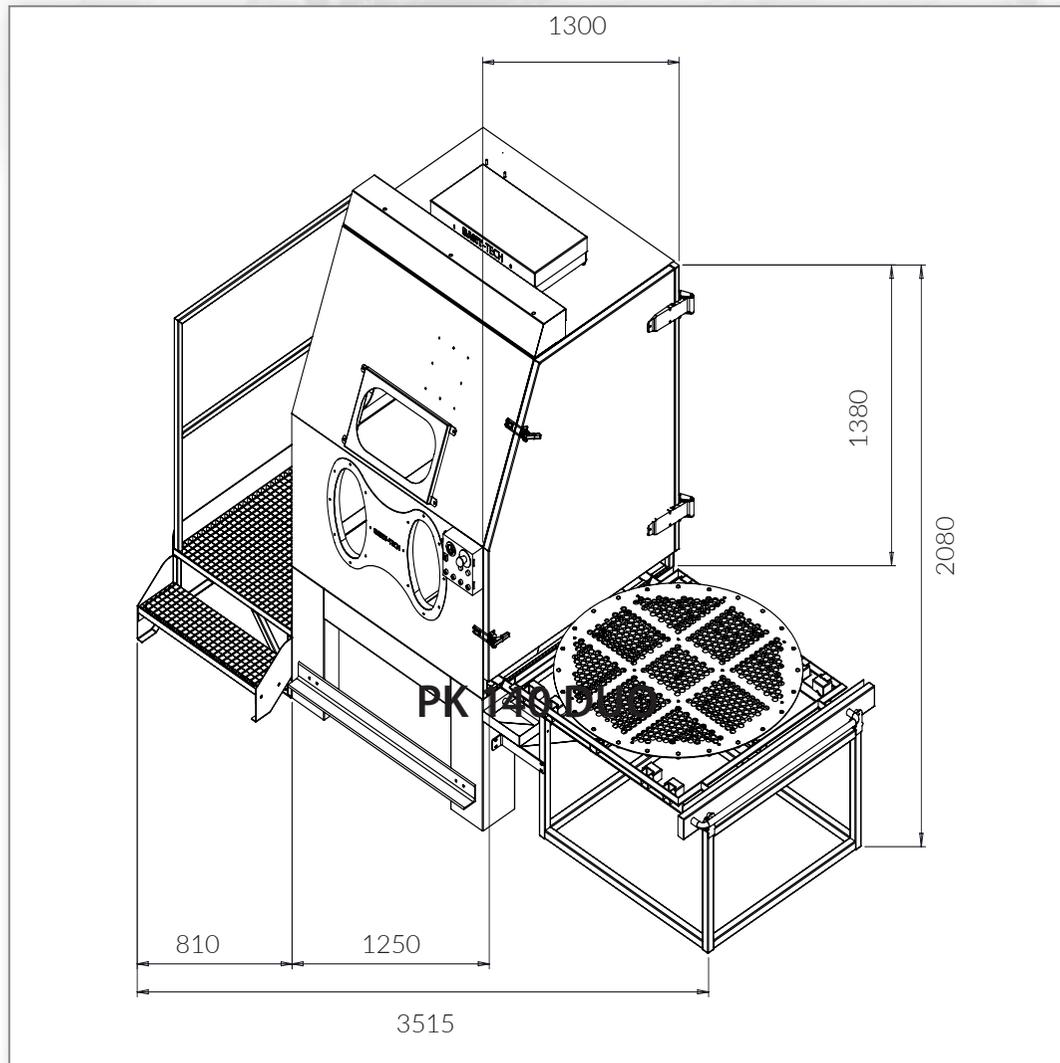
Cabinet sizes

PREMIUM HD

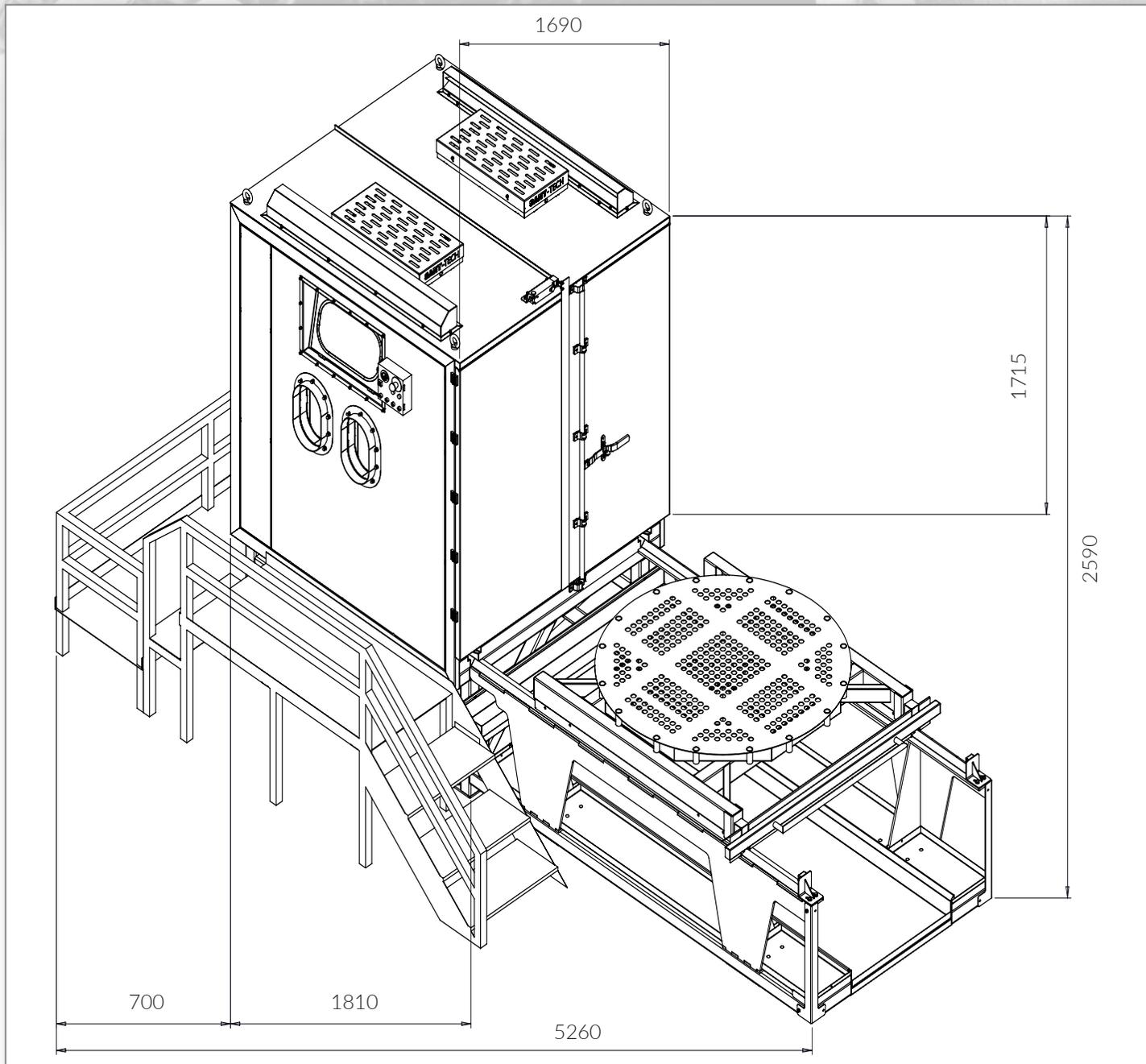
PK 160, PK 180



Cabinet sizes
PREMIUM HD
PKW 500



PKW 500



Cabinet sizes
PREMIUM HD
PKW 1000

PKW 1000

Standard equipment and the advantages of **PREMIUM HD** series



- Laser-cut, fully-welded cabinets made from 3-5mm metal sheets and steel profiles, powder-coated (no rivets).
- Solid, rigid structure guarantees long service and aesthetic exterior.



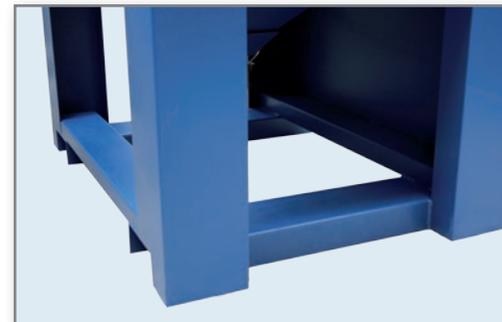
- Reinforced workbench with load capacity of up to 400kg allows for processing of very heavy objects.
- It also serves as the first-degree filter of larger solid particles (metal splinters, pieces of plastic, etc.).



- Doors on both sides of cabin:
 - allow for loading and unloading of processed objects from both sides
 - make cabin more universal
 - make it easier to fit cabin in a hall.



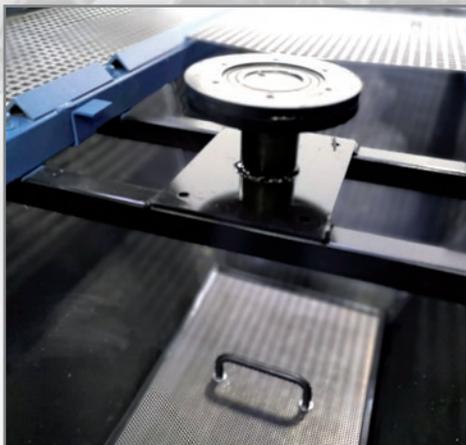
- Cabinets are fitted for transport by forklift or pallet truck, thanks to which they can be easily and quickly moved inside the factory.



- Broad, massive legs are enhancing machine's stability. Cabinet does not bend or shake even under heavy load.



- Detachable side cuvet for abrasant set on both sides of the cabinet (under the door) - when the cabin doors are being opened the scattered abrasant residue is collected in the cuvetts.



- PREMIUM HD cabinet is adjustable for the installation of a special adapter, which allows for a turntable to be added easily.

You can also opt for a cabinet without a turntable and buy it at a later time, should the need arise.



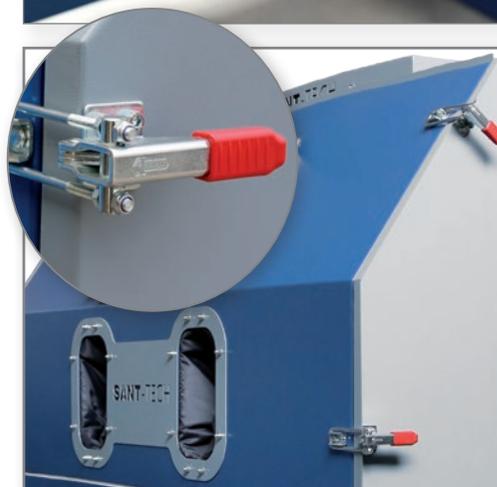
- Safety system – **SMC** limiting switches which turn the machine off should the doors be opened abruptly.



- Cabinet doors are cambered internally with inward edgings, so that the abrasant which builds up on the door can fall inside the cabinet. This solution prevents the abrasant from leaving the cabinet when the doors are being opened.



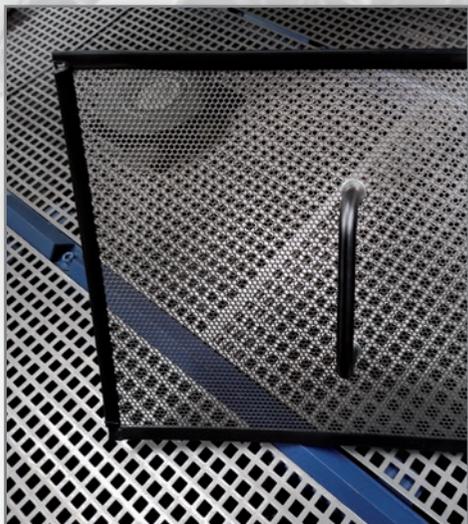
- Equipped with an adapter which allows to mount either injector or pressure set. You can opt for the injector set, and, if needed, change it to the pressure one or vice-versa.



- Double, professional locks in the cabinet door allow for downforce regulation. Thanks to this solution the integrity of the cabinet during work is maintained (dusting is kept within the cabinet). This also means that there is no need to change the seals too often.



- Additional air pistol used for blowing the abrasant remnants from the processed objects.



• Additional, easily replaceable funnel sieve, with significantly lower mesh diameter, which is the second stage of capturing pollution created in the abrasive blasting process. Filtration of smaller particulate matter using additional sieve in the funnel results in an undisturbed work of the sandblasting nozzle.



• Dampening of the cabinet with soundproof panels (3 different overlapping materials) significantly enhances work comfort. The required noise level is preserved, there is no need for hearing protectors.



• Peripheral seals made out of microporous rubber ensure lack of dust, prevent abrasant from escaping the cabinet during work and make for additional dampening.



• Air suppressor set on the cabinet in the air supply track makes for additional dampening during work.



• Lining the inside of the cabinet and funnel with abrasion-resisting panels significantly:
- lengthens the cabinet's lifespan,
- lengthens the abrasant's lifespan,
- lowers the noise level.



• An extremely practical and ergonomic control panel, which allows to keep constant track of the sandblasting parameters:
- large, legible manometer manufactured in Italy by **STRUMENTAZIONE SMC**,
- integrated pressure regulator **SVC**,
- working hours timer by **Kubler**, which allows to plan servicing and maintenance work,
- lighting switch for the cabinet,
- safety switch,
- START/STOP.



- Panoramic viewport (no dead angle), made out of:
 - hardened glass enclosed by the seal, easily replaceable glass pane protecting the hardened glass,
 - replaceable protection foil, glued to the glass pane from the inside of the cabinet.Viewport allows for excellent visibility and safety of the operator.



- An original air circuit in the cabinet integrated with double regulated throttles for retracted air, which guarantees good visibility during the sandblasting process.



- Large, oval hand slots which facilitate effortless hand maneuvering during sandblasting, with integrated sandblasting gloves.

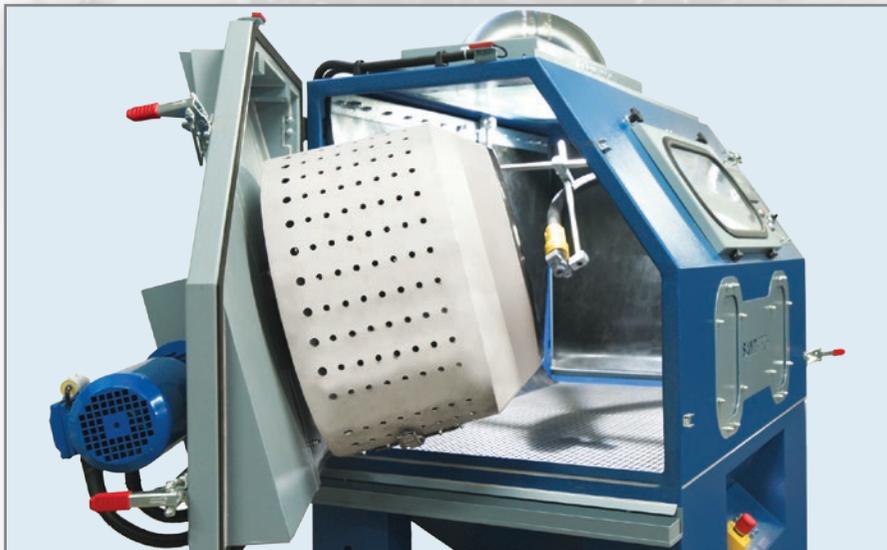


- Replaceable, high-quality protective long gloves, resistant to mechanical damage resulting from sandblasting. Gloves are padded with frost-proof foam and coated with cotton-lined PVC. They are manufactured according to the European Directive 89/686/EWG and were issued all the required attestations and certificates in this regard.

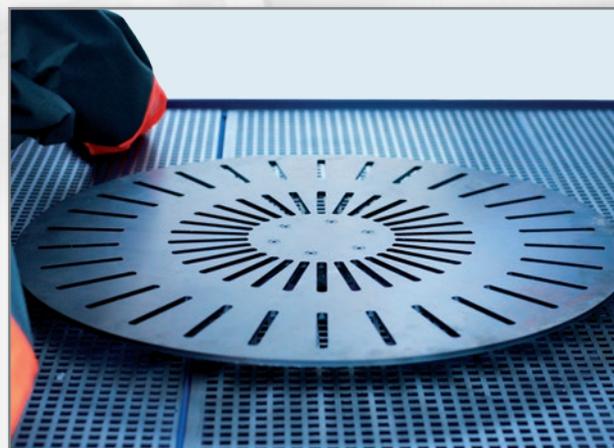


- Halogen LED lighting ensures good visibility and energy saving, which means lower operating costs.

Additional equipment (optional) of **PREMIUM HD** series cabinets



Rotary drum for sandblasting small workpieces.



Manual turntable with load capacity suited to client's needs.



Side slots allow to process longer workpieces.



Turntable with load capacity suited to client's needs, extendible on a side trolley (it facilitates loading and unloading of processed workpieces).



Additional LED lighting situated on the viewport level significantly enhances the visibility of processed material and thus the comfort and precision of the operator's work.

PREMIUM HD series CABINET + PRESSURE SET = PRESSURE SANDBLASTING CABINET

Technical parameters of PK-C PREMIUM pressure sandblasting cabinets:

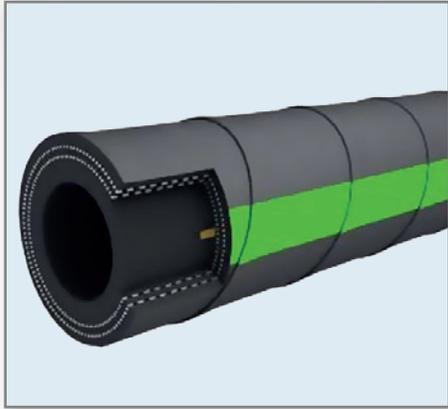
Sandblasting cabinet model	PK-C 100 Premium	PK-C 140 Premium	PK-C 160 Premium	PK-C 180 Premium	PK-C 140 DUO Premium
dimensions of the device (br-le-he)	1140 x 750 x 1905 [mm]	1540 x 1000 x 1965 [mm]	1790 x 1150 x 2040 [mm]	1990 x 1850 x 2100 [mm]	2940 x 1000 x 1965 [mm]
dimensions of the working cabinet (br-le-he)	1000 x 740 x 810 [mm]	1400 x 950 x 810 [mm]	1600 x 1100 x 980 [mm]	1800 x 1780 x 1000 [mm]	2800 x 950 x 810 [mm]
cabinet volume with the funnel	640 [dm ³]	1380 [dm ³]	2000 [dm ³]	3800 [dm ³]	2770 [dm ³]
weight of the cabinet	250 [kg]	350 [kg]	600 [kg]	1000 [kg]	700 [kg]
volume of the pressure vessel	13, 40, 100 [l]	40, 100 [l]	40, 100 [l]	40, 100 [l]	40, 100 [l]
optimal working pressure	4-8 [bar]				
load capacity of the working table	400 [kg]				
air demand	from 1000 [l/min] => 60 [m ³ /h] - min. quality class 4				
power supply of the cabinet	230 [V], 50 [Hz]				
type of supported abrasant	brown and noble aloxite, glass and ceramic microballs, steel and stainless shot, polyamic and plastic shot, other				

We offer pressure sets with 13l vessels suspended under the cabinet or pressure sets with standalone vessels for the PREMIUM HD series cabinets.

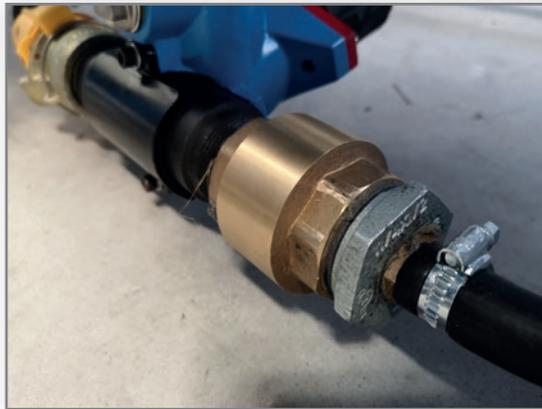


PREMIUM HD series CABINET + PRESSURE SET = PRESSURE SANDBLASTING CABINET

Furthermore, each standard pressure set is equipped with, i.a.:



Wear-resistant hose for pressure sandblasting.



Non-return valve which prevents the abrasant from entering the pneumatic circuit while the pressure vessel is decompressed.



MICRO valve which dispenses the abrasant.



Extremely expedient and reliable, integrated pneumatic control foot pedal.



OMAL VIP control valve.



Pneumatic nozzle produced by **CLEMCO** or **CONTRACOR** made from boron carbide (the toughest available nozzle material, lifespan of up to 1000 working hours) with Venturi tube – makes sandblasting even 40% more efficient!

PREMIUM HD series CABINET + PRESSURE SET = PRESSURE SANDBLASTING CABINET

We recommend buying **PWR5** system for the pressure sets used in the PREMIUM HD series.

It is a reliable backup system, which allows for increased efficiency of sandblasting, and thus shortened processing time.

PWR5 makes it possible to work within the pressure range as low as 2 bar. It works best when you need to quickly (practically immediately) start and stop the sandblasting.

Advantages of PWR5 system:

- precise selection of processing parameters within the range of 2-10 bar
- shorter reaction time to the pneumatic control foot pedal
- automatic vessel decompression (allows for reduced wearing of protective cabinet panels as well as nozzles and hosepipes of the sandblasting set)
- significant increase in efficiency as compared with the pressure set without the PWR5 system.

Our stainless steel solutions

Our machines are also offered in customized versions, e.g. for cleaning, preparation and finishing of surfaces of non-ferrous wares (for instance: using chromic (Cr) or nickel-chromium (CrNi) abrasants).

Using such abrasants makes for a fully ecological alternative to the chemical processing and other solutions in the area of surface treatment, produces significantly less waste and dust. Stainless steel abrasive materials are fully recyclable and adhere to the strictest WHS regulations.



Exemplary pressure set with PWR5.

PREMIUM HD series CABINET+ INJECTOR SET = INJECTOR (SUCTION) SANDBLASTING CABINET

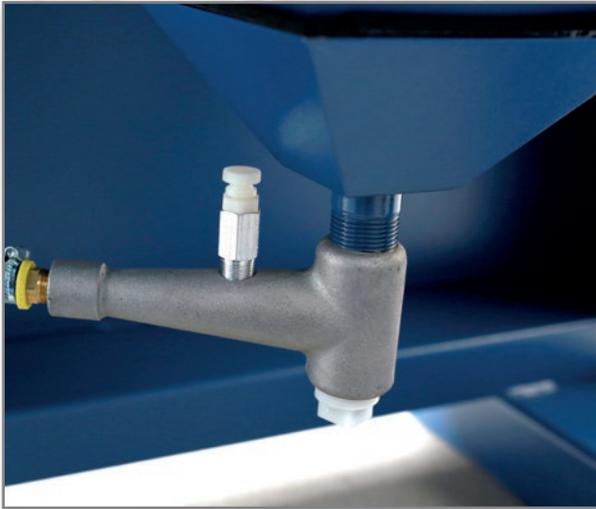
We offer tested and reliable injector sets for the PREMIUM HD series cabinets.

Technical parameters of PK-I PREMIUM injector sandblasting cabinets:

Sandblasting cabinet model	PK-I 100 Premium	PK-I 140 Premium	PK-I 160 Premium	PK-I 180 Premium	PK-I 140 DUO Premium
dimensions of the device (br-le-he)	1140 x 750 x 1905 [mm]	1540 x 1000 x 1965 [mm]	1790 x 1150 x 2040 [mm]	1990 x 1850 x 2100 [mm]	2940 x 1000 x 1965 [mm]
dimensions of the working cabinet (br-le-he)	1000 x 740 x 810 [mm]	1400 x 950 x 810 [mm]	1600 x 1100 x 980 [mm]	1800 x 1780 x 1000 [mm]	2800 x 950 x 810 [mm]
cabinet volume with the funnel	640 [dm ³]	1380 [dm ³]	2000 [dm ³]	3800 [dm ³]	2770 [dm ³]
weight of the cabinet	250 [kg]	350 [kg]	600 [kg]	1000 [kg]	700 [kg]
optimal working pressure	4-8 [bar]				
load capacity of the working table	400 [kg]				
air demand	from 1000 [l/min] => 60 [m ³ /h] - min. quality class 4				
power supply of the cabinet	230 [V], 50 [Hz]				
type of supported abradant	brown and noble aloxite, glass and ceramic microballs, steel and stainless shot, polyamic and plastic shot, other				



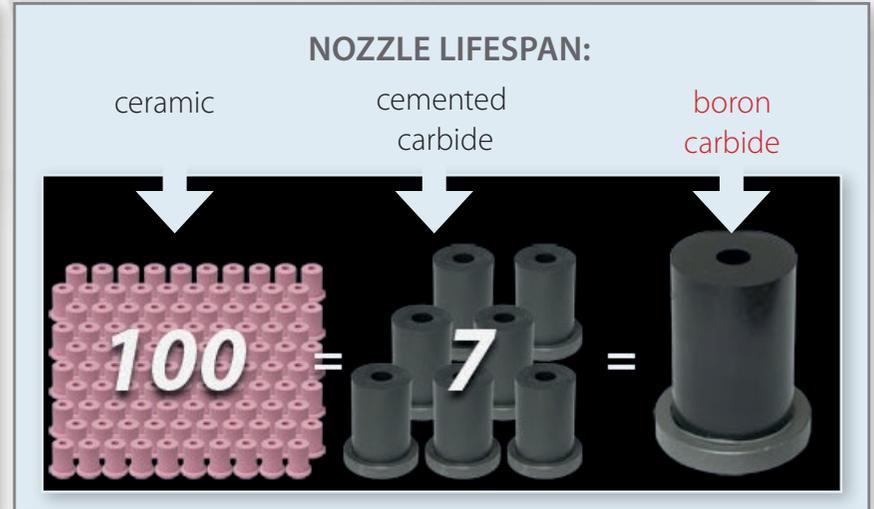
Each standard injector set is comprised of, i.a.:



Intake manifold of the injector set.



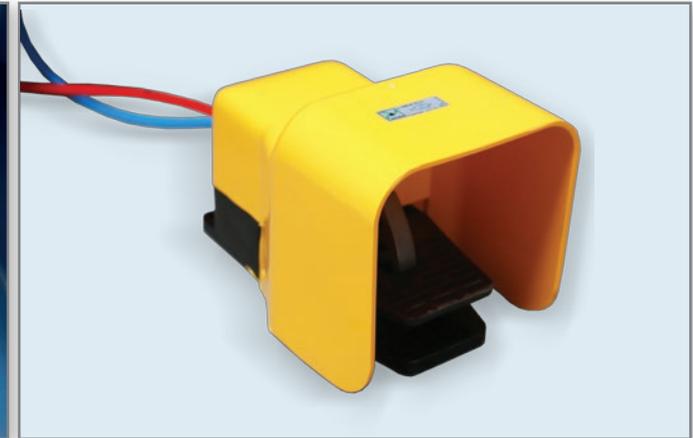
Boron carbide pistol nozzle (the toughest available nozzle material).



BNP injector pistol produced by CLEMCO.



Control valve made by OMAL.



Extremely expedient and reliable, integrated pneumatic control foot pedal.

TWO-TIER PKW 500 **PREMIUM** CABINET SANDBLASTING MACHINE

The PREMIUM series also includes multi-tier sandblasting cabinets, with which, according to client's needs and required processing system, we use pressure or injector sandblasting sets.



PKW 500 PREMIUM cabinet sandblasting machine allows for sandblasting on two levels. This solution is intended for processing of large-size objects.



Technical parameters of PKW 500 PREMIUM sandblasting cabinets:

Sandblasting cabinet model	PKW 500 Premium
dimensions of the device (br-le-he)	3515 x 1630 x 2220 [mm]
dimensions of the working cabinet (br-le-he)	1300 x 1250 x 1300 [mm]
cabinet volume with the funnel	2112 [dm ³]
weight of the cabinet	660 [kg]
optimal working pressure	4-8 [bar]
load capacity of the working table	500 [kg]
air demand	from 1000 [l/min] => 60 [m ³ /h] - min. quality class 4
power supply of the cabinet	230 [V], 50 [Hz]
type of supported abradant	brown and noble aloxite, glass and ceramic microballs, steel and stainless shot, polyamic and plastic shot, other



THREE-TIER PKW 1000 **PREMIUM** CABINET SANDBLASTING MACHINE

Another multi-tier SANT-TECH sandblaster is PKW-1000 PREMIUM. Due to being equipped with working platforms and the possibility of processing on three different levels, it is perfect for sandblasting of extremely large objects.



Technical parameters of PKW 1000 PREMIUM sandblasting cabinets:

Sandblasting cabinet model	PKW 1000 Premium
dimensions of the device (br-le-he)	5380 x 2670 x 2700 [mm]
dimensions of the working cabinet (br-le-he)	1600 x 1700 x 1400 [mm]
cabinet volume with the funnel	3808 [dm ³]
weight of the cabinet	1300 [kg]
optimal working pressure	4-8 [bar]
load capacity of the working table	1000 / 2000 [kg]
air demand	from 1000 [l/min] => 60 [m ³ /h] - min. quality class 4
power supply of the cabinet	230 [V], 50 [Hz]
type of supported abradant	brown and noble aloxite, glass and ceramic microballs, steel and stainless shot, polyamic and plastic shot, other



PREMIUM HD SERIES NON-STANDARD SANDBLASTING MACHINES

To meet the market demands, we also produce non-standard sandblasting machines as a part of our PREMIUM line of products. They are adapted to diverse technological processes and are constructed according to the individual preferences of our clients. These devices can be operated manually, they can also be partly- or fully-automated.



Exemplary sandblasting machines / cleaners /
non-standard shot-blasting machines



We offer ZO-150P, ZO-200P and ZO -250P dust extraction systems for the PREMIUM HD sandblasting cabinets.

Model of the extraction system is selected according to the type of sandblasting cabinet its area of work and the abrasant being used.

ZO series, type P dust extraction systems are professional extraction units with high dedusting efficiency. The use of mid-pressure, centrifugal fans with high compression ratio and separate filter cartridges made from nonwoven, net-reinforced polyester ensure a highly efficient filtering of dust and pollution.

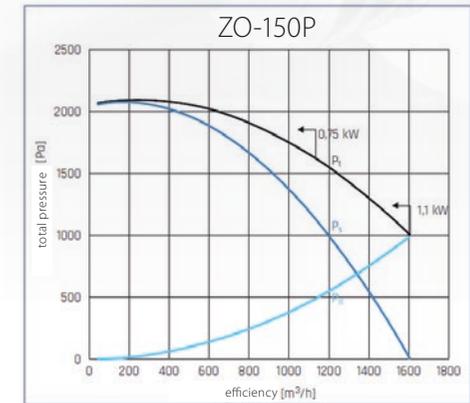
Those extraction units are supported by cyclonic, magnetic or mechanic solid particle separators. The default equipment consists of automatic filter cleaning systems, throttles allowing for manual regulation and low-maintenance waste containers. Additionally, you can purchase electronic system for extraction control and LDC dampening sets.

ZO series, type P dust extraction units with cartridge filters are used in many divisions of industry to cleanse the air from loose material and dust, especially by sandblasting cabinets.

TYPE ZO-150P



Electronic system of extraction control – main panel.



Technical parameters of ZO-150P extraction units:

Parameters	ZO - 150P
size of the device [br- le-he]	610 x 775 x 1600 [mm]
filter type	PATRON 150
filter area	10 [m ²]
DN vent diameter	150 [mm]
radiator's rated flow	1450 [m ³ /h]
engine power	0,75 [kW]
max. noise level	75* [dB]
filtering efficiency	99,95[%]
power supply	400 [V]
volume of dust container	39 [dm ³]
weight	100 [kg]
electronic control system	option
grammage of filtering material	260 [g/m ²]

*when damper is used

ZO-150P with LDC dampening set and electronic system for extraction control.

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Our devices are equipped with radiators compliant with the ERP guideline.

TYPE ZO-200P, ZO-250P

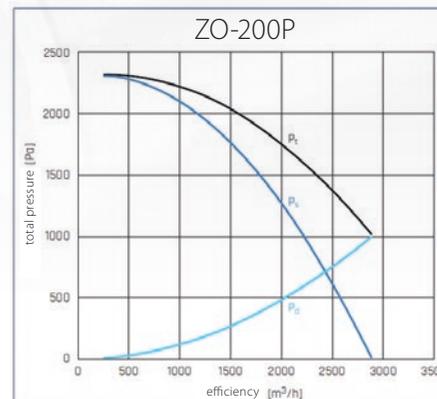
Electronic system of extraction control -
- main panel.



ZO-250P with LDC dampening set and electronic system for extraction control.



Low-maintenance waste container.



Technical parameters of ZO-20P, ZO-250P extraction units:

Parametres	ZO - 200P	ZO - 250P
size of the device (br-le-he)	1300 x 900 x 2100 [mm]	1500 x 900 x 2200 [mm]
filter type	PATRON 200	PATRON 250
filter area	20 [m²]	40 [m²]
DN vent diameter	200 [mm]	315 [mm]
radiator's rated flow	3200 [m³/h]	6600 [m³/h]
engine power	2,2 [kW]	4 [kW]
max. noise level	77* [dB]	78* [dB]
filtering efficiency	99,95 [%]	99,95 [%]
power supply	400 [V]	400 [V]
volume of dust container	51 [dm³]	40,8 [dm³]
weight	150 [kg]	200 [kg]
electronic control system	option	option
grammage of filtering material	260 [g/m²]	260 [g/m²]

*when damper is used



Our devices are equipped with radiators compliant with the ERP guideline.

Standard equipment for ZO series, type P dust extraction units (ZO-150P, ZO-200P, ZO-250P):

- foolproof, centrifugal fan
- nonwoven polyester, net-reinforced cartridge filters
- low-maintenance waste container
- suited for continuous work
- regulated thrust throttle
- system for automated flicking of the filtering cartridge allows for effective work of extraction/dedusting unit while significantly lengthening filter's lifespan



The system for ZO-200P and ZO 250P

Optional equipment (possible expansion) for ZO series, type P dust extraction units

LDC DAMPENING SET
SIGNIFICANTLY
REDUCES VOLUME
OF EXTRACTION UNIT
DURING WORK.



ELECTRONIC SYSTEM
OF EXTRACTION CONTROL

MERITS:

- regulated rotation speed of the engine
- regulated torque of the engine
- lowered cranking current



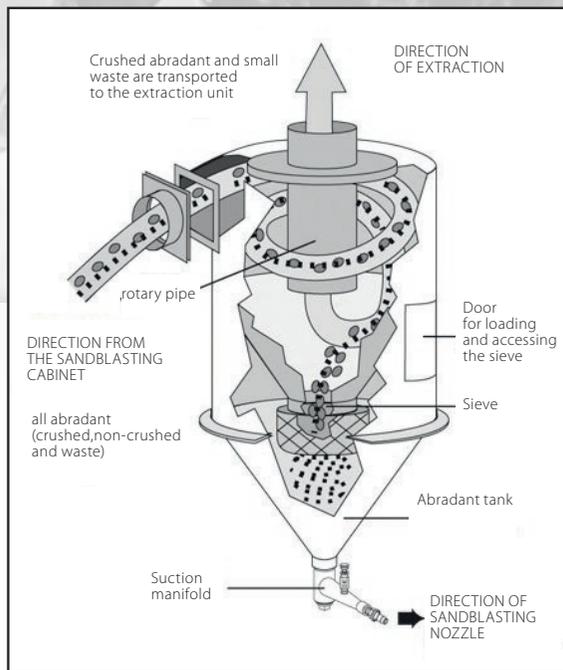
The above regulations result in significant savings in power consumption. They also play part in the smooth regulation



of the amount of pumped air, thus allowing to react to the current dusting level.

PROPERTIES:

- three-phase power source
- auto-tuning of the engine
- in-built inhibiting unit
- internal PID controller
- 150% of torque at 0,5Hz
- possibility to control the signal from -10 to +10V
- earth fault protection
- automatic restart after power failure or breakdown
- manual and automatic torque forcing
- many ways to control the engine's speed
- three-wire control, eight step speeds, etc.
- speed search function
- automatic change of carrier frequency

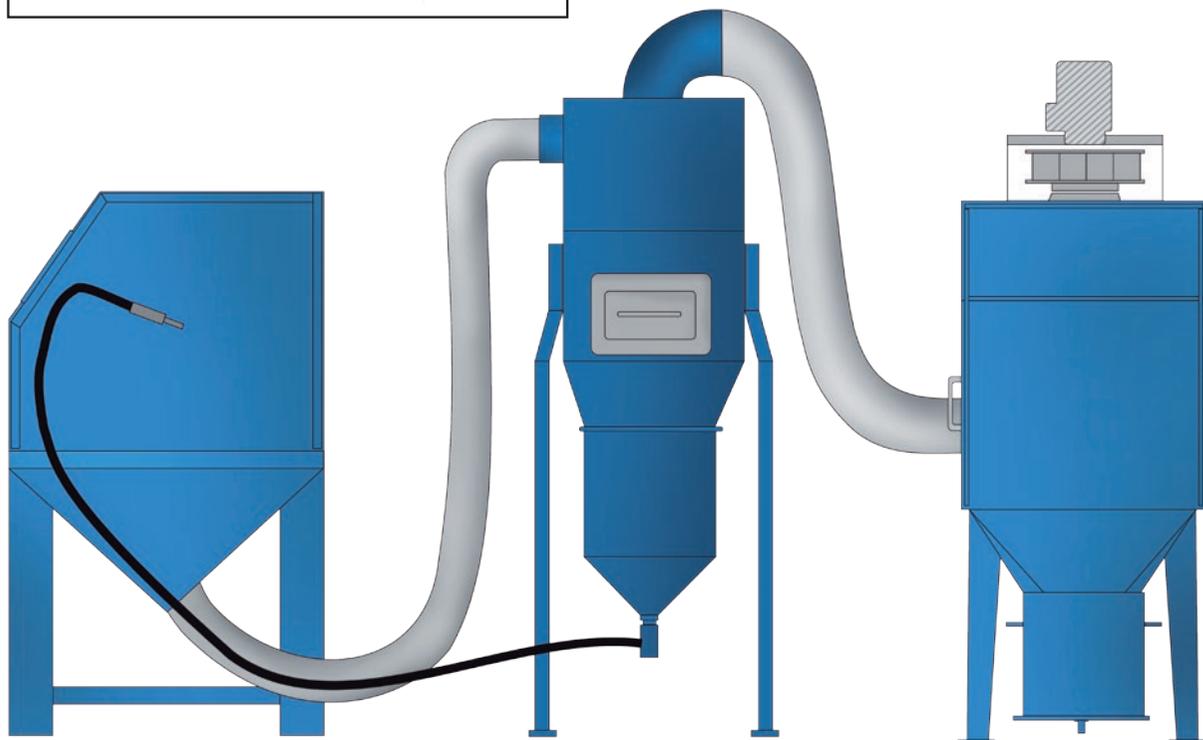


CYCLONIC ABRADANT SEPARATORS

We recommend buying cyclonic abradant separators produced by SANT-TECH for PK PREMIUM series sandblasting cabinets. Using the abradant separators significantly improves the quality of circulating abradant, which contributes to the precision of processing and remarkably lengthens the abradant's lifespan. This in turn means considerably lower costs of sandblasting.

An example of using cyclonic separator in an abrasive blasting set.

Parameters	DS 600 L	DS 600 Z
size of the device (br-le-he)	850 x 1000 x 1770 [mm]	850 x 660 x 960 (+ tank) [mm]
inlet/outlet diameter	150/200 [mm]	150/200
separated substance	abradants	abradants
type of assembly	standalone -injector system	to be installed on the pressure tank



DS 600L
cyclonic abradant separator



DS 600Z
cyclonic abradant separator

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Sant-Tech production halls

Sant-Tech LTD headquarters

SANT-TECH[®]
Abrasive Blasting Machines Manufacturer

SANT-TECH Ltd,
31G Pollanki Street, 30-740 Cracow, Poland
Phone:+48 12 350.24.55, Fax:+48 12 350.24.05
sant-tech@sant-tech.pl

www.sant-tech.eu



Producer reserves the right to modify and enhance the devices presented in this catalogue.

YouTube

Videos demonstrating our machines at work on the SANT-TECH YouTube channel.

