

CONTROL AND DISPATCH DESKS



CATALOGUE

2003



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CONTROL AND DISPATCH DESKS

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CONTROL AND DISPATCH DESKS

Zakład Produkcji Automatyki Sieciowej S.A.



About the company

The company **Zakład Produkcji Automatyki Sieciowej (ZPAS)** was founded in 1973 initially as the Experimental Department of the Power System Automation Institute of Wrocław. At the beginning of 1980s it became the part of the Research and Manufacturing Centre for Power System Automation. In 1990 the company achieved full independence and in 1992 was transformed into a private stock company. Experience got in 30 years history, and mainly during political changes which started in 1989, enable us to keep steady development of the company, extension of infrastructure and forming modern process lines.

Modern and high-tech equipment, well-educated and selected personnel determine the guarantee of high quality and flexibility of company's offer. ZPAS S.A. has got both the Quality Assurance System certificate ISO 9001:2000 and Environmental Management System certificate ISO 14001:1996.

The product line-up of ZPAS S.A. mainly refers to needs of relatively young IT branch. Our products are frequently important part of teletechnical protection of modern telecommunication, computing and power industry systems.

New technological solutions made by ZPAS S.A. created uniform and comprehensive product line-up. Due to these solutions, it was possible to join previously divided groups of products of computing and power industry branch.

We offer the following product line-up and services:

- 19", 21" and 10" cabinets for data and telecommunication networks (in floor-standing and wall-mounted versions),
- outdoor cabinets,
- cabinets in EMC standard,
- structural cabling system PowerLink,
- fibre optic distribution frames in OptiTel and OptiLan series,
- power industry cabinets,
- mimic panels,
- dispatch and control desks,
- system of supervising climatic conditions ZPAS-Control M-Bus,
- products made of stainless and acid-proof steel,
- other products on customers' request.



Gateway to the plant



Administration Building

In 2002 we introduced brand new products: OptiTel - system of module fibre optic distribution frames, PowerLink-structuralcablingssystem, SZE2-newseries of power industry cabinets, SD and SJ - wall-mounted cabinets, KCS-1 - cassette of central signalling, ZPAS-Control M-Bus - system of supervising climatic conditions. All detailed information about the product line-up are on our website: <http://www.zpas.com>.



View of the upper part of the plant



About the company



Road to the lower part of the plant



View from the company's car park



Marketing Department Building



Electrical Plant Building

The plant is located on the former coal mine grounds RUDOLF (after 1945 coal plant BOLESŁAW) and the former steelworks BARBARA. In 1948 the buildings of steelworks became property of the Central Repair Shop for Coal Industry. From 1964 to 1973 this was a foundry belonging to Świdnica Wagons Factory.

Historic buildings from the beginning of the second half of 19th century of the former steelworks BARBARA (presently ZPAS's Mechanical Plant) are registered as historic monuments. All remodelling and development must conform to preservation service directives.



Mechanical Plant

About the company



Z P A S S . A .

ZPAS S. A. Mechanical Plant: 1. - 3. numerically controlled machinery for sheet working, 4. - 5. welding robot.

About the company



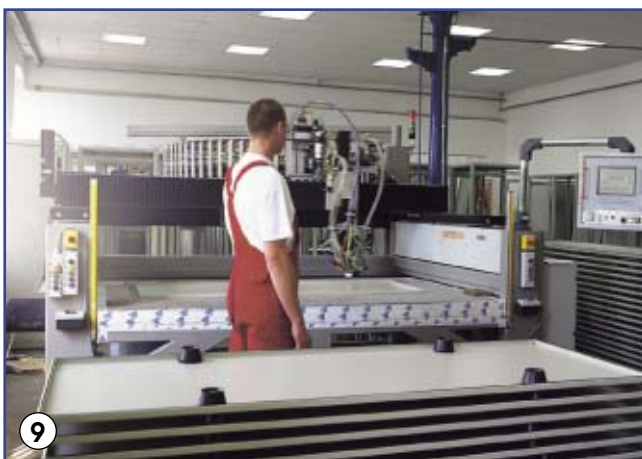
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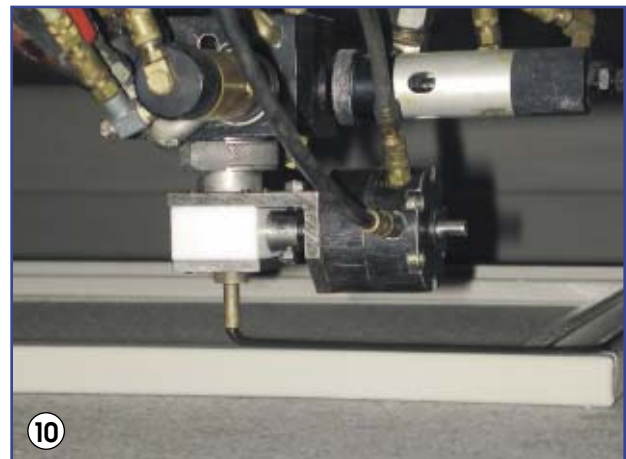
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ZPAS S. A. Mechanical Plant: 6. - 8. automated powder paint shop, 9. - 10. cast gasket machinery.

ISO 9001, ISO 14001



GUARANTEE



Z P A S S . A .

Note: ZPAS S.A. reserves the rights to changes in construction of its products.

References

The control and dispatch desks are manufactured since the very beginning of ZPAS SA existence, it means 1973, both for home and foreign market. Altogether there were produced hundreds of desks including 80 during the last five years. They are mainly designed for the power plants, thermal-electric power stations, energy plants, sugar factories, integrated mills, cement plants, nitrous works, gas works, cokeries, hard and brown coal mines, and many other industrial branches.

The offer includes universal modular desks and consoles being made for a special order upon customer's documentation or prepared by ZPAS SA. Supplement of offer is determined due to PSL standard control desks series with a modular construction, which are intended for production lines, tooling centres etc. In composition of each console delivery the complete electric equipment and full site-assembly can be offered.



SAMPLE REALIZATIONS

POWER PLANTS

- Power plant Jaworzno III, unit 6
- Power plant Kozienice
 - Świerże Górne, control rooms of units 2, 3, 4, 6, 7, 10
- Power plant Połaniec
 - control rooms for units 1, 4, 5
 - control room for dispatcher engineer
- Power plant Rybnik
 - control room for unit 8
- Power plant Turów-Bogatynia
 - control rooms for units 8, 9, 10
- Power plant Gacko - Bosnia and Herzegovina
- Hydroelectric power station Porąbka Żar S. A. in Międzybród Żywiecki

THERMAL-ELECTRIC POWER STATIONS

- Thermal-electric power station Gorzów Wielkopolski
- Thermal-electric power station Lublin
 - electric control room
- Thermal-electric power station 3 in Łódź
- Thermal-electric power station Boruta in Zgierz
- Thermal-electric power station Władysławowo
- Thermal-electric power station Opole
- Thermal-electric power station Siekierki
- Thermal-electric power station Cieszyn
- Thermal-electric power station Żerań
- Thermal-electric power station II Bydgoszcz - electric control room
- Thermal-electric power station Zabrze
- Thermal-electric power station Katowice - carburizing control room

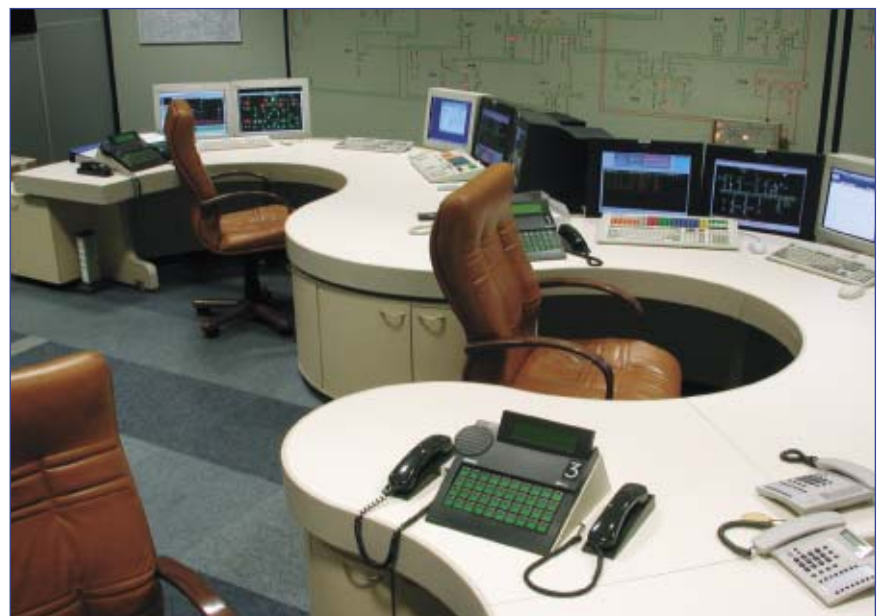
ELECTRIC PLANTS

- Dispatch room - Goleniów
- Electric station Wielopole
- Dispatch room - Chełm
- Electric station Pasikurowice
- Electric plant Będzin - dispatch room
- Regional dispatch room - Katowice

OTHERS

- Stamping press Kondratki
- Stamping press Włocławek
- Electric dispatch room Siennica Nadolna
- Electric dispatch room, sugar factory, Lublin
- Prison in Piotrków Trybunalski
- Seismological research centre - Gazprom

- KGHM Polska Miedź S. A.
 - Mining Plant, Lublin
- Brown Coal Mine - Kleczew
- Open pit dispatch room - Kazimierz Wielki
- Open pit dispatch room - Lubustów
- Open pit dispatch room - Józefów
- Refinery Ruwais, Abu Dhabi, United Arab Emirates
- Steel rolling mill Czechowice - Dziedzice
- Wrocławskie Kopalnie Surowców Mineralnych S. A. (quarry)
- Zielonogórskie Kopalnie Surowców Mineralnych S. A. (quarry)
- Arctic Paper Kostrzyń



General characteristic of desks

In the range of control and dispatch desks ZPAS S.A. produces first and foremost constructions adjusted in their shape and functionality for the particular site needs. Such consoles are manufactured according to documentation supplied by the customer or prepared by Designing Department of ZPAS S.A. Quite often these consoles are the part of complex order containing their electric accessories, producing mimic panels for the particular room, and on-site assembly.

Because of round-the-clock usage, the consoles are made of the highest quality materials that guarantee high durability and esthetic. Therefore ZPAS S.A. designers co-operate with designing offices, architects and ergonomic specialists.

CONTROL DESKS INTENDED FOR INDUSTRIAL ROOMS

Control desks can be entirely manufactured of sheet steel. The console shape and dimensions should be adapted to the particular room and adjusted to appliances installed upon customer's request.

DISPATCH AS WELL AS DISPATCH AND CONTROL DESKS

In the event of dispatch or dispatch and control desks, which also perform a function of operation station, the construction consists of base, desktop, and also with tops if it's necessary.

The wide range of materials is used to produce the desktops, from wood-like boards to synthetic materials - depending on particular needs and requested standard. In constructions characterised with simplicity, and not requiring an expensive technologies, the double-sided laminating or MDF boards with any lamination colour finishes are applied. Acrylic materials such as Paracore or Corian allow for better application freedom.

Desktops can be also made of mimic panels. Such solution enables quick and easy change of graphical mosaic diagram and the installed-in accessories arrangements.

Consoles' desktops can be equipped with tops with various shapes and dimensions. It enables for easy installation of monitors, push buttons, meters, displays, or other devices.

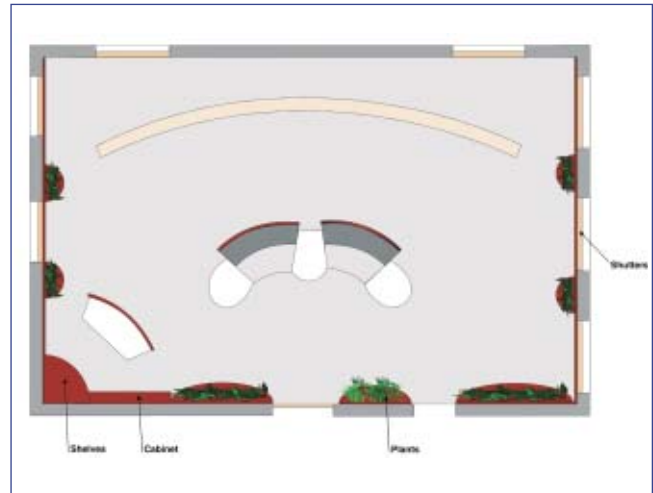
COLOURS

The metal parts of consoles can be painted, galvanised, or made of stainless steel without any supplementary surface finishing. Paint choices are epoxy and polyester powder paints, textured, in all colours from RAL catalogue.



Visualisation

ZPAS S. A., due to constant and close co-operation with specialists from many fields, like industrial design, ergonomics, interior architecture and experienced crew, is able to complete individual set of control desks, present visualisation in the room and assembly the whole investment on site.



Taking advantage of modern computer programmes, we can present to our customers visualisation of rooms with complex proposition of fittings as well as delivery both with on-site assembly.

SAMPLE VISUALISATIONS OF DISPATCH ROOMS



I N T R O D U C T I O N



Modular control and dispatch desks

GENERAL CHARACTERISTIC

New range of consoles produced by ZPAS S. A. is characterised by new approach to construction of control and dispatch desks.

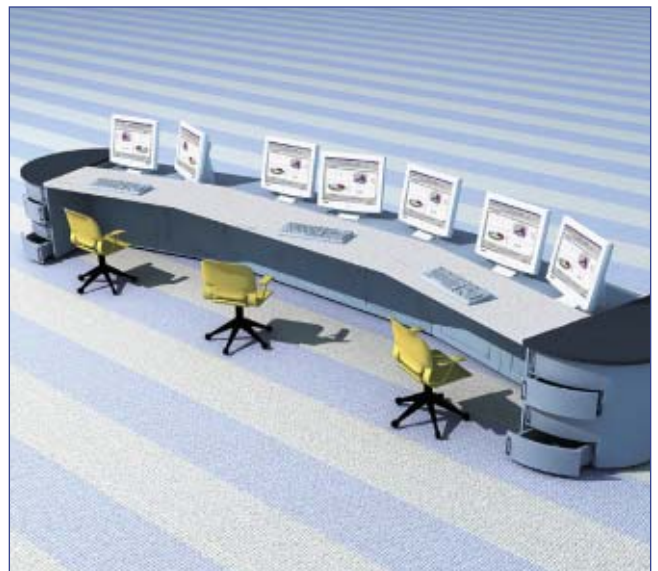
The main design assumption of new modular desks was to create and define the standard, which due to its modular construction enables to make individual combinations between elements of the system.

This solution, in comparison with other unitary constructions produced so far, has got lower price and shorter lead time. Now, the potential customer can choose between typical modules, which put together create ready product.

It is also possible to choose optionally different colours of elements, what make it easy to adjust the colours for individual rooms and customers' requests.

Moreover, the construction based on the frame, enables to use different finish material, what gives possibility to choose between more economical version and luxurious, more prestigious one.

The main design idea of new modular consoles is based on creation of few replaceable elements, which are characterised by innovative attributes, due to their shape and construction. Modular construction enables to adjust the console to nearly every room.



STANDARD CONSTRUCTIONS OF DESKS

Standard colours of modular desks' elements



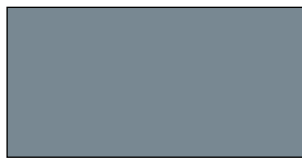
RAL 1002



RAL 1015



RAL 5007



RAL 7000



RAL 7024



RAL 7035

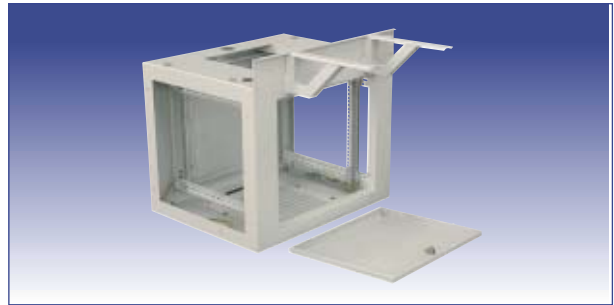
Modular control and dispatch desks

SEPARATE ELEMENTS OF MODULAR CONTROL AND DISPATCH DESKS

Main elements of new range of control and dispatch desks are:

① PC module

Two levelled 19" case intended for installing central unit of the system or other types of electronic devices. Upper part of the case is used as a support for the working desktop, lower part (rear) is for putting monitors. There are forecasted two PC modules for one working place.



② Cylinder with 8 drawers

Central unit, enables to put sets at optional angle.

Possibility of joining with:

- PC module,
- shield joining cylinder with PC module.

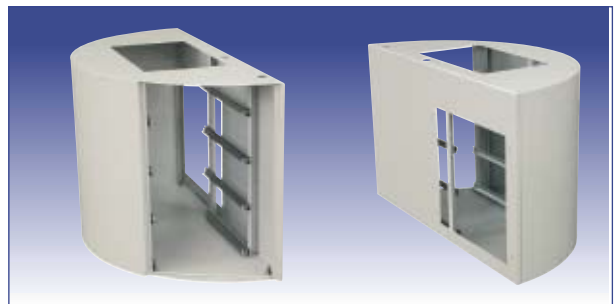


③ Half cylinder with 4 drawers

Side elements for ending sets.

Possibility of joining with:

- PC module,
- shield joining cylinder with PC module,
- second half of the cylinder (central module).



④ Side wedge

Ending element (without drawers).

Possibility of joining with:

- PC module.



⑤ 15° wedge

Enables to bend sets by 15° angle. Using more than one wedge enables to achieve more bent set.

Possibility of joining with:

- PC module.



Modular control and dispatch desks

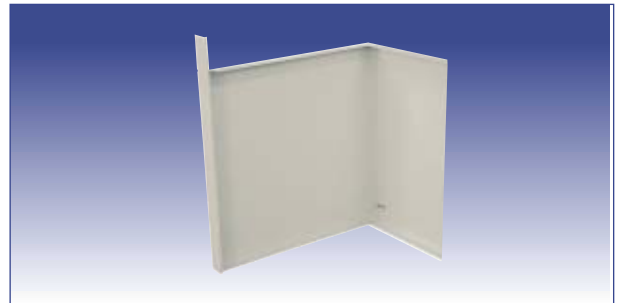
SEPARATE ELEMENTS OF MODULAR CONTROL AND DISPATCH DESKS

⑥ Rear shield

Shield intended for masking the rear space between the cylinder and PC module.

Possibility of joining with:

- PC module,
- Cylinder as the central element of the console.

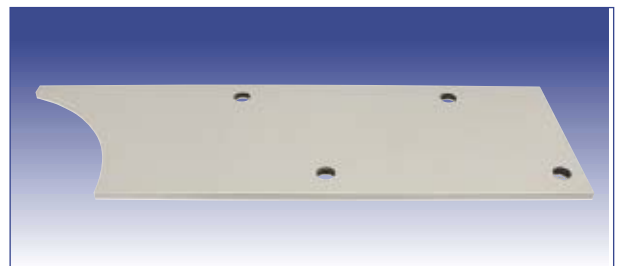
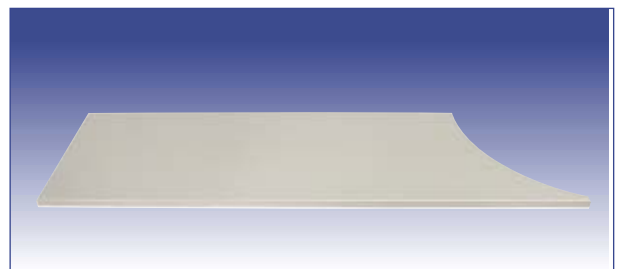


⑦ Desktops

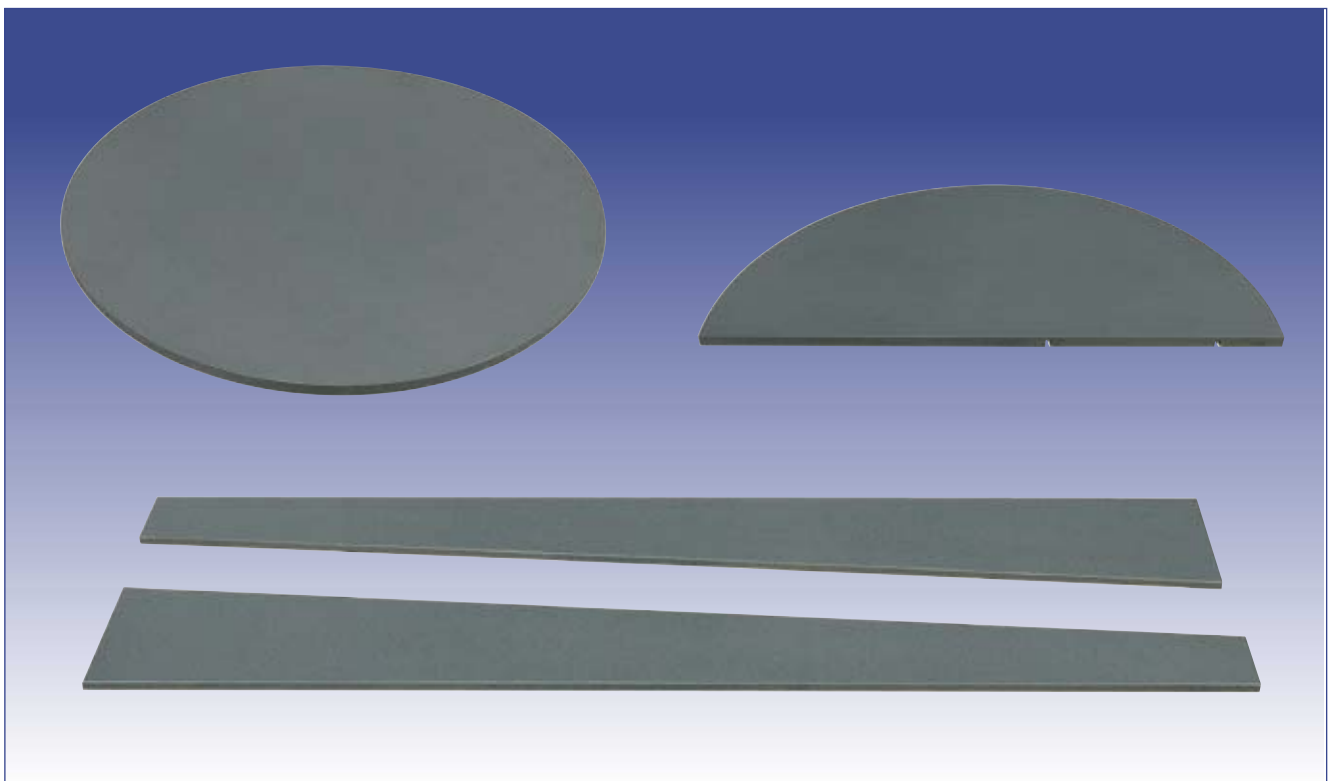
Desktops, sides, tops and other elements of consoles can be made of modern synthetic materials - depending on customer's needs and required standard. Because round-the-clock usage, it is necessary to make the consoles of high quality materials with long durability and good esthetic.

In recommended modular control and dispatch desk, materials used for desktops are as follows:

- Chipboard with laminate on both sides, front of the desktop made of PCV strip in the colour of the desktop.
- MDF board, laminated, with increased resistance on abrasion, front of the desktop made of PCV strip in the colour of the desktop.
- Modern synthetic materials, for example Paracor/Plexicor, Corian, SSV.



STANDARD CONSTRUCTIONS OF DESKS

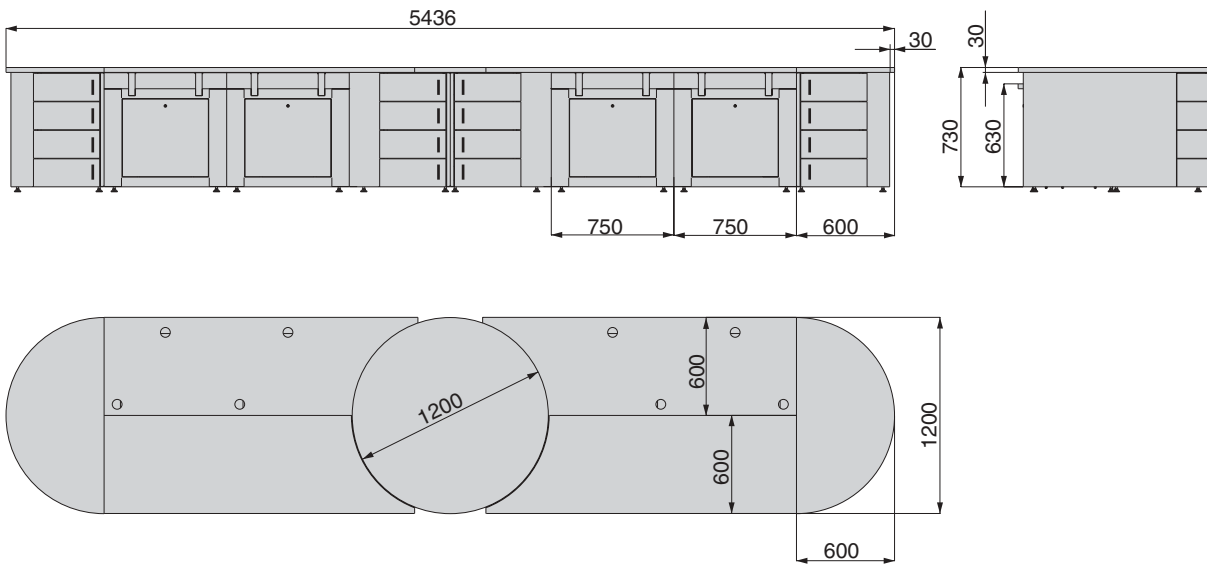


Modular control and dispatch desks

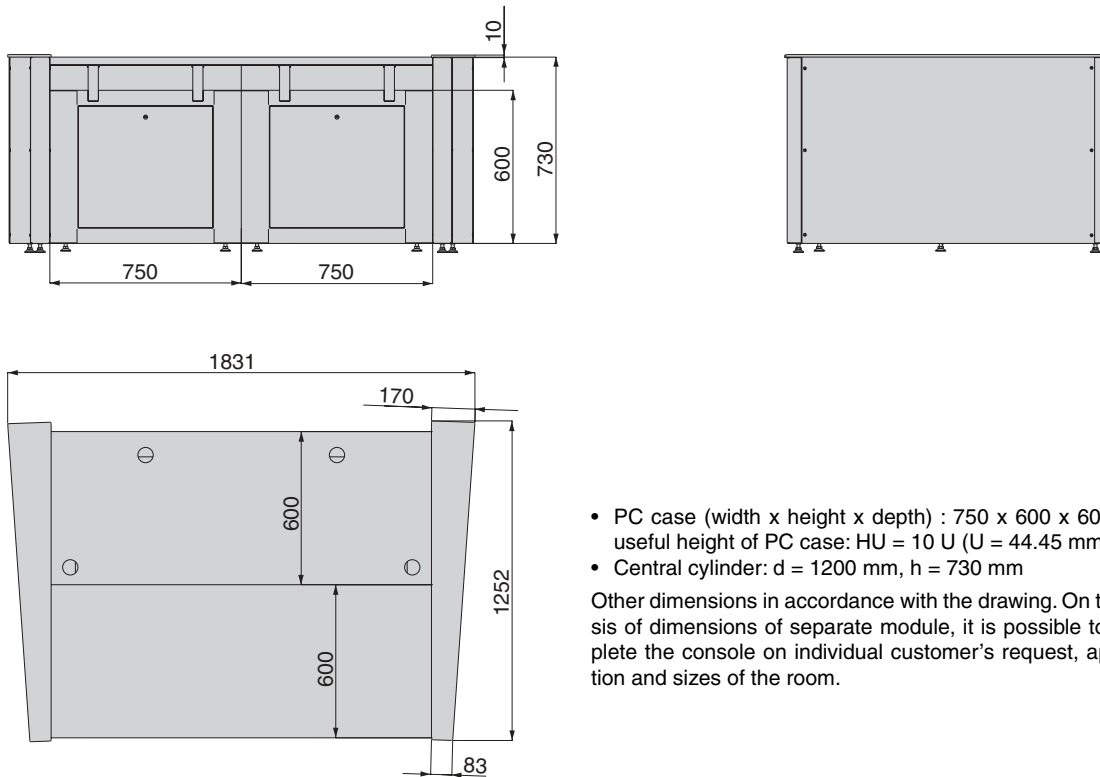
DIMENSIONS OF MODULES

Optional joining of described modules enables to create unlimited sets of working places.

Two-working places console, straight



One-working place console



- PC case (width x height x depth) : 750 x 600 x 600 mm; useful height of PC case: HU = 10 U (U = 44.45 mm)
- Central cylinder: d = 1200 mm, h = 730 mm

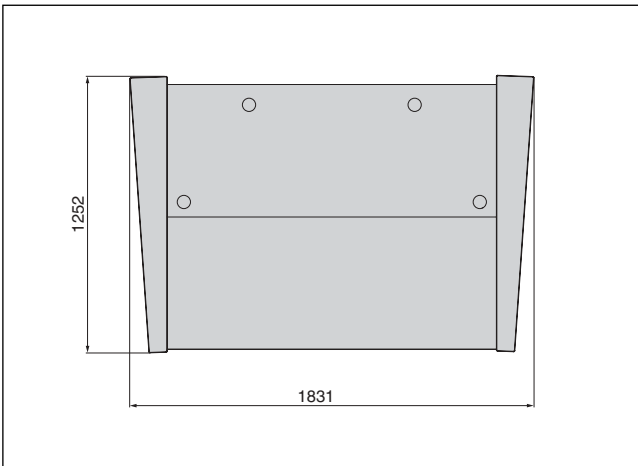
Other dimensions in accordance with the drawing. On the basis of dimensions of separate module, it is possible to complete the console on individual customer's request, application and sizes of the room.

STANDARD CONSTRUCTIONS OF DESKS

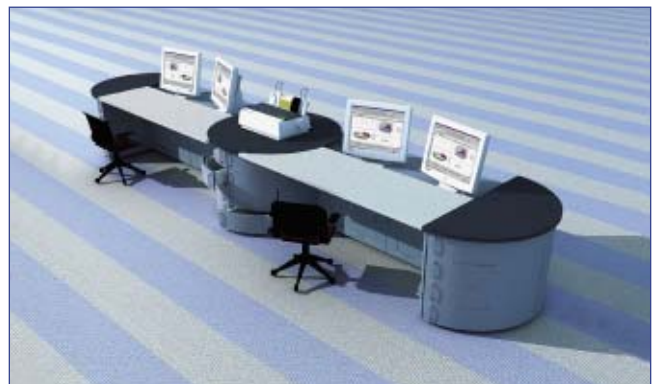
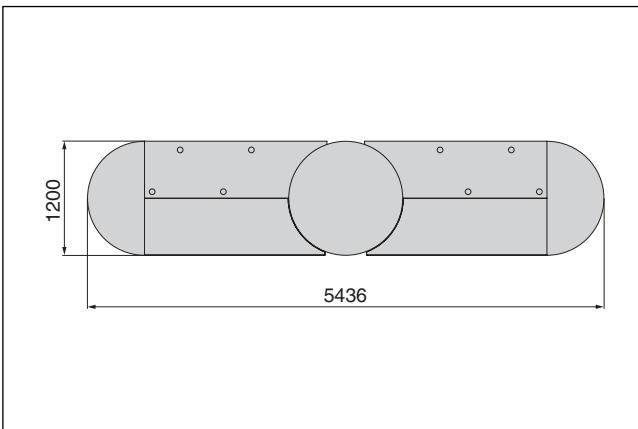


Modular control and dispatch desks

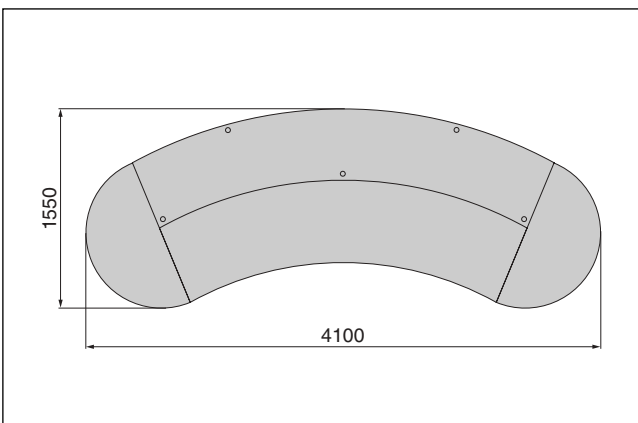
STANDARD CONSTRUCTIONS OF DESKS



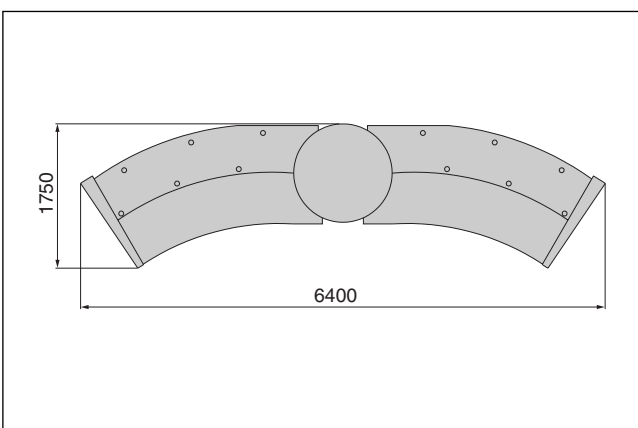
One-working place desk



Two-working places desk, straight



Arc desk



Two-working places desk, bent

ARCUS dispatch desks

ARCUS is a versatile applications dispatch desk. It is an example of modern industrial design, beautiful shape coupled perfectly with ergonomic comfort and high quality, extremely durable materials. Its modular construction enables to complete configuration suitable to individual customer's needs.

ARCUS 1/2

Desk for 1 or 2 dispatchers. An ideal solution for the dispatch room supervisor.

It consists of four 19" PC modules designed to mount computer equipment and two rounded side modules with drawers.



ARCUS 2/4

Desk for 2 for 4 dispatchers.

It consists of eight 19" PC modules, two rounded side modules with drawers and a central module designed for registration and connection devices (speakers, microphones, recorders, telephones, CD-ROM drivers etc.) and system emergency shut-down buttons.



ARCUS dispatch desks

MODULAR CONSTRUCTION OF THE CONSOLE

PC module

The basic element of the ARCUS is PC module, housing the central system unit or other electronic equipment.

PC module has got two levels:

- first - workstation desktop,
- second - which has the function of shelf for monitor placement.

The front and the rear are equipped with removable shields ensuring easy access to internal equipment.

Shields have got patent locks.

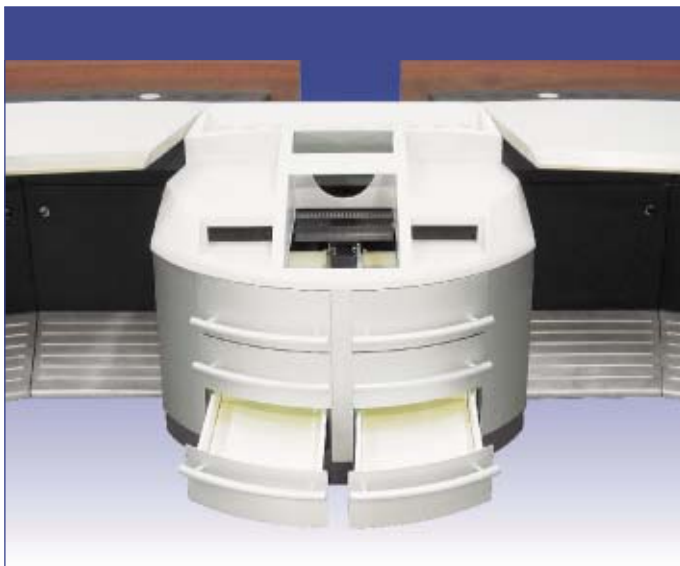


Central module

Is a perfect place for installation of connection devices and control elements.

Central module, as other modules, is set on adjustable feet.

Dome's shape may be adjusted to customer requirements.



STANDARD CONSTRUCTIONS OF DESKS



ARCUS dispatch desks

Side module

Side module is with three drawers or two drawers and a spare retractable chair, that is stowed between drawers. On the side module's top plate and desktop can be cut out openings for installation of control and connection appliances.



Materials:

Modules' bodies:

- powder painted sheet steel.

Workstation desktops:

- plywood with high-resistance laminate veneer.

Side and rear shields:

- plywood with natural veneer.

Central module's dome and cable entries in the desktops:

- Corian.

Fronts of drawers and retractable chair, modules' sides:

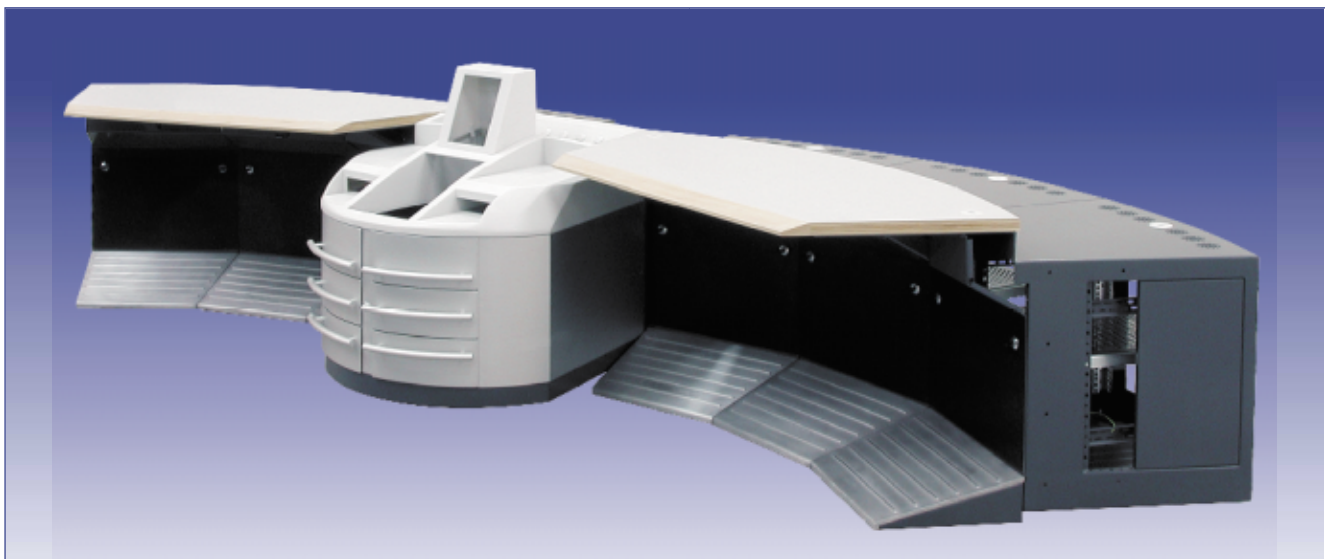
- anodised aluminium.

Footrests of PC modules:

- sand-blasted aluminium casts.

NOTE:

On customer's request, other materials are available.



Example of two working places dispatch desk, consists of central module and six PC modules, with dismantled rear shields. Side modules can be replaced with two control desks or furniture board.

PSL control desks

DESCRIPTION OF EXAMPLE OF CONTROL DESK

- ① Hinged panel of top segment
- ② Hinged panel of front segment
- ③ Top segment
- ④ Front segment
- ⑤ Bottom segment
- ⑥ Rear shields
- ⑦ Doors
- ⑧ Plinth



STANDARD CONSTRUCTIONS OF DESKS

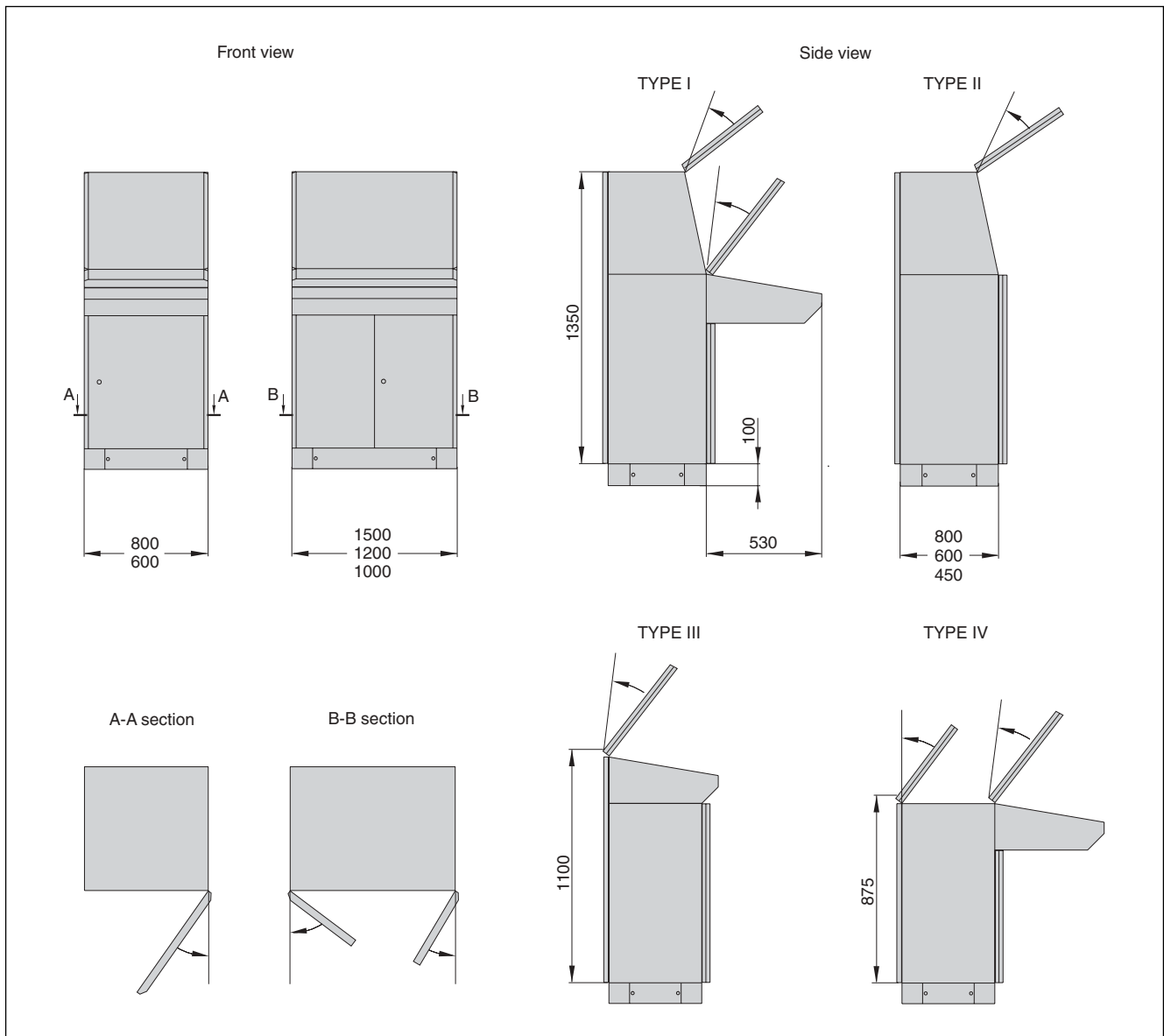
NOTE:

- Both top and bottom segments are equipped with mounting plates with adjustable depth of situation.
- On customers request, the panels of top and front plate can be slotted.
- Cable entries are in the base of bottom segment.
- Desk is set on the plinth with ability of anchoring in the floor.



PSL control desks

PSL control desks are designed for mounting control apparatus, monitoring systems, measurements devices and visualisation of production processing. They are particularly recommended for operation stations, automated processing lines or machining centres. In standard, PSL control desk is manufactured in four types.



STANDARD CONSTRUCTIONS OF DESKS



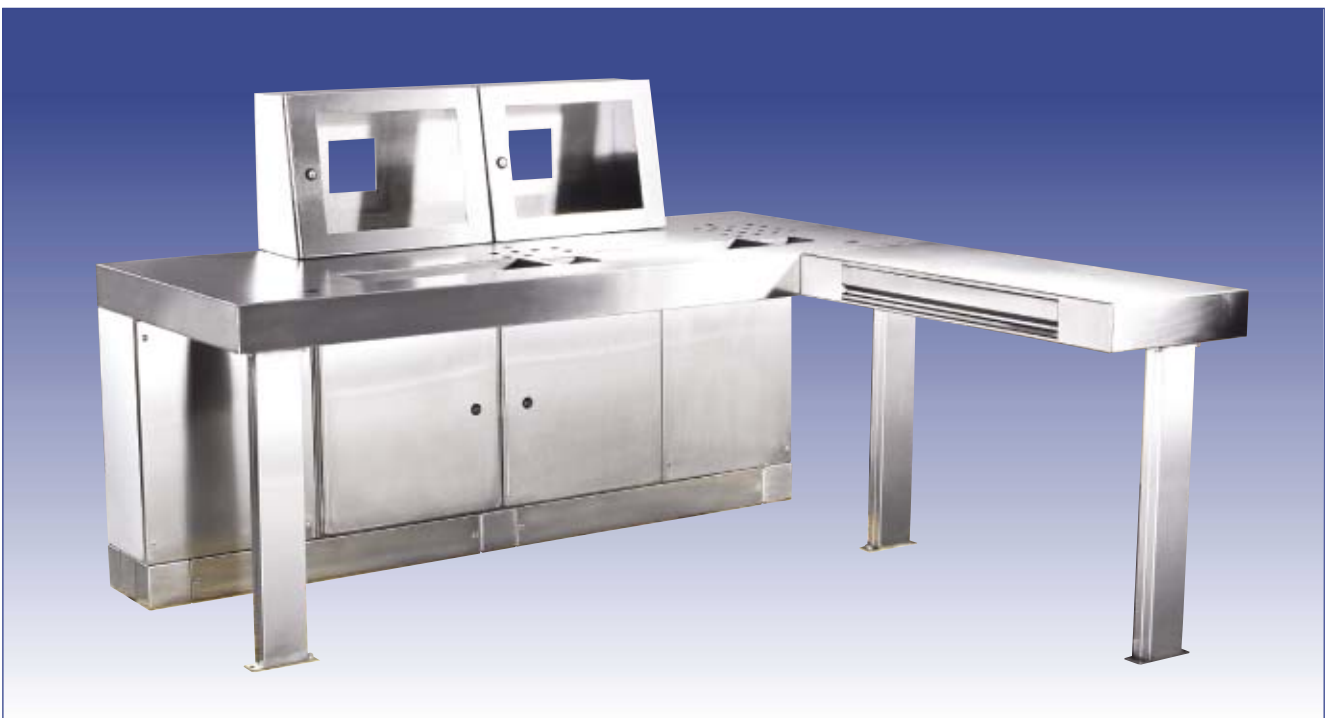
One working place desk with the top

One working place desk with the top, that is fitted with mimic panel with synoptic diagram. Supporting structure of the desk is made of powder painted sheet steel. The desktop is made of laminated chipboard.



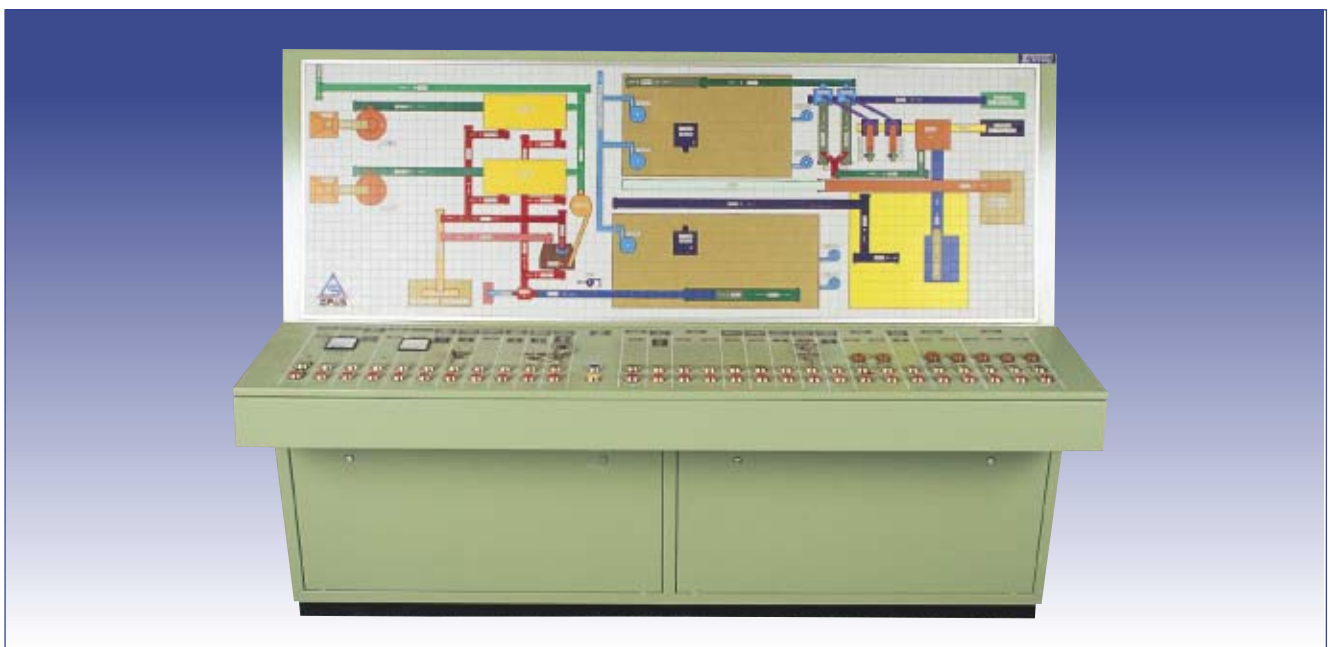
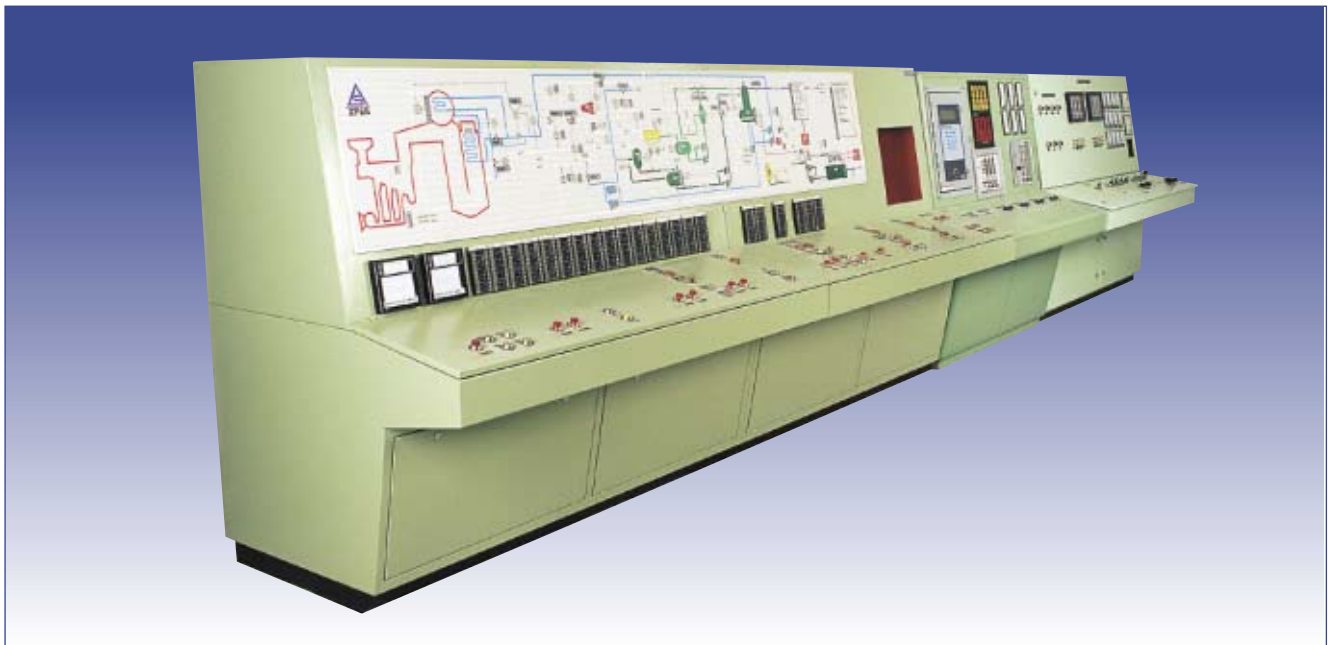
Stainless steel desk

Stainless steel desk manufactured for GE Industrial Systems - Berlin.



Utilisation Works of Municipal Waste Constants in Warsaw

Control desks made of sheet steel, fitted in mimic panel with technological diagram and electrical components. Rear shield is removable and equipped with patent locks.

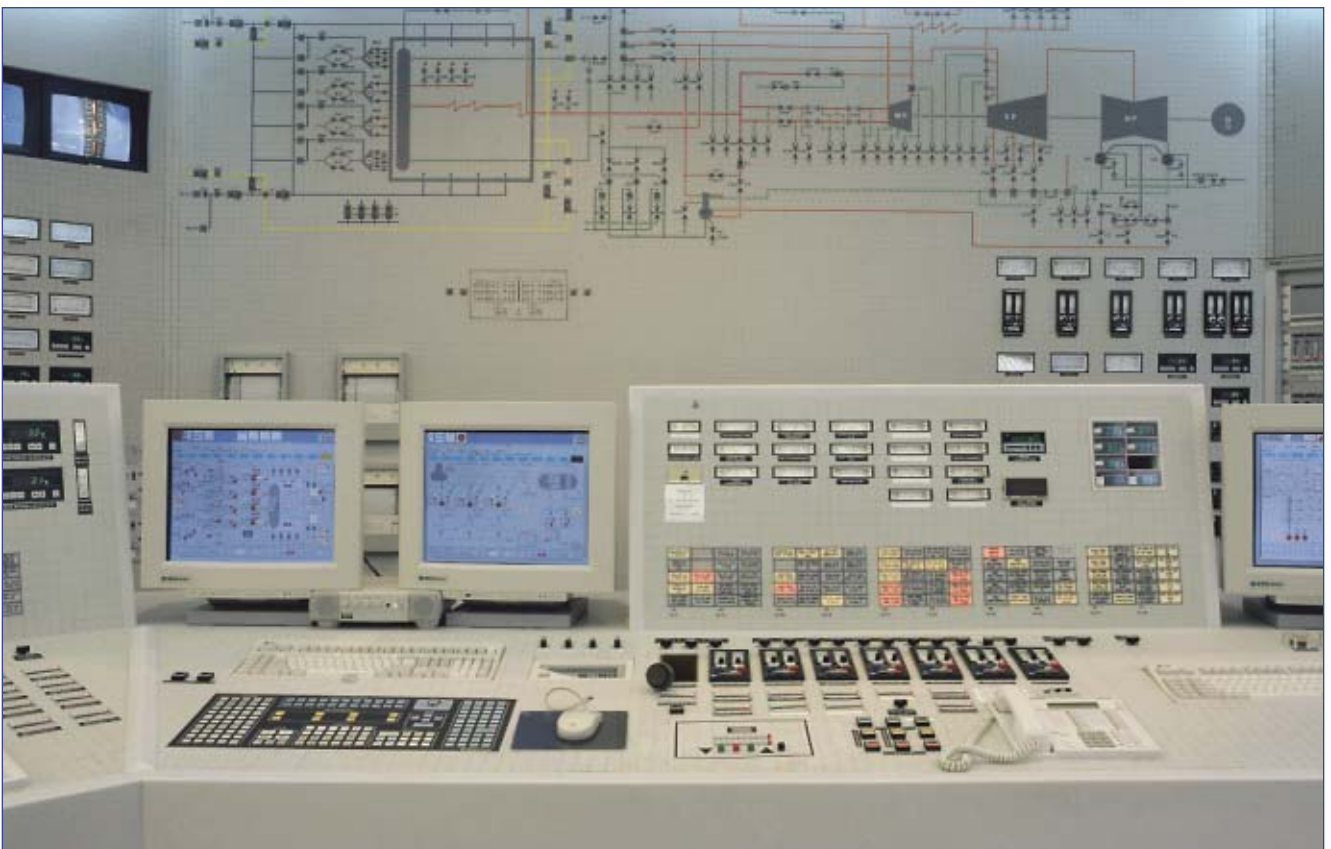


INDIVIDUAL PROJECTS



Koziencie Power Plant - power unit 3

Dispatch and control desk. Supporting structure made of sheet steel, desktops and front faces of the tops made of mimic panel with installed electrical equipment.



Kozienice Power Plant - power unit 10

Example of control and dispatch desk placed on individual 19" cabinets. Cabinets' sides are covered with Corian. Cabinets' plinths are set on rubber shock absorbers. Desktop is made of Corian, its rear lower part is designed for placement the monitors.



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Hydroelectric Power Station in Porąbka Żar

Two working places dispatch desk installed in control room of hydroelectric and pumped storage power plant in Porąbka Żar. The construction is based on 19" cabinets with desktop made of laminated board. Rear of the desk is hidden by metal shields.



INDIVIDUAL PROJECTS



Power Plant in Połaniec

Control and dispatch desk made of closed metal enclosures equipped with shields - slidable in the rear part, removable in the front. Fronts and rear desktops are made of Corian, front desktops and tops are made of mimic panels with installed measuring and control devices. In front desk section, there are three lockable boxes with keyboard drawers.



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Gas Stamping Press in Kondratki

Control desk designed for computer equipment installation. It consists of standard metal 19" cabinets and double-level Corian desktop.



Thermal-Electric Power Station in Katowice

Dispatch desk intended for monitors or computer terminal units. Desktop made of chipboard finished with slats and veneer. Metal, open supporting structure is powder painted.



I N D I V I D U A L P R O J E C T S



Power Plant in Turów

Multi-station dispatch desk. The middle section of the console is constructed of Corian desktop placed on the base of 19" closed cabinets. The rear side of the console is made of slidable shields.

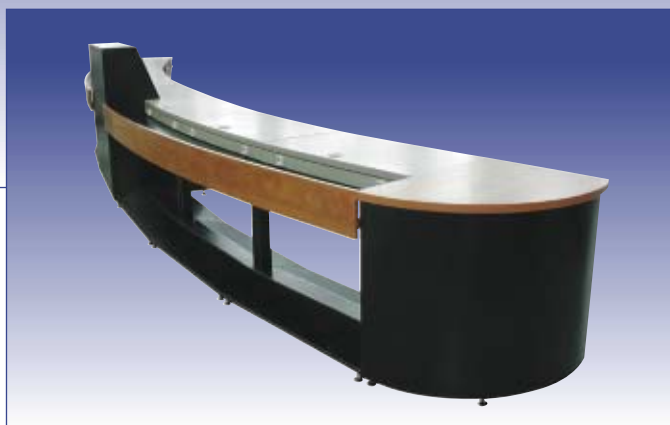
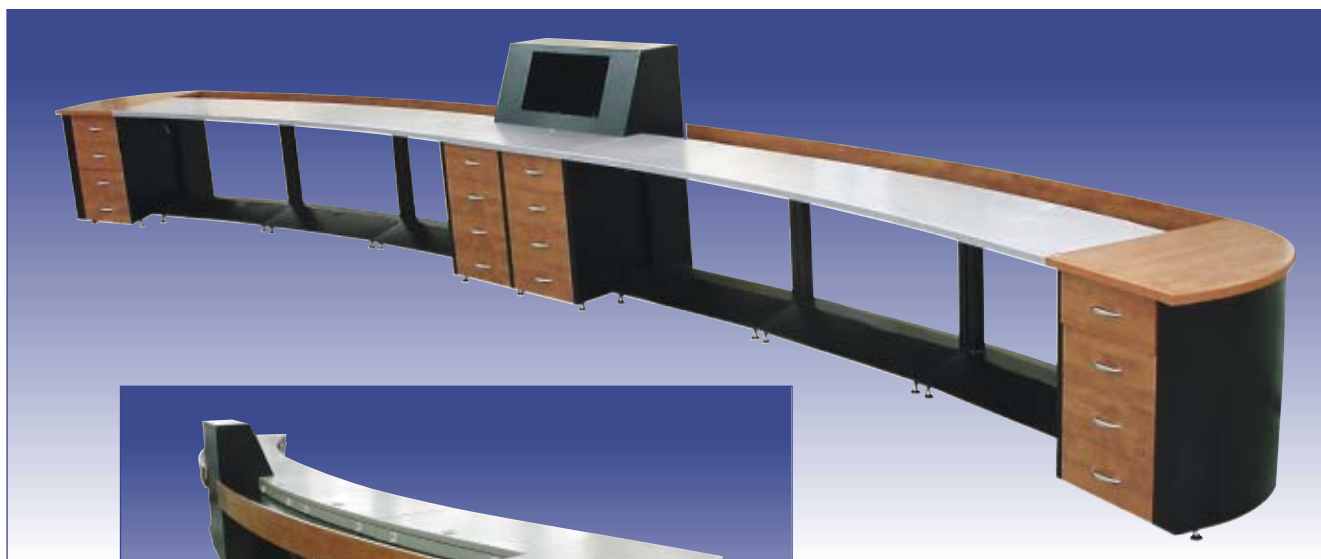


Power Dispatch Room in Katowice



Set of control and dispatch desks manufactured in accordance with individual architectural design.

Dispatch desk RUS-3 for GAZPROM, Russia



Set of manufactured in accordance with individual design. Working part of the desktop is made of Corian. Rear, narrow part intended for LCD monitors.

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Power strips for dispatch desks

POWER STRIP LZ-30F

Technical data:

Voltage rating	230 V AC
Maximum current	16 A
Attach power	16 A / 3600 W
Attach conductor	1.5 mm ²
Protection system	2P + Z
Protection degree	IP 20
Surge current	6.5 kA
Network filter	30 MHz

Characteristics:

- Optimum height of strips: 1U = 44.45 mm.
- Possibility of fixing the strips by 4 different angles.
- 35° - rotated position of outlet box enables unlimited usage of angular plugs - possibility of fixing strip directly one over another.
- Easy, practical and universal way of fixing the strip
- By using strips with network filter and overvoltage protection we achieve the following:
 - Effective protection against any interferences or surge
 - Extension of durability of power supplied data equipment, computer systems, or audio-visualisation devices etc.



Dimensions:

19" x 1U (440 x 44 x 44 mm).

Supply includes:

5 outlets with pin, illuminated switch, overvoltage protection, optical signalling for the overvoltage protection to be switched "on" and "off", 3 m conductor with plug, brackets and fixing accessories for 19" installation.

Note:

Ability for usage of other types of outlets in acc. with customer's request agreed with ZPAS S.A.'s Marketing Department.

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PORTABLE POWER STRIP

Dimensions: 240 x 116 x 60 mm

Supply includes:

ability for placing max. 12 outlets in 1 unit, illuminated switch, network filter, overvoltage protection, optical signalling for the overvoltage protection to be switched "on" and "off", 1,5 m long cord with a plug, brackets and fixing accessories.



Power strips for dispatch desks

POWER STRIP FIXED ABOVE THE DESK-TOP

Supply includes:

3 network outlets, RJ 45 (CAT 5) - fully shielded outlet for a lap-top connection, 3 m long cord for data transmission, brackets and fixing accessories.



POWER STRIP FIXED DIRECTLY TO THE DESK-TOP

Dimensions:

324 x 74 x 87 mm

Supply includes:

3 network outlets, RJ 45 (CAT 5) fully shielded outlet for a lap-top connection, RJ 12 (ISDN) fully shielded outlet for a phone connection, brackets and fixing accessories.



POWER STRIP FIXED INTO THE PLATE OF THE DESK-TOP

Dimensions:

324 x 74 x 87 mm

Supply includes:

2 or 4 network outlets, 1 or 2 RJ 45 (CAT 5) fully shielded outlet for a lap-top connection, RJ 12 (ISDN) fully shielded outlet for a phone connection, brackets and fixing accessories.



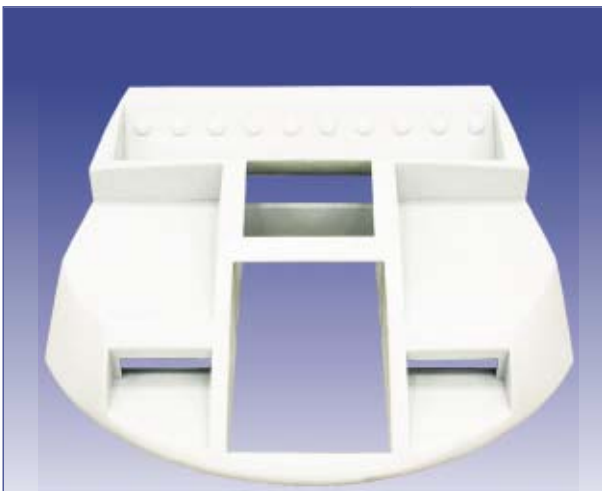
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Corian and Paracor - modern finishing materials

Desktops, sides, top segments, as well as other elements of control desks can be made of modern materials such as Corian or Paracor/Plexicor.

- These materials are acryl-mineral composites constituting massive and hygienic surfaces. They are manufactured in as plates in different colour groups, varying in shade and pattern. Plates ranging in their thickness from 6 to 13 mm are most commonly used as desktops of the control desks.
- They have got a homogenous structure which can be cut, milled, hebenberigted, drilled as well as freely shaped and connected, what allows for execution of vastly complicated projects.
- All joints are performed with two-ingredient glues, mixed in an appropriate proportion in temperature not lower than 15 °C. Durability of gluing process amounts to no less than 30 MPa.
- Pleasing to the touch they imitate sensation of warmth. Their smooth surface makes it easy to be kept clean.
- Do not absorb neither smells nor liquids, they are electrostaticly neutral. There is no contradiction as far as contact with food is concerned. They're classified as flame retardant materials.
- They are proof against majority of chemical agents, high temperatures and mechanical damages (cracks, scratches) that can be easily renewed without traces of dents.
- Wide choice of more than forty colours and textures (pastel, uniform, grainy or stripy) give unusual performance and design possibilities.

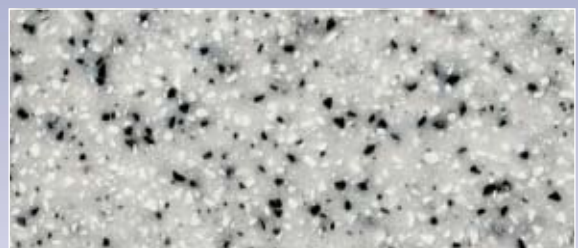
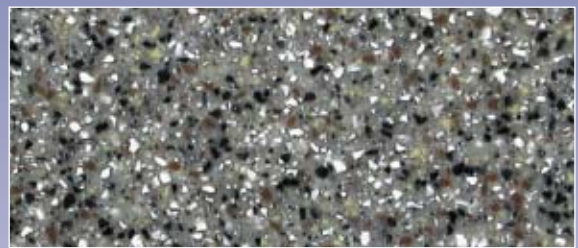
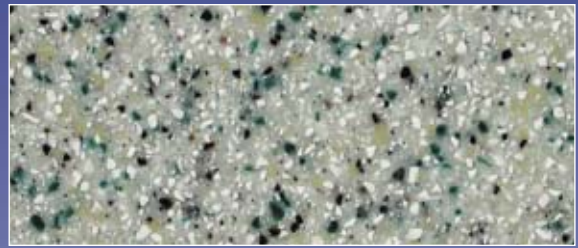
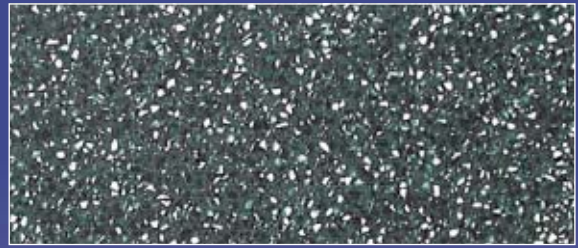
MODERN FINISHING MATERIALS



Dome's shape of ARCUS made of white Corian

NOTES:

- CORIAN® is lawfully reserved sign of Dupont concern.
- PARACOR/PLEXICOR plates are produced by German company Para-Chemie GmbH



Some examples of plate's colours made of Paracor material (stone like textures - macro photography)





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