

SEMPA

p u m p

pump technologies booklet



for **cities** and **industries**



i'm
pump
technology

since 1972

hello to the next 50 years.

Generating Power!

Power, Traction, Thrust! Three sympathetic movements of our business. Beyond pump production, we produce our technology movement that can communicate with its user and continue the cycle it creates in the future, by using our attractive power against fixed-mindedness.

The pump is an engineering that exchanges services in buildings, agricultural areas and industrial areas, which are the dynamic areas of our lives. Our primary goal is to mobilize our sympathetic engineering and turn it into safer, more economical and more autonomous systems that make life easier.

We can manufacture pumps at world standards with a fully integrated production facility of 132,000 m2. We are improving our ability to solve current problems and produce qualified products with the investments in production technologies we make continuously.

1972!

We used time together with information to navigate. Each time period we have passed has led us to define our future place, learn with our audience, and grow with our values. We keep our communication and brand culture alive in order to be the producer of the future and preferable for generations.

In short, we pursue sympathetic works, produce more than a pump with the power of having vast experience, and experience the excitement of touching the lives of people and all other living things.

Sempa Pump Technologies

We are the **symphony of cities and industries.**



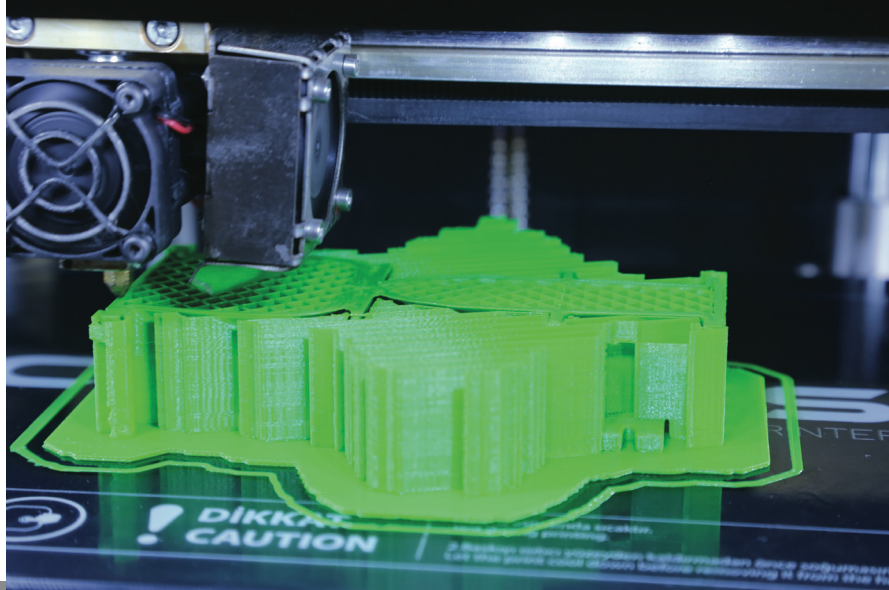


integrated
manufacturing
campus



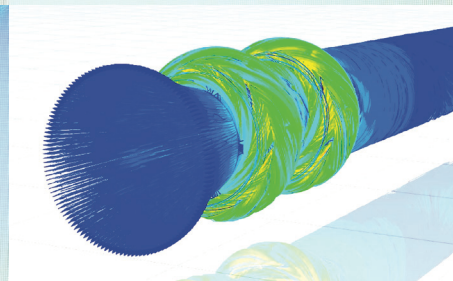
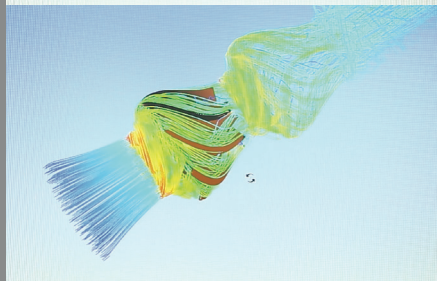
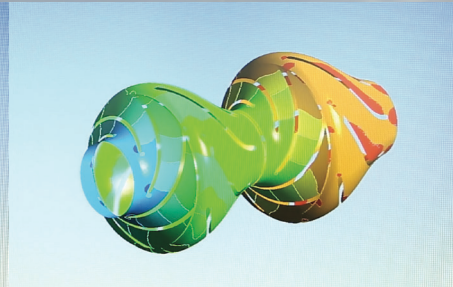
innovation & design

*R & D special design office and analyzes.
*Special engineering and product generation.



Explore, Design, Produce.

R&D engineers are designing and analyzing the product to satisfy their requirement . Start with Sempa Garage approval.





mold park

After the prototype, which is the first response to all the developments of our innovation team, it is our molding phase, which we call "true birth".

We always run a prototype. With three-dimensional machining technology, we stage minimal prototypes for R&D purposes. There are many steps before the production of the pump and the prototype is just one of them. Once our observations get the right engineering response, we move from the prototype to the actual mold. Honestly, we are very excited about this. Sempa monitors all stages of a pump according to monitoring classes.

After the first output of all our pump projects that we will turn into reality is completed with innovation and R&D, it passes to the molding process that we have experienced for half a century. We produce the molds of all the pumps we produce in our own mold park. No outsourcing or production is used in the combination structure of Sempa pumps. This is why Sempa pump users and sellers are always happy.





casting





casting park

It is one of the most important stages of our kitchen. In Turkey's best equipped production facility, we melt the ore and embroder the product. Durability, raw materials capable of real proportions, workability, transformation and strong results are the production policy of our casting park.

Our raw material sources, which are carefully separated with thermal values, become a single body in our own molds. As in all our fields, our tests are applied one-to-one in our casting park. Even if it is very small, we never allow faulty castings to be released as products. We fully implement all stages of our quality policy and fully operate our control mechanism.



We pay attention to all synchronies in the casting stages of our raw material content that we bake with precision. Because we do not want to produce a product that makes you unhappy. The casting stage determines the quality, working volume and durability of all pumps. That is why we attach importance to our casting infrastructure as much as the hardware. The body structure of the pump must be able to prove itself in every environment. The internal structure must be strong and able to fulfill its duty completely. Casting requires micronic works and a high level of knowledge in order to meet all expectations.

Sempa has proven the power of its casting park with hundreds of thousands of pumps.





machining



machining park

360 Metal Processing Park

The Sempa production facility is equipped with high-tech tools that focus on speed and accurate results, as in all its units. With 360 metal processing technology, our machining park is able to provide production with professional response to special engineering and designs. It has the capacity to process metal in many sizes and is constantly updated. In the machining unit, there are 25 CNC machines (horizontal lathe, vertical lathe, vertical machining, horizontal machining). The machine park has a monthly casting processing capacity of 220-250 tons. The quality control process works effectively in this unit as in all processes.



In the quality control unit, initial inspection-adjustment approvals and all subsequent controls are carried out. Quality controls within the scope of the production park are completed in the presence of the innovation team. All products that do not comply with the actual values and the nature of the product quality receive a red code and proceed to the destruction step.

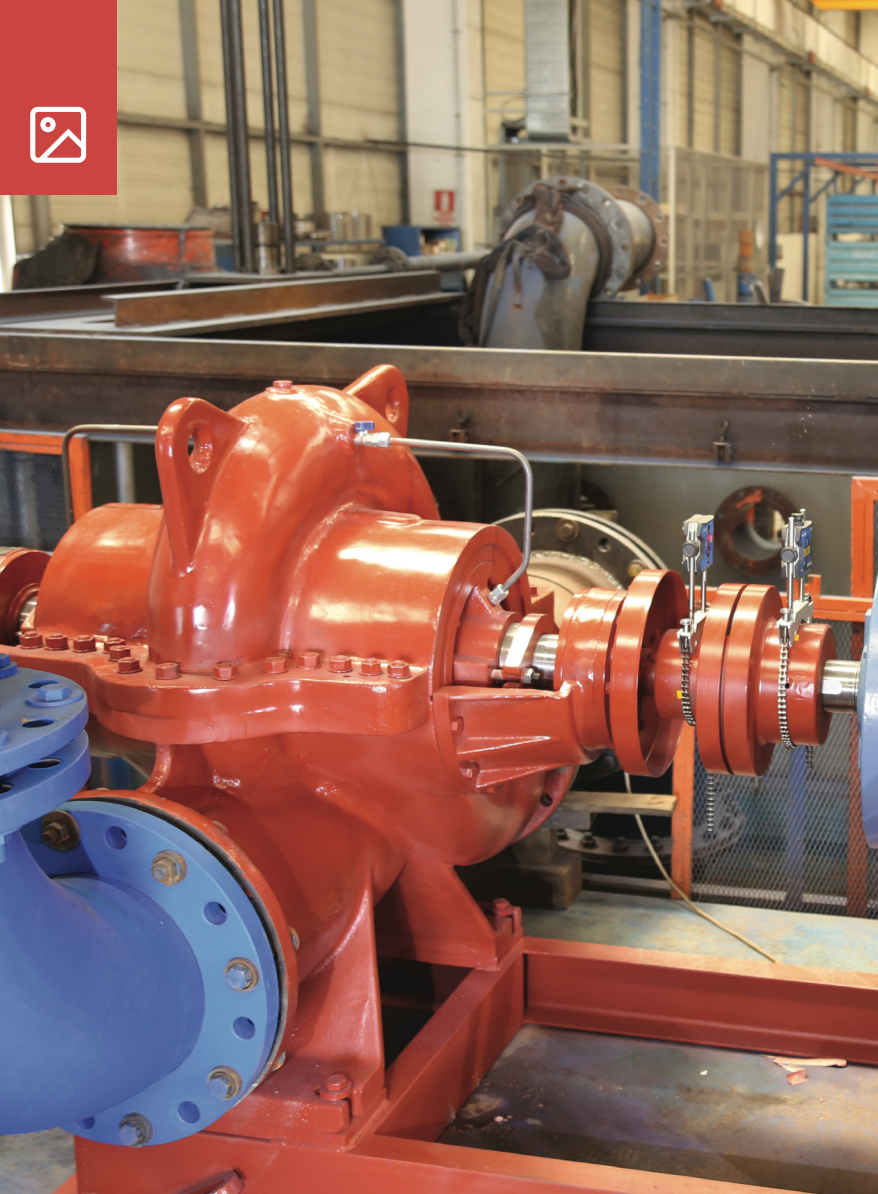
All the processes we carry out in order to maintain world standards in our production sensitivities are fully monitored, ensuring the protection of our brand value in product and service standards. Rejuvenation, transformation type and revision product production is not carried out in any way. Sempa builds its product assurance on the social value it produces. Zero-to-one production authority is observed for the protection of consumer-oriented production and professional results.





testing

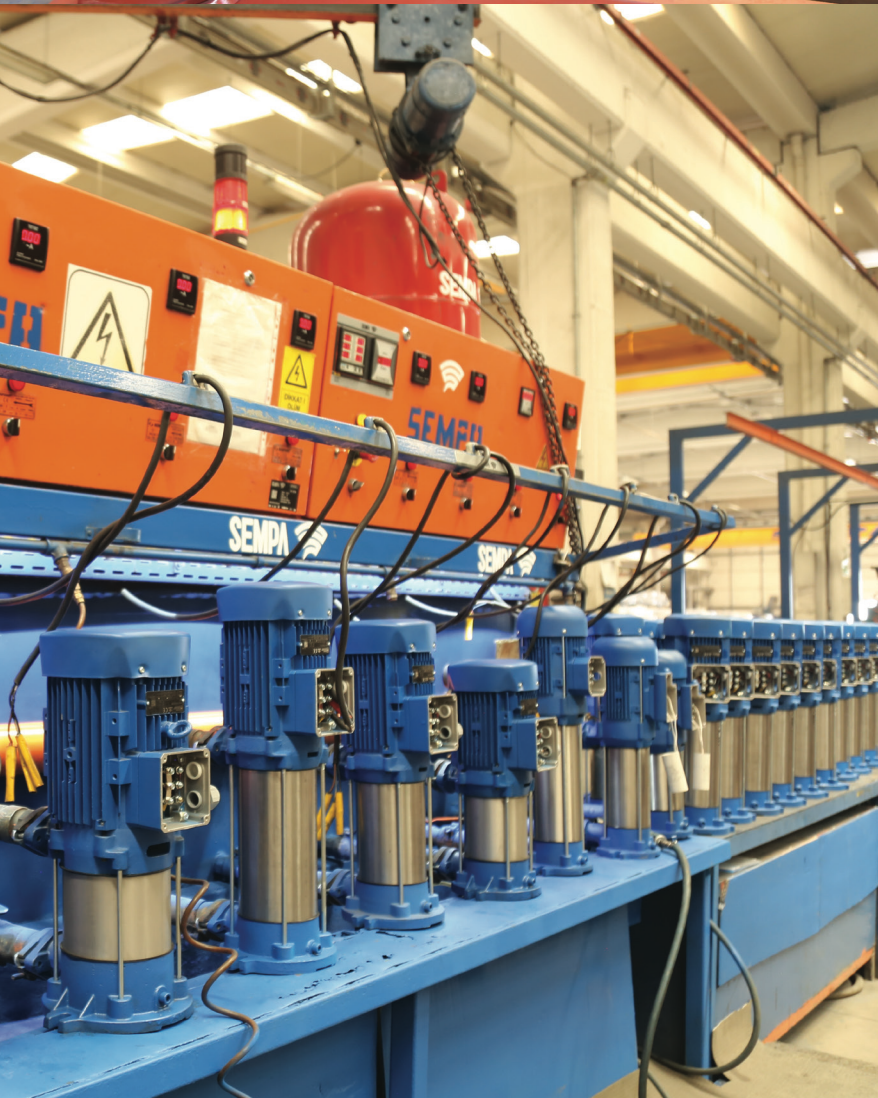




test garage

Sempa Garage is the most important part of all our production and innovation stages. Basic and supplementary tests of our pump technologies after raw production take place in Sempa Garage. We can subject all pump standards, including special design productions, to higher than standard tests.

Sempa Garage works in depth before and after our quality control management. The safety of our pump technologies is monitored after sales and this task belongs to Sempa Garage. Sempa Garage has high-tech equipment and fully rates all pump attacks. Real tests are vital for the pumps to fulfill their operating principles in a superior way.



All Sempa users have access to the identities of our pump technologies and are assured of the operational safety of the product with Sempa Garage assurance. Sempa Garage has the capability to perform real-time and real-value testing.

- Fully Automated VDF Test
- 4000 m³/h Capacity
- 60 Bar - 1000 kW Power

Test Procedure

All pumps will follow the test procedure by below points:

- Vibration test of the pump according to ISO 10816-7 category 2.
- Noise test of the complete system.
- Heat test of the bearings.
- Performance test according to ISO 9906-2012.
- Hydrostatic pressure test and leakage test.
- Dimension control.





quality





quality control

Robust Pumps Go Through Robust Processes.

Our pumps must operate reliably even in the toughest conditions. That's why we leave nothing to chance in our production: In the selection of materials, we focus on top quality, which allows us to achieve superior strength and resistance to wear. Before material is accepted, we verify the quality of each incoming material by spectral analysis.

Every Sempa product is the work of dedicated hearts and professionals persevering to achieve perfection.





technology



e-mission

e-service



E-MISSION! UNCOMPROMISED EFFICIENCY

Our products with E-mission identity have demonstrable high performance and savings at the same time. The e-mission series we have developed for you and tomorrow can fight in any climate and condition. Eliminating the user's concerns about energy, time and performance, e-mission can be preferred in all our pump types.



E-SERVICE LIFE STOPS IF WE STOP

The Sempa service team is the Sempa service support system that operates the after-sales service policy determined by country.

Completion of all kinds of service support requests before the consumer and focusing on customer satisfaction are the main conditions.





**SEMPA-X
EXPLORE, DESIGN, PRODUCE**

Sempa Innovation Center is an approved center in accordance with world standards. Working integrated with the R&D team, the Innovation Center has the distinction of being the first approved center within the manufacturer in the field of pump technologies. Our Innovation Center, which has the power to produce by fully supporting special design demands, can make new model discoveries thanks to its incubation structure. In special and standard pump designs, we apply simulation tests with the closest value to reality before production.



LEARN AND TEACH

Within our entrepreneurial movement designing and producing from 0 to 1, we carry out our startup movement with future engineers and share our 50 years experience with our engineer candidates from Sempatech technology academy.



culture

SEMPAX

SEMPATECH 

TECHNOLOGY ACADEMY



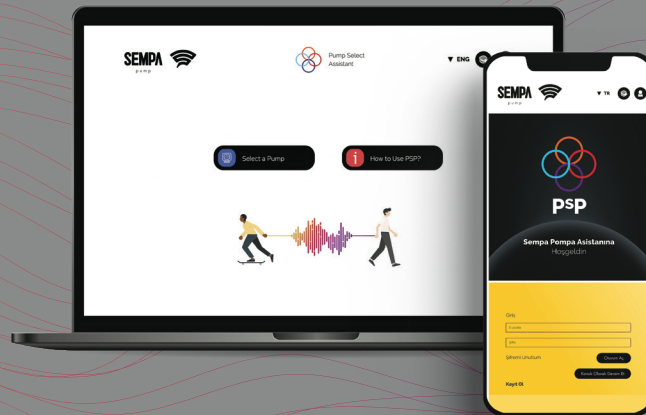
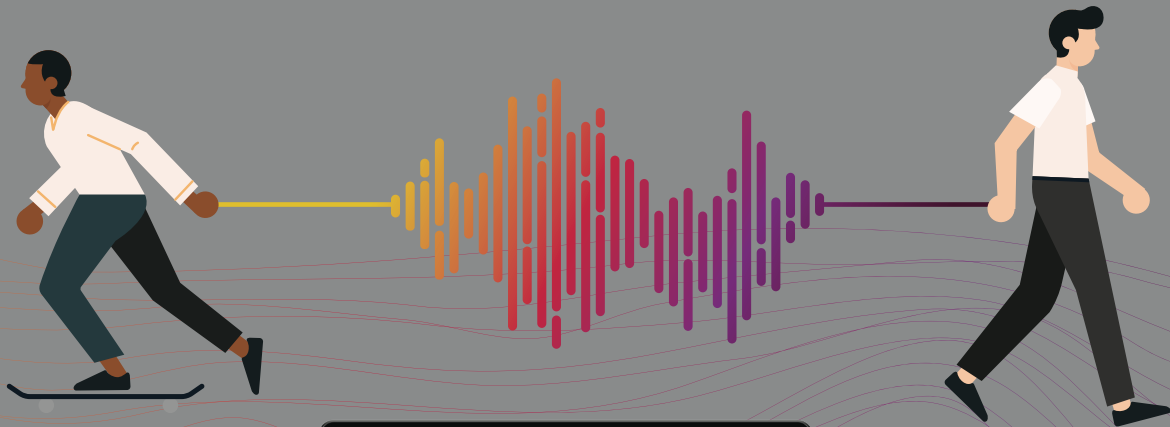


PUMP SELECTION PROGRAM

Are you ready to meet Sempa's amazing performance? Our Pump Selection Platform, which simplifies pump selection for users, offers extensive and reliable statistical data. PSP is accessible with confidence from all countries and is quite simple and functional for users.



TAKE CONTROL OF YOUR FLOW



psp.sempapompa.com





Iron and Steel Industry



Marine



Power Plants



Agricultural Irrigation
and Drainage



Building System



Water Treatment and
Pressurization



Chemical Industry



Heating, Ventilating and
Air Conditioning



Fire Fighting



Food and Beverage Industry



Oil Industry



Mining

pump usage areas



TKF series



end suction centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|------------------------------|
| Discharge Flange | DN 32 - DN 250 |
| Capacity | up to 1750 m ³ /h |
| Head | up to 100 m |
| Working Temperature | From -25 °C to +140 °C* |
| Casing Pressure (Pmax) | 10 bar (16 bar)* |



DESIGN FEATURES

- TKF series pumps have designed for pumping non-abrasive and small particulars liquids.
- TKF series pump has just one impeller, pump and motor is connecting by coupling. It gives your advantages for easy disassembling.
- Pump Dimensions are according to EN 733 - DIN 24255 standard.
- Suction and discharge flanges according to EN 1092-2/ PN 16.
- TKF series have a closed impeller, impeller blades located between the balancing holes to minimize the axial load is taken in dynamic load balancing.
- Sealing is provided by gland packing. Sealing is provided by also mechanical seal as customer request.
- Easy disassembly to pump and change impeller, bearings, and seals.
- All impellers are statically and dynamically balanced according to ISO 1940 class 6.3.
- In addition to 29 models, 10 complementary models are designed in according to EN 733 standards. The main dimensions of complementary models may different from other manufacturers.
- Direction of rotation is clockwise viewed from the driver end.
- Optionally, pumps can be manufactured with shaft bushings and/or wear rings.
- The complete bearing assembly, including the impeller and stuffing box cover, can be disassembled without the need to remove the volute casing from the pipe system, thanks to the back pull-out design.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

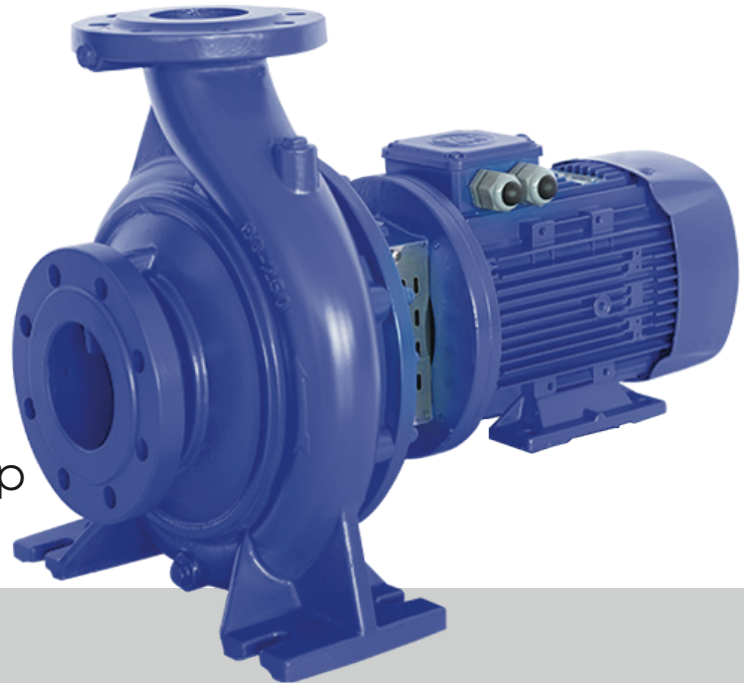
| | |
|-------------------------|---|
| Iron and Steel Industry | Marine |
| Building System | Water Treatment and Pressurization |
| Fire Fighting | Food and Beverage Industry |
| Power Plants | Agricultural Irrigation and Drainage |
| Chemical Industry | Heating, Ventilating and Air Conditioning |
| Oil Industry | Mining |



TKF-M series



monoblock end suction centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|-----------------------------|
| Discharge Flange | DN 32 - DN 200 |
| Capacity | up to 600 m ³ /h |
| Head | up to 100 m |
| Working Temperature | From -25 °C to +140 °C* |
| Casing Pressure (Pmax) | 10 bar (16 bar)* |



DESIGN FEATURES

- Monoblock centrifugal pumps with horizontal shaft, volute casing, single stage, end suction and closed impeller.
- The main dimensions of the housing comply with EN 733 standards.
- Design according to EU 547/2012 energy rating.
- Suction and discharge flanges according to EN 1092 - 2 / PN 16. Flanges are suitable for EN 1092 - 1 / PN 16 in pumps with steel or stainless steel body material. Pumps could be produced with ANSI / ASME flanges optionally.
- Pumps are used with electric motors of high efficiency class according to IEC structure sizes.
- All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.
- The axial force is balanced with the wheel balancing holes system.
- The direction of rotation is clockwise by the engine.
- Monoblock pumps are smaller and lighter than the same hydraulic centrifugal pumps.
- Optionally, pumps can be manufactured with wear ring and / or shaft bushings.
- The pump shaft is connected to the motor shaft with a plug-in shaft or rigid coupling. The axial and radial forces of the pump have covered by the motor bearings.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|---|------------------------------------|
| Building System | Marine |
| Agricultural Irrigation and Drainage | Water Treatment and Pressurization |
| Heating, Ventilating and Air Conditioning | Food and Beverage Industry |



TKF-I series



in-line type centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|-----------------------------|
| Discharge Flange | DN 40 - DN 200 |
| Capacity | up to 400 m ³ /h |
| Head | up to 100 m |
| Working Temperature | From -25 °C to +140 °C* |
| Casing Pressure (Pmax) | 10 bar (16 bar)* |

DESIGN FEATURES

- Single-stage, closed impeller monoblock centrifugal pumps with volute, which can be connected to straight pipe (line type).
- Suction and discharge flanges conform to TS EN 1092-2 / PN 16. For pumps with steel or stainless steel housing, the flanges comply with TS EN 1092 - 1 / PN 16. It can be produced with ANSI / ASME flange upon request.
- Pumps are used with high efficiency electric motors according to IEC construction sizes.
- All impellers are balanced dynamically or statically in accordance with ISO 1940 class 6.3.
- Axial force is balanced with impeller balancing holes system.
- Optionally, pumps can be manufactured with wear ring and / or shaft bushing.
- The direction of rotation is clockwise when viewed from the motor side.
- The pump shaft is connected to the motor shaft by means of a shaft or rigid coupling and the axial and radial forces of the pump are compensated by the motor bearings.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|-------------------------|---|
| Iron and Steel Industry | Marine |
| Building System | Water Treatment and Pressurization |
| Fire Fighting | Food and Beverage Industry |
| Power Plants | Agricultural Irrigation and Drainage |
| Chemical Industry | Heating, Ventilating and Air Conditioning |
| Oil Industry | Mining |



TKF-K series



end suction thermal oil centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|-----------------------------|
| Discharge Flange | DN 32 - DN 125 |
| Capacity | up to 500 m ³ /h |
| Head | up to 100 m |
| Working Temperature | up to 350 °C |
| Casing Pressure (Pmax) | 10 bar (16 bar)* |



DESIGN FEATURES

- Horizontal shaft, volute, single stage, end suction, air cooled, closed impeller centrifugal pumps.
- Suction and discharge flanges conform to EN 1092-2 / PN 16. (flanges for pumps with stainless steel body conform to EN 1092 - 1 / PN 16)
- With the detachable design of the pump, it is possible to remove the bearing assembly, the seal bearing, the pump shaft and the impeller without removing the snail from the pipe. (Optionally, the rotor group of the pump can be removed without removing the motor from the motor carrier by applying the spacer sleeve coupling).
- All impellers are balanced dynamically or statically in accordance with ISO 1940 class 6.3.
- The direction of rotation is clockwise when viewed from the motor side.
- The axial force is compensated by the balancing vanes on the rear of the impeller.
- TKF-K type pumps use "oil lubrication" bearings as standard.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|-------------------|---|
| Power Plants | Iron and Steel Industry |
| Chemical Industry | Heating, Ventilating and Air Conditioning |



TKF-AH series



ISO 2858 norm
centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|------------------------------|
| Discharge Flange | DN 32 - DN 250 |
| Capacity | up to 1750 m ³ /h |
| Head | up to 160 m |
| Working Temperature | From -25 °C to + 140 °C |
| Casing Pressure (Pmax) | 16 bar (25 bar)* |



DESIGN FEATURES

- Horizontal, radially split volute casing type, single stage, end suction centrifugal pumps with closed or semi-open impeller.
- In addition to 29 basic sizes conforming with ISO 2858, there are 10 additional sizes. Dimensions of additional sizes may differ from other suppliers.
- Heavy duty shaft not in touch with the medium handled (dry shaft)
- Body sealing is ensured by flat gaskets that are not displaced under pressure.
- Suction and discharge flanges conform to EN 1092-2 / PN 16. (EN 1092-1 / PN 16 for steel or stainless steel casing)
- Due to the back-pull-out design, the complete bearing assembly including impeller and casing cover can be dismantled without removing the volute casing from the pipe system. (With spacer coupling application, also possible to take out the rotor group without dismantling the electric motor.)
- All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.
- For closed impellers, axial thrust is balanced by impeller balancing holes system while for semi-open impellers, it is balanced by back ribs.
- Direction of rotation is clockwise viewed from drive end.
- Bearings of TKF-AH type pumps are always oil lubricated.

PSP DATA



**Go to Pump
Selection
Program**

USAGE AREAS

Iron and Steel Industry

Food and Beverage Industry

Power Plants

Mining

Chemical Industry

Oil Industry



TKF-KE series



self priming centrifugal pump



GENERAL INFORMATION

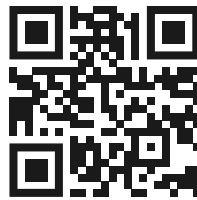
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|------------------------|------------------------------|
| Discharge Flange | 4" - 10" |
| Capacity | up to 1100 m ³ /h |
| Head | up to 70 m |
| Working Temperature | From -25 °C to +140 °C* |
| Casing Pressure (Pmax) | 10 bar * |



DESIGN FEATURES

- TKF-KE and TKF-E series pumps are self-priming centrifugal pumps with flap. Since they are self-priming, it is sufficient that the pump is above the well to be suctioned, only the suction installation is in the well.
- TKF-KE are flange connected, TKF-E series pumps are threaded installation connected.
- TKF-KE series pumps can be driven by diesel engine or electric motor with elastic coupling.
- TKF-E series pumps are connected directly as monoblock to the electric motor with the pump shaft.
- TKF-KE series pumps consist of 4 different types: 4",6",8",10".
- TKF-E series pumps consist of 2 different types: 80-2.5 and 100-3.
- TKF-KE series pumps are open impeller and two vane. TKF-E series pumps have closed impeller.
- TKF-KE series pumps are very easy to unclog. Thanks to the maintenance cover that can be removed from the front, it facilitates access to the impeller, seal box and mechanical seal. It is easy to clear the blockage without any work on the suction and discharge installations.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|--------------------------------------|------------------------------------|
| Power Plants | Water Treatment and Pressurization |
| Chemical Industry | Food and Beverage Industry |
| Agricultural Irrigation and Drainage | |

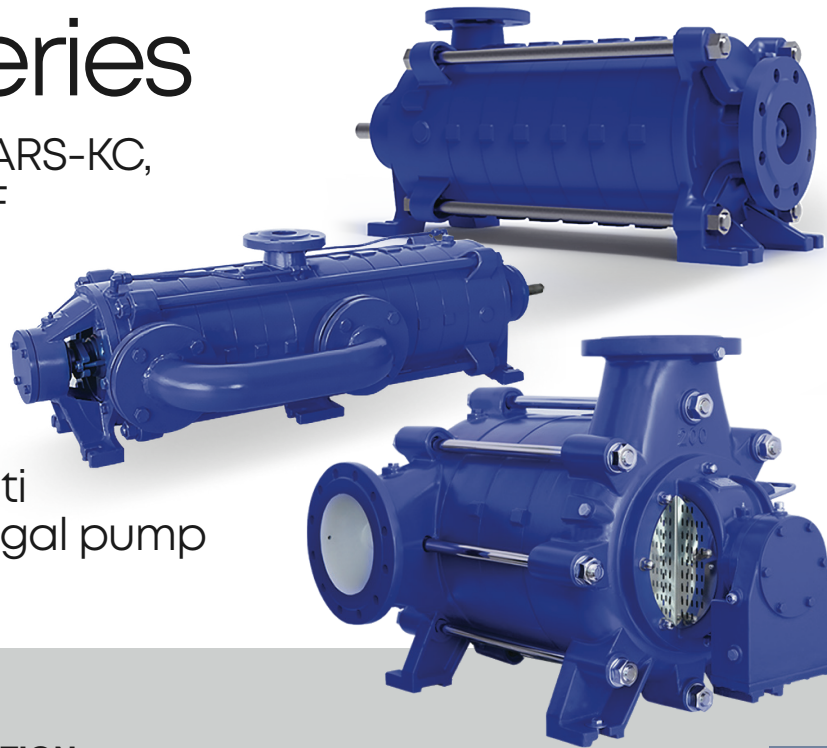


ARS series

ARS, ARS-DD, ARS-KC,
ARS-U, ARS-UF



horizontal multi
stage centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|------------------------------|
| Discharge Flange | DN 25 - DN 250 |
| Capacity | up to 1200 m ³ /h |
| Head | up to 600 m |
| Working Temperature | From -25 °C to +140 °C* |
| Casing Pressure (Pmax) | 30 bar (63 bar)* |
| Design Type | BB4 |



DESIGN FEATURES

- Centrifugal pumps with horizontal shaft, split body, diffuser, multistage, closed impeller.
- 11 models from DN 25 to DN 250 discharge flange diameter.
- Suction flanges according EN 1092 - 2 / PN 16 and discharge flanges to EN 1092 - 2 / PN 40 (PN 63). (flanges in pumps with stainless steel body material according to EN 1092-1 standard pressure class.)
- In standard production, the suction flange is on the coupling side and on the right side, the discharge flange at the other end and top (R 4/2). If flange positions other than standard manufacture are required, this request must be specified at the time of order.
- All impellers are balanced dynamically or statically in accordance with ISO 1940 class 6.3.
- Axial force is balanced by impeller balancing holes system.
- The direction of rotation is clockwise when viewed from the motor side.
- ARS type pumps use "grease lubricated" bearings as standard.

PSP DATA



**Go to Pump
Selection
Program**

USAGE AREAS

| | |
|--------------------------------------|---|
| Building System | Water Treatment and Pressurization |
| Fire Fighting | Power Plants |
| Agricultural Irrigation and Drainage | Heating, Ventilating and Air Conditioning |
| | Food and Beverage Industry |



ARS-D series



vertical multi stage
centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|-----------------------------|
| Discharge Flange | DN 32 - DN 80 |
| Capacity | up to 140 m ³ /h |
| Head | up to 220 m |
| Working Temperature | From -25 °C to +140 °C* |
| Casing Pressure (Pmax) | 30 bar (63 bar)* |



DESIGN FEATURES

- Centrifugal pumps with vertical shaft, split body, diffuser, multistage, closed impeller.
- 8 models from DN 32 to DN 150 discharge flange diameter.
- Suction flanges according to EN 1092 - 2 / PN 16 and discharge flanges to EN 1092 - 2 / PN 40 (PN 63). (flanges in pumps with stainless steel body material according to EN 1092-1 standard pressure class.)
- ARS-D and ARS-DY pumps are used with high efficiency electric motors according to IEC size.
- Pump and motor shafts are connected to each other with rigid coupling.
- All impellers are balanced dynamically or statically in accordance with ISO 1940 class 6.3.
- Axial force is balanced by impeller balancing holes system.
- The direction of rotation is counterclockwise when viewed from the motor side.
- In ARS-D and ARS-DY type pumps, "grease lubricated" bearings are used as standard. The plain bearings used on the underside of the pumps are lubricated with the pressed liquid.

PSP DATA



**Go to Pump
Selection
Program**

USAGE AREAS

| | |
|-----------------|------------------------------------|
| Building System | Water Treatment and Pressurization |
| Power Plants | Fire Fighting |



ARS-DY series



vertical multi stage centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|-----------------------------|
| Discharge Flange | DN 32 - DN 150 |
| Capacity | up to 450 m ³ /h |
| Head | up to 350 m |
| Working Temperature | From -25 °C to +140 °C* |
| Casing Pressure (Pmax) | 30 bar (63 bar)* |

DESIGN FEATURES

- Centrifugal pumps with vertical shaft, split body, diffuser, multistage, closed impeller.
- 8 models from DN 32 to DN 150 discharge flange diameter.
- Suction flanges according to TS EN 1092 - 2 / PN 16 and discharge flanges to TS EN 1092 - 2 / PN 40 (PN 63). (flanges in pumps with stainless steel body material according to TS EN 1092-1 standard pressure class.)
- ARS-D and ARS-DY pumps are used with high efficiency electric motors according to IEC size.
- Pump and motor shafts are connected to each other with elastic coupling.
- All impellers are balanced dynamically or statically in accordance with ISO 1940 class 6.3.
- Axial force is balanced by impeller balancing holes system.
- The direction of rotation is counterclockwise when viewed from the motor side.
- In ARS-D and ARS-DY type pumps, "grease lubricated" bearings are used as standard. The plain bearings used on the underside of the pumps are lubricated with the pressed liquid.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|-------------------------|---|
| Iron and Steel Industry | Mining |
| Building System | Water Treatment and Pressurization |
| Fire Fighting | Food and Beverage Industry |
| Power Plants | Agricultural Irrigation and Drainage |
| Chemical Industry | Heating, Ventilating and Air Conditioning |
| Oil Industry | |



SCE series



double suction split case centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|------------------------------|
| Discharge Flange | DN 65 - DN 600 |
| Capacity | up to 6000 m ³ /h |
| Head | up to 180 m |
| Working Temperature | From -20 °C to +110 °C* |
| Casing Pressure (Pmax) | 16 bar - 25 bar* |



DESIGN FEATURES

- Suction and discharge flanges are on the same axis line. The double-suction design reduces axial forces by directing flow into both sides of the impeller. The double-volute design, available on most models, reduces the radial load and minimizes noise and vibration.
- Suction and discharge flanges are PN 16 according to EN 1092-2 (DIN2501).
- Seal box is cooled with water. Seals are easily dismountable, which makes replacing and fitting up additional seals easy.
- Split-case pumps could manufacturing horizontal or vertical.
- The impellers are dynamically balanced according to ISO 1940 class 6.3.
- Direction of rotation is clockwise when viewed from the motor in standard manufacture. In this case, the suction flange is on the right side. If required, the direction of rotation can be adjusted counter-clockwise. In this case, the suction flange is on the left side.
- Replaceable case wear rings protect the pump casing and reducing maintenance costs.
- Bronze shaft sleeves protect the shaft and help with fixation of the impeller.
- In horizontal installation, ball bearing with grease lubrication is used as standard. In the case of vertical installation, the bearing with fluid lubrication is used on the lower side and the ball bearing with grease lubrication is used on the upper side.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|-------------------------|---|
| Iron and Steel Industry | Marine |
| Building System | Water Treatment and Pressurization |
| Fire Fighting | Food and Beverage Industry |
| Power Plants | Agricultural Irrigation and Drainage |
| Chemical Industry | Heating, Ventilating and Air Conditioning |
| Oil Industry | Mining |



SP series



booster pump



GENERAL INFORMATION

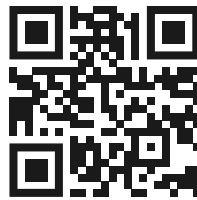
| | |
|-----------------------|-----------------------------|
| Flow rate | up to 150 m ³ /h |
| Pressure | up to 150 m |
| Frequency | Three-phase 50 Hz - 60 Hz* |
| Fluid Temperature | From 0 °C to + 60 °C |
| Maximum Body Pressure | 10 - 16 bar |



DESIGN FEATURES

- SP Series boosters are designed for pressing non-corrosive liquids without large solid particles.
- Impeller material is glass fiber reinforced noryl.
- Vertical pumps with closed impeller can able to be separated.
- Balancing holes of the impellers are dynamically balanced and minimizes axial loads.
- Cylindrical roller bearings that are resistant to high temperatures and can operate under heavy conditions are used at both ends of the pump.
- The discharge flange of the pump is on the motor side and the suction flange is below.
- With its vertical shaft structure, it occupies less space than horizontal shaft design.
- Boosters are manufactured with horizontal or vertical pumps.
- It can be produced as single, double and triple pumps according to the desired flow rate. Up to 6 pumps can be set if needed.
- Single pump booster has phase protection and sequencing relay (FKS).
- It is available water level float (electric float) in single pump systems.
- Multiple sets, phase control in multiple pump boosters and liquid level control are standard features.
- Pressure boosters can be frequency controlled upon request It can be manufactured with variable speed.
- Boosters it can work automatically and manually in two different modes.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|-----------------|--------------------------------------|
| Building System | Water Treatment and Pressurization |
| Power Plants | Agricultural Irrigation and Drainage |



FP series



fire fighting pump



GENERAL INFORMATION

| | |
|--------------------------|----------------------------|
| Capacity | 2500 m ³ / h |
| Head | 180 m |
| Frequency | Three-phase 50 Hz - 60 Hz* |
| Fluid Temperature | From 0 °C to + 60 °C |
| Maximum Working Pressure | 16 - 20 bar |



DESIGN FEATURES

- Due to the special importance of NFPA fire pumps, a standard has been developed according to the material and performance characteristics.

These requirements must be met for compliance with NFPA 20. According to these conditions, it is seen that fire pumps are quite different from other pumps. Fire pumps are designed and manufactured to provide maximum reliability and net output pressure throughout their lifetime.

PSP DATA

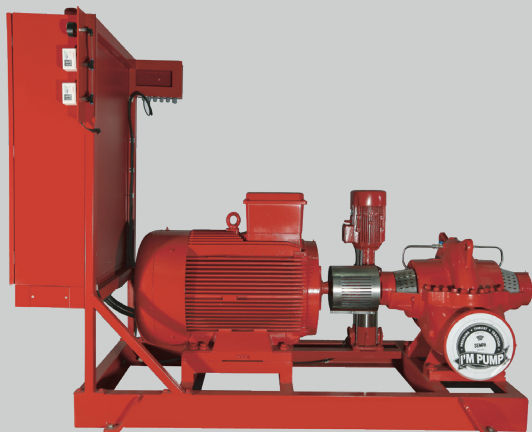


Go to Pump Selection Program

USAGE AREAS

Building System

Fire Fighting



SVDP series



vertical turbine pump



GENERAL INFORMATION

| | |
|------------------------|--------------------------------|
| Capacity | up to 30.000 m ³ /h |
| Head | up to 600 m |
| Working Temperature | From -25 °C to +140 °C |
| Casing Pressure (Pmax) | 63 bar |

DESIGN FEATURES

- Vertical shaft, split design, stator, discharge head, multi-stage or single-stage turbine pumps.
- Vertical shaft turbine pumps are produced with a closed type impeller as a standard. It can also be produced as a semi-open or open type impeller upon request.
- The direction of rotation is counterclockwise when viewed from the motor side.
- SVDP Series pumps are a used water lubricated housing system as a standard. Optionally, an oil lubricated housing system can be used.
- SVDP Series pumps are used with high-efficiency class electric motors according to IEC construction sizes.
- Pump and motor shafts are connected to each other by rigid coupling.
- It can be driven by different types of electric motors, optionally: Vertical Solid Shaft Electric Motor, VHS Type Vertical Hollow Shaft Electric Motor, Right Angle Gear Drive, Vertical Pulley Assembly.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|-------------------------|---|
| Iron and Steel Industry | Marine |
| Building System | Water Treatment and Pressurization |
| Fire Fighting | Food and Beverage Industry |
| Power Plants | Agricultural Irrigation and Drainage |
| Chemical Industry | Heating, Ventilating and Air Conditioning |
| Oil Industry | Mining |



DPT series



submersible waste water centrifugal pump



GENERAL INFORMATION

| | |
|------------------------|------------------------------|
| Discharge Flange | DN 50 - DN 400 |
| Capacity | up to 3000 m ³ /h |
| Head | up to 100 m |
| Protection Class | IP 68 |
| Thermistor Protection | PT100 |
| Insulation | Class H |
| Working Temperature | up to +40 °C* |
| Casing Pressure (Pmax) | 10 bar* |



DESIGN FEATURES

- Vertical, wide volute casing, single stage, submersible type centrifugal pump with enclosed, semi-open or vortex types impeller.
- 20 basic sizes covering wide range of operational area.
- The electric motor has an IP68 protection class.
- Discharge flanges conform to EN 1092-2 / PN 10. (EN 1092-1 / PN 10 for steel or stainless steel casing)
- All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.
- Axial thrust is balanced by impeller back ribs.
- In case of request motor cooling jacket is also applicable (For models larger than 12 HP)
- Bearings of DPT type pumps are "life time grease lubricated" ball bearings.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

Water Treatment and Pressurization



DPT-DI series



waste water and process pump



GENERAL INFORMATION

| | |
|------------------------|------------------------------|
| Discharge Flange | DN 40 - DN 400 |
| Capacity | up to 3000 m ³ /h |
| Head | up to 100 m |
| Working Temperature | from -10 °C to +110 °C* |
| Casing Pressure (Pmax) | 10 bar (16 bar)* |



DESIGN FEATURES

- Horizontal / Vertical, wide volute casing, single stage, end suction, centrifugal pumps with enclosed, semi-open or vortex type impeller.
- 18 basic sizes covering wide range of operational area.
- Due to the back-pull-out design, the complete bearing assembly including impeller and casing cover can be dismantled without removing the volute casing from the pipe system. (With spacer coupling application, also possible to take out the rotor group without dismantling the electric motor.)
- Discharge flanges conform to EN 1092-2 / PN 10. (EN 1092-1 / PN 10 for steel or stainless steel casing) · All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.
- Axial thrust is balanced by impeller back ribs.
- Direction of rotation is clockwise viewed from drive end.
- Bearings of DPT-DI type pumps are "life time grease lubricated" ball bearing up to DPT-DI 150-315 size. For bigger sizes oil lubricated bearings are used. In vertical design (DPT-DI-M) always grease lubricated bearings are used.

PSP DATA



Go to Pump Selection Program

USAGE AREAS

| | |
|-------------------------|---|
| Iron and Steel Industry | Building System |
| Power Plants | Water Treatment and Pressurization |
| Chemical Industry | Heating, Ventilating and Air Conditioning |



DPT-TR series



transformer oil pumps



GENERAL INFORMATION

| | |
|-------------------------|-----------------------------|
| Discharge Flange | DN 65 - DN 150 |
| Capacity | up to 340 m ³ /h |
| Head | up to 16 m |
| Working Temperature | from -25 °C to +115 °C* |
| Terminal Box Protection | IP56 |
| Casing Pressure (Pmax) | 10 bar* |



DESIGN FEATURES

- DPT-TR series transformer oil pumps; It is designed as a horizontal shaft, monoblock, single stage.
- Closed impellers are used in the designs and there are balancing holes between the blades of these impellers to minimize axial loads.
- The general dimensions of the volute casing are designed in accordance with the TS EN IEC 60076-22-5 standard.
- Suction and discharge flanges comply with TS EN 1092-2 / PN 10 standard.
- Impellers are statically and dynamically balanced in accordance with ISO 1940 class 6.3.
- The surface coating complies with the ISO 12944:2018 standard. C5 H (High Durability - 320 μ)

PSP DATA



**Go to Pump
Selection
Program**

USAGE AREAS

Heating, Ventilating and
Air Conditioning



certificates

quality management



IAF / **TÜRKİYE KALİTE ENSTİTÜSÜ** / **Form of IQNET**

KALITE YÖNETİM SİSTEMİ BELGESİ
QUALITY MANAGEMENT SYSTEM CERTIFICATE

Form No / Certificate No.: KY-3208-04/09-R15
Belge Tarihi / Date of Certificate: 12.10.2021

Organizasyon Adı / Name and Address of the Certified Organization:
SEMPA POMPA MAKİNA A.Ş.
KONYA
KONYA KÜLTÜR YOLU NO:2
KONYA 46100
T.C.

Organizasyonun Adresi / Address of the Certified Organization:
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IAF / **TÜRKİYE KALİTE ENSTİTÜSÜ** / **Form of IQNET**

KALITE YÖNETİM SİSTEMİ BELGESİ
QUALITY MANAGEMENT SYSTEM CERTIFICATE
EK / APPENDIX

Form No / Certificate No.: KY-3208-04/09-R15
Belge Tarihi / Date of Certificate: 12.10.2021

Organizasyon Adı / Name and Address of the Certified Organization:
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KONYA 46100
T.C.

IQNET
THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

TSE has issued an IQNET recognized certificate that the organization:

SEMPA POMPA MAKİNA A.Ş.

BÜYÜKKAYACIK MAH. KONYA OSB KÜDÜSİ CAD. 22. SOK. NO:4 BELÇİUKLU - KONYA / TÜRKİYE

has implemented and maintains a
QUALITY MANAGEMENT SYSTEM
which fulfills the requirements of the following standard:

TS EN ISO 9001:2015
Issued on: 12-10-2021
Expires on: 12-10-2024

This attestation is directly linked to the IQNET Partner's original certificate and shall not be used as a stand-alone document.

Registration Number :TR-KY-3208-04/09-R15

Alex Stoichitov
President of IQNet

Izzet Sen
Konya Certification Manager

IQNET
THE INTERNATIONAL CERTIFICATION NETWORK

Annex to IQNET Certificate Number :TR-KY-3208-04/09-R15

Name and Address of the certified organization

SEMPA POMPA MAKİNA A.Ş.

BÜYÜKKAYACIK MAH. KONYA OSB KÜDÜSİ CAD. 22. SOK. NO:4 BELÇİUKLU - KONYA / TÜRKİYE

Scope of the Certificate

DESIGN AND PRODUCTION OF

- SUBMERSIBLE PUMPS
- HYDROFOR PUMPS
- CENTRIFUGAL PUMPS
- LINE SHAFT VERTICAL TURBINE PUMPS

This annex is only valid in connection with the above-mentioned certificate.

TURKISH STANDARDS INSTITUTION

certificates

service and satisfaction



TSE-ISO 10002



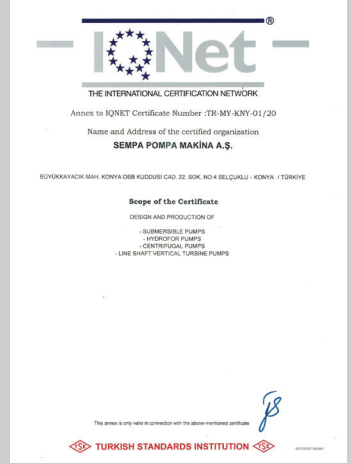
TSE-ISO 10002



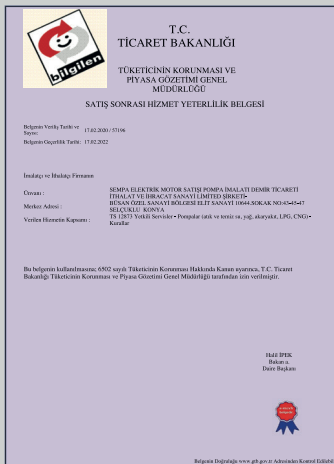
TSE-ISO 10002



TSE-ISO 10002



AFTER SALES SERVICE COMPETENCE



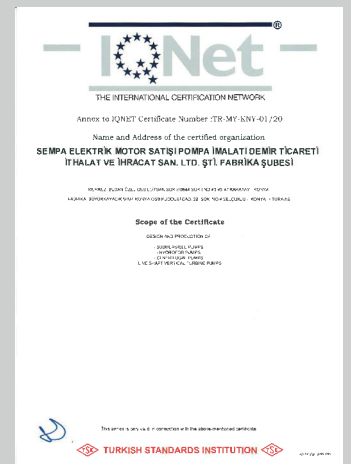
CERTIFICATE OF SERVICE COMPETENCE



TS ISO 10002:2018



TR-MY-KNY-01



certificates

environment and safety

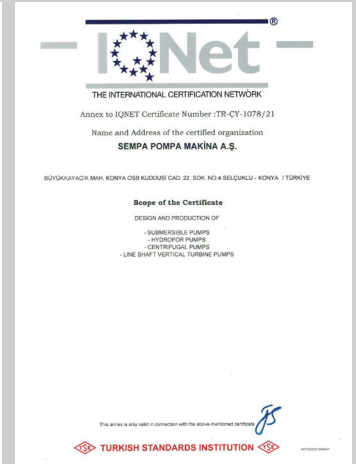


TSE-ISO-EN 14000

TSE-ISO-EN 14000

TS EN ISO 14001

TS EN ISO 14001

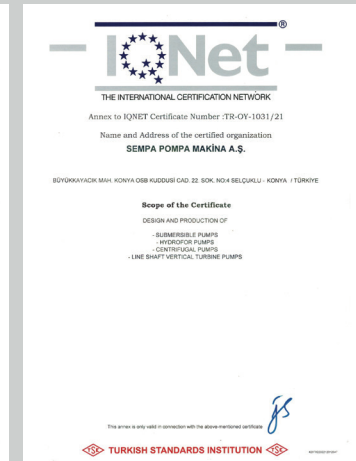


TSE TS ISO 45001

TSE TS ISO 45001

TS ISO 45001

TS ISO 45001





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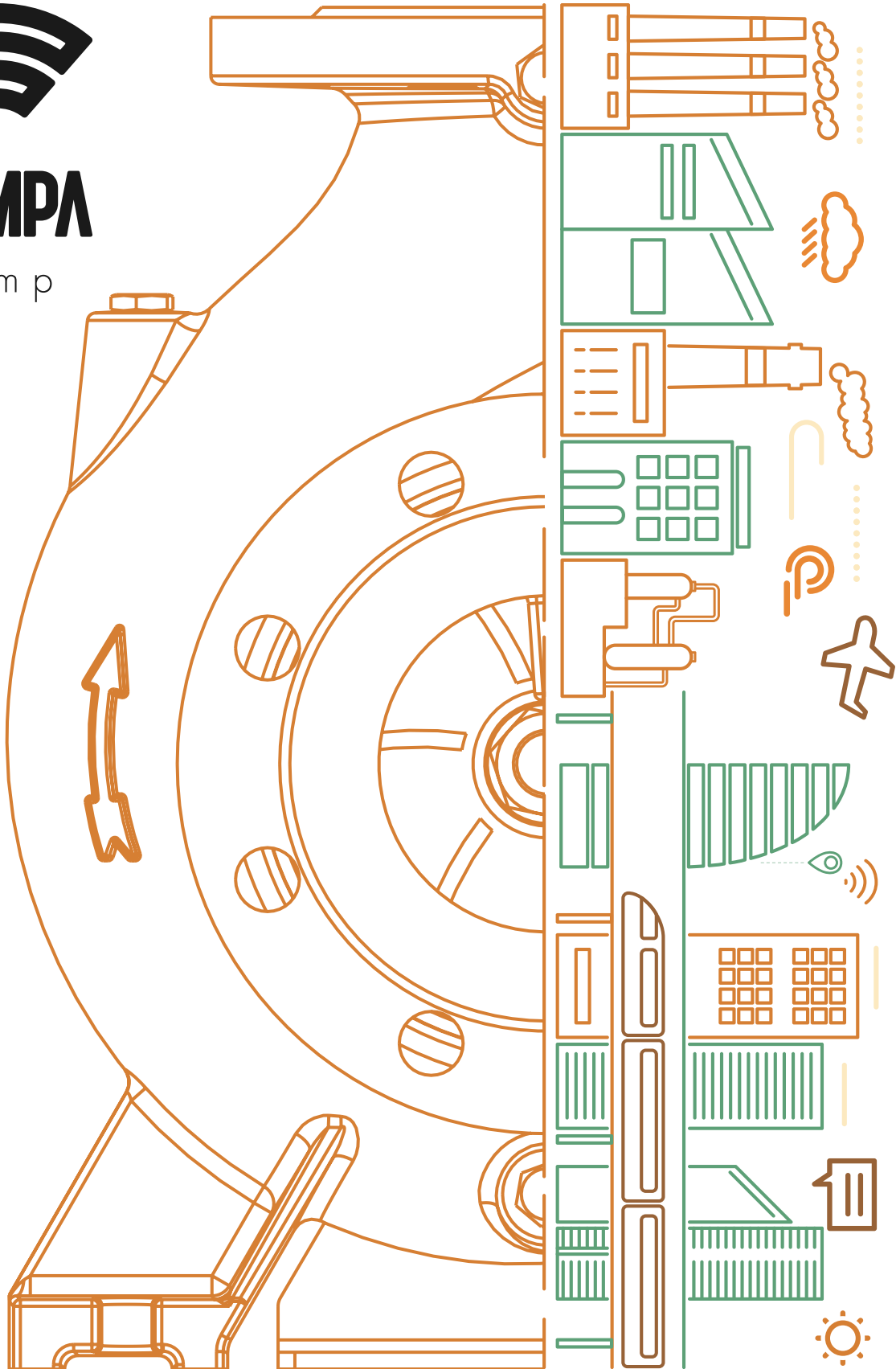


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