



No noise hydraulic pumps Applications presentation



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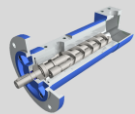
Energy Saving Systems

Hydraulic press servo drives have been on the market since many years. In Asia most of the market of plastic injection molding machines is using variable servo drive motors and fixed displacement pumps, like external gear, vane or internal gear pumps. The usage of this type of systems enables **energy savings up to 65%** when compared to conventional drive systems (fixed speed motor and variable displacement hydraulic pumps).

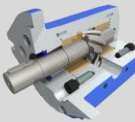
Today, more than 100.000 servo drive systems are used in the manufacturing process of hydraulic presses. This kind of systems, while reaching **real energy savings**, also enables **huge simplifications of the hydraulic circuits**: no more proportional valves or complicated hydraulic pressure feedback are needed to control the press actions and cycles.

Servo pump systems use motor speed between nearly 0 and 3.000 RPM, to enable **very fast movement of the molds and a high cycle dynamics**.

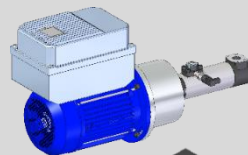
Settima package is suitable for **press modernization and revamping**. It's possible to remove all of the old and noisy hydraulic components and to replace them with our system, making the old machines **more flexible and quieter than ever**.



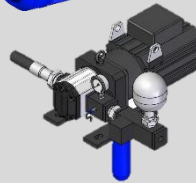
The **SMT** pump can manage **high and low viscosity fluids** and **coolant oils**. It is profitably used in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



The **CONTINUUM®** no-noise low-pulsations **helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



The **PID control variable-flow frequency inverter system** has been designed with the goal of **save energy**, thus **lower costs** while being **eco-friendly**. This system can be installed on any tool machine without modifying the machine itself.



The **Continuum®** servo pump is used in the market of presses since 2008. **Easy to install**, it enables the press designers to reach wide speed dynamics in heavy duty pressing cycles **without noise**, and with **real energy savings**.

Did you know? Settima energy saving systems are designed to be extremely easy to install on a system. They can be mounted on any tool machine or system, without any re-engineering or modification needed!

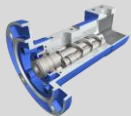
Plastic Injection Molding Machine

Settima, for use in **Plastic Injection Molding Machines (PIMMs)**, proposes several pumps, in order to meet all the machines' needs: the **SMT16B** and **SMT8B** screw pumps, for the cooling and filtration systems, and the **Continuum® helical rotor pump**, for the power hydraulic systems.

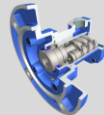
The **SMT8B** pump, designed for low-pressure applications, due to an **extremely compact body** is perfect for closed-loop circuit chiller units as well as low-pressure filtration units. The **SMT16B**, for medium-pressures, up to **40 bar**, is fit to be used both on bigger filtration systems and on more powerful chiller units, pumping the low-temperature coolant oil from the reservoir tank to the connected machine, and due to its greater pressure is able to manage multiple coolant nozzles.

The **Continuum®** pump, able to manage pressures up to **300 bar**, due to the patented **no-noise low-pulsations helical rotor**, it drastically lowers the noise pollution. Thus, it is perfect for applications where noise pollution abatement is an irreplaceable quality, such in an industrial environment, where lower noise means better quality of work.

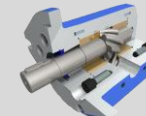
Additionally, a **Magnetic Coupling** assembly option can be provided for every **Settima** pump, ensuring that no leakage of fluid will ever happen, thus increasing the lifespan of the machine and minimizing the chance of a failure.



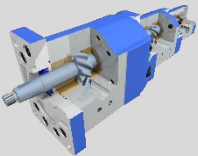
The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model for **USA market (SMAT16B)** is available.



The **SMT8B** pump is mainly utilized in **compact cooling and filtrations plants** and industrial applications up to **15 bar**. A model for **USA market (SMAT8B)** is available.



The **CONTINUUM® no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



The **CONTINUUM®** pump can be combined in a **multiple configuration system** (managing fluids from different tanks if needed), to be used in closed loop circuits, when there's need to drastically **heighten the flow** or to **save space**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? **Settima SEAL-LESS MAGNETIC COUPLINGS PUMPS** have been chosen by one of the world's leader in plastic injection molding machines as the safety measure of choice. **Settima MAGNETIC COUPLINGS PUMPS** are installed over the **PIM** machines used to produce one of the most loved toys for children all over the world, the **LEGO®** blocks, to prevent any fluid leakage that could possibly contaminate the products. **Settima** scores another point in ensuring safer conditions at work and home, and a cleaner world!

(LEGO® is a registered trademark of LEGO® Group, and it is reported here for information purposes only)

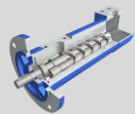
Tool Machines

Settima three-screw and gear pumps for tool machines are perfectly suited to manage the various operations of cooling, lubrication and cleaning. **Settima** pumps can easily support **coolant fluids up to 4 cSt at 100 bar**, water/glycol emulsions, mineral and synthetic oils and cutting fluids, to serve all the needs of the tool machines.

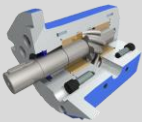
For the specific cooling, lubrication and cleaning services, **Settima** offers:

- For **Cutting/Grinding/Milling Tool Cooling** and **Burrs Cleaning**, the **SMT HA G TMK**, suited for dirty water/glycol emulsions and cutting oil.
- For **Mandrel Cooling**, the **SMT8B**, **SMT16B** and the **Continuum®** pumps, able to manage very clean water/glycol emulsions in a pressure range from 0 up to 300 bar.
- For **Linear Guides Lubrication** and **Cooling**, the **SMT8B**, **SMT16B** and the **Continuum®** pumps, suited for clean hydraulics oils and emulsions at a wide range of pressure.
- For **Pedestal Cooling**, the **SMT8B** and **SMT16B** pumps, perfect for handling cutting oils and water/glycol emulsions, both clean and dirty.
- For **Hydraulic Power Jaws**, the **SMT** and the **Continuum®** pumps, able to manage clean hydraulic oils and sustain the high pressures needed.

Choose the products that meet your needs.



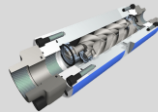
The **SMT** pump can manage **high and low viscosity fluids** and **coolant oils**. It is profitably used in any oil circulation activity and industrial applications up to **100 bar**.
A model for **USA market (SMAT)** is available.



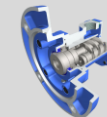
The **CONTINUUM®** no-noise low-pulsations **helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**.
A model for **USA market (SMAT16B)** is available.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



The **SMT8B** pump is mainly utilized in **compact** cooling and filtrations plants and industrial applications up to **15 bar**.
A model for **USA market (SMAT8B)** is available.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? Noise emission in a tool machine is the by-product of vibration. Vibration poses its own issues to be solved, starting with the fact that a vibrating tool machine can be less accurate in manufacturing and/or grinding metal parts. With **Settima Continuum®** two issues are solved. The first one, a no-pulsation pump generates trascurably low levels of vibration, thus magnifying the precision of the work processes. The second one, a silent pump can reduce noise emission by an average of 15 dB less than standard gear pumps, and provide a more silent, more comfortable work environment, thus maximizing productivity!

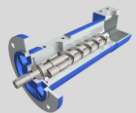
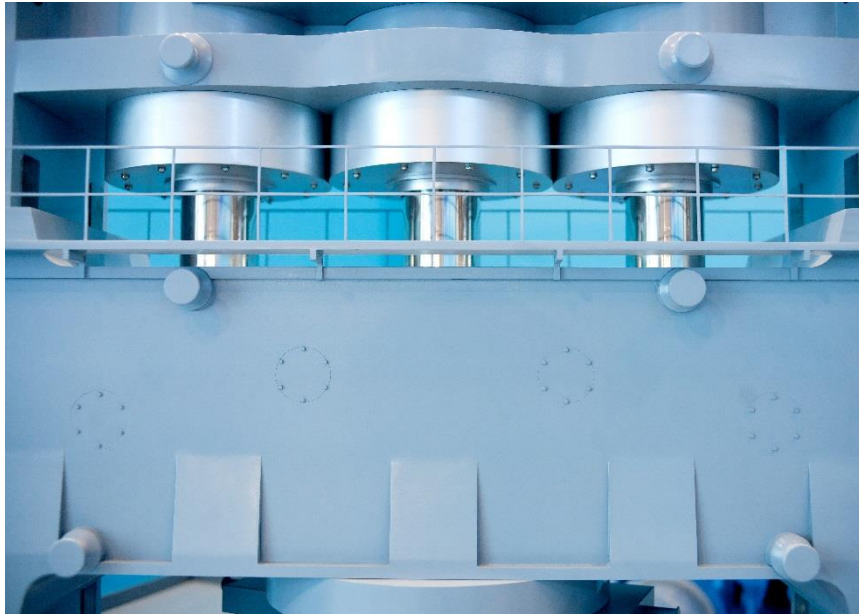
Presses

For the Presses application, **Settima** propose its most advanced and revolutionary product: the **Continuum®** pump.

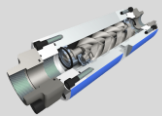
For its unique nature, presses need to operate at very high pressures and possibly high flows, in large places without noise barriers. It is therefore of the utmost importance to have pumps that not only provide adequate performances, but also that reduce noise emissions to a minimum, to ensure a safer, less chaotic and more comfortable workplace, thus magnifying efficiency and productivity.

The technical features of **Continuum®** pump, high pressure, low noise, compact design, are extremely well suited for application in **presses**. The revolutionary **no-noise low-pulsations helical rotor** is ideal where noise pollution abatement is of critical importance. Furthermore, if there should be the need to heighten the flow, or of a more accurate control of the flows in certain operations, multiple **Continuum®** pumps can be combined in a single group.

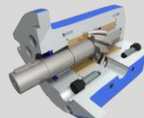
With **Continuum®** pump, industrial workplaces can be no more synonymous of dangerously high noise levels.



The **SMT** pump can manage **high viscosity fluids** and is profitably used in windmill application as well as in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



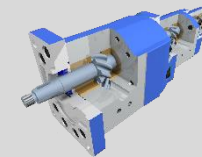
Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



The **CONTINUUM® no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.



The **CONTINUUM®** pump can be combined in a **multiple configuration system** (managing fluids from different tanks if needed), to be used in closed loop circuits, when there's need to drastically **heighten the flow** or to **save space**.

Did you know? **Settima CONTINUUM® NO-NOISE PUMP** has become the pump of choice for many industrial presses producers. Presses applications are widely used in all manufacturing plants, and they represent a very large portion of **CONTINUUM®** customers!

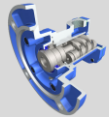
Mobile

For the Mobile industry, **Settima** has developed two concepts among the most innovative and revolutionary on the market: **SMT8B** and **Continuum**[®].

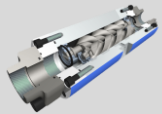
The operations of cooling, filtration and low-pressure recirculation of earthmoving machinery, are entrusted to a pump, which is unique both for its compact size and for the efficiency of performance: the series **SMT8B**.

The technical features of **Continuum**[®] pump, high pressure, low noise, compact design, are ideally suited for application in **power units, mobile compactors, and steering units**. The **Continuum**[®] pump is also fully interchangeable with gear or vane pumps, and particularly suited for applications where noise pollution abatement is an irreplaceable quality, especially taking into account that protecting the quality of the work has become increasingly synonymous of cost control and productivity improvement.

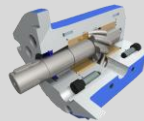
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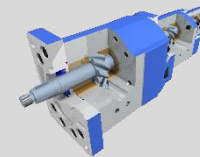
The **SMT8B** pump is mainly utilized in **compact cooling and filtrations plants** and industrial applications up to **15 bar**. A model for **USA market (SMAT8B)** is available.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



The **CONTINUUM**[®] **no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile to marine), up to **300 bar**.



The **CONTINUUM**[®] pump can be combined in a **multiple configuration system** (managing fluids from different tanks if needed), to be used in closed loop circuits, when there's need to drastically **heighten the flow** or to **save space**.

Did you know? **Settima CONTINUUM**[®] **NO-NOISE PUMP** has been chosen by an important Italian waste compactor vehicles manufacturer. Several municipalities of the Trentino Alto Adige, a mountainous region renowned for eco-sensitivity and attention to the quality of life of both its citizens and its tourists, needed a reasonably quiet and extremely efficient service of garbage disposal, and **Continuum**[®]-equipped compactors, keeping noise emission to a minimum level, were the only satisfying solution!

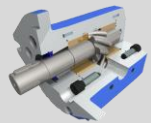
Material Handling

In the Material Handling equipment sector, there are two main issues to solve: the need of high pressure pumps to face the problems of movement, storage, control and protection of materials, goods and products, and the need to keep the workplace as safe and as comfortable as possible, especially considering that bettering the conditions of work environments has become increasingly synonymous of cost control and productivity improvement.

Settima, first all over the world, has developed an innovative and revolutionary pump, internationally patented: the **Continuum**[®].

The technical features of **Continuum**[®] pump are: high pressure, low noise, compact design, full interchangeability with gear or vane pumps. They are perfectly suited for application in **forklifts**. The **Continuum**[®] pump has the high-pressure capabilities of a gear pump, but thanks to the patented **no-noise low-pulsations helical rotor**, it drastically lowers the noise pollution. Thus, it is perfect for applications where noise pollution abatement is an irreplaceable quality.

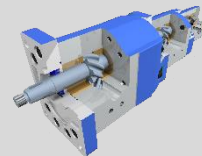
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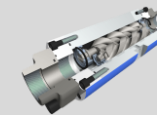
The **CONTINUUM**[®] **no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.



The **CONTINUUM**[®] pump can be combined in a **multiple configuration system** (managing fluids from different tanks if needed), to be used in closed loop circuits, when there's need to drastically **heighten the flow** or to **save space**.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.

Did you know? **Settima CONTINUUM**[®] **NO-NOISE PUMP** has been adopted by a material handling equipment manufacturer for a low-noise forklift model series. The company, with offices and production facilities in both Italy and Ireland, received a specific request by some of its clients. They had to manage very large warehouses, with many forklifts operating in closed spaces, and the noise level was a serious issue. The **Continuum**[®] pump on a specifically designed forklift series solved their problems!

Industrial

Settima is constantly involved in research and development of innovative solutions to be applied to hydraulic systems used in industrial applications.

After thirty years of activity, **Settima** offers a very wide range of products, in order to meet industrial requirements.

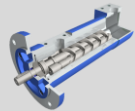
Settima makes available various models of screw pumps for hydraulic power, usable in presses, machines for sheet metal working, hydraulic winches, and also for Hydro Power, in particular for the lubrication of turbines and compressors, the industries of paper and sugar.

Settima is the only company able to provide the industry a product, the **Continuum**[®] pump, which, while working at high pressure, is able to eliminate one of the largest and seemingly unsolvable problems, the **noise level**. Unlike the traditional hydraulic pumps such as gear and vane pumps, the noise of **Continuum**[®] is **almost inaudible**. With **Continuum**[®], for the first time, the hydraulic pumps are no longer synonymous of noise.

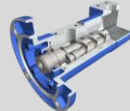
In the industrial machines sector, **Settima** is, thanks to the **Continuum**[®] pump, an important reference point, with excellent results, especially in the development of servo drives and power circuits of machines for plastic injection.

Continuum[®] is also used in high pressure filtration and cooling of machines for milling, grinding, multitasking machining centers, drilling, metal processing machinery and saws.

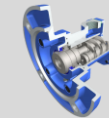
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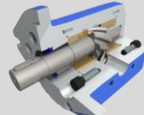
The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model for **USA market (SMAT16B)** is available.



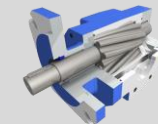
The **SMT8B** pump is mainly utilized in **compact cooling and filtrations plants** and industrial applications up to **15 bar**. A model for **USA market (SMAT8B)** is available.



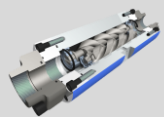
The **SMAPI** pumps are manufactured according to **API 676 3rd edition**. They are used in marine applications for boiler ignition / feeding and fuel transfer up to **60 bar**.



The **CONTINUUM**[®] **no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



The **2VHL CONTINUUM**[®] **no-noise low-pulsation helical rotor** pump is especially designed for use in extreme environments, for windmill plants, marine and industrial **low-pressure** applications up to **40 bar**.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? **Settima CONTINUUM**[®] **NO-NOISE PUMP** has been installed in a dark ride present in several **DISNEY** amusement parks, in Los Angeles, Orlando and Hong Kong. The rail of the dark ride was running along the control unit, in which was installed a common, very noisy gear pump. The operators tried to solve the problem by raising the background music volume, to cover the noise, but when it failed, they went for the **most silent gear pump in the world**, the **Settima CONTINUUM**[®], solving the issue!

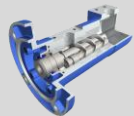
Cooling

Settima has addressed the needs of the Cooling applications market, by developing 2 **three-screws pumps**, the **SMT8B** pump and the **SMT16B** pump. Both of these pumps are specifically designed with the high-technology, high-efficiency, low noise capabilities typical of **Settima** products, to be used in fan **cooler units** and in more complex **coolant oil refrigeration systems**.

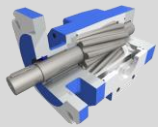
The **SMT8B** pump, designed for low-pressure applications, due to an **extremely compact body** is perfect for small fan cooling units as well as for closed-loop circuit chiller units, pumping the coolant oil from the reservoir tank to the refrigerator unit and then, when the liquid had lost heat, back to the coolant reservoir tank.

The **SMT16B**, for medium-pressures, up to **40 bar**, is fit to be used both on bigger and more powerful fan cooling units, and on chiller units, pumping the low-temperature coolant oil from the reservoir tank to the connected machine, and due to its greater pressure is able to manage multiple coolant nozzles.

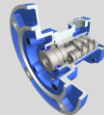
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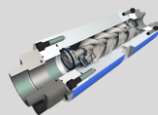
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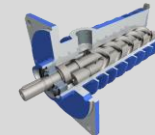
The **2VHL CONTINUUM®** **no-noise low-pulsation helical rotor** pump is especially designed for use in extreme environments, for windmill plants, marine and industrial **low-pressure** applications up to **40 bar**.



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A model for **USA market (SMAT8B)** is available.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



The **SM** pump has been produced since 1978. These pumps are used in lift and elevators applications up to **80 bar** and with VF motors in energy saving systems.
A model for **USA market (SMU)** is available.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? **Settima** designed and built, for an Australian company specialized in refrigeration units, four custom pumps for a cooling service able to manage an inlet pressure up to 20 bar. The pumps were installed in a propane-compressor lube oil cooling system.

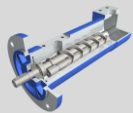
Filtration

Settima in the filtration applications proposes a three-screws pumps range of products: the **SMT** pump, the **SMT16B** pump and the **SMT8B** pump.

The **SMT** pump is able to manage high pressures, the **SMT16B** is perfect for medium pressures, and the **SMT8B**, with its **extremely compact design**, is perfect for low pressures and small plants.

The three pumps also offer a range of flow capacity so wide to meet any request for any type and dimension of filtration plant.

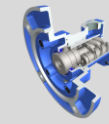
Choose the products that meet your needs.



The **SMT** pump can manage **high viscosity fluids** and is profitably used in windmill application as well as in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



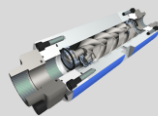
The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model for **USA market (SMAT16B)** is available.



The **SMT8B** pump is mainly utilized in **compact cooling and filtrations plants** and industrial applications up to **15 bar**. A model for **USA market (SMAT8B)** is available.



The **FOTP** pumps are **tandem units** (2 fluids, main + spare) that can handle **any fuel oil**. They are especially suited for marine, power generation and filtration applications up to **80 bar**.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

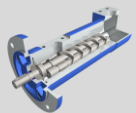
Did you know? **Settima** three-screw pumps are ideal for filtration systems. A standard gear pump generates a certain level of pulsation. Those pulsations push repeatedly the impurities against the filter, thus slowly widening its mesh, until they will be able to slip off. A continuous, non-pulsating flow, like the one generated by three-screw pumps, creates the right conditions for the filter to function at optimal capacity.

Oil & Gas

For the Oil & Gas applications **Settima** offers several three screw pumps series designed in compliance with the latest **API676** regulations, with the abitudinal high efficiency and quality of all **Settima** products.

Settima three screw pumps are suitable for transfer, circulation and mixing of clean fluids with lubricating power, at low and high viscosity, such as oil, crude oil and fuel oil, but also for the lubrication at medium viscosity, with lubricating oil, fuel or paraffin.

Choose the products that meet your needs.



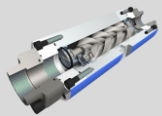
The **SMT** pump can manage **high viscosity fluids** and is profitably used in windmill application as well as in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model for **USA market (SMAT16B)** is available.



The **SMAPI** pumps are manufactured according to **API 676 3rd edition**. They are used in marine applications for boiler ignition / feeding and fuel transfer up to **60 bar**.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? **Settima** pumps aided a project of an Italian society in the top ten Oil & Gas producers worldwide: **Settima SMAPI API676** pumps were utilized for diesel oil transfer during the only voyage of the **FSRU Toscana**, the colossal floating gas storage/production facility offshore Livorno. All the previous pumps were unable to manage the extreme stress of fuel injection and power generation onboard, and they failed.

API614 Lube Oil & Gas Seal Control

API614, Fourth Edition, chapter 3 (1999), defines the requirements of components for general purpose lube oil systems. It also, for the first time, sets an industry accepted standard for oil-type shaft-sealing systems and dry gas face-type shaft-sealing systems. These systems may serve equipment such as compressors, gears, pumps, and drivers, and this standard is intended to be used for petroleum, chemical, gas and other industries.

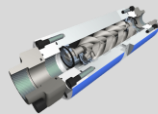
The latest edition of the API requirements states that in order to be compliant with **API614** norms, positive displacement screw pumps must be designed to follow the **API676 standards**.

Settima SMAPI for API676 has been designed to be **fully compliant** with those rigid standards. The pump is available in several sizes, from the compact GR 20 to the huge and incredibly powerful GR 180, to cover all possible applications.

SMAPI for API676 has become the pump of choice for difficult and demanding naval and industrial installation.



The **SMAPI** pumps are manufactured according to **API 676 3rd edition**. They are used in marine applications for boiler ignition / feeding and fuel transfer up to **60 bar**.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? Settima Meccanica is the only European pump manufacturing company (and one of the very few worldwide) which is able to design and manufacture a **100% API676 compliant** pump. Settima can provide the clients with the pumps and all the necessary documentation and certifications to meet the severe American Petroleum Institute standards. Ask Settima for the **SMAPI676 100%**!

Power Generation

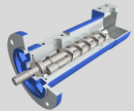
The success of **Settima** in the Power generation sector is the result of a technological design that is renewed every day, to provide **quality products** and **high energy savings**.

Settima has developed pumps for the transfer and loading of various types of oils and all the lubricant fluids, covering the requirements of lubrication, filtration and cooling of turbines and compressors. In particular, **Settima** products are used in **Lube Oil** cooling services and applications, and in **Oil Jacking** systems, where the jacking oil pumps ensure there is no direct metal contact between a journal and the bearing of the huge shafts of steam turbines, thus greatly reducing friction and bearing wear.

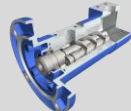
Settima pumps are widely used in tandem solutions for feeding and injection systems for burners, for corrosive liquids and oil at high temperature, or in **Seal Oil** systems, diverting a portion of lubrication oil to hermetically close the seals ensuring no gas leakage.

Settima is the partner of many leading engineering firms, major equipment manufacturers (OEMs) and end-users, so it is now a well-known name in the industry.

Choose the products that meet your needs.



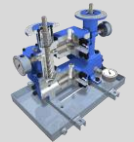
The **SMT** pump can manage **high viscosity fluids** and is profitably used in windmill application as well as in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



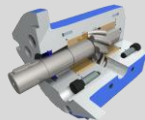
The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model for **USA market (SMAT16B)** is available.



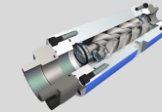
The **SMAPI** pumps are manufactured according to **API 676 3rd edition**. They are used in marine applications for boiler ignition / feeding and fuel transfer up to **60 bar**.



The **FOTP** pumps are **tandem units** (2 fluids, main + spare) that can handle **any fuel oil**. They are especially suited for marine, power generation and filtration applications up to **80 bar**.



The **CONTINUUM® no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? **Settima SMAPI (API676) GR180**, the largest three-screws pump ever built in **Settima**, with a total motor pump unit length of 3 meters and a weight just short of 2 tons, able to manage a flow of 250L m3/hour at 1.800 rpm, has been specifically designed and manufactured to be used in a very large power plant in South Korea!

Windmill

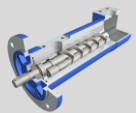
The Windmill application is a very demanding one for the hydraulic pumps industry. Nearly half of the utility grade wind turbines currently in service depends on hydraulic pitch and yaw controls. Many of the others may incorporate the use of hydraulics for braking or utilize a forced lubrication system.

Since maintenance costs are very high and turbines can be quite difficult to reach, they must run unattended for **more than 5 years of continuous operations**; thus, it is expected from all parts to run without maintenance, all year round, with a Medium Time Before Failure (MTBF) in excess of **100.000 hours**. To this end, all parts and components manufacturers must guarantee a lifetime of more than **20 years** in extremely harsh conditions.

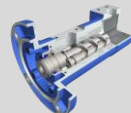
For the Windmill application **Settima** has faced the many challenges posed by these difficult parameters by developing a range of pumps particularly able to withstand the rigors of windmill installation, both on the ground and in open sea: the **SMT SN** pump, the **SMT16B** pump, and the **2VHL Continuum®** pump.

Settima pumps are of the highest quality: they can manage a viscosity of up to **100.000 cSt**, all parts are sourced from first class certified suppliers, built with stainless steel fixing screws and hard anodic oxidation (**MIL A-8625F** and **UNI 7796** compliant) to avoid corrosion damage. Additionally, a **Magnetic Coupling** assembly option can be provided for every **Settima** pump, ensuring that no leakage of fluid will ever happen, thus increasing the lifespan of the windmill and minimizing the chance of a failure.

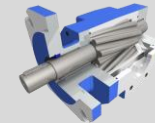
Choose the products that meet your needs.



The **SMT** pump can manage **high viscosity fluids** and is profitably used in windmill application as well as in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model **for USA market (SMAT16B)** is available.



The **2VHL CONTINUUM® no-noise low-pulsation helical rotor** pump is especially designed for use in extreme environments, for windmill plants, marine and industrial **low-pressure** applications up to **40 bar**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? **Settima 2VHL CONTINUUM®** is one of the most durable pumps on the market. With its body made of cast iron, and its helical rotors manufactured with high-strength hardened steel, the **2VHL CONTINUUM®** can easily manage a fluid viscosity of 100.000 cSt and remain fully operational from -50°C up to 150°C, in the most extreme conditions, without shortening its lifespan. The **2VHL CONTINUUM®** has therefore become the pump of choice for difficult and demanding installations, like inside windmills on the open sea, where its reliability and resistance to stress can truly be taken advantage of to a full extent!

Lube

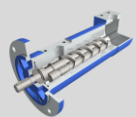
Lubrication systems are a critical part of all industrial machinery, to protect the gears from wear and corrosion, to reduce friction and to transfer heat from the moving parts of the machines.

Settima offers both three-screw and helical rotor pumps. The three-screw traditional ones are the **SMT** pump and the **SMT16B** pump, while the helical rotor is the **Continuum**® pump.

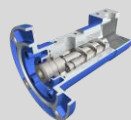
The **Continuum**® helical rotor pumps are designed for loading, stripping, moving and transferring fluids with good lubrication properties, medium and high viscosity fluids such as lubricating oils, at high pressures, and all of this with the lowest noise emissions on the market.

With **Continuum**® noise pollution on the workplace is a problem no more, thus increasing the safety, comfort and productivity.

Choose the products that meet your needs.



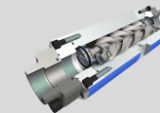
The **SMT** pump can manage **high viscosity fluids** and is profitably used in windmill application as well as in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model for **USA market (SMAT16B)** is available.



The **2VHL CONTINUUM**® **no-noise low-pulsation helical rotor** pump is especially designed for use in extreme environments, for windmill plants, marine and industrial **low-pressure** applications up to **40 bar**.



The **SMAPI** pumps are manufactured according to **API 676 3rd edition**. They are used in marine applications for boiler ignition / feeding and fuel transfer up to **60 bar**.

Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.

The **CONTINUUM**® **no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.

A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.



Did you know? **Settima** built several **SMAPI 100% API676 compliant** and supplied them to the **Shin Nippon Project**. Those **SMAPI**, thanks to a high-reliability mechanical seal, were fully complying with the **API 682 requirements**, and so they were certified by the American Petroleum Institute!

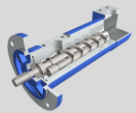
Marine

Settima is able to offer a **full solution** for **engine rooms**, a plant perfect for **fuel oil handling (low and high temperature, low and high viscosity)**. **Settima** is also able to cover the **needs of ships of different types and sizes**, up to the biggest cargo container ship, with products tested for a long life cycle, with **low running costs** and **maintenance**. For the marine sector **Settima** offers a wide range of three screw pumps (fully compliant with **API676** and **ISO8217 international regulations**), and helical rotor pumps.

Settima also ensures the **ready availability of spare parts** as the sector requires, by maintaining a constant availability of products in stock to guarantee prompt and fast deliveries with the lowest delay.

Settima pumps are widely used in the transfer, filtration, cooling, control and movement of the oil for diesel engines, gas turbines and reducers. They are used in tandem solutions (usually, the **FOTP**) for marine **boilers**, in the **filtration** and **feeding** of fuel of **engines**, in the feeding systems of **burners**, in the injection and feeding of **diesel engines**, for **biodiesel** plants and applications and systems for **off-line filtration**.

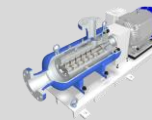
Settima pumps are also used in the yacht building industry for lifting equipment, walkways, automatic dive stairs, automatic boarding ladders. Pumps are also available for in-vehicle systems, as rudder actuators, propeller pitch controls, propeller drive, mini power packs, and in many other possible applications.



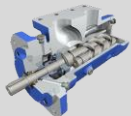
The **SMT** pump can manage **high viscosity fluids** and is profitably used in windmill application as well as in any oil circulation activity and industrial applications up to **100 bar**. A model for **USA market (SMAT)** is available.



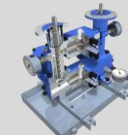
The **SMT16B** pump has the **widest range of applications**, including cooling, filtration, mineral and synthetic oil plants, and industrial applications up to **40 bar**. A model for **USA market (SMAT16B)** is available.



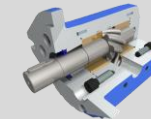
The **SMAPI** pumps are manufactured according to **API 676 3rd edition**. They are used in marine applications for boiler ignition / feeding and fuel transfer up to **60 bar**.



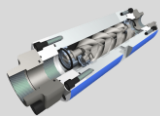
The **SFO** pump is designed for lubrication and circulation of diesel oil engines, hydro turbines, and other marine and industrial applications up to **40 bar**.



The **FOTP** pumps are **tandem units** (2 fluids, main + spare) that can handle **any fuel oil**. They are especially suited for marine, power generation and filtration applications up to **80 bar**.



The **CONTINUUM® no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



Settima Flowmeter is especially designed for the metering of viscous fluids. The unit works volumetrically according to the principle of screw transmitters with **high accuracy**. It can operate up to a viscosity of **40.000 cSt**.



A hermetically sealed **magnetic coupling** is available (as option) for all pump models to replace standard seals. In case of critical media the magnetic coupling is a reliable seal and prevents any serious leaking.

Did you know? **Settima** range of specialized Marine pump has been quite successful: **Settima SFO** has been designed with the precise purpose of being compatible with most installation specifics on the marine market, and **Settima** managed to build the **SFO** with an eye on the final price of the product, lower than most of its competitors, keeping an high quality of materials and performance. **Settima FOTP** has been adopted by one of the largest marine boiler manufacturer in the world, to be used on its installations!

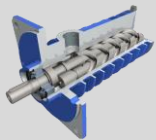
Lifts

Settima was born in 1978 with the production of three screw hydraulic pumps for hydraulic/oleodynamic **lifts**, and over the years has grown to become the **undisputed European leader** in this field. The intent was to develop a type of pump that, in addition to having characteristics of **durability, low cost** and **high quality**, could also **eliminate vibration** and **reduce noise pollution** as much as possible during operation.

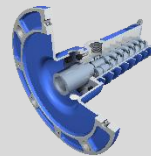
The result of years of experience is the **SM** series, volumetric pumps designed with axial transfer of the pressure, for both external and submerged use. Besides to the **SM** series, **Settima** produces the **SMU** series, designed to meet the regulations of the **United States**.

The **SM** and **SMU** are used in control units for lifts and elevators.

Choose the products that meet your needs.



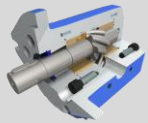
The **SM** pump has been produced since 1978. These pumps are used in lift and elevators applications up to **80 bar** and with VF motors in energy saving systems. A model for **USA market (SMU)** is available.



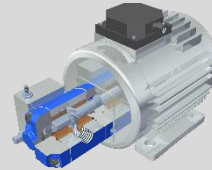
The **SM AC** pump is a model of the **SM** pump with an hollow shaft. A model for **USA market (SMU)** is available.



The **SMTU** pump is designed for the **USA market only** and it's used in lift and elevators applications up to **1.160 PSI**.



The **CONTINUUM® no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



Settima MicroLiv is a **micro-levelling** motor pump unit that is **compact** and with **very low noise emissions**. The system integrates a safety bypass and can be installed in any place due to its very compact size designed to **save space**.

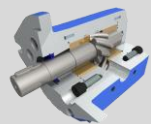
Did you know? **Settima SM** is the oldest pump designed by **Settima**, on the market since 1978. As a statement of its sound and reliable design, the **SM** pump has changed little over its almost 40 years of service, except obviously for the many technical innovations adopted and the use of new, more advanced, reliable and durable materials. In 2013 **Settima** received a request for a new **SM** pump to replace the old one, which just broke up. The original **SM** pump was installed in 1982, and worked perfectly for more than 30 years before malfunctioning!

Parking Systems

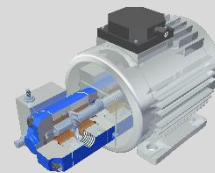
Settima was born with the production of three screw hydraulic pumps for hydraulic/oleodynamic **lifts**. It was only a natural step further to provide the same high power, high-reliability, energy saving and no-noise services to **elevators & parking systems**.

Due to its many years of research and development, Settima, now the **undisputed European leader** in this field, proposes for this application his innovative and revolutionary pump, internationally patented: the **Continuum®**.

The technical features of **Continuum®** pump are: high pressure, low noise, compact design, full interchangeability with gear or vane pumps. They are perfectly suited for application in **elevators & parking systems**. The **Continuum®** pump has the high-pressure capabilities of a gear pump, but thanks to the patented **no-noise low-pulsations helical rotor**, it drastically lowers the noise pollution. Thus, it is perfect for applications where noise pollution abatement is an irreplaceable quality, such as parking systems in hotels or in densely-populated areas, in particular during the night time.



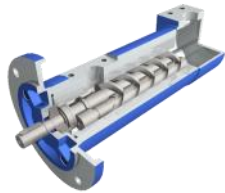
The **CONTINUUM® no-noise low-pulsations helical rotor** pump, with its internationally patented design, is perfect for a wide range of **high-pressure** applications (ranging from industrial to mobile and marine), up to **300 bar**.



Settima MicroLiv is a **micro-levelling** motor pump unit that is **compact** and with **very low noise emissions**. The system integrates a safety bypass and can be installed in any place due to its very compact size designed to **save space**.

Did you know? Settima **CONTINUUM® NO-NOISE PUMP** can ensure **drastically lower noise emission** than its competitors, up to **15 d(B)A less**. This advantage has been widely appreciated, in particular when used in hotels' parking systems. A difference of 15 d(B)A means the difference between an happy, well-rested customer and an upset customer who didn't manage to sleep due to outside noise!

Settima full complement of products:



SMT – high-pressure industrial, lube and tool machines



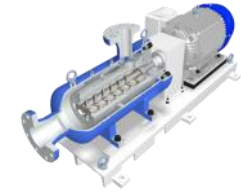
SMT16B – cooling, filtration and lube oil



SMT8B – compact cooling and filtration



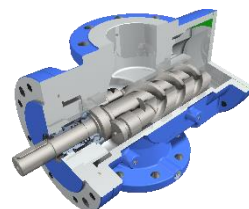
SFO – shipyards diesel oil handling



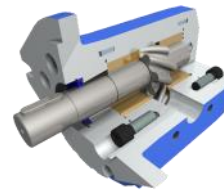
SMAPI (API676) – wide range of marine and industrial applications



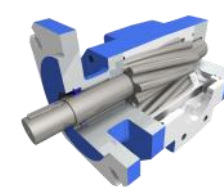
FOTP – high-reliability boiler ignition/feeding marine application



SLN – in-line plants for cooling, filtration, lube and fuel oil



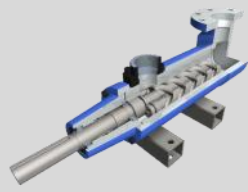
CONTINUUM® – high-pressure, no-noise fluid power applications



2VHL CONTINUUM® – low-pressure no-noise lube oil services



SM – lifts and freight elevators



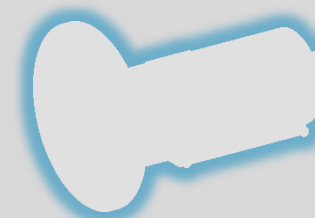
SMTU – USA lifts and freight elevators



FLOWMETERS – high-pressure, high-precision flow measurement



MAGNETIC COUPLING – seal-less option for no medium leakage



TWO-SCREW PUMP – innovative project currently in R&D!



ENERGY SAVING SYSTEMS – currently in R&D, available soon!

Engineering and certification are a resource for our customers. If some certification is not available today, it could be available soon: ask Settima and we will answer.



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