TwinOmatic Compact

- Extra protection due to prefILTER.
- Fully automatic operation.
- Wide filtration range.
- Simple, reliable and compact.
- Minimal flush water for cleaning.
- Process, manual override possible.
- Automatically initiated self-cleaning filtration area.
- Highly effective cleaning of total filtration during cleaning cycle.
- Uninterrupted flow and continuous filtration.

TwinOmatic Vertical

- Uninterrupted flow and continuous drainage cleaning cycle.
- High effective cleaning of total filtration area.
- Automatically initiated self-cleaning process, manual override possible.
- Solids removal for process equipment.
- Low maintenance.
- Very effective cleaning through brushes.
- Uninterrupted flow and continuous filtration.

TwinOmatic Brush

- Low maintenance.
- Fully automatic operation.
- Wide filtration range.
- Simple, reliable and robust.
- Minimal flush water for cleaning.
- Process, manual override possible.
- Very effective cleaning through brushes.
- Uninterrupted flow and continuous filtration.

TwinOmatic Mega

- Multiple filtration screens.
- Small footprint due to vertical position.
- Fully automatic operation.
- Wide filtration range.
- Simple, reliable and robust.
- Minimal flush water for cleaning.
- Process, manual override possible.
- Highly effective cleaning of total filtration during cleaning cycle.
- Uninterrupted flow and continuous filtration.

TwinOmatic Horizontal

- Uninterrupted flow and continuous drainage cleaning cycle.
- High effective cleaning of total filtration area.
- Automatically initiated self-cleaning process, manual override possible.
- Large, reliable and robust.
- Wide filtration range.
- Fully automatic operation.
- Low maintenance.

For more detailed information please see our data sheets, available on request.

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Parker Hannifin representatives of Twin Filter products:

Parker Hannifin North America, Houston TX
dick.koelewijn@parker.com
phone  +1 713 769 7295

Parker Hannifin Australia, Perth
dick.koelewijn@parker.com
phone  +61 93693 4031

Parker Hannifin Singapore PTE LTD
bphilips@parker.com
phone  +65 6647 4030

www.twinfilter.com
twinfilter.info@parker.com
phone  +31 756 555 000
fax  +31 756 555 015

Parker Twin Filter

Twin Filter BV
A Parker Hannifin company
Zaadstraat 398
1505 HE Zaandam
The Netherlands
phone  +31 76 505 7070
twinfilterinfo@parker.com
www.twinfiltertechnology.com
www.twinfilterbv.com

Parker Hannifin Industrial/Malaysia
dick.koelewijn@parker.com
phone  +60 3 7849 0800

Parker Hannifin Indonesia
dick.koelewijn@parker.com
phone  +62 21 7368 1806

Parker Hannifin Singapore PTE LTD
dick.koelewijn@parker.com
phone  +65 6647 4030

TWINOMATIC
Automatic Self Cleaning Filter Series
Our TwinOmatic self cleaning filters are commonly used as first filtration step for surface waters such as sea, lake, river or canal water. The TwinOmatic is highly effective in removing suspended solids down to 50 micron without flocculants, pre coats or granulated media. The TwinOmatic is positioned directly after the water intake pump and is normally equipped with one or more screens in the range of 50 to 1000 micron. This pre treated water can than be used in a wide range of applications like: pipeline flushing, injection water for enhanced oil recovery, RO pre filtration, cooling water and general process water.

**FILTERING PROCESS**

Water enters the filter through the inlet into the coarse screen (depending on type) from outside in and flows into the fine screen from inside out, creating minimum head loss. Different types of screens can be used for different threshold heads. The filter cake accumulating on the screen surface causes the development of head loss across the screen. When this pressure difference reaches a pre set value, the cleaning mechanism is initiated. The suction scanner is driven by an electric motor and scans the screen spirally. It removes the filter cake after the drain valve opens. The hollow nozzles of the scanner collect the accumulated solids, which are then discharged through the drain valve. Cleaning takes approximately 25 seconds.

**CONTROL SYSTEM**

The TwinOmatic is equipped with a switch that transmits an electric signal to the controller when the differential pressure across this screen reaches the pre set value. The controller (PLC) activates the flushing cycle by opening the drain valve and starts the motor drive. The control system of the TwinOmatic can be integrated into your existing control room (DCS system) or the TwinOmatic can be supplied with a control cabinet for stand alone operation. Our TwinOmatic is ATEX compliance.

**BENEFITS**

- The TwinOmatic series is a competitive piece of filter equipment that can be used for the removal of suspended solids.
- A TwinOmatic extends the life, performance and efficiency of downstream bag or cartridge filters and/or other equipment.
- The filter flushes according to a pre set differential pressure and/or a pre set time. This ensures an uninterrupted flow and continuous filtration during cleaning of the filter screen.
- Minimal flush water loss (less than 5% of the total flow) is used for a short period of time for the cleaning process.

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**PIPELINE FLUSHING**

Systems such as fuel lines, tube lines, oil transfer lines and hydraulic systems require regular flushing to keep the pipelines clean. Our TwinOmatic is the ideal solution to remove large volumes of solids such as sand, gravel, heavy powder and rust. The TwinOmatic series protect the system to avoid and/or reduce wear and tear of the pipelines.

**INJECTION WATER**

Injection water is used to enhance pressure on a well, stimulating production and thus increasing oil recovery. Contaminated water will have significant impact on the performance of the water treatment facilities and will result in scaling of the pipes and loss of oil production. When using surface water, our TwinOmatic is the ideal solution as a first step to clean the water.

**RO PRE FILTRATION**

Sea water has to be desalinated in order to convert to fresh water suitable for human consumption. The reverse osmosis (RO) process removes salt from sea water and it is essential to remove contaminants from the water stream to protect the RO membranes from fouling. TwinOmatic is the ideal system to prolong the life of RO membranes and minimizes downtime.

**COOLING WATER**

All heat exchangers need to be protected against solids build up. Contaminants such as marine organisms eg, eggs, larvas etc can pollute heat exchangers and reduce efficiency. Our TwinOmatic is the most efficient and economical solution to clean the water and therefore protect your heat exchangers.

**GENERAL PROCESS WATER**

In all industries process water is reused for all kinds of applications. Our TwinOmatic can clean up this resource and thus optimizes your process.

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**SKID MOUNTED SYSTEM**

Twin Filter builds complete systems specially designed for the high demands of the oil and gas process industries. Parker Twin Filter can design a custom made skid mounted lay-out for the TwinOmatic series, to match your needs and protect the equipment on site. Other options such as material, connection type and size are available on request.

* Please note that a TwinOmatic is a custom made piece of equipment and all technical specifications are subject to the application where the TwinOmatic is used. Please consult us to discuss your specific requirements.
**Adding value to your process.**

Suitable for (surface) water intake applications within the oilfield and industrial process industries.

Twin Filter B.V., a member of the Parker Hannifin Corporation, manufactures its own automatic self cleaning filter series: TWINOMATIC. Heavy duty filter equipment that can be used in many different applications within the oilfield and industrial process industries, specially designed for high flow rates and continuous operation. Our TwinOmatic is capable of handling flow rates up to 7200 m³/h covering a filtration range from 50 to 1000 microns. The unique design of the TwinOmatic automatic self cleaning filter series guarantees a continuous flow rate, even during the cleaning cycle. The cleaning mechanism uses high efficiency suction nozzles which clean 100% of the total filter area due to the spiral rotation of the suction scanner. After reaching a pre set differential pressure the cleaning process starts automatically but manual override is always possible.

**BENEFITS**

- The TwinOmatic series is a competitive piece of filter equipment that can be used for the removal of suspended solids.
- A TwinOmatic extends the life, performance and efficiency of downstream bag and/or cartridge filters and/or protect other equipment.
- The filter flushes according to a pre set differential pressure and/or a pre set time. The ensures an uninterrupted flow and continuous filtration during cleaning of the filter screen.
- Minimal flush water (less than 5% of the total flow) is used for a short period of time for the cleaning process.

**SKEW MOUNTED SYSTEM**

Twin Filter builds complete systems specially designed for the high demands of the oil and gas and process industries. Parker Twin Filter can design a custom made skid mounted lay-out for the TwinOmatic series, to weigh, move or protect the equipment on site. Other options such as material, connection type and size are available on request.

*Please note that a TwinOmatic is a custom made piece of equipment and all technical specifications are subject to the application where the TwinOmatic is used.* Please contact us to discuss your specific requirements.

**PIPING FLUSHING**

Systems such as fuel lines, tube lines, oil transfer lines and hydraulic systems require regular flushing to keep the pipelines clean. Our TwinOmatic is the ideal solution to remove large volumes of solids such as sand, gravel, heavy powder and rust. The TwinOmatic series protect the system to avoid and/or reduce wear and tear of the pipelines.

**INJECTION WATER**

Injection water is used to enhance pressure on a well, stimulating production and thus increasing oil recovery. Contaminated water will have significant impact on the performance of the water treatment facilities and will result in excessive treatment and loss of oil production. When using surface water, our TwinOmatic is the ideal solution as a first step to clean the water.

**RO PRE FILTRATION**

Sea water has to be desalinated in order to convert to fresh water suitable for human consumption. The reverse osmosis (RO) process removes salt from sea water and it is essential to remove all suspended particulates from the water stream to protect the RO membranes from fouling. TwinOmatic is the ideal system to prolong the life of RO membranes and minimizes downtime.

**COOLING WATER**

All heat exchangers need to be protected against solids build up. Contaminants such as marine organisms, eggs, larvae, etc can pollute heat exchangers and reduce efficiency. Our TwinOmatic is the most efficient and economical solution to clean the water and therefore protect your heat exchangers.

**GENERAL PROCESS WATER**

In all industries process water is reused for all kinds of applications. Our TwinOmatic can clean up this resource and thus optimize your process.

**FILTERING PROCESS**

Water enters the filter through the inlet to the coarse screen (depending on type) from outside in and flows into the fine screen from side out, cleaning, minimum head loss. Different types of screens can be used for different head losses. The filter cake accumulating on the screen surface causes the development of head loss across the screen. When this pressure difference reaches a pre set value, the cleaning mechanism is initiated. The suction scanner is driven by an electric motor and scans the screen spirally. It removes the filter cake after the drain valve opens. The hollow nozzles of the scanner collect the accumulated solids, which are then discharged through the drain valve. Cleaning takes approximately 25 seconds.

**CONTROL SYSTEM**

The TwinOmatic is equipped with a switch that transmits an electric signal to the controller when the differential pressure across the screen reaches the pre set value. The controller (PLC) activates the flushing cycle by opening the drain valve and starts the motor drive. The control system of the TwinOmatic can be integrated into your existing control room (DCS system) or the TwinOmatic can be supplied with a control cabinet for stand alone operation. Our TwinOmatic is ATEX compliance.
Minimal flush water (less than 5% of the total flow) is used for a short period of time for the cleaning process. The TwinOmatic series is a competitive piece of equipment that can be used for the removal of suspended solids.

Our TwinOmatic self-cleaning filters are commonly used as first filtration step for surface waters such as sea, lake, river or canal water. The TwinOmatic is highly effective in removing suspended solids down to 50 micron without flocculants, pre coating or granulated media. The TwinOmatic is positioned directly after the water intake pump and is normally equipped with one or more screens in the range of 50 to 1000 micron. This pre treated water can than be used in a wide range of applications like: pipeline flushing, injection water for enhanced oil recovery, RO pre filtration, cooling water and general process water.

**FILTERING PROCESS**

Water enters the filter through the inlet to the coarse screen (depending on type) and flows into the fine screen from inside out, creating minimum head loss. Different types of screens can be chosen for different treatment needs. The filter cake accumulating on the screen surface causes the development of head loss across the screen. When this pressure difference reaches a pre-set value, the cleaning mechanism is initiated. The suction scanner is driven by an electric motor and repositions itself using a brush that is then discharged through the drain valve. Cleaning takes approximately 25 seconds.

**CONTROL SYSTEM**

The TwinOmatic is equipped with a switch that transmits an electric signal to the controller when the differential pressure across the screen reaches the pre-set value. The controller (FC) activates the flushing cycle by opening the drain valve and starts the motor drive. The control system of the TwinOmatic can be integrated into your existing control room (DCS system) or the TwinOmatic can be supplied with a control cabinet for stand alone operation. The TwinOmatic is ATEX compliance.

**PIPELINE FLUSHING**

Systems such as fuel lines, tube lines, oil transfer lines and hydraulic systems require regular flushing to keep the pipelines clean. Our TwinOmatic is the ideal solution to remove large volumes of solids such as sand, gravel, heavy powder and rust. The TwinOmatic series protect the system to avoid and/or reduce wear in the pipelines.

**INJECTION WATER**

Injection water is used to enhance pressure on a well, stimulating production and thus increasing oil recovery. Contaminated water will have significant impact on the performance of the water treatment facilities and will result in cleaning of the pump and loss of oil production. When using surface water, our TwinOmatic is the ideal solution as a first step to clean the water.

**RO PRE FILTRATION**

Sea water has to be desalinated in order to convert to fresh water suitable for human consumption. The reverse osmosis (RO) process removes salt from sea water and it is essential to remove contaminants from the water stream to protect the RO membranes from fouling. TwinOmatic is the deep system to prolong the life of RO membranes and minimize downtime.

**COOLING WATER**

All heat exchangers need to be protected against solids build up. Contaminants such as marine organisms, eggs, larvae etc can pollute heat exchangers and reduce efficiency. Our TwinOmatic is the most efficient and economical solution to clean the water and therefore protect your heat exchangers.

**GENERAL PROCESS WATER**

In all industries process water is reused for all kinds of applications. Our TwinOmatic can clean up this resource and thus optimize your processes.
TwinOmatic Self Cleaning Filter

Our standard TwinOmatic series consist of the following types:

- **TwinOmatic Horizontal**
  - Uninterrupted flow and continuous operation, highly effective cleaning of total filtration area.
  - Automatically initiated self cleaning process, manual override possible.
  - Simple, reliable and robust.
  - Wide filtration range.
  - Fully automatic operation.
  - Low maintenance.

- **TwinOmatic Vertical**
  - Uninterrupted flow and continuous operation, highly effective cleaning of total filtration area.
  - Automatically initiated self cleaning process, manual override possible.
  - Simple, reliable and robust.
  - Wide filtration range.
  - Fully automatic operation.
  - Low maintenance.

- **TwinOmatic Compact**
  - Uninterrupted flow and continuous operation, highly effective cleaning of total filtration area.
  - Automatically initiated self cleaning process, manual override possible.
  - Simple, reliable and compact.
  - High efficiency due to prefiltor.
  - Low maintenance.
  - Fully automatic operation.
  - Wide filtration range.
  - Simple, reliable and compact.

- **TwinOmatic Brush**
  - Uninterrupted flow and continuous operation, highly effective cleaning of total filtration area.
  - Automatically initiated self cleaning process, manual override possible.
  - Simple, reliable and compact.
  - High efficiency due to vertical position.
  - Minimal flush water for cleaning.
  - Fully automatic operation.
  - Low maintenance.

- **TwinOmatic Mega**
  - Uninterrupted flow and continuous operation, highly effective cleaning of total filtration area.
  - Automatically initiated self cleaning process, manual override possible.
  - Simple, reliable and compact.
  - High efficiency due to vertical position.
  - Minimal flush water for cleaning.
  - Fully automatic operation.
  - Low maintenance.

For more detailed information please see our data sheets, available on request.

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**TwinOmatic Automatic Self Cleaning Filter Series**

- **Twin Filter BV**
  - A Parker Hannifin company
  - Product specialists
  - The Netherlands
  - phone +31 71 456 0000
  - fax +31 71 456 0700
  - twinfilt@parker.com
  - www.twinfilt.com

- **Twin Filter Australia, Sydney**
  - phone +61 2 9653 4111
  - www.twinfilt.com

- **Twin Filter Indonesia**
  - phone +62 21 7380 1006
  - www.twinfilt.com

- **Twin Filter Singapore PTE LTD**
  - phone +65 6487 4000
  - www.twinfilt.com

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**For more detailed information please see our data sheets, available on request.**
Our standard Twinomatic series consist of the following types:

- **TwinOmatic Horizontal**
  - Continuous flow and continuous cleaning cycle.
  - Highly effective cleaning of total filtration area.
  - Automatically initiated self-cleaning process, manual override possible.
  - Simple, reliable and robust.
  - Fully automatic operation.
  - Low maintenance.
  - Extra protection due to prefiltro.

- **TwinOmatic Vertical**
  - Continuous flow and continuous cleaning cycle.
  - Highly effective cleaning of total filtration area.
  - Automatically initiated self-cleaning process, manual override possible.
  - Simple, reliable and robust.
  - Fully automatic operation.
  - Low maintenance.
  - Extra protection due to vertical position.

- **TwinOmatic Brush**
  - Continuous flow and continuous cleaning cycle.
  - Highly effective cleaning of total filtration area.
  - Automatically initiated self-cleaning process, manual override possible.
  - Simple, reliable and robust.
  - Fully automatic operation.
  - Low maintenance.
  - Extra protection due to vertical position.

- **TwinOmatic Mega**
  - Continuous flow and continuous cleaning cycle.
  - Highly effective cleaning of total filtration area.
  - Automatically initiated self-cleaning process, manual override possible.
  - Simple, reliable and robust.
  - Fully automatic operation.
  - Low maintenance.
  - Extra protection due to vertical position.

For more detailed information please see our data sheets, available on request.

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**TwinOmatic Automatic Self Cleaning Filter Series**

- **Twin Filter**
  - A Parker Hannifin company
  - Complete line of Twin Filter products
  - TwinFilter Web site: www.twinfilter.com

- **Parker Hannifin Singapore PTE LTD**
  - phone: +65 6647 5000

- **Parker Hannifin Industrial Malaysia**
  - phone: +60 3 7849 0800

- **Parker Hannifin Indonesia**
  - phone: +62 21 7588 1906

For more detailed information please see our data sheets, available on request.