



**PENTAIR**



**PACKAGED PRODUCTS**  
**COMMERCIAL AND**  
**INDUSTRIAL SYSTEM**  
**SOLUTIONS**

**VERSATILITY - RELIABILITY - COMPETITIVENESS**

**WATER PURIFICATION**

**TANKS & SYSTEMS - PACKAGED PRODUCTS**

# COMMERCIAL & INDUSTRIAL SYSTEM SOLUTIONS

Pentair launches a new range of system solutions for commercial and industrial applications.

Suitable for media and filtration purposes, this offering is aimed at providing complete solutions for applications ranging from 5 to 80+ m<sup>3</sup>/h flow rate.

Made of selected Pentair components, this range is designed to address most of today's environmental

issues, such as reduction of water consumption, but also enhancement of efficiency of various medias for commercial and industrial purposes.

Other system solutions can be developed to accommodate specific customer needs

## MODALITIES OF THE RANGE

### 1. WATER QUALITY

Unless the application is known, list the constraints, specifications and required water quality by using the determination module.

### 3. INDIVIDUAL PACK

Each module will be packed in an individual packaging.



### 2. EASY KIT

Kits are made of several modules: valve, tank and accessories. Those can be combined into a system that matches the best your needs.



### 4. SYSTEM ASSEMBLY

Assemble various modules to make your system.



**EXAMPLE** of ref. CI-FSK63-DUOSFEP01, a 63" filtration system delivering a 40m<sup>3</sup>/h filtered water and 80m<sup>3</sup>/h backwash

# KITS FROM FAMOUS BRANDS

## Softening and filtration kits originating from famous brands

Commercial & Industrial system solutions regroup many of Pentair's core branded products. Here is a selection of the most famous ones:

### FLECK



A large range of commercial and industrial valves, both metallic and composite. Customizable thanks to various options.

### AUTOTROL



A range of multi-port composite valves operated by flappers, and also controllers and accessories.

### SIATA



A broad range of multi-port composite valves with service flow rates up to 35m<sup>3</sup>/h, also suitable for DI application. The Profilter valve has a flow rate capability of more than 80m<sup>3</sup>/h, for demanding applications.

## WHAT ARE THE BENEFITS OF THE C&I SYSTEM SOLUTIONS RANGE?

	Procurement	Warehouse	Installation	Sales	Savings
Advantage					
	Manage only one kit reference, instead of several component references	System shipped on a unique stackable pallet = reduced stocking area	All components ready to be assembled for a reduced assembly time	No risk of losing a sale due to missing components	Ecological benefits of the Premium range: estimated 20% of water and salt savings
	Easier follow-up of order, shipment and delivery	Faster inventory turn, resulting in optimized warehousing efficiency	Reduced risk of errors or missing parts		Calculated reduction up to 40% on installation costs on multitank versus single tank operation
	A complete solution provided by a unique vendor, instead of having to work with several sources		Pentair hotline support		

# PROVEN SOLUTIONS

Our softening solutions can be supplied with the **Viridion technology**, which major benefit is to only use what is really needed in terms of water and salt during the regeneration process. This is making sure the earth's resources are used in a sustainable way.



## What is a Viridion technology?



A constant monitoring of water salinity during the regeneration phase permits to reduce the water consumption, leading to an increase of its efficiency.

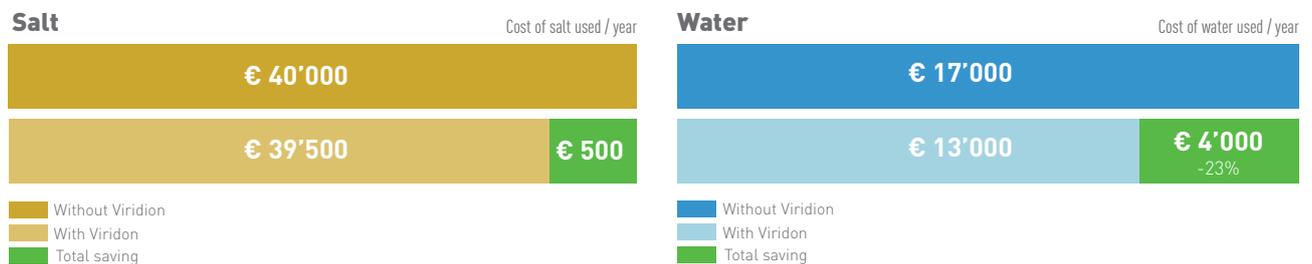
By stopping the rinse cycle once the level of water quality has been reached, the Viridion technology is able **to save an average 23% of water.**

### Benefits:

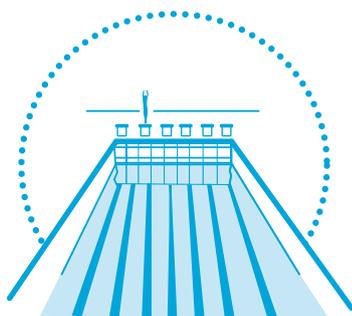
- Reduced water consumption during regeneration
- No chloride residuals in treated service water
- Regeneration phases' monitoring



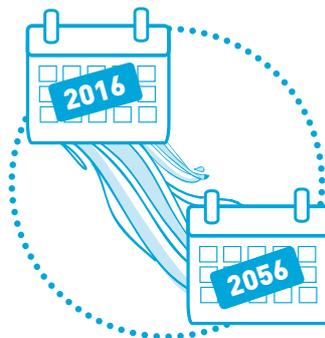
Practical example showing the yearly savings provided by one unit continuously treating 24m<sup>3</sup>/hour, ie 576m<sup>3</sup>/day



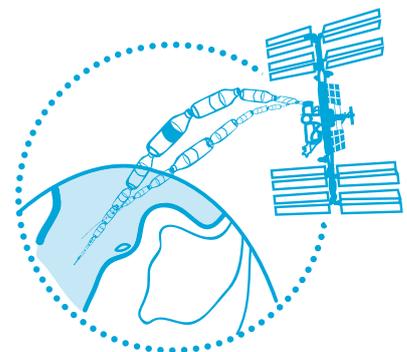
The amount of water saved each year is of 2200m<sup>3</sup> of water, which corresponds to:



1 olympic pool saved each year



40 years of water consumption for 1 person



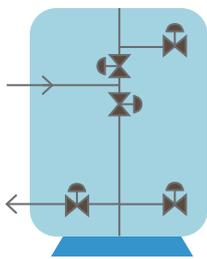
2.2 mio of bottles of water piled one onto each other would be the distance from Earth to the ISS space station and back

# PROVEN RESULTS

Significant savings can be obtained on filtration application by using several smaller tanks instead of a single bigger one.

Example below shows the difference between a single tank versus a multi-tank installation for a sand filter producing 100 m<sup>3</sup>/h 24/7:

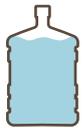
## SINGLE TANK DESIGN



1 tank of 100"  
with 5 two-way valves

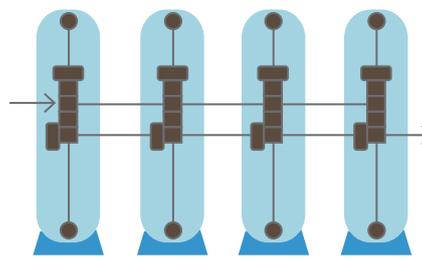


1 PUMP  
150kw



STORAGE TANK  
10'000 liters

## MULTI-TANK DESIGN



4 tanks of 48"  
with 1 multiport valve each



1 PUMP  
50kw



STORAGE TANK  
1'000 liters

## BENEFITS OF THE MULTI-TANK DESIGN VS SINGLE TANK

### Financial comparison single versus multi-tank design

Installation costs	Single tank design	Multi-tank design
Tanks	30'000€	27'200€
Valves & controller	12'800€	6'800€
Storage tank	4'500€	600€
Backwash pump	20'000€	5'000€
<b>Total</b>	<b>67'300€</b>	<b>39'600€ (-41%)</b>
Operation costs over a 10 year period		
Electricity (pump)	4'100€	1'400€
Maintenance valve	8'100€	2'900€
Maintenance pump	20'000€	5'000€
<b>Total</b>	<b>32'200€</b>	<b>9'300€ (-71%)</b>
Total installation + maintenance over period	<b>99'500€</b>	<b>48'900€</b>

save -50%

#### • DELAY

- Reduced manufacturing lead time thanks to standard smaller tanks

#### • HANDLING & TRANSPORT

- Easier handling and cheaper transport with 48" tanks
- Same applies to storage tank

#### • SPACE

- Smaller sized products means greater flexibility in terms of room layout and reduced size constraints

#### • MAINTENANCE

- Superior redundancy : reduced impact of performance in case of critical part change
- Reduced manufacturing lead time thanks to standard smaller tanks

#### • SAFETY

- Easier installation as parts are less heavy = reduced injury risk during commissioning

# 2 AVAILABLE CHOICES

## 1-BUDGET

- Ideal for **price sensitive** markets
- Reliable, simple, proven technology
- Access to common **accessories and features** from the Premium range, ie standard Pentair controllers, twin units...



## 2-PREMIUM

- A comprehensive solution for **specific and demanding** needs
- Several unique options, available for customers keen to **preserve the environment** or when interested in high-end technical options, such as the Viridion technology.



### FAST BRINING

Brine is mechanically produced by a water stream refill.

#### BENEFIT:

Immediate brine production

### VARIABLE BRINING

Brine is produced proportionally to the consumed media.

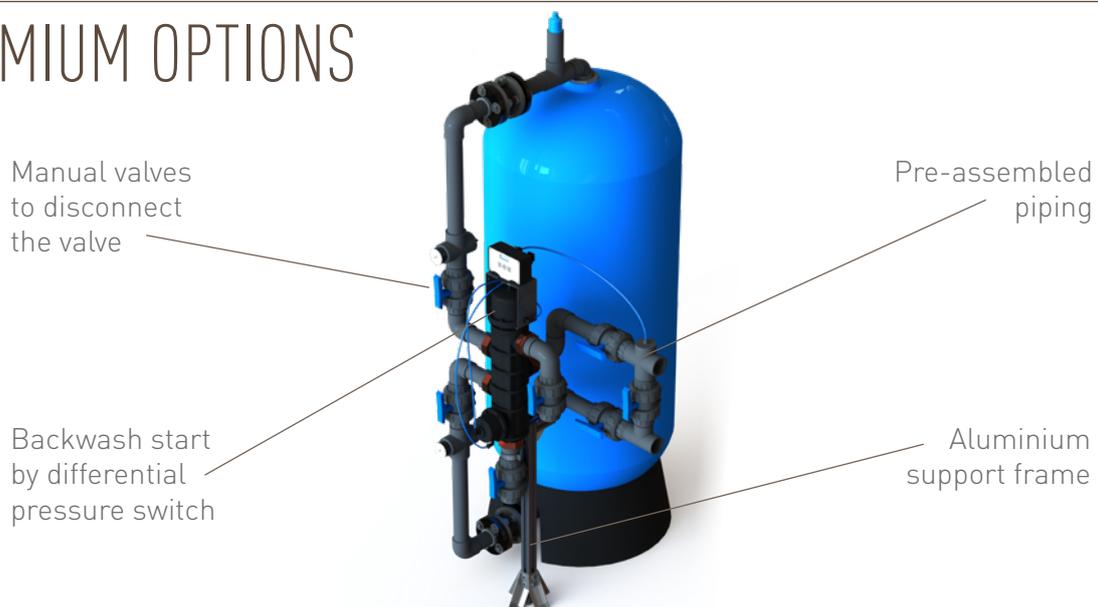
#### BENEFIT:

Only the required amount of brine is made up, leading to up to 30% salt savings

# SNAPSHOT OF THE RESPECTIVE FEATURES AND BENEFITS OF THE BUDGET AND PREMIUM OPTIONS.

	Advantages	Budget	Premium
Features	Customized high technological product line		•
	Multiplex (multiple units)		•
	Parallel units	•	•
	Twin units	•	•
	AMC Viridon intelligent controllers		•
	SFE-EV Viridon intelligent controllers		•
	Standard Pentair controllers	•	•
	Fast brining		•
	Variable brining		•
	Up Flow service		•
	Up Flow regeneration	•	•
	Backwash start based on differential pressure, ie less water consumption		•
	Pre-assembled piping	•	•
	Benefits	High efficiency , low chemicals and water consumption	
Full Pentair range access		•	•
User-friendly maintenance		•	•
Technical features and support		•	•
Specific, customized technical features and support			•
Customized packaging			•
Spare parts availability		•	•

## PREMIUM OPTIONS





## FOCUS ON 3 WAY VALVE

### 3 WAY VALVE V363 FILTRATION SYSTEM

Up to 40 m<sup>3</sup>/h  
backwash flow rate

Less number of  
valves compared to 2  
way valves

Can replace 1.5" to  
2.5" Aquamatic valves



## FILTRATION SYSTEM WITH 3 TANKS IN PARALLEL

### EQUIPPED WITH 3 WAY VALVES

Up to 40 m<sup>3</sup>/h backwash flow rate

Less number of valves compared to 2 way valves

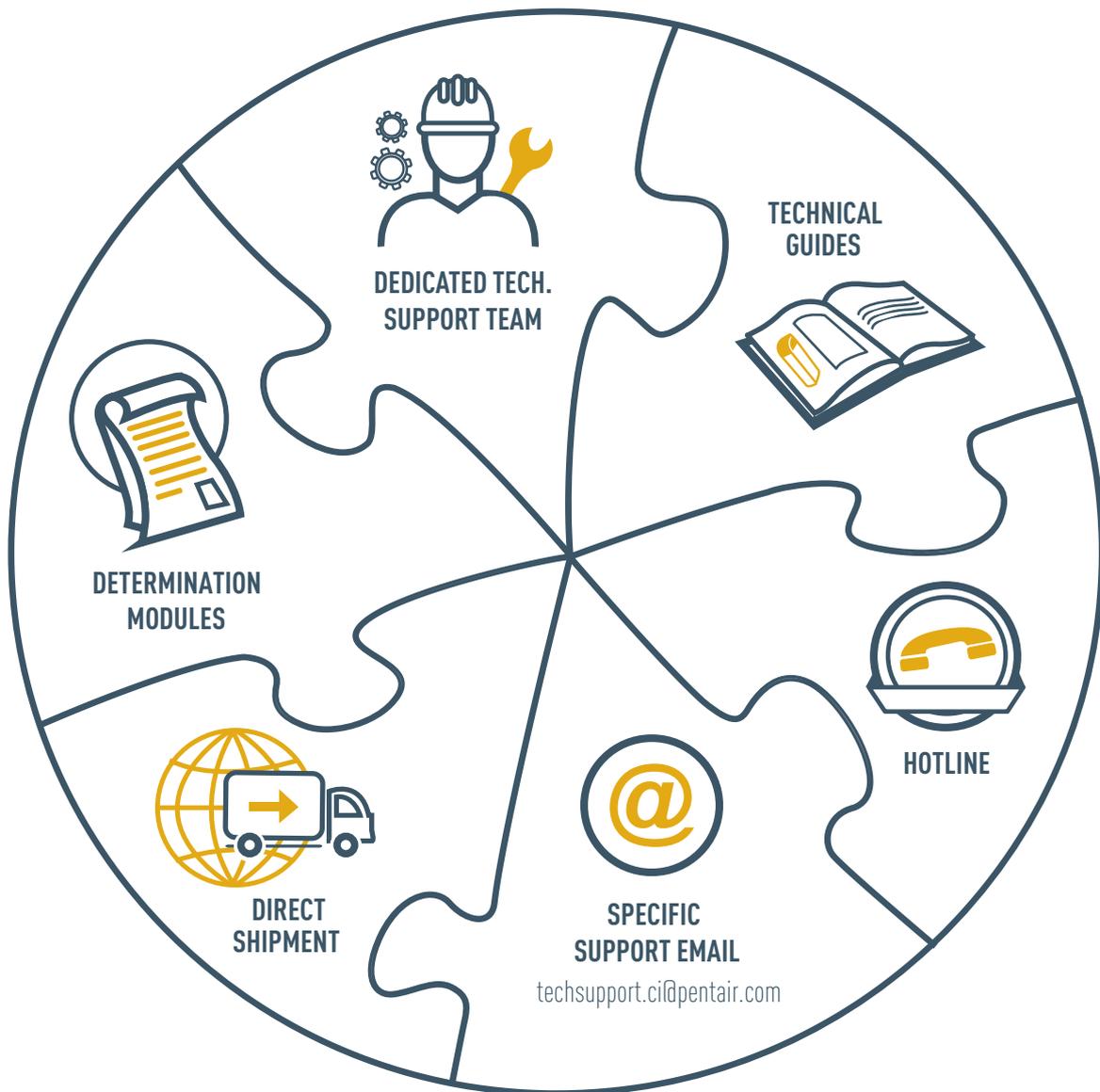
Can replace 1.5" to 2.5" Aquamatic valves

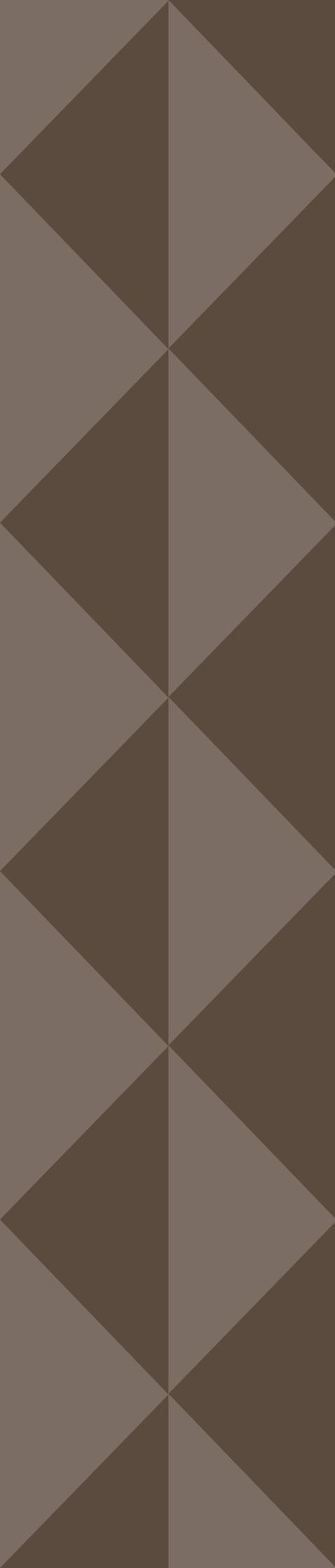


# SOLUTIONS WITH DEDICATED FEATURES

The C&I system solutions is supported by various documentation, people and technology, that are listed here below.

Do not hesitate to contact us if you would like to know more about the specifics of this range.





[www.pentairaquaeurope.com](http://www.pentairaquaeurope.com)