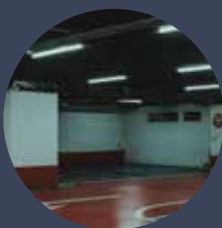


## PAM GLOBAL<sup>®</sup> Plus



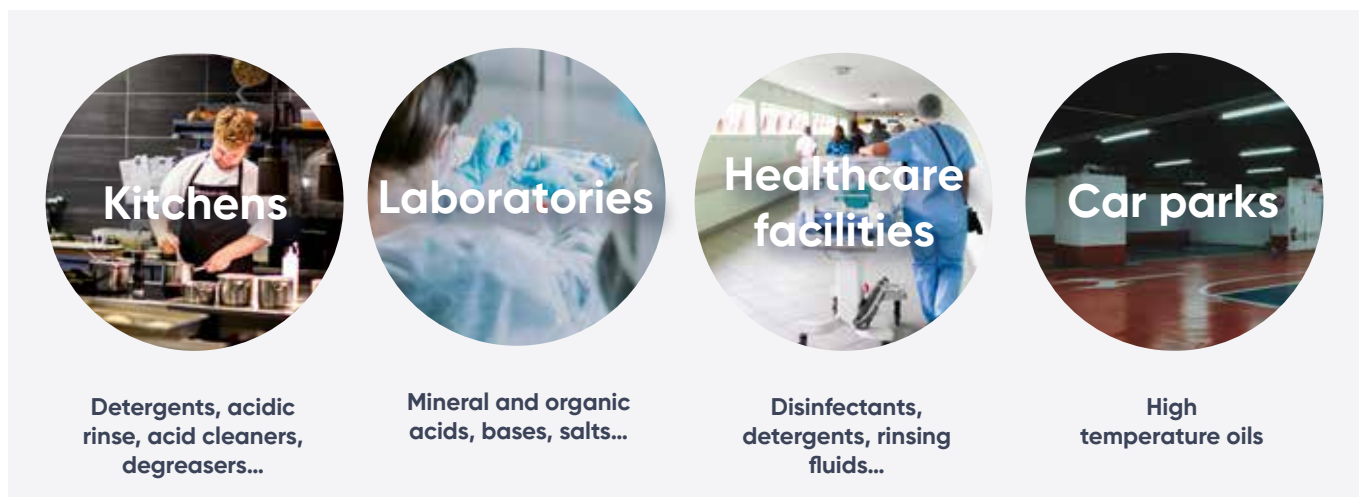
 High performance drainage solutions for aggressive fluids

# PAM GLOBAL® Plus

## Designed for buildings discharging aggressive effluents

✚ In environments such as hospitals, laboratories, collective kitchens, laundries, and parking facilities, the discharge of wastewater containing aggressive effluents presents a significant challenge. These settings require specialized sanitary drainage solutions that can withstand the harsh chemical and thermal conditions.

The PAM GLOBAL® PLUS range is specifically engineered to meet these demands, offering robust resistance to aggressive effluents and high temperatures, ensuring long-term durability and reliability in even the most demanding applications.








### ✚ The advantages of cast iron with additional core and outer guard



# Chemical & corrosion resistance

Resistance to the most common aggressive effluents for the intended applications. Test conditions as recommended by the supplier manufacturer.

	Description	Solution/medium	Dilution	Ph	Temperature of use (°C)	PLUS RANGE
 <b>Kitchen</b>	Highly alkaline detergent designed for use in dishwashers	Suma special L4	2 ml/l	/	60°C	OK
	Acidic rinse specially designed for use on a wide range of dishwashers	Suma CRYSTAL A8	0,1 ml/l	/	80°C	OK
	Concentrated acid cleaner for descaling small equipment	Suma calc D5	50 ml/l	/	20°C	OK
	Degreaser-disinfectant-bactericide	Suma Chlorsan D 10.4	1%	11,5	20°C	OK
 <b>Laundries</b>	Highly concentrated and phosphate-free detergent	Clax Revoflow PRO 0-P 35X2	4g/kg	11	60°C	OK
	Softening agent	Clax Revoflow Deosoft breeze 54x1	0,2 ml/l	3	20°C	OK
	Highly concentrated medium temperature activated oxygen bleach for fabric washing	Clax Revoflow OXI 4XP2	2 g/kg	9,9	60°C	OK
	Low-foaming disinfectant detergent for cleaning and disinfecting floors and surfaces	TASKI Sprint DS 5001	1%	9,5-11,3	20°C	OK
 <b>Health care</b>	Soft soap	Aniosafe (Aniosafe savon doux HF)	pure	7,9	40°C	OK
	Disinfectant	Soluscope A	0,06%	5,5	40°C	OK
	Concentrated detergent and pre-disinfectant for ENT and TEE machines	Soluscope C+ (chlorure d'amonium)	0,50%	2,5	40°C	OK
	Disinfectant	Soluscope P (acide parasétique)	0,06%	1,5	40°C	OK
	Detergent for automatic washing machines and washing tunnels	Aniosyme Synergy WD ultra	0,50%	10	55°C	OK
	Détergent pré-désinfectant pour nettoyer les instruments médicaux	Anio (Aniosyme X3)	0,50%	7,5	20°C	OK
	Pre-disinfectant cleaner for medical and surgical instruments	Anios Clean Excel D	0,50%	7	20°C	OK
	Disinfectant for surgical equipment	Actanios HLD	pure	5	20°C	NOK
	Detergent, disinfectant for the treatment of surgical equipment	Actanios LDI	0,50%	12	55°C	OK
	Neutralising rinsing fluid with lubricating effect for dental and medical instruments	Anios RWH	0,30%	2,5	55°C	OK
	Disinfectant for hemodialysis generator circuits and water treatment circuits	Anios Oxyanalyse	3%	2,5	20°C	OK
	Acid rinsing product - Contains surfactants	Anios LB 30	0,30%	2	55°C	OK
	Concentrated rinsing detergent for the treatment of thermal wash basins	Anios LB 400	0,30%	2,5	55°C	OK
	Neutral disinfectant detergent - concentrate. Bactericide, fungicide, virucide	Degragerm Smart Dose - Taski	1%	11	20°C	OK
	Broad spectrum disinfectant detergent for non-porous surfaces - Bactericide, Virucide, Levuricide	Oxivir Excel	4%	1,5	20°C	OK
	Detergent / descaler for sanitary facilities	TASKI Sani Antikal	pure	1,5	20°C	OK
 <b>High temperature oils</b>		Petroleum	pure		20°	OK
		Gasoline	pure		20°	OK
		Diesel	pure		20°	OK
		Lubricants, petroleum derivatives	pure		20°	OK
		High temperature oils	pure		80°	OK

		Solution/medium	Formule	Dilution	Ph	Temperature of use (°C)	PLUS RANGE
<div> Laboratories Industries</div>	Water		Salt water	30 g/l	5,5	80°	OK
			Desalinated water	pure	6,5	80°	OK
	Mineral acids	Hydrochloric acid	HCl	5%	1	20°	OK
		Sulphuric acid	H <sub>2</sub> SO <sub>4</sub>	10%	1	20°	OK
		Phosphoric acid	H <sub>3</sub> PO <sub>4</sub>	10%	1,3	20°	OK
		Phosphoric acid	H <sub>3</sub> PO <sub>4</sub>	2,5	2	80°	OK
		Nitric acid	HNO <sub>3</sub>	10%	2	20°	OK
	Organic acids	Lactic acid	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	10%	1,1	20°	OK
		Citric acid	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	5%	2	80°	OK
		Vinegar		30%	2,9	20°	OK
	Bases	Soda solution(sodium hydroxide)	NaOH	0,01 mol/l	12	80°	OK
		Soda solution(sodium hydroxide)	NaOH	1 mol/l	13,5	20°	OK
		Ammonia(sodium hydroxide)	NH3	1 mol/l	12	80°	OK
		Potash	KOH	2 mol/l	13,5	20°	OK
		Potash	KOH	2 mol/l	13,5	80°	NOK
	Salts	Potassium chloride	KCl	3%	4,2	20°	OK
		Sodium phosphate monobasic	NaH <sub>2</sub> PO <sub>4</sub>	3%	4,2	20°	OK
		Ammonium sulphate	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	3%	6,7	20°	OK
	Solvents (except acetone)	Glykol	C <sub>2</sub> H <sub>6</sub> O	pure		20°	OK
		Ethanol	C <sub>2</sub> H <sub>6</sub> O <sub>2</sub>	pure		20°	OK
		Methanol	CH <sub>3</sub> OH	pure		20°	OK
		Xylene	C <sub>8</sub> H <sub>10</sub>	pure		20°	OK
		White spirit		pure		20°	OK

# PAM GLOBAL® Plus

## Designed for intensive use

The Plus range is a high-performance cast iron pipes and fittings system designed to withstand intensive use. Smartly designed to drain wastewater in above- and below-ground applications when exposed to hot and/or aggressive discharge. When installed below ground in aggressive environments it is highly resistant to external stresses.

### Certified performance

- Compliant with EN 877 standard validated by third party quality marks



### Fire safety

- Euroclass A2, s1-d0** reaction to fire
- Fire resistance up to 240 minutes depending on the configuration (generally requires no special fire protection, saving time and costs)

### Acoustic comfort

- Tests according to standard EN 14366 (IBP laboratory) for a flow rate of 2 liters/second, wall : 220kg/m<sup>2</sup>

### Easy maintenance & installation

- Long-lasting operational safety thanks to the robustness and stiffness (around 700 kN.m) of cast iron and the use of flexible mechanical couplings
- Ease of installation due to mechanical couplings assembled with simple tools

### Chemical & corrosion resistance

- Hot water resistance: 24 h at 95°C
- Thermal cycle resistance: 1500 cycles between 15°C and 93°C
- Chemical resistance for 2 ≤ pH ≤ 13 : up to 80°C (check resistance for more than 30 different effluents in the tables on p.56 and 57)
- External coating corrosion resistance test to neutral salt spray according to standard NF-EN ISO 9227\_2017: 2500 hours

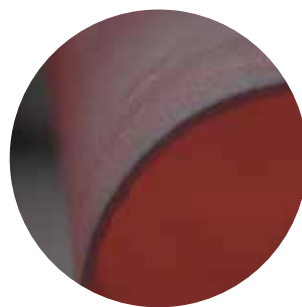
### Environment

- Recycled content: 99%
- Fully recyclable



# PAM GLOBAL® Plus

## Industrial expertise for safety and durability



### Manufacturing process

After casting, the pipes are specifically heat-treated at a 950°C temperature. They are cooled slowly and evenly. This thermal post-treatment leads to a rosette shaped formation of the graphite and thus to improved mechanical properties of the cast iron: among other things, the residual stresses are reduced and the tensile strength increases.

“

**As a result,  
PAM GLOBAL®  
cast iron pipes  
are particularly  
easy to cut.**

With thermal post-treatment, the cast iron pipe becomes softer and achieves a strength value of 210 HB measured according to Brinell hardness (HB). The pipes are therefore easy to machine.

### Cast Iron, a long lasting and noble material



#### COMPLIANCE

Manufacturing process and products are in compliance with international standards.



#### LONG LIFE

Durable and long lasting products saving long term financial resources.  
Watertightness, resistance to thermal expansion and internal pressure.



#### CHEMICAL AND CORROSION RESISTANCE

Resistant to aggressive and non aggressive effluents thanks to their coatings performances.



#### MINIMAL MAINTENANCE

Minimal maintenance during the lifetime of the building in normal conditions.



#### EASE OF INSTALLATION

Resistant to aggressive and non aggressive effluents thanks to their coatings performances.



#### FOREVER CIRCULAR

Our cast iron is made from 99% of recycled material and fully recyclable.

# PAM GLOBAL® Plus

Our products  
are installed  
worldwide



Some of the key references where  
our Plus solution is installed

- 01. Onassis Hospital • Athens, Greece
- 02. CHU Agadir • Morocco
- 03. Dubai Opera House • Dubai, UAE
- 04. Clinica Universidad de Navarra • Madrid, Spain

& more...



## YOU HAVE A PROJECT? ASK OUR EXPERTS



### Technical support

We can provide you  
bill of quantities,  
recommendations,  
information about  
acoustics, fire protection,  
or any other topic you  
have.



### Bespoke development

Upon request, we can  
provide special designs of  
fittings outside the ranges  
offered in our catalog.  
Send us your details and  
we will provide a response  
concerning the feasibility  
within two days.



### BIM library

- Generic cast iron EN 877  
BIM library
- Plus range EN 877 BIM  
library

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

[tcbatiment.sgpam@saint-gobain.com](mailto:tcbatiment.sgpam@saint-gobain.com) • Tel: +33 (0)3 66 88 19 47





For 150 years, we have been designing, manufacturing and supplying high-quality drainage systems for residential and commercial buildings and engineering structures.

We work exclusively with cast iron, a noble and durable material, of which we are a specialist and leader.

As a **leading manufacturer**, we claim excellence in our processes, products and services.

As a **responsible manufacturer**, we are at the forefront of sustainable performance to help reduce the carbon footprint of the construction sector.

As an **innovative manufacturer**, we put all our creative audacity into developing new, more specific and more efficient technologies, to deliver better products for your future needs.

Over **400**  
**employees**

Sales in more than  
**50 countries**

**+38** : our indicator  
« **Employee Net Promoter** » that  
reflects the number of  
staff willing to become  
Ambassadors of the  
company (on a scale of  
-100 to +100)

**2 manufacturing sites**  
for our products:

- Bayard sur Marne in France
- Telford in England

**35%**  
**female managers**

**1<sup>st</sup>** business in the  
cast iron industry to  
have published a third-party  
validated Environmental  
Product Declaration (EPD)

**1/3**  
**internships and**  
**work-study contracts**  
converted to full  
employment contracts

## Committed to reducing our impact on the environment



### Our mission: the safety and durability of buildings

Our cast iron solutions and systems contribute to ensure the comfort, safety and durability of the most demanding residential and commercial buildings. Their characteristics allow them to contribute to HQE, BREEAM, LEED and other international environmental certifications.



### Recycling of metal waste

Our products are made of 99% recycled materials (mainly scrap metal), which can be recycled indefinitely. Cast iron is a simple and sustainable material that allows a smart reuse of materials. Resistant, reliable and durable, cast iron has a bright future ahead of it. In 2021, we recycled the equivalent of 21,000 cars.



### Our ambitious goals for 2028-2030

Reducing carbon emissions directly linked to the cast iron pipe manufacturing process: a project for a electric furnace, a low-carbon energy source in France, was opened in 2024 for commissioning by 2028-2030 at our Bayard-sur-Marne site. A key step in pursuing the company's ambitions in terms of circular economy and environmental responsibility



**Customer service**

Opening hours : 8.30am -5.30pm (frenchtime)

Tel: +33 83 80 76 50/53/54

Fax: +33 3 \_3 80 76 57

**Pam Building**

21 avenue Camille Cavallier

BP 129 54705 PONT-À-MOUSSON Cedex, France

Tel : +33(0)3 83 80 67 89

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

Safe  
& forever  
circular