



VINYL SHEET PILES FOR CIVIL AND HYDROTECHNICAL ENGINEERING



The Pietrucha Manufacturing Philippines, Inc. a vinyl sheet pile manufacturing plant is located in the Freeport Area of Bataan, in Central Luzon, the Philippines.

The facility was established in 2016 by a Polish family company with 60 years' history specializing in the manufacturing and distribution of top-class geotechnical profiles and complete solutions for civil and hydrotechnical engineering.

- 30 years' track record in plastics processing
- Project support team and installation assistance
- Advanced machine park and quality control lab
- Own R&D division, cooperation with the leading research institutes
- ISO 9001:2015 certification









Durable, easy to install,, lightweight and economic alternative to the traditional solutions such as steel sheet piles, wood or concrete.



- Do not corrode and are resistant to the impact of atmospheric and biological factors including UV radiation, sea water.
- Resistant to mechanical damage such as scratches, cracking and abrasions.
- Costs efficient in transport due to their low weight.
- Simple installation using standard equipment: excavators, vibrohammers, piling rigs.
- Environmentally friendly solution with low carbon footprint.
- Safe for people and animals, neutral to drinking water.

Application:



Sheet pilings and cut-off walls with anchoring systems



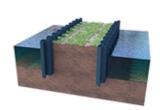
River bank protection and regulation



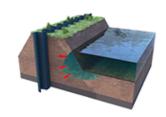
Retaining systems protecting slopes, landslides and various excavation sites



Protection of banks with variable water levels



Construction of causeways on water reservoirs



Reinforcement of floodbanks



Cut-off walls used to protect places with variable or raised groundwater level

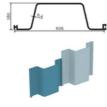


Cut-off walls in ecologically threatened areas

PRODUCT RANGE

Product Range Vinyl Sheet Piles

GW-610/6.4	unit	value
Section width	mm	606
Section depth	mm	180
Thickness	mm	6.4
Section modulus	cm³/m	613
Moment of inertia	cm ⁴ /m	5514
Allowable moment*	kNm/m	13.5
Ultimate moment	kNm/m	27



Product Range Vinyl Caps

Cap 120	unit	value	
Section width	mm	127	
Section depth	mm	60	
Thickness	mm	2,7	



Cap 180	unit	value
Section width	mm	180
Section depth	mm	90
Thickness	mm	9



Cap 290/6.0	unit	value
Section width	mm	290
Section depth	mm	90
Thickness	mm	6/7



Cap 290/9.0	unit	value
Section width	mm	290
Section depth	mm	90
Thickness	mm	9



GW-610/7.2	unit.	value
Section width	mm	606
Section depth	mm	200
Thickness	mm	7,2
Section modulus	cm³/m	774
Moment of inertia	cm ⁴ /m	7743
Allowable moment*	kNm/m	17,0
Ultimate moment	kNm/m	34,1

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GW-610/9.0	unit	value
Section width	mm	606
Section depth	mm	230
Thickness	mm	9
Section modulus	cm³/m	1109
Moment of inertia	cm4/m	12758
Allowable moment*	kNm/m	24.4
Ultimate moment	kNm/m	48

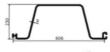


GW-458/10.4	unit	value
Section width	mm	458
Section depth	mm	254
Thickness	mm	10,4
Section modulus	cm³/m	1542
Moment of inertia	cm+/m	20718
Allowable moment*	kNm/m	33,9
Ultimate moment	kNm/m	67,8

^{*} Safety factor = 2

GW-458/12.0	unit	value
Section width	mm	458
Section depth	mm	254
Thickness	mm	12
Section modulus	cm³/m	1717
Moment of inertia	cm ⁴ /m	22937
Allowable moment*	kNm/m	37.8
Ultimate moment	kNm/m	75.5

Safety factor = 2











Product Range Corners

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Corner 45	unit	value
Section width	mm	81,50
Section depth	mm	76,70

Corner 580/610	unit	value
Section width	mm	96,50
Section depth	mm	58,80

Corner 300	unit	value
Section width	mm	45,00
Section depth	mm	15,60







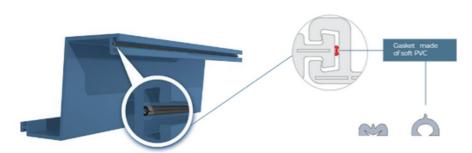




SHEET PILES WITH GASKETS

Sheet piles with gaskets 100% water tight structures

Some strategic investment projects require a guarantee of full water-tightness of the construction. In such cases, the Pietrucha sheet piles may be additionally equipped with integrated gaskets.





Unlike other manufacturers that either manually apply a gasket or recommend the inconvenient application of a hydrophilic sealant prior to installation, Pietrucha has incorporated a durable fused rubber gasket in the female connector.

The Gasket is co-extruded at the same time as the sheet pile and uses a soft PVC and is not rubber.

The gasket is hot fused with the sheet pile in the continuous production line which provides greater consistency, bond strength, and seal performance in excess of 10 bar. Anti-extrusion ridges prevent seal failure due to single-sided pressure.





CERTIFIED TECHNOLOGY

Pietrucha sheet piles are made from tough polyvinyl chloride, modified with refining agents (e.g. toughness modifiers, UV and thermal stabilizers and mineral filling components). The profiles are manufactured using the extrusion moulding method as monolithic profiles. Thanks to the use of the closed-cycle recycling, vinyl and hybrid sheet piles are an environmentally friendly solution.







COST EFFICIENCY

Installation and long-term cost savings due to superior corrosion resistance and lower price per unit meter material. The low weight of vinyl sheet piles results from the material density of 1.44 g/cm3. The density of steel used to manufacture steel sheet piles equals 7.86 g/cm3, i.e. over five times more. This significant weight reduction of PVC sheet piles generates considerable financial savings on transport.



50+ DESIGN LIFE

Due to its superior corrosion resistance, Pietrucha Vinyl Sheet Piles can be installed with the confidence of structural integrity and appearance even after 50 years.



BEST QUALITY TO PRICE RATIO

While other sheet pile suppliers deliver less quality products to help clients cut costs, Pietrucha Manudacturing Philippines offers affordable rates without sacrificing performance.



THE OPTIMAL SOLUTION

The profiles are corrosion-proof and resistant to the impact of atmospheric and biological factors including UV radiation, sea water.

Vinyl and hybrid sheet piles are costs efficient in transport due to their low weight.

Installation is fast and simple, covers small construction area and there is no need for heavy equipment.

Vinyl sheet piles are safe for drinking water.

- We offer installation assistance at the construction site by our technical team and training of the installation teams.
- Vinyl and hybrid sheet piles are compatible with traditional equipment – they can be driven and trimmed with conventional tools used for steel sheet piles.
- The installation works, as in the case of steel sheet piles, are performed using an excavator or a piling rig and a suitable vibrohammer.

CONTACT SALES AND TECHNICAL SUPPORT:

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