



PREFABRICATED VERTICAL DRAIN

(Machine & Materials)

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PREFABRICATED VERTICAL DRAIN (Machine)



PREFABRICATED VERTICAL DRAIN (Machine) NPS-20W



TECHNICAL DATA

PVD STITCHER

Description	Units	Data
Model	n/a	NPS-20W
Type	n/a	Wire rope type
Mast Height	m	22
Maximum Driving Depth	m	20
Capacity	m per day	12000**
Equipment for Mounting	n/a	Minimum 30 ton excavator
Motor Specification		
Brand	n/a	STAFFA (UK)
Geometric Displacement	cm ³ / r	3080
Average Actual Running Torque	Nm / bar	46.07
Max Continuous Speed	r / min	135
Max Continuous Output	kW (Hp)	130 (174)
Max Continuous Pressure	Bar (PSI)	250 (3625)
Max Intermittent Pressure	Bar (PSI)	293 (4250)

** assuming 10 working hours per day, 3 persons to a team and soil condition of less than SPT 20. The speed of driving also depends on the depth of driving and the general productivity which varies from country to country.

PREFABRICATED VERTICAL DRAIN (Machine) NPS-25W



TECHNICAL DATA

PVD STITCHER


Description	Units	Data
Model	n/a	NPS-25W
Type	n/a	Wire rope type
Mast Height	m	27
Maximum Driving Depth	m	25
Capacity	m per day	12000**
Equipment for Mounting	n/a	Minimum 45 to 50 ton excavator
Motor Specification		
Brand	n/a	STAFFA (UK)
Geometric Displacement	cm ³ / r	3080
Average Actual Running Torque	Nm / bar	46.07
Max Continuous Speed	r / min	135
Max Continuous Output	kW (Hp)	130 (174)
Max Continuous Pressure	Bar (PSI)	250 (3625)
Max Intermittent Pressure	Bar (PSI)	293 (4250)

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PREFABRICATED VERTICAL DRAIN

(Materials Technical Data Sheet)

A pocket-style PVD for the improvement of soft ground having a stable long-term discharge capacity, strong physical & mechanical properties, high chemical resistance and durability, which has achieved **CE certification** and the first certificate of product reliability, **R-mark**, related to the long-term performance of PVD in Korea.

Item	Property	Test Method	Unit	VD-808
Drain				
1	Core Configuration			
2	Core Material			Polypropylene
3	Width	ASTM D 3774, ISO 22198	mm	100 ± 5
4	Thickness	ASTM D 5199, ISO 9863-1	mm	3.5 ± 0.2
5	Tensile Strength, full width	ASTM D 4595, ISO 10319	N	≥ 2500
6	Tensile Strength at 10% Strain, full width	ASTM D 4595, ISO 10319	N	≥ 2000
7	Discharge Capacity, q_w , 350kPa ($i=1.0$)	ASTM D 4716	cm ³ /s	≥ 90
Filter				
8	Wide Width Tensile Strength, MD	ASTM D 4595, ISO 10319	kN/m	≥ 7.0
9	Grab Tensile Strength, MD	ASTM D 4632	N	≥ 500
10	Tear Strength, MD	ASTM D 4533	N	≥ 100
11	Puncture Resistance	ASTM D 4833	N	≥ 100
12	Coefficient of Permeability, k	ASTM D 4491, ISO 11058	m/s	≥ 1 × 10 ⁻⁴
13	Apparent Opening Size, O ₉₅	ASTM D 4751, ISO 12956	μm	< 75
Nominal Dimension				
1	Roll Length		m	250 / 300
2	Outside Diameter of Roll - approx.		m	1.10
3	Inside Diameter of Roll - approx.		m	0.15
4	20' container loading capacity - approx.		m	50,000
5	40' HC container loading capacity - approx.		m	125,000 / 150,000

Notes:

- 1) Discharge capacity, q_w , is based on index test with rigid-rigid bedding condition and calculated based on $q_w = Q/i \cdot R_T$, where Q is the flow rate per each unit of time (m³/s), i is hydraulic gradient and R_T is the temperature correction coefficient.
- 2) The values given are indicative and correspond to average test results obtained in our laboratory and independent authorized institutes. The above information may be subject to revision according to new developments and findings.
- 3) **Various specifications of PVD are available upon customer's demand.**