

# ASW MESH-TECH™ SAND SCREEN

Next generation, high performance unitized sand control screens

ASW Mesh-Tech screens are produced with an entirely new kind of technology that combines the support core, drainage layers, filter layers and protective outer shroud into a single, unitized screen cartridge. The screen cartridge is then assembled to perforated base pipe for a ready-to-run sand control solution. The unitized construction provides mechanical strength for stress and impact resistance. The cartridge design protects all of the inner meshes and affords the additional benefit of holding the meshes together, while large ID/OD ratios improve production efficiency.

Mesh-Tech screens provide 3D filtration that sorts produced sand while yielding sand-pack permeability significantly higher than formation sand. This creates negative skin at the sand and screen interface. With higher open flow areas, Mesh-Tech screens are superior to conventional slotted liners and wire-wrapped screens that provide only 2D filtration. Mesh-Tech screens are often preferred over pre-packed screens that provide 3D filtration, but have lower open flow areas and round uniform pores that can plug.

The unique pairing of high flow capacity and 3D filtration makes Mesh-Tech screens ideal for many sand control applications. They are ideal for conventional or heavy-oil production in long horizontal wells and in wells where produced sand sizes can vary from heel to toe. Mesh-Tech screens are also used for pump protection, and are often run below ESPs in high flow rate wells. The versatility of Mesh-Tech technology also allows these screens to be used with all inflow control devices (ICD).



## Applications

- Stand-alone sand control applications
- Used where screen durability is critical
- Ideal for installation in horizontal wells, and wells with extreme lengths, severe doglegs and tortuous environment
- Thermal and SAGD wells
- Pump protection.

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## Advantages

- High mechanical strength
- Rugged performance
- Flexibility in design and production
- Corrosion and erosion resistant
- High flow capacity and plugging resistance
- Optimized sand control and well productivity
- Longer well life
- Reduced completion costs, more cost-effective.

## ASW Mesh-Tech Sand Screen Dimensional Data

Base Pipe OD		Base Pipe ID		Base Pipe Weight		Base Pipe	Base Pipe Hole Size		Open Area of Base Pipe Holes		Mesh-Tech Screen Joint OD					
(in.)	(mm)	(in.)	(mm)	(lb/ft)	kg/m	(holes/ft)	(in.)	(mm)	(sq. in./ft)	(sq.cm/mm)	Fine		Medium		Course	
(in.)	(mm)	(in.)	(mm)	(lb/ft)	kg/m	(holes/ft)	(in.)	(mm)	(sq. in./ft)	(sq.cm/mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)
2.375	60.3	1.995	50.7	4.6	6.8	48	0.375	9.65	5.3	112.8	2.90	73.66	2.93	74.42	2.98	75.69
2.875	73.0	2.441	62.0	6.4	9.5	54	0.375	9.65	6.0	126.9	3.40	86.36	3.43	87.12	3.48	88.39
3.500	88.9	2.995	76.1	9.2	13.7	70	0.375	9.65	7.8	164.5	4.02	102.11	4.05	102.87	4.10	104.14
4.000	101.6	3.476	88.3	11.0	16.4	76	0.375	9.65	8.4	178.6	4.52	114.80	4.54	115.31	4.60	116.84
4.500	114.3	4.000	101.6	11.6	18.7	78	0.375	9.65	8.7	183.3	5.02	127.50	5.05	128.27	5.10	129.54
5.000	127.0	4.408	112.0	15.0	22.0	88	0.375	9.65	9.8	206.8	5.52	140.21	5.55	140.97	5.60	142.24
5.500	139.7	4.892	124.3	17.0	25.3	90	0.375	9.65	41.0	211.5	6.02	152.91	6.05	152.90	6.10	154.94
6.625	168.3	5.920	150.4	24.0	35.6	108	0.375	9.65	12.2	253.8	7.14	181.36	7.17	182.11	7.23	183.64
7.000	177.8	6.276	159.4	26.0	34.2	126	0.375	9.65	14.0	296.1	7.52	191.01	7.55	191.77	7.60	193.04

Mesh-Tech screen joints are supplied with base pipe for a unitized, ready-to-run sand control solution.



## ASW Mesh-Tech/TT Thru-Tubing Sand Screen Dimensional Data

Base Pipe OD		Base Pipe ID		Base Pipe Weight		Base Pipe	Base Pipe Hole Size		Open Area of Base Pipe Holes		Mesh-Tech/TT Screen Joint OD	
(in.)	(mm)	(in.)	(mm)	(lb/ft)	kg/m	(holes/ft)	(in.)	(mm)	(sq. in./ft)	(sq.cm/mm)	Fine	
(in.)	(mm)	(in.)	(mm)	(lb/ft)	kg/m	(holes/ft)	(in.)	(mm)	(sq. in./ft)	(sq.cm/mm)	(in.)	(mm)
1.315	33.4	1.049	26.7	1.70	2.6	30	0.375	9.65	5.1	107.9	1.65	41.90
1.660	42.2	1.380	35.1	2.30	3.5	36	0.375	9.65	6.0	127.1	2.04	51.80
1.900	48.3	1.610	40.9	2.75	4.1	42	0.375	9.65	4.6	97.4	2.31	58.70
2.063	52.4	1.751	44.5	3.25	4.9	42	0.375	9.65	4.6	97.4	2.42	61.80

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