# **SpinTek STMM Metal Membranes**



Closeup showing woven wire mesh



Stainless steel turbulence promoter

## Description

STMM Metal Membranes consist of a thin sintered matrix of stainless steel mesh membrane within the pore structure of sintered, woven-wire mesh. The thin This support structure is thin, yet exceptionally strong.

The medium has a smooth surface and excellent uniformity. It is an ideal choice for solid separation and solids recovery applications. In liquid service, this filter medium will function as an exceptionally high-performance stainless steel membrane.

## **STMM Chemical Resistance**

Standard construction material is all 316L Stainless Steel.

## **Major Advantages and Benefits**

The SpinTek STMM medium is capable of very fine removal efficiencies. The ultra thin filter medium stands up to repeated cleaning, thanks to the supporting wire mesh and the strength of its all-stainless steel construction. The SpinTek PALL Membrane PMM medium provides efficient cake formation and release for solids recovery applications, while providing a higher surface area than other technologies.

Acids	Alcohols	Aromatic Hydrocarbons	Bases	Esters
Acetic acid - glacial, 10%, 30%:, 90% Hydrochloric acid - conc. (35%), 6N (20%), 1N (3.3%) Nitric acid - conc. (67%), 6N (27%) Sulfuric acid - conc. (96%), 6N (16%)	Amyl Benzyl Butanol Ethanol Isopropanol Methanol	Benzene Toluene Xylene	Ammonium hydroxide - 3N (5.7%), 6N (11.4%) Potassium hydroxide - 3N (15%) Sodium hydroxide - 3N (11%), 6N (22%)	Amyl acetate Butyl acetate Cellosolve acetate Ethyl acetate Isopropyl acetate Methyl acetate
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#### **KEY BENEFITS**

- Very fine removal efficiences
- Thin filter medium
- Repeatedly cleanable
- Efficient solids recovery
- High surface area
- Excellence chemical resistence
- Back-flushable





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Exploded view showing STMM membrane stack

### STMM Chemical Resistance (continued)

Ethers	Glycols	Halogenated Hydrocarbons	Ketones	Miscellaneous
Ethyl ether Tetrahydrofuran Tetrahydrofuran/ water (50/50 v/v)	Ethylene glycol Glycerol Propylene glycol	Carbon tetrachloride, Chloroform Ethylene dichloride Methylene chloride Tetrachloroethylene	Acetone, Cyclohexanone Methyl ethyl ketone Methyl isobutyl ketone	Acetonitrile Dimethyl formamide Dimethyl sulfoxide Formaldehyde - 37%, 4% Hexane - dry Kerosene Pyridine 8 Megohm water; Cottonseed oil Peanut oil





Based on modified F2 efficiency test, removal efficiency by particle count. Weight percent removal data based on AC Fine Test Dust in air. Absolute retention ratings based on actual particle count data.



#### FLOW CHARACTERISTICS Clean pressure drop, liquid service water permeability 4

Pressure drop in psi obtained by multiplying value shown by actual flow desired in gpm, viscosity of liquid in centipoise (if other than 1 cp), all divided by total filtration area (ft2) selected.

#### STMM MEMBRANE SPECIFICATIONS

Grade	Size (in.)	Part Number
STMM020	11.75X48	STMM, 020, 316L, 11.75X48
STMM050	11.75X48	STMM, 050, 316L, 11.75X48
STMM100	11.75X48	STMM, 100, 316L, 11.75X48
STMM150	11.75X48	STMM, 150, 316L, 11.75X48
STMM200	11.75X48	STMM, 200, 316L, 11.75X48
STMM250	11.75X48	STMM, 250, 316L, 11.75X48

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