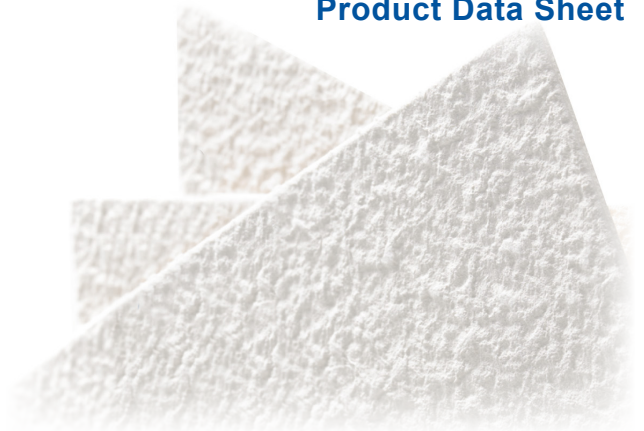


Gusmer's 1900SD series of gradient density depth filters are manufactured under strict process and quality controls to ensure uniform and consistent filtration performance. The combination of highly refined pulp and inorganic filter aids enhance filtration performance and provide higher wet strength, low extractables, and increased throughout.



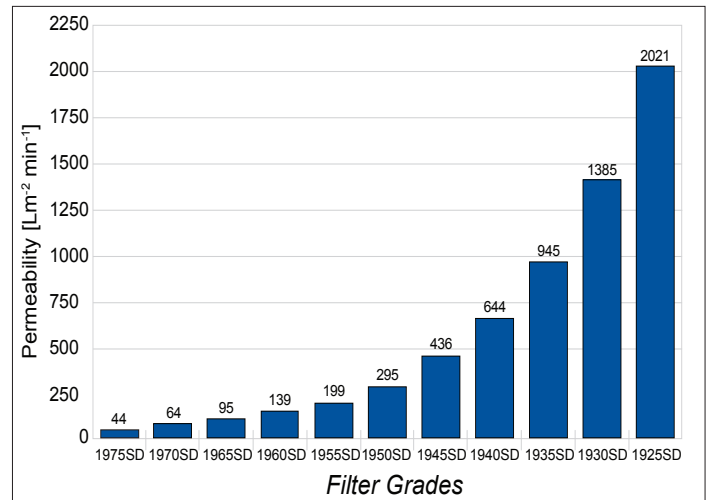
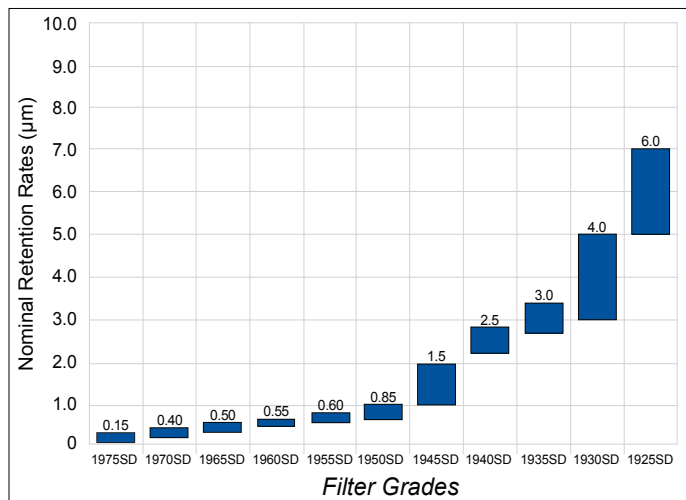
APPLICATION GUIDE

The information in this Application Guide is provided as a recommendation.

Filtration Type	Filter Grades	Possible Applications	Recommended Flow Rates gal/hr/ft ² (liter/hr/m ²)	Maximum Flow Rates gal/hr/ft ² (liter/hr/m ²)	Maximum Differential Pressure (psid)
Coarse Filtration	1925SD	Arrest Fermentation,	16 - 32 (652 - 1304)	30 - 40 (1222 - 1630)	45
	1930SD	Bioreduction, Fining			
	1935SD	Agent Removal, Gross			
	1940SD	Clarification			
Polish / Clarifying Filtration	1945SD	Bioreduction, Fining	8 - 24 (326 - 978)	20 - 30 (815 - 1222)	45
	1950SD	Agent Removal, Gross			
	1955SD	Clarification, Polished Degree of Clarity			
Sterile / Pre-membrane Filtration	1960SD	Bioreduction, Membrane	3 - 12 (122 - 489)	10 - 15 (407 - 611)	21
	1965SD	Protection, Micro-Organism			
	1970SD	Removal, Polished Degree			
	1975SD	of Clarity			

SHEET RETENTION AND PERMEABILITY RATINGS

Find the appropriate 1300SD filter for your application by choosing the desired level of retention and permeability.



PHYSICAL SHEET PROPERTIES

These tests are carried out according to ASTM methods or in accordance with Gusmer's standard laboratory test methods.

Grade Designation	Thickness (mm)	Mass per unit Area (gsm)	Ash Content (%)
1925SD	3.43	878	46.0
1930SD	3.43	975	54.0
1935SD	3.43	1000	54.0
1940SD	3.43	1060	54.0
1945SD	3.43	1070	54.0
1950SD	3.43	1070	54.0
1955SD	3.43	1080	54.0
1960SD	3.43	1100	53.0
1965SD	3.43	1100	53.0
1970SD	3.43	1185	51.0
1975SD	3.43	1220	51.0

Note: Test results are typical.

CERTIFICATIONS

Other documents including Certificate of Compliance, Certificate of Analysis, and Material Safety Data Sheets are available upon request. Supporting documentation is on file at Gusmer Enterprises, Inc.

CHEMICAL DATA

Typical metal extractables for the 1900SD Series are provided.

Metals	µg/g media
Aluminum (Al)	---
Antimony (Sb)	0.03
Arsenic (As)	---
Barium (Ba)	0.16
Boron (B)	0.44
Calcium (Ca)	0.91
Copper (Cu)	0.91
Iron (Fe)	---
Lithium (Li)	0.03
Magnesium (Mg)	10.67
Manganese (Mn)	0.97
Molybdenum (Mo)	0.07
Nickel (Ni)	0.08
Potassium (K)	12.8
Sodium (Na)	13.24
Strontium (Sr)	0.22
Titanium (Ti)	0.06
Tungsten (W)	0.01
Vanadium (V)	0.07
Zinc (Zn)	0.44

Metals: ppb, pure water flush of 5 L/sq. ft. with 24-hr soak

Note: "—" indicates metal was not detected

Note: Bi, Cd, Cr, Co, Ga, Ge, Pb, Hg, Ag, Sn also not detected in any sample



Important Note: Gusmer Enterprises, Inc. provides this information to the best of our knowledge. This information does not claim to be complete and Gusmer Enterprises, Inc. cannot assume liability for improper use. All users are advised to test products to meet their specific needs.