DIP TUBES & SPARGERS

Custom Manufactured For Your Application

Molded from heavy-wall, Virgin PTFE tubing, MFP Seals designs and manufactures both Dip Tubes and Spargers (Aerators) for applications where metallic tubing may have an adverse reaction with other materials or liquids. MFP Seals T1000, Virgin PTFE material remains inert and will not contaminate other compounds or liquids that it comes in contact with. We design our PTFE Dip Tubes and Spargers with a threaded tube and flange, that when assembled is also back-welded to ensure rigidity.

Our T1000 Dip Tubes and Spargers can handle temperatures up to +500°F and are designed specifically for applications with no agitation. To ensure the reliability and performance of our Dip Tubes and Spargers, each is custom made for the given conditions.

Limited only by industry standard tube stock sizes, the design possibilities are endless, well almost. MFP Seals can make your design a reality, whether you are looking for straight, open end, flanged tubes, angled or curved tubes, or tubes that are perforated on one end for flow control purposes. Let us bring your Dip Tube or Sparger design to life.

Material Facts
T1000 (Virgin PTFE)

Properties	Method	Typical Value
PHYSICAL - MECHANICAL		
Density (g/cm^3)	ASTM D792	2.14 - 2.18
Hardness Shore D (points)	ASTM D2240	51 - 60
Tensile Strength CD (MPa)	ISO 527	≥ 20
Elongation at Break CD (%)	ISO 527	>200
Compressive Strength at 1% deformation CD (psi)	ASTM D695	580 - 725
Deformation under load at room temp. after 24 hours at 13.7 N/mm^2 CD (%)	ASTM D621	14 - 17
Permanent deformation as above after 24 hours of rest at room temp. CD (%)	ASTM D621	7 - 8
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Impact strength Izod (J/m)	ASTM D256	153
TRIBIOLOGICAL		
Dynamic Coefficient of Friction	ASTM D1894 ASTM D3702	0.06
Wear factor K	ASTM D3702	2.900
PV limit at 3 m/min at 30 m/min at 300 m/min	$N/mm^2 \cdot m/min$	 2.4 4.2 5.7
THERMAL		
Service Temperature (min to max)	°C °F	-200 to +260 -328 to +500
Thermal expansion coefficient (linear) 25 - 100°C (10-5in/in/°F)	ASTM D696	6.625 - 7.206
ELECTRICAL		
Dielectric Strength (specimen 0.5 mm thick) (KV/mm)	ASTM D149	≥ 40
Dielectric Constant at 60 Hz and 106 Hz	ASTM D150	2.05 - 2.10
Volume Resistivity ($\Omega \cdot cm$)	ASTM D257	1018
Surface Resistivity (Ω)	ASTM D257	1017

CD = Cross Direction

MFP SEALS®
MARTIN FLUID POWER

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