

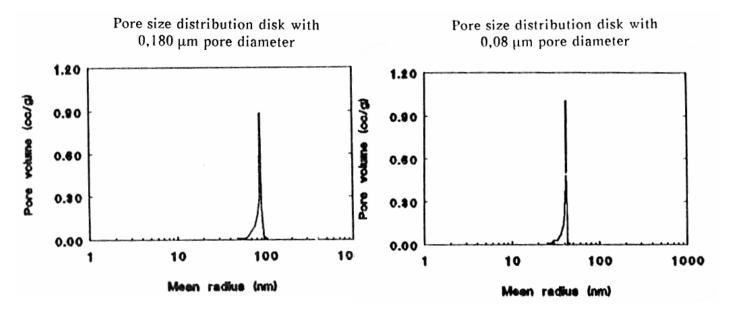
Functional Materials for Advanced Core Analysis, Rock Mechanics & Earth Sciences in the Laboratory & Field

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Ceramics

Supplied in Ø1" (25.4mm) and Ø1.5" (38.1mm) - usual thickness 5mm (other sizes available on request) Conversion to Oil-Wet character with Quilon C agent available.

Pore Size (um)	Calculated Bubble Point Pressure(bar)	
0.15	18.9	
0.08	35.5	



Membranes

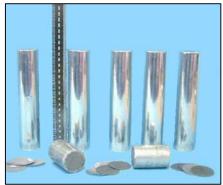
Oil-Wet and Water Wet available For example ErgoTech FP1 Oil Wet Microporous Membrane (Water Entry Pressure \sim 11 bars) Supplied in Ø1" (25.4mm) and Ø1.5" (38.1mm) - (other sizes available on request)

Various Pc and Electrical Contact Materials

Oil-Wet and Water Wet versions available Supplied in \emptyset 1" (25.4mm) and \emptyset 1.5" (38.1mm) - (other sizes available on request)

Malleable Tin Tubes

Parallel Wall Malleable Tin Alloy Tubes (Ø 38.1mm I/D x 180mm long x 0.2mm wall thickness) Suitable for Unconsolidated and Friable Core Mounting for Subsequent Routine Core Analysis



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Screens

Various mesh sizes available in 316L Stainless Steel and PTFE Supplied in Ø1" (25.4mm) and Ø1.5" (38.1mm) - (other sizes available on request)

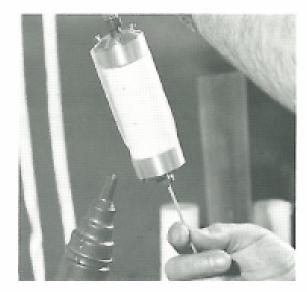


FEP Heatshrink

FEP Heat-shrink Method of Mounting Unconsolidated Sediments Supplied in Ø1" (25.4mm) and Ø1.5" (38.1mm) - (other sizes available on request)

Fluoroplastic Heat-Shrink Sleeves for Unconsolidated/Friable Reservoir Sediment Core Analysis

- Can be shrunk onto frozen, punched and standard core plugs
- Relatively low shrinkage temperature
- Completely unaffected by chemicals & solvents
- Completely unaffected by simulated brine
- Temperature stable in live crude and reservoir brine to 200°C
- Stable specific gravity
- Transparent
- Wide range of sizes



Nominal Core Dia. (inch - mm)	GEOSHRINK Order code	Internal dia, as aupplied (mm)	Min Internal dia. after shrink (mm)	Wall thickness before shrink (mm)	Average Wall thickness over core
1 - 25.4	GF\$23	31	23	0.4	0.5
1.5 - 38	0F832	43	32	0.4	0.5
2 - 51	GF846	62	46	0.4	0.5
2.5 - 64	GFB60	80	60	0.4	0.5
2.6 - 67	GF\$60	80	60	0.4	0.4
3 - 76	GF\$70	95	70	0.4	0.5
3.5 - 89	GFS70	95	70	0.4	0.4
4 - 102	GF895	128	95	0.4	0.5
4.5 - 114	GF895	128	95	0.4	0.4
5.25 - 133	GFS125	167	125	0.4	0.5
6 - 152	GFS125	167	125	0.4	0.4

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Method for 1" & 11/2" Core Plugs.

A piece of GEOSHRINK is cut to cover the full length of the plug plus 25 to 35mm. Cutting is best done with a scalpel blade against the edge of a metal tube which gives a square cut and does not distort the tube. The extra 20mm to 30mm of GEOSHRINK is needed to pre-shrink one end of the cut sleeve on a plug gauge to enable easy assembly of base, screen, core sample etc.

The base shrinking is achieved by applying the heat from an approx. 20mm diameter orifice at an angle of about 30° from the vertical axis of the plug gauge. The plug gauge is normally an aluminium tube whose diameter is slightly larger than the base platen or core sample.

With suitable skills and correct equipment the bottom region can be controlled to shrink only 15mm to 20mm. The resultant "Preform" is pulled off the plug gauge and slid on the base shrinking platen so that at least 5mm length of shrunk GEOSHRINK is extended above its top surface. A coarse stainless steel end screen with edge "barbs" pointing upwards is dropped into the tube and pushed against the base platen with the plug gauge. A fine stainless steel end screen is placed on top of the

coarse one and pushed firmly in place as before. A liquid nitrogen cored and cut or dry punched/cut plug is carefully spiral wrapped on its outer surface with appropriate thickness (see accessories list) of Teflon' unsintered tape. The prepared plug is carefully but firmly pushed against the fine screen. The top end of the plug is fitted with a fine screen followed by a coarse one with the "barbs" pointing downwards. The whole "sandwich" assembly is held between an other platen similar to the base one. The final shrinking is done whilst this stack is held together firmly and spun to ensure even heat application.

For best result the heat gun should be held in a simple jig for the best incident angle of the heat stream. The heat is applied from bottom upwards until the full extent of the sample plus the top platen is covered.

To achieve the necessary dexterity and protection from heat, the platens are fitted with long ¼" diameter stems which can be held securely during the critical manipulations. When the shrinking is completed the sample is pulled off the platens and the excess GEOSHRINK is cut back to about 5mm beyond the coarse screen.

Perforated PTFE Disks

for NMR Spectroscopy Supplied in Ø1" (25.4mm) and Ø1.5" (38.1mm) - (other sizes available on request)

