



Geo-Shrink® Heat Shrink Sleeving

Geo-Shrink® heat shrink is designed for unconsolidated and friable reservoir sediment core analysis.

Geo-Shrink® sleeving is made from special fluoropolymers, which were developed in 1992 and have gained acceptance with a wide circle of core analysis contractors, oil company exploration and production research laboratories.

Geo-Shrink® is available in a wide range of sizes, from 31mm to 160mm ID, and 0.50mm and 0.70mm thickness. We can also offer custom under expanded sizes cut to length, for specific testing applications.

Geo-Shrink® Heat Shrink Features

- ◆ Can be shrunk onto frozen, punched and standard core plugs
- ◆ Temperature stable in live crude and reservoir brine to 200°C
- ◆ Relatively low shrinkage temperature
- ◆ Completely unaffected by chemicals, solvents or simulation brine
- ◆ Stable specific gravity



Standard Geo-Shrink® Heat Shrink Sleeving Sizes

Core Dia. (inch - mm)	Adtech Part No	Supplied ID (mm)	Recovered ID (mm)	Wall Thickness (mm)	Wall Thickness over Core
1.00 - 25.40	GFS23	31	23	0.4	0.50
1.50 - 38.00	GFS32	43	32	0.4	0.50
2.00 - 51.00	GFS46	62	46	0.4	0.50
2.50 - 64.00	GFS56	76	56	0.4	0.50
2.60 - 67.00	GFS56	76	56	0.4	0.40
3.00 - 76.00	GFS65	80	65	0.4	0.50
3.50 - 89.00	GFS65	80	65	0.4	0.50
4.00 - 102.00	GFS95	115	95	0.4	0.50
4.50 - 114.00	GFS95	115	95	0.4	0.40
5.25 - 133.00	GFS113	150	115	0.5	0.70
6.00 - 152.00	GFS125	160	115	0.5	0.70

Geo-Shrink® Heat Shrink Application Technique

A piece of Geo-Shrink® is cut to cover the full length of the plug plus 25 to 35mm. Cutting is best done with a scalpel blade against the square edge of a metal tube, which gives a square cut and does not distort the tube. The extra 20-30mm of Geo-Shrink® 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.

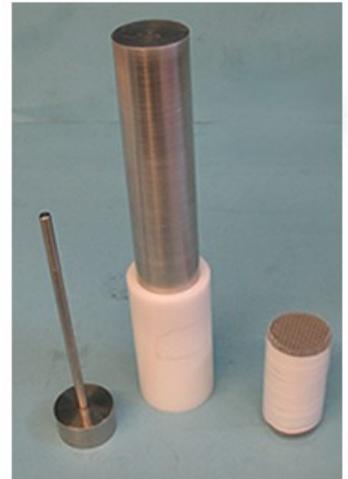
The base shrinking is achieved by applying the heat from an approx. 20mm diameter orifice at an angle of about 30 degrees from the vertical axis of the plug gauge. The plug gauge is normally an aluminium tube whose diameter is slightly larger than the base platen or core sample.

With suitable skills and correct equipment the bottom region can be controlled to shrink only 15mm to 20mm. The resultant 'Preform' is pulled off of the plug gauge and slid on the base shrinking platen, so that at least a 5mm length of shrunk Geo-Shrink® 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 PTFE 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 another platen similar to the base one. The final shrinking is done whilst the stack is held together firmly and spun to ensure even heat application.

For best results 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 1/4" 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 Geo-Shrink® is cut back to about 5mm beyond the coarse screen.



Accessories:

- ◆ Heat Gun 240 volt, 1500 watt, variable temperature
- ◆ PTFE Unsintered Tape 12mm wide, 0.075mm thick
- ◆ PTFE Unsintered Tape 12mm wide, 0.20mm thick
- ◆ Stainless Steel Screen, Coarse (20) (1"/25.4mm)
- ◆ Stainless Steel Screen, Fine (200) (1"/25.4mm)
- ◆ Stainless Steel Screen, Coarse (20) (1.5"/38mm)
- ◆ Stainless Steel Screen, Fine (200) (1.5"/38mm)

For more information about our Geo-Shrink® Heat Shrink, please visit adtech.co.uk

For other custom sizes or technical assistance, contact our customer service team:

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