
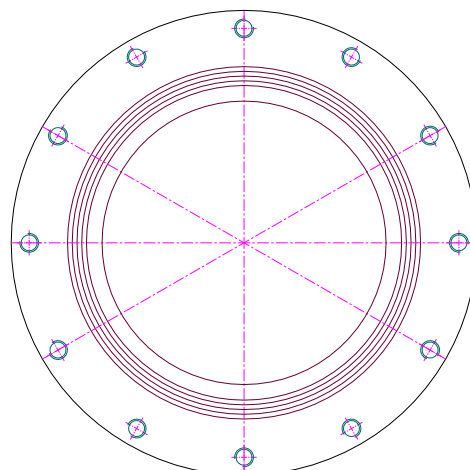
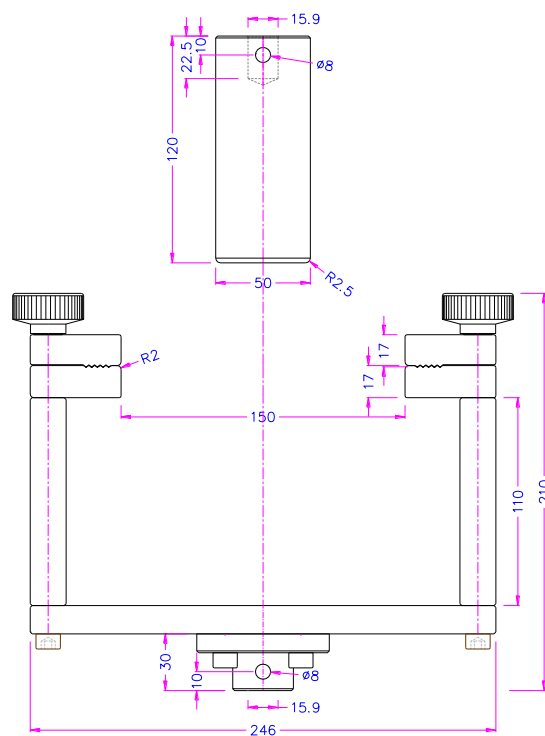
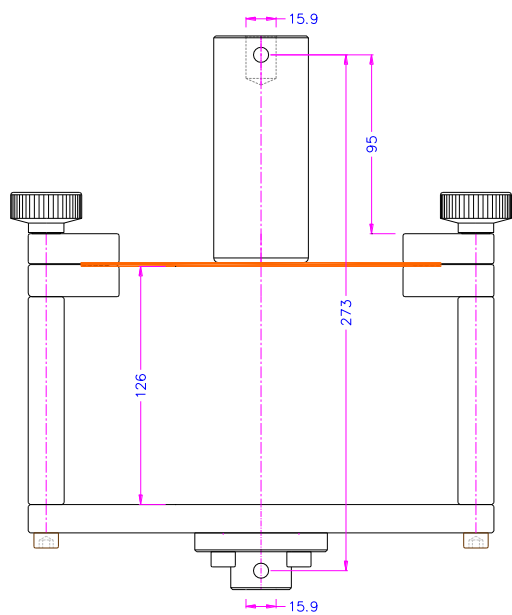



## PUNCTURE FIXTURES

to test geotextiles, plastic films, protective clothing, etc. according to ASTM-D6241-B, GOST56335, DIN EN ISO12236, ASTM-D5748.

<b>Item no.:</b>	<b>THS174-D150-F50-V1</b>	
Puncture fixture according to <b>ASTM-D6241-B, GOST56335</b> to test geotextiles		
Max. load:	50 kN	
Coupling:	Af159. Further couplings on request.	
Body:	Steel, nickel-plated	
Plunger:	Steel, hardened, nickel-plated	
Temperature range:	0 ... +70°C Further temperature ranges on request	
Weight:	19 kg per fixture with Af159 plunger incl. positioning tool	
Scope of supply:	1 fixture incl. sample positioning tool	



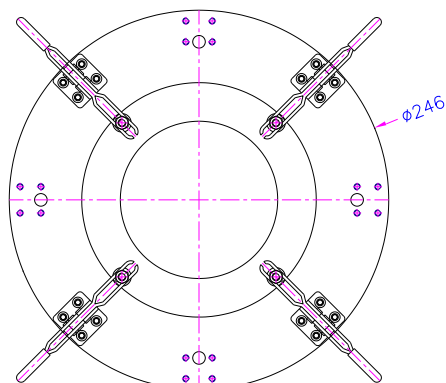
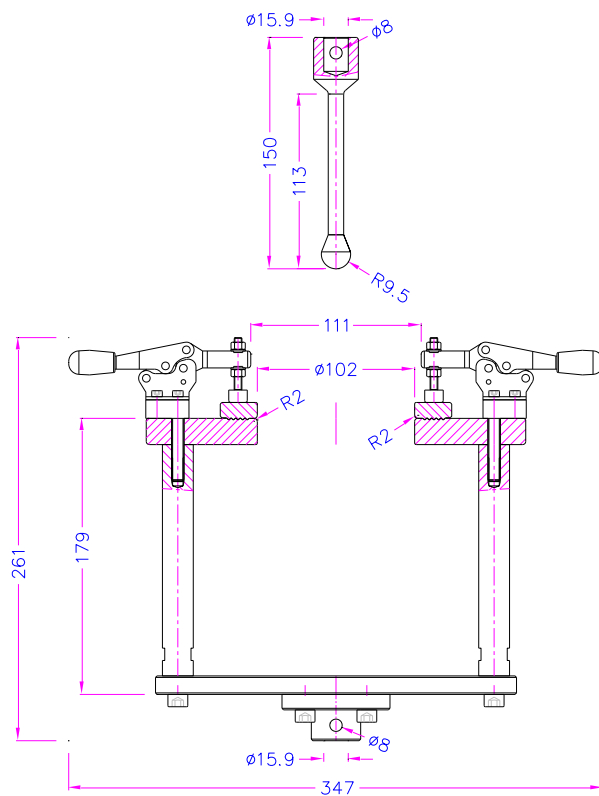
<b>Item no.:</b>	<b>THS174-D150-F50-V2</b>	
Puncture fixture according to <b>ASTM-D6241-B</b> , <b>GOST56335</b> , <b>DIN EN ISO12236</b> to test geotextiles		
Like <b>THS174-D150-F50-V1</b> but with a stainless-steel plunger		
Max. load:	50 kN	
Coupling:	Af159. Further couplings on request.	
Body:	Steel, nickel-plated	
Plunger:	Stainless steel	
Temperature range:	0 ... +70°C Further temperature ranges on request	
Weight:	19 kg per fixture with Af159 plunger incl. positioning tool	
Scope of supply:	1 fixture incl. sample positioning tool	

**Sample positioning tool for THS174-D150-F50-V1 and THS174-D150-F50-V2:**



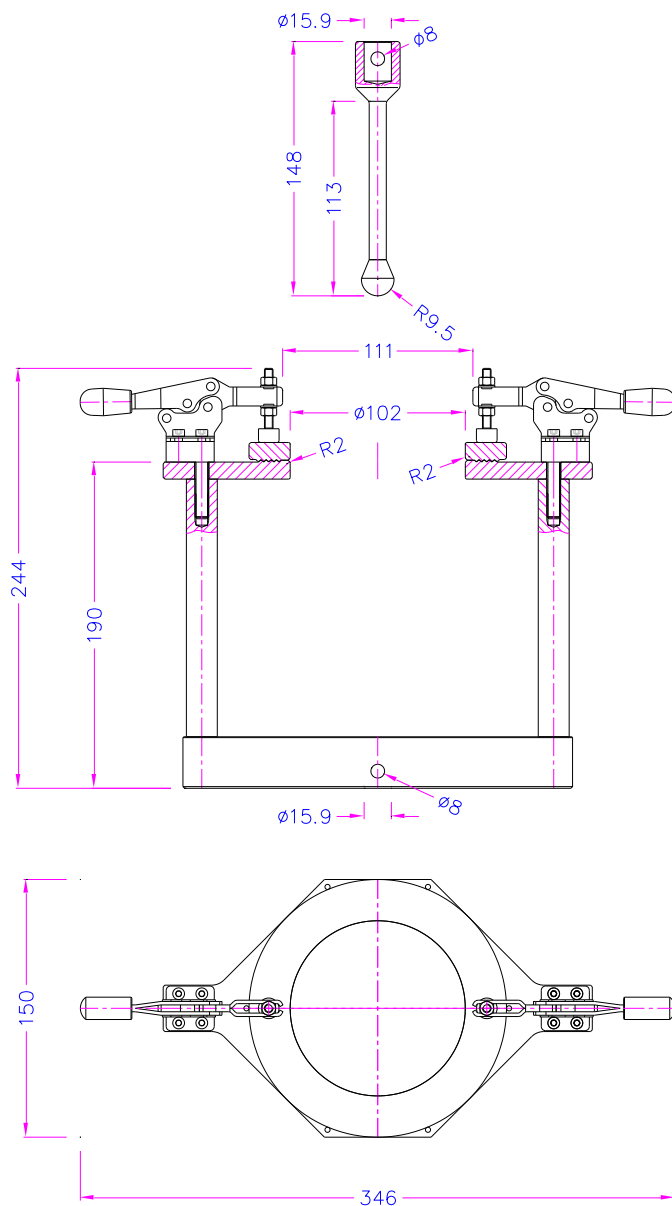
**Puncture fixture according to ASTM-D5748  
(Standard version – 8.9 kg)**

<b>Item no.:</b>	<b>THS174-D102-R9.5Te</b>
Puncture fixture according to <b>ASTM-D5748</b> to determine protrusion puncture resistance of stretch wrap film	
Max. load:	5 kN
Coupling:	Af159. Further couplings on request.
Body:	Steel, nickel-plated
Temperature range:	0 ... +70°C Further temperature ranges on request
Weight:	8.9 kg per fixture with Af159 plunger
Scope of supply:	1 fixture

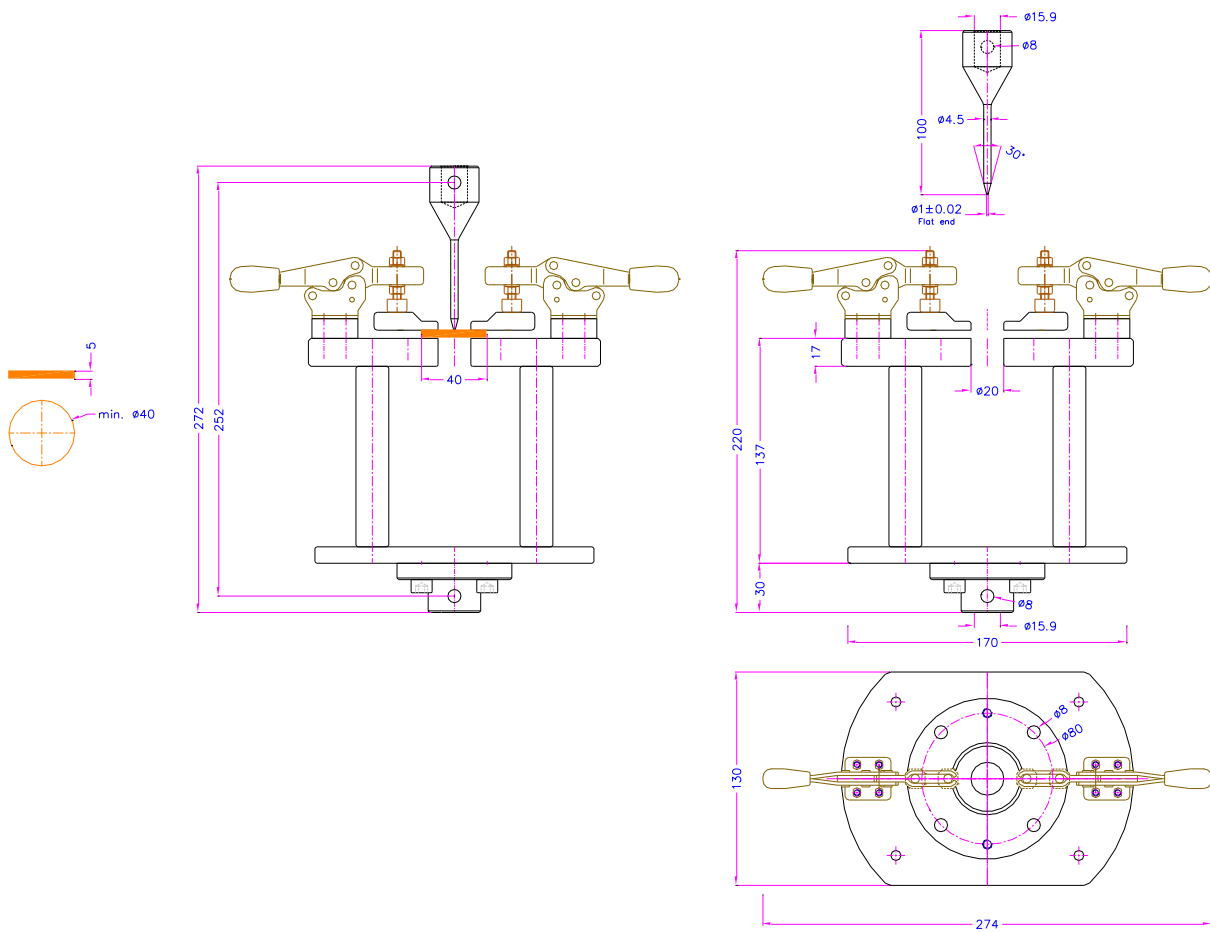
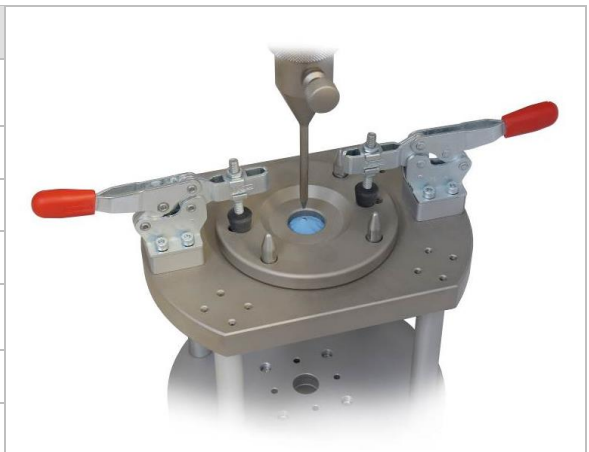


**Puncture fixture according to ASTM-D5748  
(Light version – 3.8 kg)**

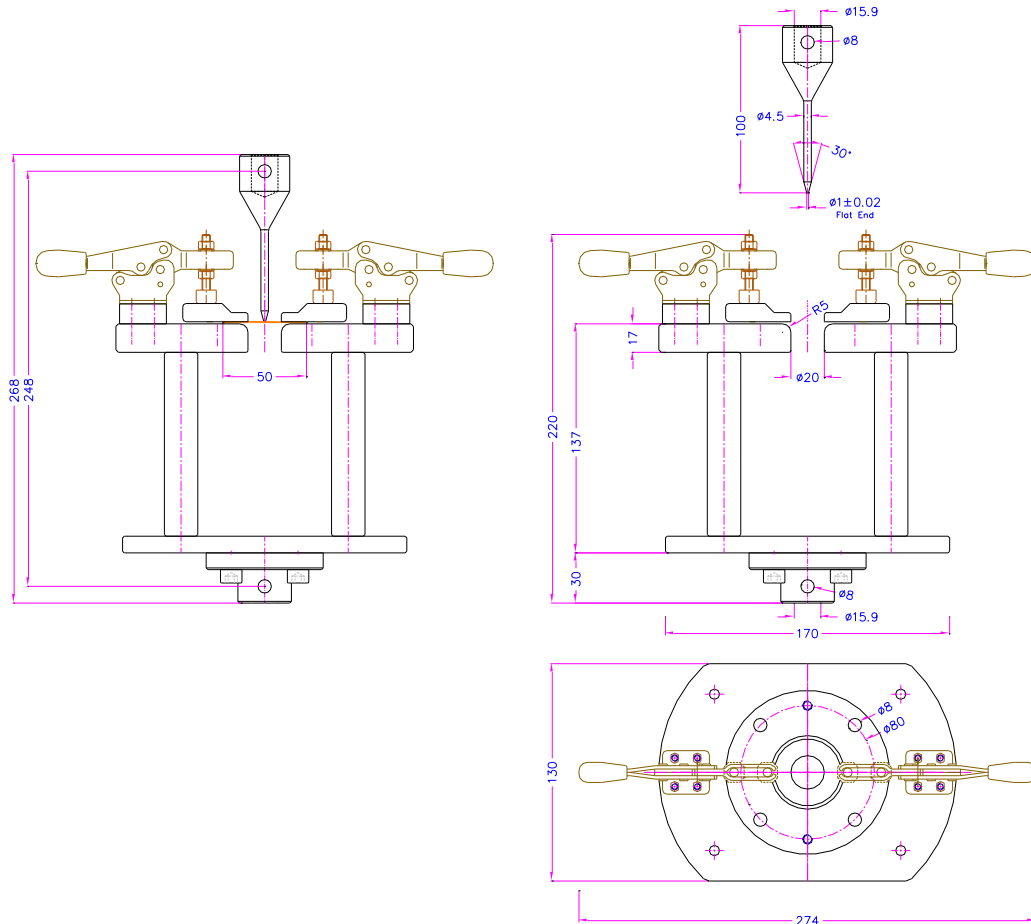
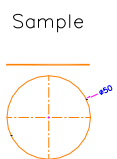
<b>Item no.:</b>	<b>THS174-D102-R9.5Te-LV</b>
Puncture fixture according to <b>ASTM-D5748</b> to determine protrusion puncture resistance of stretch wrap film	
Max. load:	5 kN
Coupling:	Af159. Further couplings on request.
Body:	Steel, nickel-plated
Temperature range:	0 ... +70°C Further temperature ranges on request
Weight:	3.8 kg per fixture with Af159 plunger
Scope of supply:	1 fixture




<b>Item no.:</b>	<b>THS174-D20-F1V30-W130-EN388</b>
Puncture fixture according to <b>DIN EN388</b> to test protective gloves	
Max. load:	20 kN
Coupling:	Af159 or Af20. Further couplings on request.
Body:	Steel, nickel-plated
Temperature range:	0 ... +70°C Further temperature ranges on request
Weight:	4.75 kg per fixture with Af159 probe
Scope of supply:	1 fixture



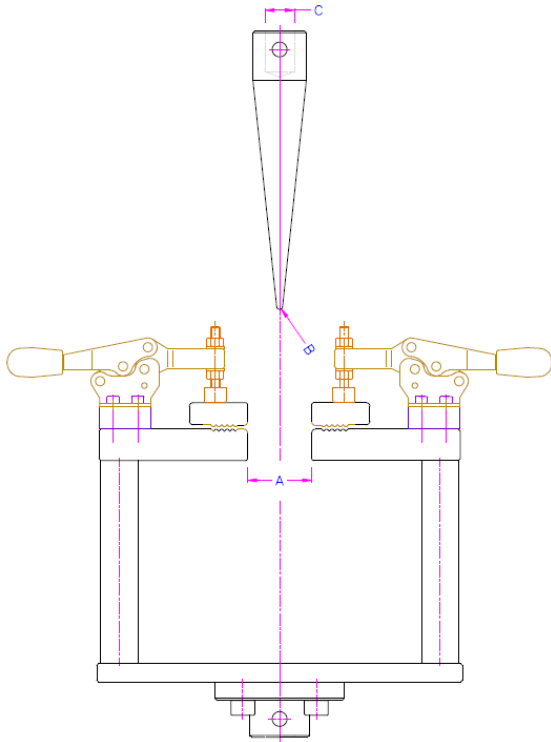
<b>Item no.:</b>	<b>THS174-D20-F1V30-W130-EN863</b>
Puncture fixture according to <b>DIN EN863</b> to test protective clothing	
Max. load:	20 kN
Coupling:	Af159 or Af20. Further couplings on request.
Body:	Steel, nickel-plated
Temperature range:	0 ... +70°C Further temperature ranges on request
Weight:	4.8 kg per fixture with Af159 probe
Scope of supply:	1 fixture



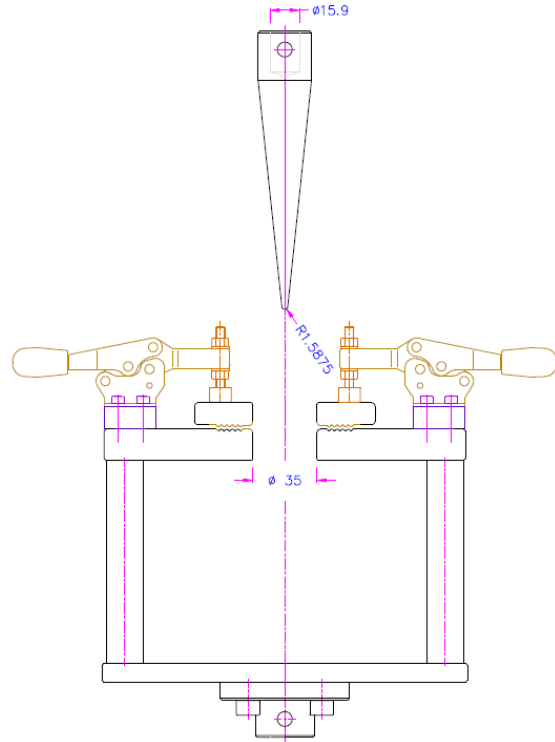
Examples for custom made solutions:

	
<p><b>THS174-D40-R1</b> Inserts with 20 mm and 30 mm Ø of hole</p>	<p><b>THS1598-D35-F15</b> Similar to ASTM-D4032, to determine stiffness of fabric, square design 200x200 mm, aluminium</p>
	
<p><b>THS174-D25R2-F1V30-Af159-ISO20344-Fig14</b> Special puncture test fixture for footwear according to ISO20344 Fig.14 Plate hole 25 mm, radius 2 mm Upper probes 1 mm Ø and 3 mm Ø, coupling Af159 Steel, aluminum</p>	<p><b>THS174-D76-R6.35-Af159-ASTM-D3763</b> Special puncture test fixture for plastics according to ASTM D3763 Plate hole 76 mm, radius 0.8 mm Plunger with radius 6.35 mm, coupling Af159 Steel, aluminum</p>

THS174 Legend:

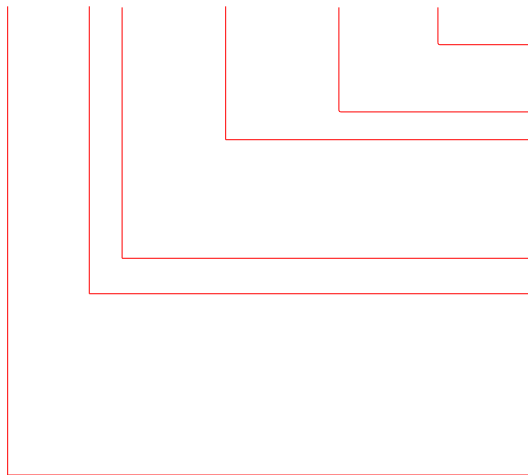


THS174-A-B-C



THS174-D35-R1.5875-Af159

THS174-D20-F1V30-W130-Af159-EN388



test standard or number for special version

A Adapter form and size f: female m: male diameter in mm  
W width of grip (important for single column tester)

A: probe tip type

- Rx = round tip with milled radius
- RxVA = V-shaped milled radius with angle A
- KD = probe tip with interchangeable ball D= ball diameter
- Fx = flat round tip; x = tip Ø; chamfer = 0 mm;
- FxAxBxc = flat rectangular tip; AxB = dimensions; c = chamfer size

A: Spitzenform

- Rx = Radius aus einem Stück
- RxVA = V-Form mit Winkel A
- KD = Stößelspitze mit austauschbarer Kugel D= Kugeldurchmesser
- Fx = flache runde Spitze; x = Spitzen-Ø; Fase = 0 mm;
- FxAxBxc = flache rechteckige Spitze; AxB = Abmessungen; c = Fase

D Diameter of the opening



**We can offer THS174 fixtures according to many other test standards such as, for example:**

ASTM D751

Standard Test Methods for Coated Fabrics

ASTM D1709

Impact Resistance of Plastic Film by the Free-Falling Dart Method

ASTM D5494

Determination of Pyramid Puncture Resistance of Unprotected and Protected Geomembranes

ASTM F1342

Protective Clothing Material Resistance to Puncture

DIN EN ISO 20344

Personal protective equipment - Test methods for footwear

DIN EN ISO 7765-1

Plastics film and sheeting - Determination of impact resistance by the free-falling dart method - Part 1: Staircase methods

DIN 53142-1

Testing of board - Puncture test - Part 1: Puncture test with a pendulum punching device

EN 12568

Foot and leg protectors - Requirements and test methods for toecaps and penetration resistant inserts

GOST 13525.8

Fibre intermediate products, paper and board. Method for determination of resistance to bursting

ISO 14704

Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for flexural strength of monolithic ceramics at room temperature

MIL-C-51251A

Cloth, coated; CBR protective

MIL-DTL-6396F

Tanks, fuel, oil, cooling fluids, internal , removable, non-self-sealing