



Model 22.200 and 22.200 SS  
Pore Water Pressing Bench  
Manual

**KC** Denmark A/S

Research Equipment  
Limnology • Oceanography • Hydrobiology

## Pore Water Pressing Bench

### Application:

The pore-water pressing bench allows pore-water extraction of any kind of sediments, from sediments rich in organic material, to sandy sediments. A thin film of Latex distribution film avoids oxidation of the sample. The resulting compression of the sediment matrix leads to expelling of the pore-water, sampled into containers beneath the pressing house. Operation in a glove bag prevents atmospheric contamination with, for example, oxygen, so anaerobic analysis of the pore-water is possible.

### Optional:



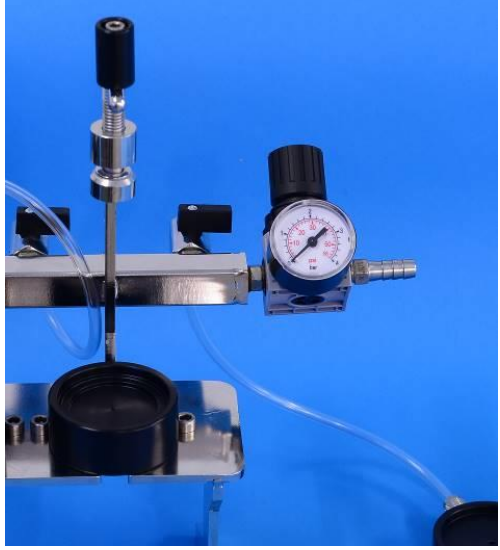
The cylinders and all accessories are also available in AISI 316 stainless steel for special purposes. The water will be in contact with stainless steel only. The cylinders and the spare parts will also fit on previous delivered models.

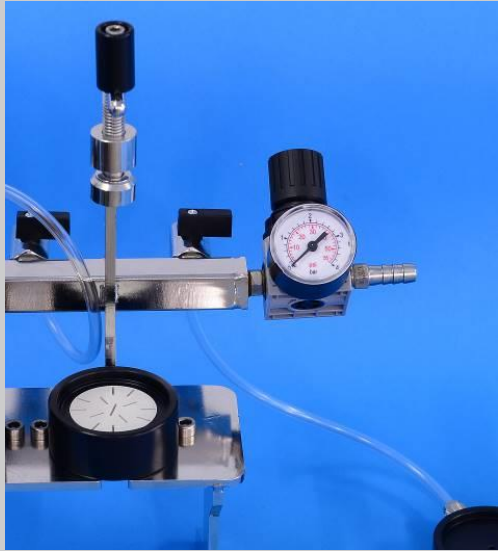
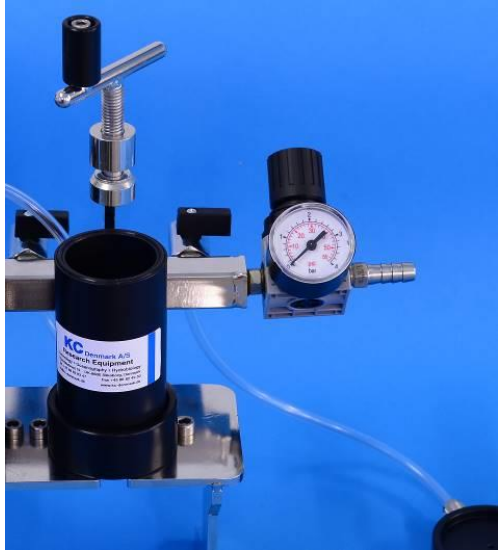
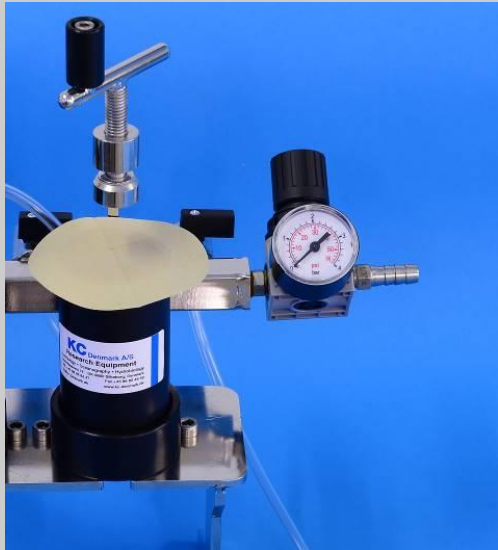
For higher versatility or special purposes, it is possible mixing POM and stainless steel cylinders on the same rack. Using the 22.109 adapter supports smaller cylinders in the same session.




Caution

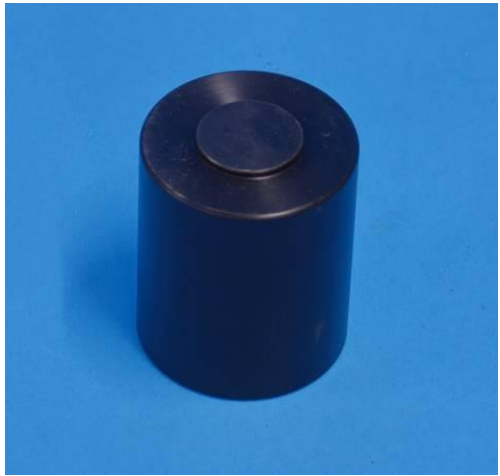
**KC Denmark A/S is not, and cannot be held, responsible for any damage(s) made to equipment or to operators who ignore safety precautions or because of misuse or wrong operation.**


Item	Preparation	
1	Each cylinder has its own valve, close all valves as shown.	
2	<p>You can apply any gas for introducing the driving over-pressure.</p> <p>Connect the inlet of the bench to a proper source and you must observe that max. operating pressure is 4 bar.</p> <p>Turning the knob clockwise increases the pressure supplied to the bench.</p>	
3	Mount the bottom part (22.115). The thin white tubing points downwards and allows you to collect the pore water into a bottle or similar.	


<p>4</p>	<p>Add the Sartorius support screen (22.145).</p> <p>The screen can be replaced with Millipore or Whatmann paper filters.</p>	
<p>5</p>	<p>Add the 100 ml cylinder (22.126).</p> <p>Fill up the cylinder with the watery sediment. If any sediment is lost on the upper O-ring of the cylinder, wipe it off, so the Latex film (step 6) and the top part (step 7) allows a hermetic closure.</p> <p><b>Note:</b> It may be easier to perform step 3-7 outside the bench. The horizontal plate of the bench has small slots allowing you to push the units in position without breaking the small outlet tube on the bottom part.</p>	
<p>6</p>	<p>On top of the cylinder, you must add 1 pc of thin Latex Film (22.135) or similar elastic material. Use a good quality of film to avoid oxidation of the sample.</p>	

7	<p>Add the top part (22.110), align it so it fits to the cylinder and fasten all items by means of the handle.</p>	
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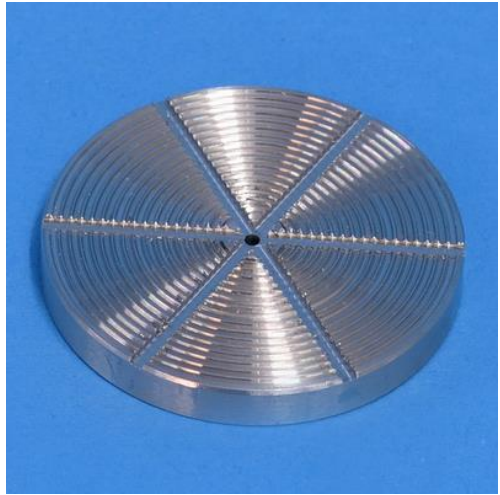

<b>Using smaller cylinders</b>		
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8	<p>Using smaller cylinders, i.e., 25 ml (22.120) requires an adapter 22.109.</p>	
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9	<p>Place the adapter on the top part of the 25 ml cylinder.</p>	
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<b>Operating the bench</b>		
10	Supply the gas to the inlet, open the corresponding valves of each cylinder and adjust the pressure for an appropriate operation. Required pressure and time of extraction depends on the sediment sample itself and the content of liquid.	
<b>Stainless steel cylinders</b>		
11	For special purposes, you can replace one or more units manufactured from AISI 316 stainless steel.	
12	Bottom part - 22.110 SS.	
13	<p>Cylinder (shown without O-ring) - 22.125 SS.</p> <p>Standard delivery comes with 2 pcs O-ring, I.D. Ø42,50 x 2,62 mm NBR70.</p> <p>For <u>autoclaving purpose</u> please replace the O-ring with a Vitron I.D. Ø42,50 x 2,62mm).</p>	



14	Top part - 22.115 SS.	
15	Support screen - 22.145 SS.	
<b>Simultaneously use of more benches</b>		
16	Manifold 22.105 allows connecting more benches to the same source.	

## Storing and Maintenance

All parts of the item can be rinsed using salt water or fresh water. Before storing, we recommend a thoroughly cleaning with fresh water.

## Safety Regulations

KC Denmark A/S is not, and cannot be held, responsible for any damage(s) made to equipment or to operators who ignore safety precautions or because of misuse or wrong operation.

An expert maintenance technician fully familiar with the attendant hazards must only do all maintenance, inspection and repairs.

When working with the unit in areas, which are difficult to access or hazardous, ensure to take adequate safety precautions for the operator and others in compliance with the provisions of law on health and safety at work.

Replace worn component with original spare parts.

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