

Operating Instructions

Sand Content Kit




1. Purpose for which this system was designed

This Operating Manual contains the information required for operation of the products described here, for the purpose for which they have been designed. This Operating Manual is intended to be used only by technically qualified staff.

The User must by all means observe the requirements and limit values, as well as all safety instructions, given in this Operating Manual. Any use of this device not in conformity with these stipulations shall be considered to be in violation of the use for which this system was intended. If this device must be operated under special conditions, or with special modes of operation, then this shall be authorized only after consultation with the manufacturer, and after obtaining his prior and express approval.

The kit is exclusively designed for determine the sand content of drilling mud in volume percent.

<p>Caution!</p> 	<p>The instructions provided in this operating manual concern only the correct use of the system. To perform the test correctly, the user must observe the specific norms for the test.</p>
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2. Guarantee

Our **General Terms of Sales and Delivery** apply in all cases.

The Manufacturer guarantees that this Operating Manual has been prepared in conformity with the technical and functional parameters of the water tank as delivered. The Manufacturer reserves the right to add supplementary information to this Operating Manual as required.

The guarantee provided by the Manufacturer is the legal guarantee. This guarantee does not cover wear-and-tear parts.

The Manufacturer guarantees trouble-free operation only if the User observes the instructions in this Operating Manual, and only if the User employs the water tank for the purpose for which it is intended.

The Manufacturer shall not be liable for damages that may occur if the water tank is used for purposes for which it is not intended, or if the User does not observe the instructions and rules for operation as set forth in this Operating Manual.

No claims for damages may be lodged against the Manufacturer if the water tank is modified in its structural or constructional characteristics without the prior written consent of the Manufacturer, or if its functional characteristics are modified without such consent.

3. Acceptance of delivery

When accepting delivery of the water tank, first inspect it for its outer, visible condition. If this inspection is satisfactory, the machine may be accepted from the freight forwarder (railways, parcel service, or other haulage company).

If there are no shortcomings, and if there are no transport damages, then use the bill of delivery to make sure that the consignment is complete, and that all parts have been delivered.

If you assume or suspect transport damage, or if transport damage becomes apparent only after you have accepted the delivery, immediately make an exact report of the conditions and any damage as they exist. Send us this report immediately by fax or e-mail. Important: Absolutely do not make any changes to the delivered goods.

After we have studied your report, we can make a decision whether we can:

- Deliver spare parts to you, or
- Send a specialized fitter/installer to your plant, or
- Ask that you return the system to us for repair.

4. Description

The sand content of the drilling fluid defines sand-sized particles larger than 74 μm in size. The volume of sand, including that of void spaces between grains, is usually measured and expressed as volume percent. Sieve analysis is the preferred method for sand content determination because of the reliability of the test and simplicity of equipment.

Excessive sand may result in the deposition of a thick filter cake on the wall of the hole, or may settle in the hole about the tool when circulation is stopped, thus, interfering with successful operation of drilling tools or setting of casings. High sand content also may cause excessive abrasion of pump parts and pipe connections.

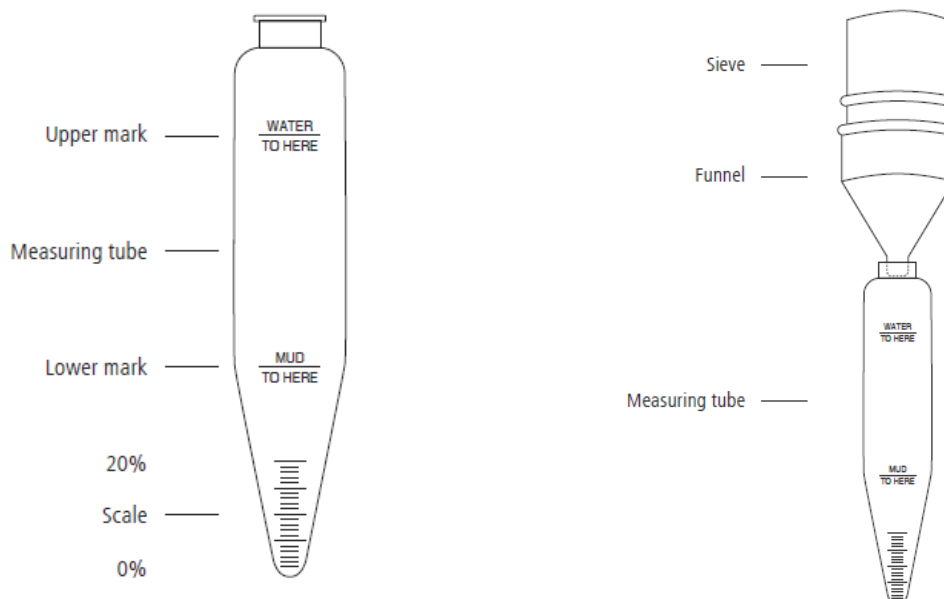
The Sand Content Kit consists of special developed sieve with mesh-size 0,08 mm (200-mesh), a proper plastic funnel and a special modeled measuring tube. A mark at the measuring tube indicates the amount of the filled in drilling fluid. The percentage of sand may read off directly from the measuring tube graduated from 0 to 20%.

5. Technical Specifications

Transport box		
Length	270 mm	10.63"
Width	185 mm	7.28"
Height	100 mm	3.94"
Weight	0.6 kg	1.32 lbs

6. Operation

1. Fill the measuring tube to the indicated mark with mud. Use the wash bottle to add water to the upper mark. Close the mouth of the tube and shake vigorously.
2. Pour the mixture onto the clean sieve. Discard the liquid passing through the screen.
3. Add more fluid from the wash bottle to the tube, shake, and again pour onto the sieve. Repeat until all the drilling fluid has been washed out of the tube.
4. Flush the screen with fluid from the wash bottle to free the sand remaining on the sieve of any remaining mud.
5. Fit the funnel upside down over the top of the sieve. Slowly invert the assembly and insert the tip of the funnel into the mouth of the glass measuring tube.
6. Wash the sand into the tube by spraying a fine spray of fluid from the water bottle through the sieve (tapping on the side of the sieve with a spatula handle may facilitate the process). Allow the sand to settle.
7. Using the scale on the graduated tube, read the volume percent of sand. Report this along with the source of the mud sample (above shaker, suction, pit, etc). Coarse solids other than sand (lost circulation material, coarse barite, coarse Ilignite, etc.) may be retained on the screen. The presence of such solids should also be noted.



7. Maintenance

The Sand Content Kit is maintenance free. Thoroughly wash any sand or drilling fluid from the screen, funnel, and tube after each use. Dry all equipment. Keep the parts in the transport box.

8. After-sales service

A great deal of care has been taken to ensure that this Operating Manual is correct. We cannot, however, guarantee that it is without mistakes or errors, or that all information contained herein will continue to remain valid in the event of technical changes.

With respect to the testing procedure, the relevant standards, directives, regulations, and instructions of the supervisor in charge will always apply.

8.1 Date of this version of the Operating Manual

Version no. 9, March 2013

8.2 Copyright

The copyright to this Operating Manual is held by:

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This Operating Manual is intended for use only by the User and his/her staff. It contains instructions and data that may NOT be:

- Reproduced,
- Distributed, or
- Provided to any third party.

Any person acting in violation of the above stipulations may be prosecuted before a court of law.

8.3 Spare parts and technical help

If you have any questions of technical nature, or if you need spare parts, please get in touch with the following address:

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