

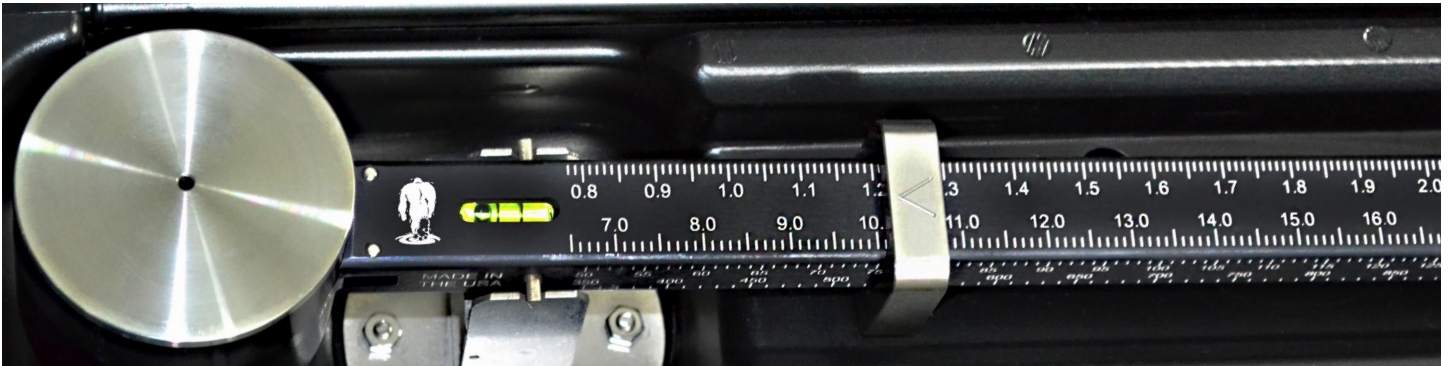


# MUD BALANCE

MEASURES DENSITY/SPECIFIC GRAVITY OF DRILLING SLURRY

MATRIX® CERTIFIED  
TESTING EQUIPMENT

PRODUCT DATA SHEET



**SIZE |** 21.5" (W) X 4.5" (H) X 4" (D) (55 X 11 X 10CM)     **WEIGHT |** 4 LB 3 OZ (1.9 KG)

This four scale sleek metal Mud Balance is built in the USA using a machine manufactured process instead of the die-cast molded method. This uniform method of construction results in a more rugged instrument that is an accurate, self-contained measuring device used to determine slurry density. It is one of the most sensitive and accurate field instruments available for determining the density or weight-per-unit-volume (specific gravity) of drilling fluids. It has a range of 7 to 24 pounds per gallon or Specific Gravity of 0.84 to 2.88.

The Mud Balance consists of a constant-volume sample cup and lid connected to a balance arm that has four graduated scales. The density balance is constructed of premium metals for durability, accuracy and ease of use. On one side are scales for measuring density in pounds per gallon (lb/gal) and specific gravity (SG g/cm<sup>3</sup>). On the other side are scales for measuring pounds per cubic feet (lbs/ft<sup>3</sup>) and pounds per square inch per 1,000 feet of depth (lbs/in<sup>3</sup>/1000 ft).

WATER SPECIFIC GRAVITY = 1.0 OR 8.34 LB/GAL	
DENSITY	RANGE
lb/gal	6.5-23
PSI/1000/Ft of Depth	340-1190
lb/ft <sup>2</sup>	49-172
gms/cm <sup>3</sup>	0.79-2.72

## PROCEDURE

1. Make sure that the balance is clean and dry before it is filled with the slurry sample.
2. Place the base stand or the carrying case on a level surface.
3. Fill the balance cup with the sample to be tested. Put the lid onto the balance cup by pushing it downward until it is firmly seated. Make sure that some of the test sample is forced out through the vent hole in the lid in order to free any trapped air.
4. Holding the lid firmly on the mud cup (with the lid hole covered with a finger), wash or wipe the outside of the cup and the entire balance clean and dry.
5. Place the beam on the fulcrum base and balance it by sliding the rider along the arm. The Mud Balance is horizontal when the level bubble fluctuates an equal distance inside the lines.
6. Take the reading from the side of the rider nearest the balance cup. (The arrow on the rider is pointing to the side). The measurement reading should be reported to the nearest 0.1 lbs/gal, 0.5 lbs/ft<sup>3</sup>, or 0.01 g/cm<sup>3</sup>, which is equivalent to specific gravity. (The 4th scale, psi per 1,000 feet depth, is not normally used in construction, although it can be readily adapted to give psi per foot of depth.)

**AVAILABILITY:** The Mud Balance for measuring slurry density can be purchased through any MATRIX Construction Products Representative. [Orders@matrixcp.com](mailto:Orders@matrixcp.com)



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PDS UPDATED JANUARY 2024

