

# Well Testing

## Measurement

### Centrifuge

**Centrifuges enable primary measurement of the Basic Sediment and Water (BS&W) content entrained in produced well fluids.**

This information will form an important element in accurately calculating oil and water production, while also ensuring that any well stream solids content is identified early to avoid the risk of asset plugging or erosion.

The centrifuge is essential during both the initial clean up phase of well testing and any subsequent production testing.

Usually either hand operated for use at the well site or well head, they can alternatively be either electrically or air powered, lab type units.

Hand-operated centrifuges are ideal for rapid settling of suspended solids from small quantities of liquid in analytical procedures, the hand crank and steel worm with bronze spiral gear is usually set at a 15 to 1 ratio.

The long-sweep crank is detachable and disengages when hand motion is stopped, allowing the head to come to a gradual rest. The unit utilises 2 or 4, 100ml graduated glass centrifuge tubes marked off in percentage increments.

Air or electrically powered centrifuges utilise the identical principal for rapid settling of solids and heavier fluid elements, although this apparatus is generally an enclosed unit avoiding any risk of sample spillage or damage to the glass tubes. They can also include the option to heat samples, assisting in water/emulsion breakdown.

They are normally used inside a well test laboratory with smaller graduated glass tubes, again marked off in percentage increments.



#### Applications

- Offshore and onshore well testing
- Clean up and flow back well testing
- Production well testing

#### Features and Benefits

- Manual, air or electrically powered
- Compact and portable
- Simple operation procedure