

# Model 20 Constant Speed Blender

*a dependable staple for your lab!*

## **Introduction:**

The OFITE Model 20 Constant Speed Blender facilitates the preparation of oil well cements and stimulation fluids for testing according to API guidelines.

Research has demonstrated that the properties of well cement slurries are highly dependent on mixing procedures. Constant speed blenders provide consistent mixing from test to test. This leads to better, more reproducible results than tests performed with other equipment.

The OFITE Model 20 also provides a means of consistently preparing stimulation fluids for testing purposes. The optional Torque Monitoring Module evaluates the hydration and cross-link times of these fluids.

## **Method of Operation:**

For cementing operations, the unit has two preset speeds of 4,000 and 12,000 RPM. In manual mode, the user can switch between the two preset speeds at any time. In auto mode, a timer controls the blender according to API Specification 10. When the user starts the timer, the unit runs at 4,000 RPM for 15 seconds and then increases the speed to 12,000 RPM for 35 seconds.

For stimulation operations, the two preset speeds are typically 1,000 and 2,000 RPM. These presets can be customized to individual needs.

An optional Torque Monitoring Module measures the hydration and cross-linking time of fracturing fluids. As the fluid thickens, the power required by the blender increases, reflecting an increase in torque. The included software graphs the torque with respect to time, showing the time required for the fluid to thicken.

## **Features and Specifications:**

- Stainless steel mixing blades
- Stainless steel 1 L mixing container (4 L also available)
- Two preset mixing speeds and variable speed
- Rotational speed is maintained at set point with a microprocessor
- Timing relays automatically control mixing times at required RPM
- Digital instrumentation provides excellent readability

## **Dimensions:**

**Crated Size:** 45" × 32" × 12" (114 × 81 × 31 cm)

**Crated Weight:** Approximately 215 lb (97.6 kg)



## **Part Numbers:**

### **Instruments:**

- #120-60 Constant Speed Blender for Cement, 115 Volt, 60 Hz
  - #120-60-1 Constant Speed Blender for Cement, 230 Volt, 50 Hz
  - #120-60-F Constant Speed Blender for Stimulation, 115 Volt, 60 Hz
  - #120-60-1-F Constant Speed Blender for Stimulation, 230 Volt, 50 Hz
  - #120-60-50 Torque Measuring Module, Universal Voltage, 50 / 60 Hz
- Each can be operated via a 1.25 KVA power supply*

### **Spare Parts:**

- #121-015 Fuse, 2 Amp
- #122-076 Fuse, 1 Amp
- #122-200 Blade Assemblies
- #122-202 Container, Stainless Steel, 1 Quart
- #122-203 Container Lid, 1 Quart
- #122-204 Bottom Gasket
- #122-209 Waring Blender, Stainless Steel Container
- #164-42 Male Connector for Power Cable, 230 Volt
- #171-44 Rubber Foot

### **Optional:**

- #120-61 One Year's Spare Parts for Constant Speed Blender

OFITE typically offers packages of spare parts that contain the recommended spares for one, two, or three years normal operation. Please note that OFITE's spare/expendable components are interchangeable with the components of most major manufacturers. Dimensions and materials of construction for many of these components are stated within API Specification 10. OFITE stringently follows these guidelines. OFITE is listed as a supplier of testing equipment with the American Petroleum Institute (API).

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