

### CLIF MOCK™

# True Cut<sup>™</sup> Circulation Systems

True Cut™ Circulation Systems allow operators to collect, store, and mix crude oil and other low-pressure sampled product in a single receptacle, minimizing the loss of light ends. Designed for use with a True Cut "C" Series Sampler, the circulation systems consist of a stationary sample receptacle, an integrated, skid-mounted gear pump and a motorized circulating and mixing system.

The larger-capacity receptacles in the True Cut Circulation Systems make them ideal for longer sampling periods, and for customers who typically analyze samples at an onsite laboratory or at a nearby test facility.

Every detail for achieving overall sampling accuracy has been addressed in the design of these systems, in accordance with API Chapter 8, Section 2, ISO 3171, ASTM and IP6.2 standards. A 3/4-in. stainless steel inline static mixer in the circulating piping assures uniform water droplet size in the mixing process.

The circulation systems are well suited for supporting LACT units, pipeline sampling, truckloading/discharge, refinery sampling, shiploading/discharge, and production platform sampling.

Two models – the CMC-500 and the CMC-250 – offer the operator a selection of receptacle designs. The receptacles differ primarily in construction material, total capacity, and pressure ratings.

Each of the designs features an inline static mixer, a motor, a gear pump and 3/4-in. tubing with carbon steel fittings as standard (316 stainless tubing is optional).

Custom enclosures (including heat tracing) designed to meet all certification requirements are also available.



## Receptacle

The CMC-500 Circulation System offers unmatched durability and performance, featuring a carbon steel receptacle available in a wide range of capacities to include 5-, 10-, 20-, 30-, and 40-gallon capacities. It is rated for pressures up to 60 psig.

The CMC-250 Circulation System combines functionality and economy in a 304 stainless steel receptacle available in 5-, 10-, 20-gallon capacities and rated for pressures up to 140 psig. The internal spray bar washes the wall of the tank and circulates sediment from the bottom of the tank, and the smooth surface of the receptacle's interior and all piping helps eliminate water and sediment traps.



See the following table for a list of standard and optional features for the CMC-500 and CMC-250 circulation systems. An " $\bullet$ " indicates a standard feature.

Feature	CMC-500	CMC-250
High level shutoff	•	•
Sightglass for monitoring fluid levels	•	Option
Full-opening cam-lock lid for easy cleaning	•	
Reverse bevel closure for a tight seal	•	
Inline static mixer	•	•
Level gauge		•
Pressure gauge	•	•
Relief valve	•	•
Sample draw-off valve with spigot	•	•
ASME code	Option	•
316 stainless receptacle	Option	Option
Severe duty	Option	Option
Multiple tank units	Option	Option
Armored sight glass	Option	Option
Heat tracing	Option	Option
Special coatings	Option	Option
Special paint	Option	Option

#### **Explosion-Proof Motor**

- 0.5 hp (other hp available)
- 115/230 VAC (other voltages available on request)
- single phase, 60 Hz
- 7.4 amps at full load of 115V;
  3.9 to 3.7 amps at full load of 230V
- 1725 rpm
- 56 frame size
- rated for 40°C (104°F) at ambient conditions

#### **Gear Pump**

- 3/4-in. port, standard
- 5 gal/min capacity at 0 psig backpressure
- 100 SUS fluid viscosity
- 1750 gal/min maximum speed
- 350 psi maximum output (internal pressure relief valve set at 100 psi)
- UL-approved

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