

# Caustic Mixing Unit

## Overview

Cameron's caustic mixing unit (CMU) streamlines the three stages - sack cutting, fluidizing, and dosing - of adding caustic material into the drilling fluids system.

The CMU features an air-tight cutting cabinet that prevents caustic dust from entering the operator work area. A pair of integrated heavy-duty work gloves eliminates the chance of direct contact with the caustic material during sack handling operations.

The holding tank can store up to 350 L of liquid, making it easy for operators to mix and store caustic fluid for more than one job.

An air-powered, no stall, double-diaphragm pump provides drive for both circulation and discharge jobs. All operation and monitoring is done locally. Manually operated ball valves are used to line up for fill, discharge, and draining operations.

The CMU is designed to be a fully-transportable unit with integrated forklift supports to enable safe, quick and hassle-free relocation whenever required. Readyng the unit for operation is a quick and straightforward process that does not require any special tools.



## Main Features

- Standalone unit with compact footprint
- Fully-transportable unit
- Engineered with minimal moving parts
- Air-powered, no stall, double-diaphragm pump requires little maintenance
- Skid drain allows for easy cleaning and flushing
- Can be used in all mud mixing lines
- Skid and piping manufactured in AISI 316L
- Three lifting lugs, each rated for 1000 kg

## Safety Features

- Integrated safety equipment eliminates direct contact with caustic powders
- Air-tight cutting cabinet prevents hazardous dust pollution in the area
- Integrated plexiglass inspection window gives clear vision
- Waste bag outlet for storing empty sacks

Technical Specifications	SI	Imperial (US)
Area classification	Safe Zone	
System operation	Manual	
System drive	Pneumatic	
System/pump discharge capacity	0.1 to 10 m <sup>3</sup> /hr	0.44-44 gal/min
System/pump suction lift capacity (dry, wet)	4.9 m, 8.8 m	16 ft, 29 ft
Tank capacity	350 L	92 gal
Maximum operating capacity	300L	79 gal
Design temperature range	-20 to 50° C	-4 to 122° F
Pneumatic supply requirements (freshwater)	1.4 - 8.6 barg (tank fill only; no pressure requirements)	
Construction of skid and piping	AISI 316L	
Injection pump type	Air-powered, no stall, double-diaphragm pump	

Scope of Supply	Options
Skid fabricated in AISI 316L with integrated drain and forklift supports	Volume control (tank)
350 L holding tank	Alternative holding tank size
Manual ball valves	Mixing tank instrumentation
Integrated sight glass (tank)	Additional certification (CE/Hazardous Zone I & II)
Air-tight cutting cabinet	NORSOK documentation
Pressure gauge	
Standard project documentation	