



Model CQ3000 Decanter Centrifuge Test Module:

The test module is the model CQ3000 decanter centrifuge with a capacity of 5 to 55-gpm, depending on the nature of the feed. This is the smallest unit in the Centriquip range and is fitted with an inverter controlled 18.5 kWh (25-HP) main drive.

The complete CQ3000 unit is mounted on an easily transported mild steel frame and can normally be ready for operation within 1 to 2-hours upon delivery to the site.

Module One dimensions: (10'L x 6'10"W x 8'H / weight approximately 8,500 pounds)

Note: On the 10'L side of the skid a portable belt conveyor is installed to assist solids disposal and will protrude approximately 6'.

A second skid module with ancillaries containing the following can also be supplied:

Module Two dimensions: (10'L x 6'6"W x 7'H / weight approximately 3,300 pounds)

- 330-gallon polymer mixing tank with agitator.
- 330-gallon feed balance tank or utility tank with agitator.



Please direct questions to: Tony Magnall @ 704-756-4122 or Magnall@bellsouth.net

Chuck Shaw @ 317-557-8901 or cshaw@uscentrifuge.com

Model CQ3000 Decanter Centrifuge Test Module Specifications:

- Centriquip centrifuge type CQ3000 complete with 25-HP 2,940-rpm drive motor and solids / centrate chutes.
- Viscotherm hydraulic pump unit type B 5.5 - 10 Z/HP with 10-HP motor.
- 3 HP PCM progressive cavity, sludge feed-pump, with variable speed drive, capacity 5 to 60-gpm.
- 1 HP "Mono" type eccentric rotor polymer dosing pump with variable speed drive capacity of 0.4 to 11-gpm.
- Krohne sludge flow meter, range 0 to 60-gpm, complete with display unit.
- Krohne polymer flow meter, range 0 to 10-gpm, complete with display unit.
- Belt conveyor 8'L and 10" W.
- **Weatherproof** electrical control panel and 45' length incoming power-supply cable.
- Connections to feed pump, polymer pump, polymer tank and sludge tank, are 3 inch "quick connect".

Services to be provided by client:

- Suitable hard foundation approximately 17 ft. x 17 ft
- Sludge supply preferably at floor level @ a maximum of 25 ft. from test unit.
- Potable water at reasonable pressure by a 1-inch hose for hydraulic cooling water (0.5-gpm at 68° F max.), for wash down and for polymer make-up.
- **Electricity supply (460V, 3 pH, 60 Hz) maximum 45 ft. from test unit fitted with 65 amp high surge fuses for start up. Running current up to 25 amps approx.**
- Laboratory bench space with electric points for performance evaluation.
- Suitable receptacle for cake produced. Sludge hopper no more than 3 ft in height is ideal.
- Centrate gravitates from the test unit at a height of approximately 3 ft. There is no centrate pumping facility, therefore the rig requires positioning adjacent to a drainage point.

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Site Preparation:

As you can see from the sample photographs of the test installations, a protective building is not a requirement, though preferred, except in areas of extremes in weather.

US Centrifuge will provide a trained field technician for two days to set up, demonstrate and operate the unit as part of the rental agreement.



The equipment will be delivered by truck, which should have easy access to test site. There are two skids to be off loaded and a suitable crane or forklift should be available at the time of delivery:

When planning the location, the source and availability of the following process materials should be considered:

- 1) **Feed material:** The material to be centrifuged can be connected directly to the feed pump. Alternatively one of the water tanks supplied can be used as an intermediate holding tank. Feed material should be available up to a maximum flow of 60 gpm, which should satisfy the capacity of the CQ3000, and **it is essential that this flow can be turned on and off easily.**
- 2) **Polymers:** If polymers are required for your application we recommend that you work with a polymer supplier before the arrival of the test modules to select the product for use in the trial. The second water tank can be used to make up polymer solution from either liquid or powder polymers.

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