



WET DISINTEGRATOR Model WD02



JEFFCO Wet Disintegrator Model WD02

- * Versatile disintegrator, mixer, liquidiser and emulsifier
- * Ideal for moisture and fibre content analysis by disintegration
- * Suitable for performing fibre, brix and pol tests in sugar mill laboratories
- * Fast, safe and quiet electrical operation with simple controls
- * 14 litre capacity bowl made from high grade cast aluminium
- * Water-cooled bowl jacket to control product temperature & characteristics
- * Powered drive for lowering, emptying and raising the bowl effortlessly
- * Microprocessor driven programmable front control panel with 3 memories
- * Large dual digital displays for timing functions
- * Compact enclosed design with modern easy-to-clean styling
- * Low maintenance requirements
- * Designed & made in Australia

The **JEFFCO Wet Disintegrator Model WD02** is a versatile, heavy duty disintegrator, mixer, liquidiser and emulsifier for both production and laboratory use. It has special relevance for the sugar industry in the testing and verification of fibre and sugar content in sugar cane. It is a further development of our Model 292 with a new array of features making it faster, safer and more affordable. The robust design consists of a fully enclosed mechanism of welded steel with compact overall dimensions and a powerful 3.0kW 3Ø electric motor. The main shaft is made of stainless steel and the cutting blades are of high grade spring steel. Special electrical and electronic interlocks are fitted for

operator safety and the unit is very quiet in operation.

With a shaft speed of 6000 rpm, the **JEFFCO Wet Disintegrator Model WD02** is fast and highly suitable for continuous use in production testing and research laboratories. The 14 litre cast aluminium bowl is complete with a water cooling jacket to allow preparation of samples without significant temperature rise. The whole bowl mechanism is driven electronically from the front panel allowing lowering, tilt/emptying and raising with no manual effort.

Either two or four blades can be fitted depending on the volume and type of product being processed, and volumes of five (5) litres

or less can be accommodated with the fitting of a special flushing blade (supplied) to the shaft. A programmable custom-designed microprocessor control panel with large dual displays makes it easy to set up test parameters

JEFFCO Wet Disintegrators are in use in dozens of countries around the world, with a long and proud history of quality and durability.

For companies who are involved in the sugar industry, we also manufacture the matching **JEFFCO Cutter Grinder Model CG03** for the preparation of fibrated samples of cane with consistent moisture content and fibre uniformity. For further information, please consult your local **JEFFCO** agent.



Auto Emptying Bowl Drive

The **JEFFCO Wet Disintegrator Model WD02** has been designed with durability, safety and speed of operation in mind. The bowl unit is mounted on a lifting fork which is driven by an electric linear actuator. This allows press button control of the raising and lowering of the bowl with little physical effort. The same mechanism permits full tilting of the bowl to empty product into a container at floor level.

To ensure that the product or bagasse being processed in the **JEFFCO Wet Disintegrator Model WD02** is not altered through elevated temperatures, the bowl is fitted with an integral water jacket. By passing 23°C water through the jacket at approx 10 litres per minute, the bowl (and product) temperature will remain at about 27°C. Without water flow, temperatures up to 75°C may be experienced.

The operation of the **JEFFCO Wet Disintegrator Model WD02** is very fast and thorough. The bowl shape has been developed to ensure efficient mixing even at low volumes, and can handle wide variations in product viscosity and volume.

A powerful custom-designed microprocessor controller is built-in to the front panel. This provides flexible timing facilities with large

dual digital displays, timing cycles in programmable preset keys and a tough, sealed mylar front panel. Industrial-grade surface mount technology ensures a long and reliable service life for the electronic components.



Electronic Control Panel

Special self-test facilities and an error reporting system warn of any safety failures or motor overload & over-temperature conditions. The machine is easily adaptable between 50Hz and 60Hz operation.

Safety is an important design feature of the Wet Disintegrator. Sensors are fitted to detect when the bowl is sealed and to power down the machine when the top cover over the shaft rotation handwheel is lifted. Electronic interlocks prohibit the operation of the bowl lowering actuator whilst the shaft motor is operative. An over-current sensor and a temperature sensor in the motor windings ensure that the machine is protected against overload conditions.

The spring steel blades are very durable but also very inexpensive and simple to replace. Special ball race bearings in the shaft unit have been designed for long and trouble-free life. These, and other well-engineered features, ensure that the on-going cost of ownership of the **JEFFCO Wet Disintegrator Model WD02** is low.

The **JEFFCO Wet Disintegrator Model WD02** is proudly designed and manufactured in Australia to the highest quality standards, with spare parts always readily available.

SPECIFICATIONS

- * **Construction:**
Fabricated steel body
Cast aluminium bowl
Stainless steel drive shaft
Fibreglass pulley cover
Precision ball bearings
Compact design
- * **Finish:**
Multilayer Epoxy Enamel
- * **Electronic Control:**
Custom μ processor controller
Mylar front panel
3 Programmable presets
Non-volatile memory
Dual green LED displays
High reliability switches
Motor overload sensing
Motor over-temperature sensing
0-99 minutes timing cycle
Error code reporting
- * **Electrical Circuitry:**
Motor: 3.0 kW
Voltage: 380-460 V 3 Φ
Frequency: 50/60 Hz
(Other ratings by request)
- * **Bowl Capacity:**
Liquid: 14 litres max
5 litres min
Fibre: 2kg max
- * **Drive Mechanism:**
Single wide Poly-V[®] belt
Long life without adjustment
Dual 50/60 Hz pulleys
Shaft Speed: 6000RPM
- * **Water Jacket Cooling:**
Flow Rate: \approx 10 litres/min
- * **Machine Dimensions:**
606 W x 1390 H x 860 D (mm)
Weight: 188 kg
- * **Transport Dimensions:**
790 W x 1600 H x 1040 D (mm)
Weight: 269 kg

Distributed by:

Proudly designed and manufactured in Australia by:

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