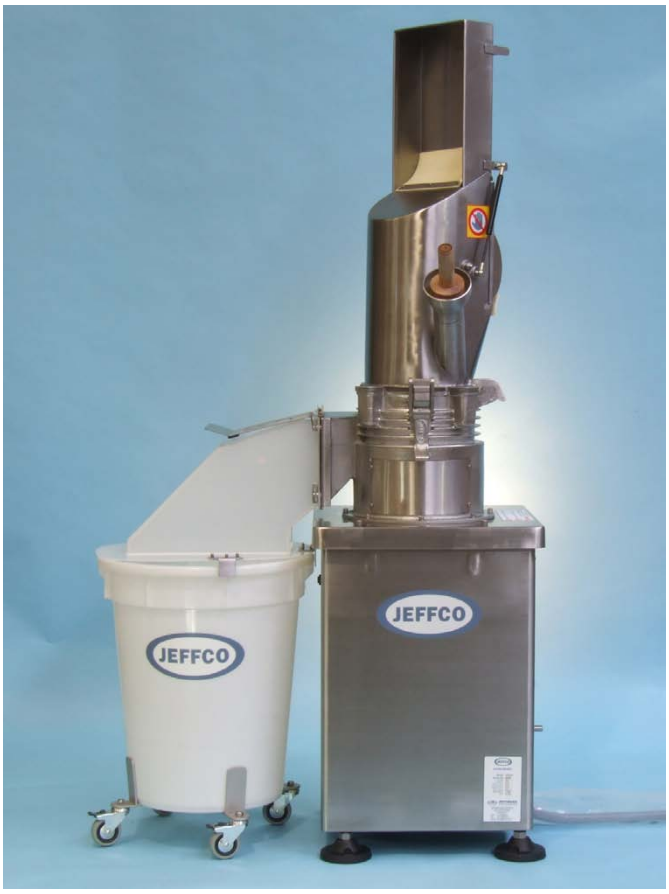
CUTTER GRINDER
Model Series CG03



JEFFCO Cutter Grinder Model CG03CB
with Discharge Hood, Sample Tub and Trolley

- Efficient all-purpose cutter, grinder, shredder and mincer for organic, chemical, plastic and animal products
- Ideal for wet chemistry analysis & NIR spectroscopy of sugar cane & bagasse
- Processes wet, dry & stringy materials
- Superior in performance to any conventional hammer mill or fibrator
- Heavy duty stainless steel construction with a powerful 11kW electric motor
- Convenient, lightweight plastic sample bin or tub & lid; stainless steel trolley
- Choice of feed heads for easy handling & fast processing of materials
- Particle size determined by selection of the screen plate – 3mm to 25mm
- Easy maintenance with quick-change, replaceable cutting components
- Triple electronic interlock sensors & electromagnetic brake for safety
- Electronic controller with integrated Y–Δ 3∅ starter and overload sensing
- Anti-vibration mounts isolate the cutting chamber & motor from the base
- Designed & made in Australia

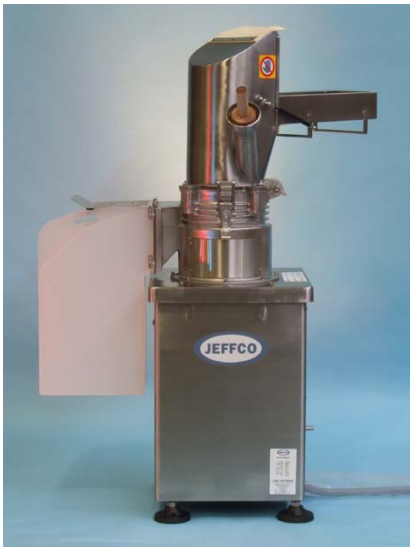
The **JEFFCO Cutter Grinder Model CG03** is a versatile, heavy duty processor for cutting, grinding, shredding and mincing of organic, chemical, plastic and animal products for both production and laboratory use. The effective cutting and separating action of the Cutter Grinder has proven itself in industries around the world for more than forty years. Now, we are pleased to present our third generation models with even better performance, speed and safety.

The all-new **CG03** incorporates the high precision **DoubleCut**™ cutting system which is the result of an extensive development program. A dual blade bank with precut and main blades reduces the material to a size which allows the fibration action to take place more effectively, whilst the laser generated screen plate filters and recirculates the material till the desired particle size is achieved. It can handle moist, stringy or fibrous material without becoming clogged or bound. Many different types of screen plates with variable geometry openings are available to produce a particle size to suit every application. The backward curve ejector places the screen plate under a down-draught force, clearing cut material away from the operating surfaces quickly and cleanly. This fast action makes the **CG03** suitable for high throughput use in production environments.

The **CG03** is especially suitable for the sugar industry in the testing and verification of brix, pol and fibre in sugar cane and bagasse, achieving a Preparation Index (pol in open cell) (POC) of ≥ 95% with the appropriate screen plate.

The **CG03** features robust, stainless steel construction and a powerful 11kW 3Ø electric motor with electromagnetic braking. For operator safety, special **QuadSense**™ electronic interlocks are fitted to detect any attempt to open the cutting chamber, remove the discharge hood or remove the sample bin during processing. The electromagnetic brake fitted to the motor ensures fast, safe stopping of the motor for quick access to the rotating parts when required whilst a foot-operated brake release makes maintenance and blade changes a snap.

Specific attention has been paid to noise and vibration – antivibration isolators are fitted under the motor mounting plate and the base is fitted with height-adjustable isolation feet.



JEFFCO Cutter Grinder Model CG03CB
with Sample Bin

The **JEFFCO Cutter Grinder Model CG03** comprises a robust stainless steel body and cutting head unit with a direct coupled motor drive system. The cutting chamber incorporates a precut blade and two main blades mounted on the rotor. The reversible precut blade is manufactured from specially treated alloy tool steel whilst the main blades are made from a proprietary alloy of our own development, and subjected to induction

Inside the Cutting Chamber

hardening. The parts are then precision ground. Both precut and main blades may be sharpened a number of times to extend their life in heavy use applications. The screen plate is laser profiled to a scientific pattern in special alloy steel which is then subjected to vacuum implantation techniques to achieve the required wear characteristics. A 19mm mesh screen plate is supplied as standard, but other optional sizes and profiles are available for coarser or finer cutting and for unique applications.

Safety is an important design feature of the Cutter Grinder. Both the output unit and the clamp arm which retains the head in place are fitted with proximity sensors. An infrared sensor ensures that the Cutter Grinder cannot be operated if the output receiver is not correctly located and a self-closing metal safety shield protects the discharge port. These safety features prevent the operator from coming into contact with moving parts.

The sample bin and sample tub are made from inert, easy-clean plastic. The tub comes with a fitted lid and a wheeled trolley for quick and easy removal of large samples from the Cutter Grinder.

The ejector provides two functions – to clear material from below the screen plate and to produce a vacuum effect through the cutting chamber which causes the material to move freely.

CG03DF Head

Main Blade Kit

The massive 11kW motor has power to cut through the most difficult materials – even CD-ROM platters – and the brake halts it completely within about one (1) second of any safety violation. A flexible coupling also helps isolate vibration from the cutting chamber.

Maintenance is reduced to a minimum through the use of high grade alloy steels for the cutting components and the generous dimensions of bearings, seals and castings. All of the cutting components may be resharpened to prolong the life of the parts and reduce the total cost of ownership.

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

The **JEFFCO Cutter Grinder Model CG03** is completely designed and manufactured in Australia to the highest quality standards for a long and trouble-free life.

Models:

CG03CB: Combination Unit for sugar cane with tilting tray for billet/core sampled cane and single funnel for whole stalk

CG03DF: Dual Funnel for whole stalk or hand sampled sugar cane

CG03TT: Tray Top for plastic pieces, meat and food products

CG03WT: Wide Throat for special entry requirements

Actual Size Photograph of Cane Output

SPECIFICATIONS

Construction:
Stainless steel body, head & base
Cutting components: stainless and special heat-treated alloy steels
Direct-coupled brake motor
Anti-vibration mounting

Motor & Electronic Circuitry:

Motor:	11kW 3 Ø
AC Supply:	380 – 460 Volts
Frequency:	50 or 60 Hz
Current:	22.5A FLC
Supply:	must be rated ≥35A
RPM:	1470 @ 50Hz
	1760 @ 60Hz
Sensors:	Inductive x 2; IR x 1
Starter:	Electronic Y–Δ 3∅
Overload:	Electronic, auto-reset
Controls:	Start, Stop, Emergency

Safety Systems:
Emergency Stop switch
Fast stop brake motor
Motor overload sensing
Electronic sensing - head closure
Electronic sensing - discharge device
Electronic sensing - tub/bin position
Outlet self-closing safety shield

Cutting System:

System:	Grappler Rotor
	Reversible precut blade
	Four fixed stators
	Dual sharpenable blades
	Geometric screen plate
	Downdraught ejector
Material:	Proprietary alloy steels

Screen Plate:

Material:	Proprietary alloy steel
Screen:	Precision laser machined
Standard:	19mm mesh (supplied)
Optional:	3-25mm mesh

Sample Tub and Sample Bin:
Polypropylene/polyethylene

Machine Dimensions:
Model CG03DF:
555 W x 1400 H x 1120 D (mm)
Net Weight: 352 kg
Model CG03CB:
555 W x 2035 H x 1120 D (mm)
Net Weight: 365 kg

Shipping Dimensions:
All Models:
660 W x 130 H x 1500 D (mm)
Gross Weight: 425 kg

Distributed by:

Our Australian Manufacturing Plant

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Proudly designed and manufactured in Australia by:

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