



**CONSTANT
SYSTEMS**
CELL DISRUPTION MADE EASY



CF Range



The CF Cell Disruptor offers Continuous Flow Processing with two models, the CF1 and CF2. Both models offer the same process and differ only by process speed, the CF1 offers up to 6L per hour and the CF2 offers up to 24L per hour processing rates. Both models benefit from a HMI control, a maximum process pressure of 40kpsi (2700 bar), integrated sample cooling jacket, 200mL inlet reservoir (hopper), auto shut down feature for when the process is complete and both models take advantage of Constant Systems precise and consistent hydraulic control which is fully scaleable through the whole product range from 0.5mL single preparation processing to large volume processing at 150L per hour. This precise control ensures that the entire sample is processed at the operators set pressure to ensure accurate and consistent results and in most cases a single process or pass is adequate meaning multiple passes are not required. Both models are capable of processing fluid or re-suspended sample types and are utilised for many sample types such as bacteria, yeast and algae.

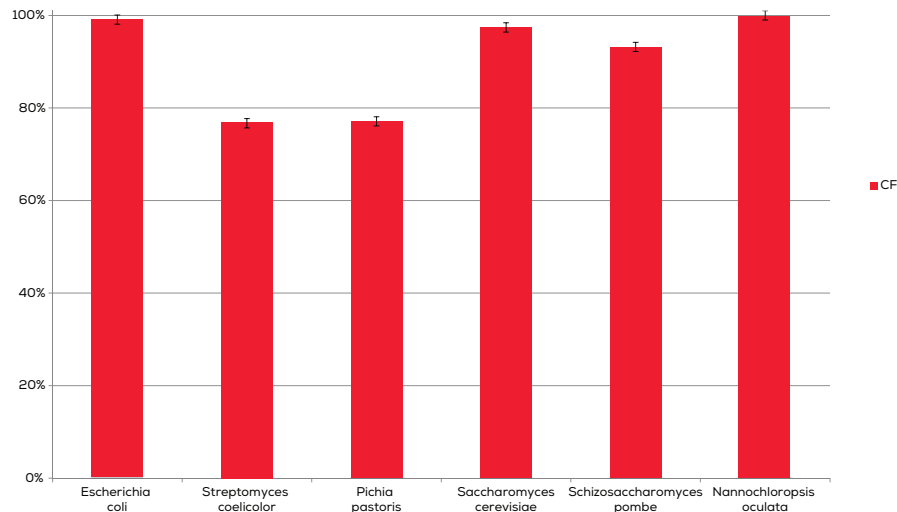
CF1 Model

At approximately 700mm² the CF1 is small enough to bench mount if required but is best suited when used on its tailor made trolley. The CF1 trolley ensures that the equipment is situated at its optimum working height and is mounted on full swivel and lockable casters that enables safe and free movement of the equipment when needed. The CF1 is recommended for process volumes in the range of 15mL through to 10L. For those processing larger volumes in this range then the CF1 can be offered with an integrated peristaltic pump fully controlled through the HMI which will ensure that the inlet reservoir is continually fed whilst recirculating the sample to help avoid any settling until the entire sample is processed.

CF2 Model

With a footprint of approx. 700mm² the CF2 is a floor standing model that is recommended for process volumes from 15mL through to 100L. The CF2 is offered with an integrated peristaltic pump as standard. The CF2 is mounted on full swivel and lockable castors that enables safe and free movement of the equipment when needed.

Lysis Efficiency of Constant Systems CF Cell Disruption Equipment Utilising a Single Pass



- Simple, quick and easy to use
- No need for compressed air or bottled gas, standard electrical supply required only
- No need to prime or purge the equipment prior to use. Any air in the system is simply processed at no detrimental effect to the sample or the equipment
- Design incorporates a stainless steel top tray to capture accidental spillages
- Disruption pressure displayed digitally and is easily and accurately set between 1- 40 kpsi
- Integrated sample cooling jacket ensures that the sample is kept at optimum temperatures throughout the process
- Constant Systems precise and consistent hydraulic control ensures that consistency is maintained during each and every process giving you confidence in repeatability with 99% of the sample being processed at the set pressure
- Utilising industry standard media such as Ethanol (70%), Sodium Hydroxide (1 molar) and detergents such as Virkon (1%) the CF models can be easily cleaned using the following methods
- Process flow cleaning – simply process cleaning media through the equipment as you would your sample
- Reverse flow cleaning and full soak – utilising the peristaltic pump your cleaning media can be pumped backwards through the equipment until the inlet reservoir is filled enabling a full soak if required
- Manual cleaning – All product path components can easily be dismantled for autoclaving or manual cleaning
- Product path materials are industry standard Stainless Steel 316L and F51 duplex or equivalent, WC, EPDM, GLFPTFE & PEEK 450G ensuring that all sample types and industry standard cleaning media can be processed as standard
- Automatic shut down once the sample has been fully processed
- IQ, OQ and PQ available upon request
- 1PH electrical connections – country specific plug type and standard single phase supply via C15 or C20 connection

CF1

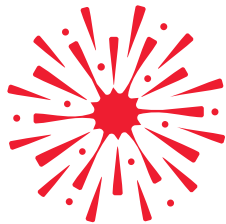
Unit Dimensions: 605x700x740 mm (DxWxH)
 Unit Weight: 130kg
 Electrical Supply: 1 Ph electricity as standard, Americas some areas require 3PH

CF2

Unit Dimensions: 720x700x1340 mm (DxWxH)
 Unit Weight: 240kg
 Electrical Supply: 3Ph electricity



Scan here to see a video on the use of the CF Cell Disrupters



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