The CF principle

The counter has three vibratory plates which transport the products from the bulk hopper to the product detection unit and separate them at the same time.

The infrared product detection unit recognizes each single product by its size. Its accuracy and reliability remains unaffected by dust.

The counted products fall straight into the bottle underneath the filling nozzle. The filling nozzle descends onto the bottle neck to prevent product spillage and can even vibrate to prevent product jamming inside.

Two pneumatic gates are used to hold the bottle right underneath the filling nozzle.

The CF-1220 model is a 12-channel high-speed tablet and capsule counter with single-track bottle conveyor.

The counter has a typical output of up to 55 bottles per minute or 5,500 products per minute, depending on the shape and size of both product and bottle.

With GMP stainless-steel machine frame, FDA approved product contact parts and minimum change parts, the CF-1220 is the fastest and most reliable counter for the pharmaceutical and nutraceutical industry.
Ever since the introduction of the first tablet and capsule counting and filling machine in 1981, Cremer has been serving many major pharmaceutical and nutraceutical companies all over the world. Cremer counters offer the flexibility of counting any kind of tablet, hard or softgel capsule and filling almost any kind of glass or plastic bottle, with minimal changeover parts.

CF-1220*2

While the product settles into the bottle, the pneumatic ‘memory flaps’ collect the pre-counted products for the next bottle. Pre-counting assures the highest possible output.

In the event of a miscount or incorrectly sized product, the bottle is rejected onto the bottle reject station.

Multiple sensors monitor the bottles for correct positioning, indexing and rejecting to guarantee that only correctly filled bottles leave the conveyor.

The full-colour and touch sensitive operator panel makes the counter easy to operate and fully 21CFR part 11 compliant. A large recipe database enables the operator to easily store and recall machine parameters.

The CF-1220*2 model is basically the twin version of the CF-1220 model and offers twice the output on a relative small footprint.

The counter has a typical output of up to 100 bottles per minute or 10,000 products per minute, depending on the shape and size and both product and bottle.

At the beginning of the dual-track conveyor the tracks diverge from a single track into two tracks while at the end the two tracks converge into a single track again, to allow full integration into any packaging line.
The CF counters are designed specifically for seamless integration into complete production lines, but can be used as stand-alone machines just as well. Both models can be customized to meet specific requirements.

The standard models can also be delivered with extended conveyor or without conveyor, with hand-filling station, double filling nozzle or can be integrated with a high-precision check weigher. To achieve even higher outputs on large counts, both models are also available in a 16-channel execution with speeds respectively up to 7,500 or 15,000 products per minute.

**Standard features**

- Large bulk hopper with product level detection
- Vibratory plates for efficient product separation
- Dust collecting tubes
- 100% accurate infrared product detection unit
- Pneumatic ‘memory flap’ unit for pre-counting
- Vibrating filling nozzle
- Pneumatic gating system for fast container indexing
- Conveyor track ‘empty’ and ‘full’ sensors
- Electric height adjustment for different bottle heights
- Hand-held Terminal (optional on CF-1220*2)
- 21CFR part 11 compliant Touch-Screen Terminal (optional on CF-1220)

**Optional features**

- Various sieve plates for extracting product chips and dust
- Channel blocking inserts for very small counts
- Central dust extraction manifold with air flow regulators
- Filling nozzle blockage sensor
- Various check sensors for correct bottle handling
- Fail safe bottle reject station
- Wet-cleaning parts trolley
- Validation support documents
The CF counter benefits

- 100% counting accuracy
- High output and efficiency
- Ease of operation
- 21CFR part 11 compliance
- Only one change part for each product change
- Designed for quick change-over
- Tool-free product contact parts
- Easy to clean
- cGMP design
- FDA approved materials for all product contact parts

**Technical data CF-1220**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tr>
<td>Input voltage (Vac)</td>
<td>230 (-15% ~ +10%)</td>
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<tr>
<td>Electrical connection</td>
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<td>Frequency (Hz)</td>
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<td>Weight (Kg)</td>
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<td>Bottle height range (mm)</td>
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<tr>
<td>Bottle diameter range (mm)</td>
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<tr>
<td>Product length range (mm)</td>
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<tr>
<td>Product width range (mm)</td>
<td>2 – 20 *</td>
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**Technical data CF-1220*2**

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<tr>
<td>Product width range (mm)</td>
<td>2 – 20 *</td>
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</tbody>
</table>

* Depending on the overall shape of the product.

Technical data and specifications in this brochure are not binding and may be subject to changes without prior notice.
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