



## TROWAL SURFACE FINISHING CIRCULAR VIBRATORS MODEL RANGE CM

### Universal applications

**Trowal** circular vibrators can be used for the surface finishing of a multitude of different parts and processing objectives.

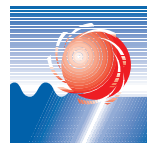
Their scope of applications ranges from the aggressive deburring and radiusing all the way up to high gloss polishing of delicate work pieces, i.e. from aggressive cutdown to generating a pre-plate surface finish. **Trowal** circular vibrators are used not only as economical "stand-alone" machines but can also be integrated into interlinked, fully automatic manufacturing systems

### The specialist!

**Trowal** circular vibrators of the model range **CM** do not have an integrated separation device. Typically they have a flat bottom work bowl. **CM** vibrators are mainly used for finishing of large and delicate components. The **CM** range consists of 6 models with work bowl volumes from 110 up to 1000 litres.



Deburring



Ball burnishing



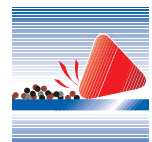
Radiusing



Degreasing



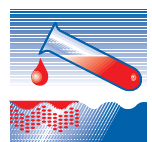
Surface smoothing



Surface cleaning



Surface polishing



Pickling, descaling

# MASS FINISHING • SHOT BLASTING

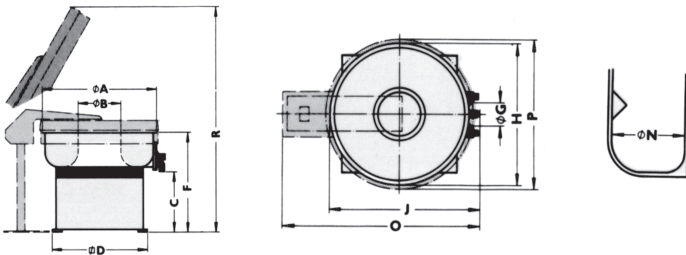
## COATING OF SMALL PARTS • EFFLUENT TREATMENT



**Pneumatic unloading gate** (optional).  
A large diameter, pneumatically activated outlet gate permits complete and quick unloading of the work bowl.



**Paddle wheel** (optional), for processing of large, delicate components.



|   | CM 115                               | CM 205       | CM 305       | CM 405         | CM 605         | CM 1045        |
|---|--------------------------------------|--------------|--------------|----------------|----------------|----------------|
| Gross volume (l)  | 110                                  | 200          | 350          | 420            | 600            | 1000           |
| Usable volume (l)*                                      | 76                                   | 110          | 190          | 260            | 390            | 700            |
| Largest work piece dimension (measured diagonally) (mm) | 160                                  | 180          | 220          | 250            | 280            | 330            |
| Machine weight (kg)                                     | 280                                  | 360          | 545          | 700            | 1165           | 2110           |
| <b>Standard version</b>                                 |                                      |              |              |                |                |                |
| Drive power at 1500 rpm                                 | 1,0 kw                               | 1,0 kw       | 2,6 kw       | 2,6 kw         | 4,0 kw         | 8,0 kw         |
| rpm range   | 1.000/1.500                          | 1.000/1.500  | 1.000/1.500  | 1.000/1.500    | 1.000/1.500    | 1.000/1.500    |
| Max. centrifugal force                                  | 17.540                               | 18.710       | 33.680       | 33.680         | 72.980         | 138.470        |
| <b>Ball burnishing version</b>                          |                                      |              |              |                |                |                |
| Drive power at 1500 rpm                                 | 1,0 kw                               | 1,0 kw       | 2,6 kw       | 4,0 kw         | 7,0 kw         | -              |
| Speed max. (rpm)  | Infinitely adjustable up to 1800 rpm |              |              |                |                | -              |
| Max. centrifugal force                                  | 25.204                               | 26.884       | 48.392       | 75.881         | 104.848        | -              |
| Vibratory drier   | G 200                                | G 200        | G 500        | G 500          | G 500          | G 1000         |
| Hot air belt drier                                      | Upon Request                         | Upon Request | Upon Request | BF-HL 600/3500 | BF-HL 600/3500 | BF-HL 600/3500 |

\* Part geometry, material and delicacy are important for the determination of the media/work piece ratio.

| CM   | A    | B   | C*  | D    | F    | G   | H    | J    | N   | O    | P    | R    |
|------|------|-----|-----|------|------|-----|------|------|-----|------|------|------|
| 115  | 910  | 366 | 646 | 660  | 1030 | 140 | 910  | 935  | 230 | 1495 | 1000 | 2100 |
| 205  | 1010 | 408 | 660 | 820  | 1022 | 140 | 1010 | 1155 | 261 | 1578 | 1110 | 2210 |
| 305  | 1210 | 482 | 670 | 1000 | 1070 | 198 | 1210 | 1320 | 314 | 1800 | 1310 | 2430 |
| 405  | 1380 | 568 | 580 | 1000 | 1109 | 198 | 1380 | 1450 | 377 | 2096 | 1480 | 2715 |
| 605  | 1580 | 644 | 760 | 1370 | 1247 | 198 | 1580 | 1670 | 400 | 2330 | 1680 | 3085 |
| 1045 | 1980 | 860 | 755 | 1570 | 1370 | 320 | 1980 | 2350 | 490 | 2900 | 2080 | 3870 |

Dimensions (in mm)  
\*When using a pneumatic unloading gate, measurement "C" will change.

**CM vibrators** are special machines with many functional advantages:

**• Paddle wheel**

For the processing of large, delicate parts a rotating "paddle wheel" is available. Every segment contains one part. This prevents part on part impingement.

**• Delicate components?**

Extremely gentle work piece processing possible.

**• No mixing of parts**

The pneumatic unloading gate (optional) allows complete discharge of a batch of parts from the work bowl and, thus, prevents parts mixing from different batches

**• Double batch operation**

CM vibrators are ideally suited for double batch operation for elimination of unproductive, idle time.

**• Accessories**

Acoustic lids, compound dosing systems, ball burnishing version for use with steel media, circular rinsing station, etc.



CM-Vibrator with noise enclosure

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