Continuous centrifuges
for recovery
of coolant and oil

Chip processing
Lift-bottom centrifuge LBC
VBU Series
More profit with RECYCLING
Chip wringing is becoming progressively more important in today's machine shops. Environmental laws limit the maximum residual coolant that can be left in transported swarf. Reclaiming the expensive coolant and the increased sales value of the dried chips are significant cost saving factors for a shop operation.

Type VBU
The small continuous chip centrifuge for the daily use

Advantages of the VBU-series centrifuges
- Adjustable centrifuge speed to fit individual requirements
- Automatic and continuous operation
- Minimum number of parts, resulting in smooth running and low maintenance
- Heat treated, one piece long life drum
- Superb de-oiling
- Long lifetime
- Small size
- Low price

<table>
<thead>
<tr>
<th>Type</th>
<th>VBU 300</th>
<th>VBU 1000</th>
<th>VBU 2000</th>
<th>VBU 3000</th>
<th>VBU 4000</th>
<th>VBU 6000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance / kW</td>
<td>0.55</td>
<td>1.5</td>
<td>3.0</td>
<td>5.5</td>
<td>7.5</td>
<td>15</td>
</tr>
<tr>
<td>Capacity / kg/h</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel (Density 1 kg/l)</td>
<td>125</td>
<td>350</td>
<td>800</td>
<td>1365</td>
<td>2140</td>
<td>4520</td>
</tr>
<tr>
<td>Cast Iron (Density 1 kg/l)</td>
<td>125</td>
<td>350</td>
<td>800</td>
<td>1365</td>
<td>2140</td>
<td>4520</td>
</tr>
<tr>
<td>Aluminium (Density 0.33 kg/l)</td>
<td>42</td>
<td>117</td>
<td>267</td>
<td>455</td>
<td>713</td>
<td>1507</td>
</tr>
<tr>
<td>Brass (Density 1.2 kg/l)</td>
<td>150</td>
<td>400</td>
<td>920</td>
<td>1570</td>
<td>2460</td>
<td>5200</td>
</tr>
</tbody>
</table>

Function:
Small metal chips are continuously and regularly fed into the centrifuges charge funnel by a feeding conveyor. The chips slide into the fast spinning centrifuge drum and are accelerated up to the drums RPM. High G-forces (up to 700 times gravity) drive the chips up the drum's side wall and over the coolant outlet towards the upper edge of the drum. In this process the coolant is wrung off the chips and forced out via the coolant outlet. The dried chips pass over the upper drum edge and are guided via the centrifuge housing and discharge funnel into an extractor conveyor or swarf bin.
**Function:**
This up and down motion of the live bottom pushes the chips upward through the sieve. The centrifugal force, up to 500 times the force of gravity, will dry the chips, resulting in the maximum degree of de-oiling. The remaining oil content is extremely low.
The dry chips fall down over the edge of the drum into a container.

### Advantagees of the LBC-centrifuges:
- Extremely low residual coolant in swarf after wringing
- Higher degree of de-oiling through long-term operation
- No cleaning of drum required even when processing sludge
- High dependability and quiet operation (less than 75 dB)
- Easy to service and repair due to highly resistant casing and easily replaceable parts
- Fully automatic and continuous operation

### Type LBC
Lifting bottom centrifuge, especially suitable for grinding swarf (with min. 30% metal particles)

| Typical residual coolant in swarf after wringing, depending on chips and coolant |
|------------------------|----------------------|----------------------|
| Steel/oil             | 1.5%                 |
| Steel/emulsion        | 1.0%                 |
| Cast Iron/oil         | 3.0%                 |
| Cast Iron/emulsion    | 2.0%                 |
| Aluminium/oil         | 3.5%                 |
| Aluminium/emulsion    | 2.5%                 |

### Type LBC

<table>
<thead>
<tr>
<th>Type</th>
<th>LBC 500</th>
<th>LBC 600</th>
<th>LBC 800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance / kW</td>
<td>5.5</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Capacity / kg/h*</td>
<td>1500</td>
<td>3000</td>
<td>6000</td>
</tr>
</tbody>
</table>

* Steel chips with a density of 1 kg/l
Mayfran International (Inc.)
P.O. Box 43038
Cleveland, OH 44143 U.S.A.
Tel.: +1 44 04 61 41 00
Fax: +1 44 04 61 55 65
info@mayfran.com

Mayfran International B.V.
P.B. 31032, Edisonstraat 7
6370 AA Landgraaf/Netherlands
Tel.: +31 4 55 32 92 92
Fax: +31 4 55 32 93 00
info@mayfran-europe.com
www.mayfran.co.uk

Tsubakimoto Mayfran Inc.
5001 Ohno, Tsuchiyama-Cho, Kouga-Gun
Shiga 528-02/Japan
Tel.: +81 7 48 67 10 01
Fax: +81 7 48 67 10 97
www.mayfran.co.jp

Korea Mayfran
72-1, Onsoo-dong
Kuro-ku 152-120, Seoul/Korea
Tel.: +82 26 11 58 86
Fax: +82 26 86 25 21
www.mayfran.co.kr

Miven Mayfran
P.O. Box 59 Karwar Road,
Hubli-580 024/India
Tel.: +91 8 36 30 36 77
Fax: +91 8 36 30 32 65

Mayfran GmbH
Hüttenstraße 7
D-52068 Aachen/Germany
Tel.: +49 2 41 93 87 20
Fax: +49 2 41 17 50 80
sales@mayfran-europe.com
www.mayfran.de

Niederlassung Süd
Richthofenstraße 32
D-73312 Geislingen/Steige
Tel.: +49 7 33 19 55 30
Fax: +49 7 33 19 55 355
sales@mayfran-europe.com

Mayfran U.K. Ltd.
3 The Quadrant, Coventry CV1 2DY/UK
Tel.: +44 24 76 45 90 00
Fax: +44 24 76 45 96 90
www.mayfran.co.uk

Mayfran France S.A.R.L.
Centre D’Affaires, Paris-Nord
Immeuble Ampère,
F-93153 Le Blanc Mesnil Cedex/France
Tel.: +33 1 48 65 78 00
Fax: +33 1 48 65 66 55
www.mayfran.fr

Mayfran Canada Ltd.
5956 Airport Road, Suite 300
Mississauga, Ontario, Canada L4V 1R9
Tel.: +1 90 56 78 00 18
Fax: +1 90 56 78 00 19