Polishing machines

Automatic machines for micro-fine polishing of tablet press tooling
Control panel.
Coloured 4.3” touch screen. User-friendly menu.

Switch cabinet.
Machine has integrated control cabinet into main frame. All wiring is guided in side panel.

Storage space.
The lower part of the machine is dedicated for storing of format holders and polishing materials.

Driv e cover.
Stainless steel cover allows for easy cleaning of the polishing chamber.

Container control.
Position and fixture of the container is controlled by mechanic sensor.

Process container.
Machine is equipped in octagonal process container, which allows the optimal movement of the granulate during polishing process. In option available cooling jacket.

Why should we polish punches and dies?

We use in our machine known and checked way of dry polishing with polishing granulate and paste. Holders with punches are plunged and dragged in hopper filled with walnut shell granulate mixed with special polishing paste with proper content of aluminium oxide. Each of three holders rotates with increased speed comparing to the whole polishing head. This system guarantees access of the granulate to each side of the punch.

The average time of the polishing cycle is about 30-40 minutes and of course depends on the punches condition before polishing.

Operator can precisely set the parameters of the process as total polishing time, direction time right/left, speed of the polishing head.

BENEFITS OF POLISHING

- lowering of the punch stiffness in the die tables of the tablet press
- higher efficiency of punch cleaning after polishing, because of smoother surfaces
- smaller tendency to stick of the tablets to punches
- removing the corrosion spots - faults appearing during incorrect maintenance and storing

PA300 Pharma

Format holders.
Easy and quick change of format holders.

BBS, B, BB or D die holder
Punch holder EUT
Punch holder EUT9

Operator can precisely set the parameters of the process as total polishing time, direction time right/left, speed of the polishing head.
Technical Specification

Polishing machines designed by us allows to polish in automatic cycle up to **80 punches** of format **EU19 (B)** and up to **60 punches** of format **EU1’ (D)**. Holders are predesigned to fit whole set of upper or lower punches from the most common production tablet press sizes.

Machine is controlled by **4.3” coloured touch screen** operating panel. User-friendly menu allows for easy setting of the parameters and problem-free operation of the machine. On the alarm list – diagnoses tells to the operator actual state of the device.

There are defined three run modes: **automatic run mode, manual** and **mixing mode**: Each of them is dedicated to different job and on the screen operator can see only necessary information.

In due time, system based on the polishing cycles timer – will inform about necessity of exchange of the polishing granulate, which guarantees the constant conditions of the polishing.

### Machine dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>PA300</th>
<th>PA500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>1950 mm</td>
<td>1950 mm</td>
</tr>
<tr>
<td>Width</td>
<td>970 mm</td>
<td>1100 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>740 mm</td>
<td>870 mm</td>
</tr>
</tbody>
</table>

### Holders types

<table>
<thead>
<tr>
<th>Type</th>
<th>Qty of tools per holder</th>
<th>Qty of holders per machine</th>
<th>Total qty of tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine type</td>
<td>PA300</td>
<td>PA500</td>
<td>PA300</td>
</tr>
<tr>
<td>Punch holder EU19</td>
<td>16</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Punch holder EU1’</td>
<td>12</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Die holder BBS, B, BB or D</td>
<td>16</td>
<td>16</td>
<td>3</td>
</tr>
</tbody>
</table>

### Technical data

- installed power 1.5kW / 2kW
- power supply 230V, 50 Hz, 3m cable