PARDUS
Stream and Drag Finish System for High Performance Cutting Tools

- Machines especially designed for cutting tools
- High productivity and low running cost
- Rapid tool exchange

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www.PD2i.com
Based on our long experience in PVD and validated by machining tests we have developed Drag Finish machines especially designed for cutting tools and tool holders.

Why Drag Finish improves the performance of your cutting tools?

The grinding process leaves a sharp, but brittle cutting edge, often with defects. PVD coating on a sharp, brittle cutting edge leads to micro chipping, peel off or breaking during the initial phases of machining.

- Improved surface roughness and removed droplets after coating reduce the torque and improve the chip flow

The Drag Finish purpose:

- Produce a reliable honed cutting edge. To create a well-defined radius in relation of the machining operations.

Double container Drag Finish

The machine is equipped with 2 media-containers:

- to avoid to change the media container for the different request of edge preparation and polishing
- tools can be operated in two different media e.g. roughing and fine polishing without media or tool change
**Benefits of Edge Preparation**

- Maximum precision and stability
- Efficient chip evacuation
- Superior surface finish
- Increased cutting speed & feed
- Longer tool life - reduced chipping

**Stream Finishing System**

During this process the clamped tools and the media container are turning; available for manual loading or with robot.

- High speed robotized loading and unloading
- Fast processes due to the high processing forces
- Processes parameters for deburring, polishing, honing in a single process operation
- Homogenous process on the full tool length
- High productivity: up to 144 tools/hour

**Carbide Drill Honing**

**Roughness and Radius measurement**
**Media mixes for Pardus drag finish units**

<table>
<thead>
<tr>
<th>Media Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAPF46</td>
<td>Media for post coating polishing/small honing (upto 10 micron)</td>
</tr>
<tr>
<td>MAHst36</td>
<td>Media for standard honing (8-18 micron)</td>
</tr>
<tr>
<td>HAR24</td>
<td>Media for large honing (15-30 micron)</td>
</tr>
<tr>
<td>VA16</td>
<td>Media for very large honing (30-50 micron)</td>
</tr>
<tr>
<td>SCH16</td>
<td>Media for polishing and small honing of tools with cooling holes of 0,8mm and smaller</td>
</tr>
</tbody>
</table>

**Tool holder**

All heads are equipped with a quick jigg connect system to facilitate the loading of the tool holders.

- Quick Tool Holder - proprietary tool holders with collets for very fast tool change; available for all shank diameters (metric and inch) 3 mm/1/8" to 25 mm/1".
- Screw Holder with bushings - the economic solution for odd sizes available for all shank diameters (metric and inch).
- Special holders for non standard tools (e.g. inserts, drill heads, stick blades, etc.) are available on request.

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