



# OERTLI



Excellence in solid wood

**HPC / HPC +**  
Tooling systems for a  
maximum productivity

# HPC / HPC+

## Performance increase thanks to an optimised environment





## A perfectly tuned team

To increase both the speed and the feed rate, the entire tool environment is taken into account along with the tool design. OERTLI optimally coordinates all the relevant factors, thus ensuring peak performance and perfect surface quality.

### Tool design:

#### SP-technology

The clamping system „SP-Technology“ guarantees an absolutely clearance-free centering of the tools on the arbor. Thanks to the most modern adhesive technology a zero tolerance between bore and spindle can be achieved. So the minimal residual imbalance and concentricity is optimized essentially.

#### CAT knife seat

By using the centrifugal forces, this new technology enables the full utilization of a CNC system. Approved for cutting speeds of up to 120 m/s, the feed rate can be increased by up to 40 %.

#### Knife system

For the selection of the optimal cutting system, OERTLI distinguishes between the executions with custom made CAT profile knives and a combination of standard reversible knives. Reversible knives are suitable for selective knife change to ensure high efficiency. The CAT profiled knives are used for custom made profiles or situations where the knives need to be changed very easily and quickly.

#### Hybrid tools

The „Hybrid“ concept combines two established knife-systems to obtain an optimal machining performance for the production on CNC machining centres. Due to a combination of pre-cutting knives and finish knives, it is possible to achieve vastly improved performance values for CNC tooling.

### Tool environment:

#### Centre of gravity

The centre of gravity is a decisive factor for the smooth running of your machine. We calculate the centre of gravity of each set of tools and adapt the maximum rotation speed accordingly.

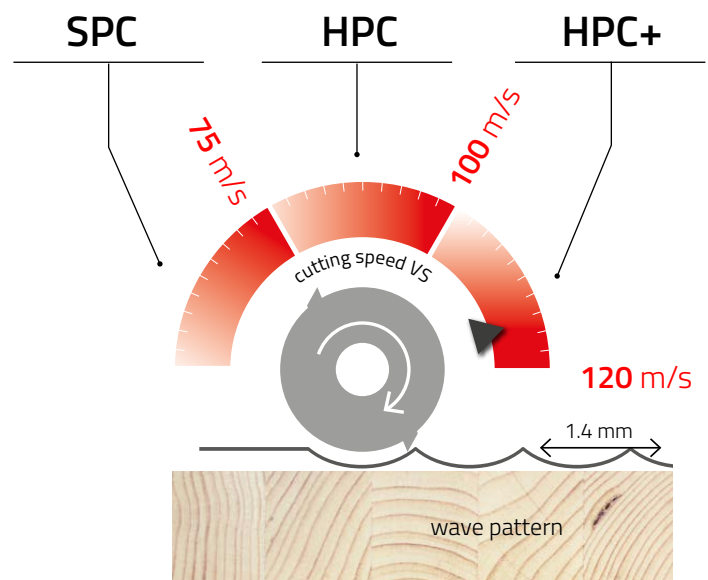
#### Weight

Light tools can rotate faster than heavy tools, as the machine spindle is subject to fewer loads. This is why we take the relevant tool weight into account when calculating the rotation speed.

## Increase of performance with HPC and HPC+

The tool design and tool environment have been optimally coordinated. Now the speeds and feed rates can be increased, while the wave pattern remains the same.

Operating data	Compared with SPC	HPC	HPC+
Diameter (mm)	180	180	<b>180</b>
Speed (U/min)	8'000	10'000	<b>12'500</b>
Feed rate (m/min)	11.2	14	<b>17.5</b>
Wave pattern (mm)	1.4	1.4	<b>1.4</b>
Vs (m/s)	75	100	<b>120</b>



- High speed
- Increased feed rate
- Constant wave pattern

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