**Technical Notes**

**Porcellana**

Alpha® Porcellana is our premium wet cutting blade designed for use by tile professionals. The diamond grits and matrix are specially formulated to cut dense porcelain tile and slab with minimal chipping at optimal speed. The Alpha® Porcellana produces high quality cuts that will minimize waste and improve your bottom line. The 8" and 10" blades are equipped with a 10mm continuous rim, which provides for a long cutting life. The blade never needs dressing, and that improves operator performance and efficiency. All these features combined make the Alpha® Porcellana quite cost-effective. Alpha® also offers this blade in a 4-3/8" and 5" size to fit our AWS-110 and AWS-125 Wet Stone Cutters. This allows tile contractors to perform wet cutting of porcelain tile on the job site, without the need for a bulky tub or tile saw. Besides porcelain, Alpha® Porcellana cuts well on most common materials such as marble and granite tile. Alpha® Porcellana is clearly the best choice for tile contractors.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Maximum RPM</th>
<th>Arbor</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT04A+</td>
<td>4-3/8&quot;</td>
<td>13,200</td>
<td>7/8&quot;, 20mm</td>
</tr>
<tr>
<td>PT05S</td>
<td>5&quot;</td>
<td>12,200</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>PT07A+</td>
<td>7&quot;</td>
<td>8,400</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>PT08A+</td>
<td>8&quot;</td>
<td>7,400</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>PT10A+</td>
<td>10&quot;</td>
<td>5,900</td>
<td>5/8&quot;</td>
</tr>
</tbody>
</table>

**How to Use**

Mount the Alpha® Porcellana blade onto the appropriate power tool designed for the blade diameter:
- 4-3/8" diameter blade will fit the Alpha® AWS-110, AWS-125 or 4-1/2" Angle Grinders.
- 5" diameter blade will fit the Alpha® AWS-125 or 5" Angle Grinders.
- 7" diameter blades will fit onto tile saws.
- 8" diameter blades will fit onto tile saws.
- 10" diameter blades will fit onto tile saws.

When mounting the blade onto the power tool, make sure the blades directional rotation matches the spindle rotation of the power tool.

Step-cutting is recommended to enhance the life of your blade.

Always make sure the power tools safety guard is mounted onto the tool. If the blade doesn’t fit with the safety guard on the tool, you’re probably using the wrong size power tool.

**Frequently Asked Questions (FAQs)**

*Which way do I install the blade on my tool?*

The blade direction is printed on the front of the blade. Install the blade so that the blade will follow this direction. If the front of the blade is no longer legible, a directional arrow is embossed into the back of the blade. As a last resort, examine the diamonds. The bond tail behind each diamond should be pointing the opposite direction of blade rotation. If the blade is installed incorrectly, the bond tails will reverse direction, which may cause some premature wear.

*What materials can I cut with the Alpha® Porcellana blade?*

The Porcellana blade is primarily designed for use on porcelain materials. In addition, it performs well on Ceramic, Marble, Granite and Engineered Stone.
Can I cut Onyx with the Alpha® Porcellana blade?
Yes. You can cut Onyx using this Porcellana blade. We also recommend the Alpha® Vetro blade designed for the glass application for cutting Onyx. It has a continuous rim with finer diamonds to minimize the chipping of the edge.

Can I use the Alpha® Porcellana blade for dry applications?
No. Wet cutting diamond blades must be used with water to prevent excessive heat buildup during cutting. Using water on the blade also reduces dust and helps enhance the cutting performance and life. A continuous water flow is critical. Using “wet” blades without water even for a few seconds will cause excessive heat and blade damage.

The speed of my cut is slowing down. What can I do to improve it?
The diamonds are rounding over or glazing causing the blade to lose its cutting ability. You need to re-dress the blade using a soft abrasive material such as a dressing stone or a concrete block.

Can I use this blade for cutting metallic glazed porcelain?
No. Alpha® recommends using the Alpha® Metalgres tile blade which is specifically designed for cutting metallic material.

What is the maximum RPM at which I can use the Alpha® Porcellana tile saw blades?
See the chart on page 1.

What is the arbor size of the Alpha® Porcellana blades?
See the chart on page 1.

Helpful Hints

- Do not force the blade to cut. Allow the diamonds to perform cutting through the material. Slower cutting helps eliminate chipping on the cut edge.
- For thick material (3cm or 1-1/4”) step-cutting is highly recommended.
- The Alpha® Porcellana blade is WET USE ONLY.
- Take appropriate steps to assure personal safety when performing any cutting application.
- Review operations manual of the power tool to assure proper usage.

Reference
For more product information, visit us on the web at www.alpha-tools.com.