Selecting The Right Burnishing Pad

BURNISHING BACKGROUND

High speed burnishing continues to be one of the most efficient methods used to maintain a high gloss shine on floors. Advances in equipment, pads, and polymer technology have made high speed floor care easier than ever before.

However, many people have trouble understanding what burnishing really is and developing a burnishing program for their facility.

Certain terms used when describing burnishing, such as “thermal” or “thermoplastic,” imply that heat plays a major role in the burnishing process. In reality, burnishing is actually a physical abrasive process that makes a rough, non-reflective surface into a smooth, highly light-reflective surface. This is accomplished with machinery that moves an abrasive pad at high rotational speeds.
BURNISHING FACTS

- All floor finishes are based on a type of polymer called “thermoplastic.” The scientific definition of a thermoplastic is a polymer that can be softened (melted) by heat and re-formed into another shape. The melting temperature of a polymer is far higher than what is achieved with burnishing. Thermoplastic acrylic polymers range in properties from very soft to very hard.
- Dry burnishing does not reduce the slip resistance of a floor finish.
- Some dust generation is an inevitable part of burnishing because of the abrasive nature of the process. Excessive dusting suggests that the finish formulation is not appropriate for burnishing or more likely, the pad is too aggressive for the machinery being used.
- The best burnishing pad for a particular application is dependent on several variables:
  - Machine Type: Electric, battery, or propane
  - Machine Speed: RPM (revolutions per minute) – 1000-2000 is considered high speed burnishing, 2000+ is considered ultra-high speed burnishing
  - Floor Finish: Burnishing finish, versatile finish, or extended wear finish
- The highest “wet look” gloss is achieved with finishes specifically designed for high speed burnishing.

BURNISHING SYSTEMS

Floor Finish: The appropriate floor finish for an application depends on customer expectations, as well as the quality and frequency of maintenance. A floor finish should be chosen based on a desired appearance and maintenance program, not the other way around.

Burnishing Finishes: For regularly scheduled high speed burnishing programs where the customer wants and expects a “wet look” appearance. These finishes should be burnished 4-7 times per week.

Versatile Finishes: These finishes can achieve high gloss with virtually any maintenance program, as long as the floor is maintained properly. They also provide greater durability than burnishing finishes.

Extended Wear Finishes: For maintenance programs based on spray buffing or programs that involve infrequent burnishing.
**Restorers:** These products are a blend of polymers, waxes, solvents, and cleaning agents to aid burnish response. Restorers also help fill in scratches and scuffs to smooth out a floor. The use of a restorer can help prolong the appearance of the floor and reduce recoat frequency.

**Equipment:** Burnishing equipment consists of three distinct types: electric, battery, and propane.

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<thead>
<tr>
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<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Electric</td>
<td>Efficient, lightweight, easy-to-use and maintain, economical. No fumes. Dust control option.</td>
<td>Pad pressure limited by power source. Requires cord.</td>
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<tr>
<td>Battery</td>
<td>More efficient, easy-to-use and maintain, no fumes, dust control option. No cord limitation.</td>
<td>Requires periodic charging, batteries add weight.</td>
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<tr>
<td>Propane</td>
<td>Most efficient. No cord limitations.</td>
<td>Odors can affect indoor air quality, noisy, hazardous pressurized fuel, high maintenance, can burn floors.</td>
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**Pads:** Burnishing pads are available in a variety of textures. For ease of comparison, pads are sometimes placed in three categories: aggressive, moderate, and light. The correct pad for any given situation depends on the type of equipment and floor finish used. As a general rule of thumb, harder floor finishes require more aggressive pads while softer finishes respond better to less aggressive pads.

**BURNISHING PAD SELECTION GUIDE**

<table>
<thead>
<tr>
<th>Burnisher Type</th>
<th>Finish Rating</th>
<th>Pad Recommendation</th>
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<tr>
<td>Propane</td>
<td>Soft Medium Hard</td>
<td>Light Moderate Moderate</td>
</tr>
<tr>
<td>Battery</td>
<td>Soft Medium Hard</td>
<td>Light Moderate – Aggressive</td>
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The number and types of burnishing pads on the market continues to expand, making pad selection more confusing. However, experimenting with different pads offers a simple and easy way to optimize appearance and achieve maximum performance. Companies like Americo®, 3M®, and ETC® offer various types of pads that are suitable for virtually any facility and maintenance program. To extend floor finish life, the least aggressive pad that accomplishes the desired effect should be used.

**Light Burnishing Pads:** Americo® Joey, 3M® Sky Blue, ETC® Jaguar

**Moderate Burnishing Pads:** Americo® CocoPad, 3M® TopLine, ETC® Aqua Plus

**Aggressive Burnishing Pads:** Americo® Buckaroo, 3M® Eraser, ETC® Gorilla

**BURNISHING TIPS**

- A clean floor free of soil and abrasive grit is essential to achieving the highest shine and durability. Prior to burnishing, place a piece of white paper on the floor, move the paper back and forth with your hand, then look for signs of dirt picked up on the paper. If the floor has grit and soils, dust mop followed by mopping or wet scrubbing.
- If the burnisher is not equipped with dust control, dust mop after burnishing.
- The most aggressive pads can be more effective at removing light scratches and scuffs. However, these pads may not provide the highest achievable gloss. A system using two different pads can be beneficial. Example: Burnish four times per week; three times utilize a moderate pad, one time use a highly aggressive pad.
- Try different pads to determine what type works best with the floor finish and equipment used. The most aggressive pads may work exceptionally well on some products, but may be too abrasive for others and may result in excessive and unnecessary finish loss.