RECKITT BENCKISER PROFESSIONAL

INFORMATION BULLETIN

SUBJECT: High Speed Burnishing
Fact versus Fiction

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The purpose of this presentation is to deal with the Facts... and the Fiction of High Speed Burnishing Programs.

To begin, let's review the chemistry of floor finishes...

A. Acrylic Floor Finishes and their inherent properties are designed around three major ingredients. Keep in mind, there are a number of important, but less significant additives which will not be mentioned in this discussion. The three major ingredients are the polymer, the wax and the plasticizers.

The polymer is the most important portion of the finish. The specific wear and maintenance properties desired belong to the base polymer. These properties include: gloss, hardness, durability, removability and resistance to scuffing, black marks, powdering, soil, detergents, water, while maintaining a safe slip resistant surface.

All the remaining chemicals that are added to produce a finished formulation are used to modify the inherent polymer properties, but the base properties desired are determined by the polymer selection.

The second major component is called "wax". This is also a synthetic polymer, although of entirely different composition than the base polymer. The function of wax in a formula is to provide the desired buffability while contributing to the film's hardness.

Typically, the higher the wax content the more buffable the finish. However, too much wax modifies the finish to make it softer and more susceptible to scuffing and dirt pick-up.

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The third major component of importance is the plasticizers. Some plasticizers are solvents that assist in film formation and evaporate as the film is drying, while other plasticizers remain within the film during its life to provide resiliency.

Various combinations and amounts of the above ingredients are basically all that are responsible for the various performance properties of finishes today, as is proven by the consistent, repairable results of MASTERPIECE® Finish and METALIST™ 20 in account after account. All the properties inherent to any floor care system are designed through the base polymer.

Keep these points in mind as we discuss the Facts ... and the Fiction of High Speed Burnishing Programs.

B. **THE FICTION**

All floor finishes used in High Speed Programs, must be “Thermoplastic” in composition.

THE FACT

Regardless of some claims to the contrary by some finish manufacturers, ALL floor finish films, whether designed for High Speed Burnishing or not, are thermoplastic.

Thermoplastic is a term that defines a material that will flow, deform or become “plastic” when heated. This material can differ in a host of ways, including its toughness, hardness and temperature at which it softens. Some examples of thermoplastic materials include:

- Steel
- Glass
- Butter
- Plexiglas
- Floor Finishes

C. **THE FICTION**

High speed burnishing causes a melt down of the layers of finish.

THE FACT

High speed burnishing is nothing more than controlled scratching that results in physical removal or abrasive smoothing of the top wear surfaces of the finish. The results of this smoothing are enhanced gloss (Figure I).

Reckitt Benckiser Professional’s recommendations have stressed the application of five or six total coats of finish for two reasons.

1. Successive coats of finish will “dampen out” the irregularities of the tile (especially after stripping).

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2. Under a burnishing program, the film is abrasively removed. Without adequate coats of finish, one runs the risk of prematurely damaging or wearing out tile.

Multiple coats of finish result in a smooth surface that reflects light in an ordered, regular pattern (See Figure 1 (B). This ordered reflectivity results in high gloss. Similar results can be achieved by the smoothing, abrasive effects of High Speed Burnishing.

D. THE FICTION

Difficulty in finish removal is caused by High Speed Burnishing.

THE FACT

Because high speed maintenance programs and durable repairable finishes such as MASTERPIECE® and METALIST™ 20 have delivered on the promise of less frequent stripping operations, the base may remain on the floor for significantly longer periods of time.

All finishes lose some of their removability as they age. The poorer removability of high speed maintained films is often a result of the time on the floor and not from any physical or chemical changes that take place as the finish is burnished.

Because removability only gets more difficult with time it is important that finishes used in a high-speed maintenance program start out with excellent removability.

Now that we've separated the Fact from the Fiction we can discuss the real benefits of a High Speed Burnishing Program:

1. Consistent, uniform gloss, since high speed burnishing helps create and maintain the level surfaces that reflect light (gloss).

Our MASTERPIECE® and METALIST™ 20 Systems are specially designed to move (repair) with High Speed Burnishing to create the level surfaces that create gloss and in addition ... no powder.

2. Reduced labor cost through more rapid gloss restoration than is possible by applying additional coats.

Since our MASTERPIECE® and METALIST™ 20 System responds so well to High Speed Burnishing, your customers will enjoy this benefit as well. In addition, the "one-step" performance of MASTERPIECE® Neutral Cleaner for general cleaning and MASTERPIECE® Penetrating Wax Stripper or METALIST™ Wax Stripper for stripping will help further reduce labor costs.

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3. Fewer recoats are required due to the high solids contributed mainly by the polymer base of MASTERPIECE® and METALIST™ 20. This not only provides a faster gloss build, but also maintains its appearance and protection through repeated cleaning and burnishing operations.

4. Less frequent strip-outs are the result of all the above properties. Ultra fast stripping, a first quality finish and powerful cleaning all prolong the life of the Floor Care System to provide the beauty ... speed ... and simplicity demanded.

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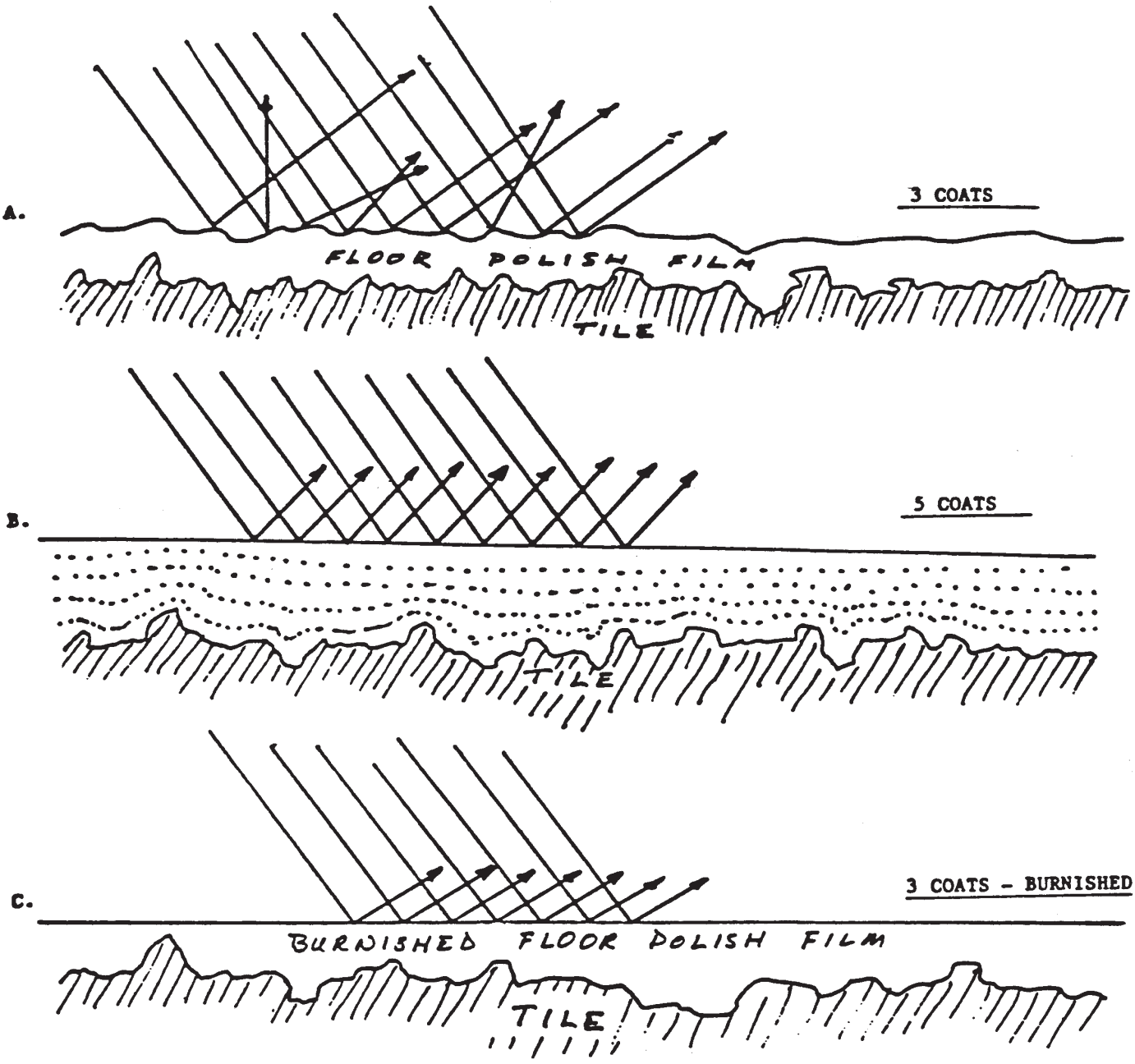
A.
3 COATS
FLOOR POLISH FILM
TILE
B.
5 COATS
TILE
C.
3 COATS - BURNISHED
BURNISHED FLOOR POLISH FILM
TILE

FIGURE I