Optimizing Your On-Premise Laundry Care Program

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Presented by
P&G Professional™
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Objectives

• Learn to pinpoint potential problem areas in your on-premise laundry program

• Realize the impact of cleanliness and presentation of linens on guest satisfaction

• Discover efficient and effective laundry practices to maximize program performance
Our Experts

• Atul Patel,
  – Regional Director, Asian American Hotel Owners Association

• Steve Kovacs
  – R&D Section Head, P&G Professional
    • University of Louisville, Masters in Chemical Engineering
    • Xavier University, MBA
    • Inventor, holds six U.S. patents

• Rachel Tetreault,
  – Customer Business Development Manager, P&G Professional
Atul Patel
Regional Director, Asian American Hotel Owners Association
What is important as an owner/operator?

- Quality & Cleanliness of Linens
- Service of Cleaning Products Professional
- Cost analysis
- Eco-friendly / Sustainable
Quality & Cleanliness of Linens

• Only thing that matters: Customer Satisfaction
  – Clean & fresh smelling linens & terry
  – Quality of linens & terry: soft and dense
  – Home-like experience
Service of Cleaning Products Professional

• Continuous staff training on products

• Reviewing linen results, testing and titrating dispensers and wash water

• Product Packaging and Delivery
COST ANALYSIS

- Mistake: Only reviewing the immediate chemical expenses but forgetting the bigger picture
- Improve labor workflow: work smarter not harder
- Review linen replacement costs from quality not theft perspective
- Upgrading to better, greener equipment to reduce utilities
Typical Operating Cost Splits for Lodging

- Labor and linen replacement combined account for more than 2/3 of all costs
- For effective cost control focus on these two elements first

Source: Data on File
Managing Operating Costs

- **Labor Costs (46% of total costs)**
  - Drive efficiency by:
    - Training employees properly including cross-training
    - Avoiding rework – follow proper procedures, such as sorting, proper linen filling into washing machines, etc.
    - Effective pretreat and rewash program
    - Improve workflow tools, carts, storage areas, & scales

- **Linen Costs (22% of total costs)**
  - Extend linen life by keeping fabrics stronger for longer. Consider near neutral pH laundry solutions, which reduces wear and tear from washing.
  - Avoid low pars in inventory thus allowing the linen fibers to rest and extending linen life
Eco-friendly

Equipment Performance and Utility Conservation

• “a poor musician blames his instruments for his performance” NOT TRUE!!!

• Use Energy-Saving Equipment
• Preventive Maintenance a MUST
• Review chemical impact on environment

Industry Trend:
The hospitality industry is increasing eco-friendly purchasing and operation. Such matters are increasingly important to patrons.

Source: Green Hotels Association
SUMMARY

• Fresh & clean linens and towels are crucial. If perceived dingy or thin, guests will often complain and ask to switch rooms or a refund
• Utilize the chemical product in the correct manner
• Do a true cost analysis not just the chemical cost
• Invest in labor efficiency ie. enough clean linens in inventory or better carts.
• Properly maintain equipment or replace with more efficient equipment.
• Consumers are increasingly eco-friendly – consider this as will impact guest satisfaction.
Laundry Soap/Detergent Evolution

- Alkaline soaps have been around since **1500 B.C.** They used animal fat and alkaline potash to make early soaps.

- Soap started to be used for cleaning clothing items as well.

- Over time, soap technology evolved, and soap became more sophisticated – less harsh by neutralizing soap completely, using purer grades of starting materials and adding in fragrance, colorants.

- First synthetic laundry detergent: Tide in 1946

- Liquid detergents evolve in 1970s and 1980s.

- Phosphates removed from P&G detergents in 1994.

- Compaction and improved performance.
Laundry Cleaning Model

What are the primary drivers of effective linen and fabric cleaning?

- Proper pre-sorting
- Four factors outlined in Dr. Sinner’s Cleaning Model:
  - Cleaning Chemistry
  - Time
  - Temperature
  - Mechanical Action
Two primary chemistry approaches, both primarily in liquid form, are being utilized in modern, automated on-premise laundry systems:

- *Alkaline Detergents*

- *Near Neutral Detergents*
### pH Scale

<table>
<thead>
<tr>
<th>Concentration of Hydrogen Ions compared to distilled water</th>
<th>Examples of solutions at this pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH = 0</td>
<td>Battery acid, Strong Hydrofluoric Acid</td>
</tr>
<tr>
<td>10,000,000</td>
<td>Hydrochloric acid secreted by stomach lining</td>
</tr>
<tr>
<td>1,000,000</td>
<td>Lemon Juice, Gastric Acid Vinegar</td>
</tr>
<tr>
<td>100,000</td>
<td>Grapefruit, Orange Juice, Soda</td>
</tr>
<tr>
<td>10,000</td>
<td>Acid rain Tomato Juice</td>
</tr>
<tr>
<td>1,000</td>
<td>Soft drinking water Black Coffee</td>
</tr>
<tr>
<td>100</td>
<td>Saliva</td>
</tr>
<tr>
<td>10</td>
<td>&quot;Pure&quot; water</td>
</tr>
<tr>
<td>1/10</td>
<td>Sea water</td>
</tr>
<tr>
<td>1/100</td>
<td>Baking soda</td>
</tr>
<tr>
<td>1/1,000</td>
<td>Great Salt Lake Milk of Magnesia</td>
</tr>
<tr>
<td>1/10,000</td>
<td>Ammonia solution</td>
</tr>
<tr>
<td>1/100,000</td>
<td>Commercial Dish Soap</td>
</tr>
<tr>
<td>1/1,000,000</td>
<td>Oven Cleaner</td>
</tr>
<tr>
<td>1/10,000,000</td>
<td>Liquid drain cleaner</td>
</tr>
</tbody>
</table>

#### pH Scales
- **Laundry Sours (acid)**
  - "Near Neutral" e.g., Tide 2X
- **Alkaline Detergents**
Alkaline Detergents

- The high pH formulation used is effective in removing body soils, grease and the like through saponification.
- Commonly used material in formulating liquid alkaline detergents is sodium hydroxide.
- Requires multiple rinsing or use of acid (sour) rinse to return pH to close to neutral.

But...

- Are corrosive.
- Safety considerations in handling by employees.
- Linens retain mineral encrustation (stiff, rough-feeling fabrics).
- Linen wear and tear.
Near Neutral Detergents

• Offer formulation flexibility to incorporate advanced cleaning chemistries for broad range of soils/particulates
• No need for pH correction through use of sour
• Softer feeling fabrics
• Less wear and tear on fabrics
• Non-corrosive and safe to handle by employees

But...
  – Are more complex in formulation strategy
Impact of Mineral Encrustation – A Recap

Near Neutral pH detergent (e.g., Tide 2X) prevents calcium formation and deposition on fabric.
Formulation Strategy – Overview

Starts with a blend of quality SURFACTANTS

**FUNCTION:** To remove greasy/oily stains including body soils. Surfactants also provide soil suspension, wetting and sudsing … the “workhorses” of the detergent formulation.

**STRUCTURE:** Anionic – think ‘tadpoles.” Surfactants are composed of a “water loving” (hydrophilic) head and “water hating/soil loving” (hydrophobic) tail.

*Like a Magnet – Attraction and Repulsion Ends*

Hydrophobic tail  
(loves dirt)

Hydrophilic head  
(loves water)

Roll up & Emulsification
**Formulation Strategy – Overview**

**Builders**
- Remove water hardness ions, calcium and magnesium, the second “enemy” of clean clothes after stains and dirt
- Hardness ions come primarily from the water

**Enzymes**
- Proteins that catalyze the degradation of specific chemical bonds in soils/stains
- Break down soils/stains into pieces which are easily washed away

**Anti-Re-Deposition Agents**
- Helps prevents soils from re-depositing once it has been removed

**Soil Release Polymers**
- Modify the fabric surface, reducing attraction between surface and soil
- Soils are more easily removed in the next cycle

**Dye Transfer Inhibitors**
- Catch fugitive dyes in solution preventing them from re-depositing to fabrics

**Rheology Modifying Polymers**
- Help with the "structure" of liquid products (viscosity, pouring, dispersing characteristics)

**Perfumes**
- Consumer preferred scents
Sustainable Cleaning

Green begins with clean
• Doing things right the first time results in avoiding rework and repeated use of products for cleaning the same linens

Additional considerations of products used:
• **No phosphates**
• **Does not contain known carcinogens or reproductive toxins**
• No APEs or NPEs
• **Meets the California Code of Regulations** maximum allowable volatile organic compounds, **VOC**, levels

**Helpful Tip:** Source reduction is the most cost-effective approach to sustainable cleaning.
Rachel Tetreault
Customer Business Development Manager
P&G Professional
Tide Professional Laundry System

More than 25 Years of Innovation and Excellence in Professional Laundry
Revolutionary Technology

Soft, Simple, Safe

PLUS

Whitening Technology

• Noticeably whiter linens in just one cycle*
• Longer lasting whiteness*
• Linens that stay stronger for longer*
• Value that you can see*

Color Safe Bleach

• Removes tough stains and helps fabrics last longer and keep them more like new even after 30 cycles.

*vs. a leading alkaline laundry system in a 50-cycle test

*1 Compared to a leading alkaline laundry system in 30-cycle test with color safe bleach
Procter & Gamble Professional On-Premise Laundry Program:

- Tide® Professional 2X Laundry Detergent
- Downy® Professional Fabric Softener
- Clorox® Bleach

- Near neutral pH
- No phosphates
- No APE’s or NPE’s
- No harsh alkali or acid
- Clorox® Bleach is not U.S. Department of Transportation hazardous
Survey Results: Guest Satisfaction

• 95% said that they are concerned about the cleanliness of their room’s towels and beddings
• 89% agreed with the statement that “soft bright whites make them believe towels and bedding are clean”
• 83% agreed that “rough dingy whites make them believe towels and bedding are dirty”

• When asked what their reaction would be if they enter a hotel or motel guestroom with “dingy” or “not bright white” towels and bedding, an overwhelming 89% responded that they would take some action, including:
  - “request new towels and bedding” (66%)
  - “call the more front desk and complain” (58%)
  - and/or “request to be moved to a new room” (42%)

Source: Survey conducted July 2010
Welcome to a New Definition of White

1. Whiteness Rejuvenation

![Image showing whiteness rejuvenation]

3. Fabric Strength

![Image showing fabric strength]

2. Whiteness Longevity

![Image showing whiteness longevity]

4. Reduce Operational Costs

- 15% SAVINGS in linen replacement budgets
  - 55% SAVINGS in replacement due to worn fabrics
  - 33% SAVINGS in replacement due to dingy linens

1 dingy linens and towels
2 vs. leading alkaline system in a 50-cycle test. Data on file.
Tide Professional Laundry System

Learn More at:
www.pgpro.com
Search term “tide professional”

• Videos demonstrating innovative features
• Request a demo
• Online interactive brochure

Or call
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Questions and Answers

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