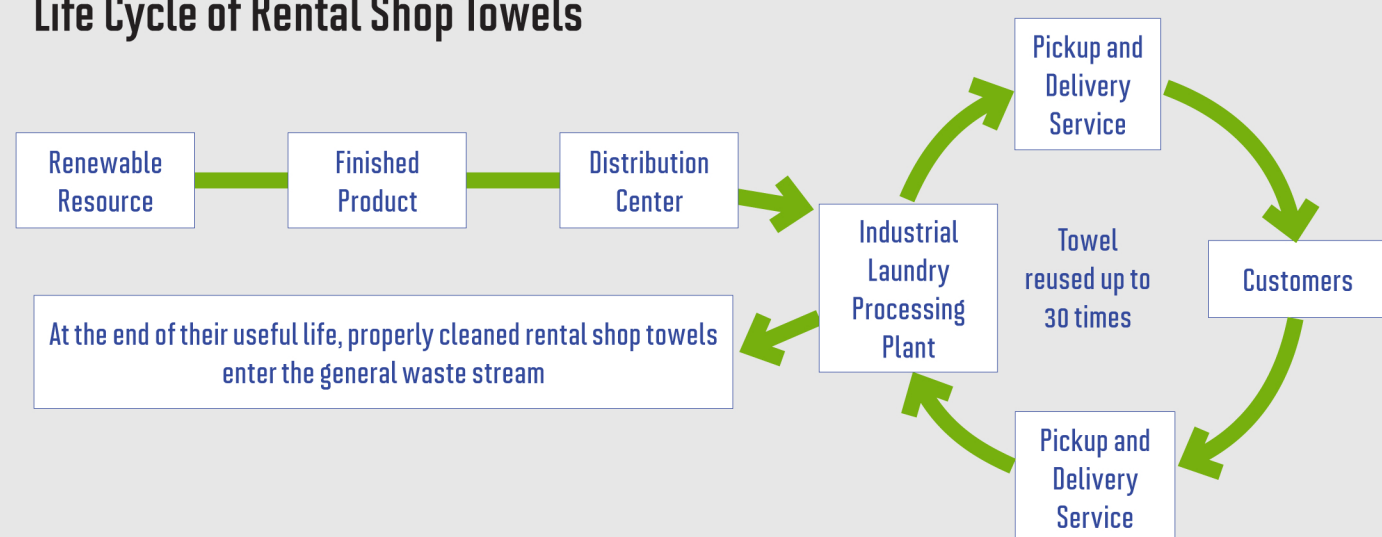


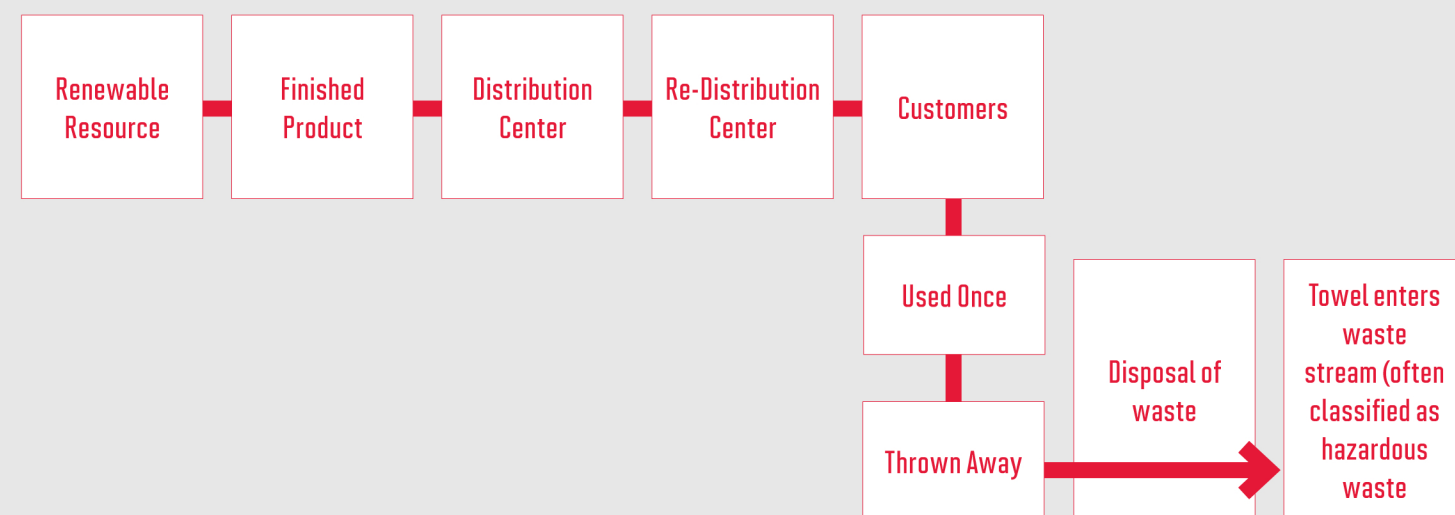
Reusable shop towels are greener, less costly and more effective than disposable paper or nonwoven products for removing industrial soils. Cloth shop towels are laundered and reused an average of 14 times compared with single use disposables.

Research supports the sustainability of reusable vs. disposable towels based on life cycle analysis from manufacturing to distribution and use. Reusable towels use less energy and create less solid waste. Users of reusable shop towels can rely on professional textile services companies to manage laundering and avoid solid waste implications of disposable wipers that subject businesses to hazardous waste regulations.

Life Cycle of Rental Shop Towels



Life Cycle of Disposable Shop Towels



SHOP TOWELS

Safe + Environmentally Friendly + Cost-Effective =
The Sustainable Choice for Industrial Wiping

Rental Towel Superiority Quantified



More Energy Efficient

Reusables expend **90% fewer BTU** than nonwoven and paper towels largely because disposables require so much power to manufacture.¹



Lower Cost

15% less to use a cloth towel for a wiping task that requires two disposables to complete, even if the shop towel has to be washed immediately after.²



Reduced Solid Waste

Under the same wiping conditions, **disposables generate 2.6 times** as much as cloth.²

¹ EPA Assessment of Shop Towel Usage in Automotive & Printing
² TRSA Solid Waste Assessment of Selected Reusable and Disposable Products



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Disposables Boosters Admit Reusables' Superiority

What supporters of paper/nonwoven industrial wipers say about their products' market inferiority to reusable woven shop towels

Demand for wipes used in industrial settings is projected to advance, though "the higher cost of disposable wipers compared to conventional shop towels will limit gains"

—*Freedonia Group market research firm, to Nonwovens Industry magazine*

"The industrial market has been somewhat slower to accept wet wipes, due in part to the higher cost these items generally maintain. Initially, costs for conventional alternatives such as laundered shop towels (and liquid chemicals) are typically lower than wet wipes."

—*Same*

"Non-laundered wipes and rags are regarded as hazardous waste after they've been used with solvents and are subjected to stringent and expensive hazardous waste management requirements."

—*Innovation in Textiles, online content resource for technical textiles*

In the U.S. general industrial market, shop towel sales are \$760 million, nonwoven disposables, \$468 million.

—*INDA, the Association of the Nonwovens Industry, quoted in Innovation in Textiles*

Safe

Shield people, products from industrial soils

Textile services companies work closely with customers to ensure that soiled shop towels are handled and laundered properly to protect workers and the environment. In contrast, disposable wipers considered hazardous waste by the EPA are more likely to be illegally discarded, imperiling workers.

Safe work practices

Textile services companies' proven best practices for handling and laundering reusable shop towels include use of gloves and personal hygiene guidelines. Industrial launderers work with customers to select the right towel for each job and provide guidelines for use and storage as part of every user's business chemical safety and health planning strategy.

Flammability risk of disposables

After wiping flammable fluids, disposable paper and nonwoven wipers are supposed to be placed in special containers and disposed separately from regular trash. But these can find their way into dumpsters heated by the sun and left too long to such exposure. In contrast, cotton shop towels are more often removed quicker, eliminating this potential hazard.

Disposables can be hazardous waste

Disposable wipers are solid waste and subject users to the costs of compliance with hazardous waste handling and disposal rules. Reusable shop towels are not classified as hazardous waste and are preferred by the EPA and other environmental authorities.

Safe to handle

A health risk assessment of laundered reusable shop towels by the international environmental engineering firm ARCADIS indicated that using laundered reusable shop towels creates no health hazard. ARCADIS found that any metals that may remain on shop towels after laundering are not readily transferred, creating no health hazard.

Environmentally Friendly

Eliminates waste and natural resource depletion

Reusable shop towels limit your environmental liability as a generator of waste and fit the EPA materials management mantra of "reduce, reuse and recycle." Under the Clean Air Act and Clean Water Act, textile services companies providing reusable shop towels bear the compliance burden. In addition, reusable shop towels are often made from recycled or byproducts from manufacturing of other textile products.

Less solid waste from cradle to grave

Throughout the lifecycle of disposable shop towels, from their manufacturing to their discarding into the solid waste stream, they generate more solid waste than reusable towels. Many wiping tasks that a single shop towel handles before washing can require two or more disposables, generating 3 to 4 times the trash.

Solves post-consumer-use disposal problem

Paper towels are responsible for 1.1 to 1.3 billion pounds of waste per year in the United States; wipes used by businesses account for 260 million to 300 million pounds of these. An industrial user who converts from paper to cloth for industrial wiping attacks America's largest solid waste problem.

Decreases need for landfill-busting packaging

Single-use products, such as disposable wipers, generate more packaging waste per task than their reusable equivalents. A task that requires one disposable generates more than 5 times as much packaging waste as a single reusable shop towel.

Environmental Benefits	
Rental Shop Towels	Disposable Shop Towels
✔ Raw materials from renewable resource	✔ Raw materials from renewable resource
✔ Used up to 20–30 times	✘ Used once
✔ Laundry service ensures proper pick-up and transport of dirty towels	✘ User is responsible for contracting with proper waste disposal company
✔ Contaminants extracted, captured and treated during laundering process	✘ Contaminants remain in towel
✔ Treated contaminants are carefully disposed of as per state & local regulations	✘ Many contaminated towels enter the general waste stream and wind up in the land fill or incinerated
✔ User's environmental liability is limited	✘ User is at risk as a "generator" of hazardous waste

Cost-Effective

Reusables: the more economical choice

When you buy disposables, the expense to purchase these items is just the first cost you'll incur. You'll also pay for storage, ordering, inventory management and more. Reusable shop towel rental is better for profitability because it enables your business to:

Be more productive with better absorbency

Cloth reusable towels are three times more absorbent than paper

Reuse instead of dispose

Shop towels are delivered, used and returned to laundries for washing and reuse; disposables are discarded. About 3,600 square feet of paper towels equate to a cubic yard of waste and a typical roll of disposable industrial wipers is about 1,000 square feet. At \$300 per month per dumpster, disposal costs mount. At least 8 large bags (20- to 30-gallon size) are needed per cubic yard of waste. It would require at least two bags for each of these typical rolls of disposable wipers, adding more than 40 cents to the roll's price.

Keep storage space to a minimum

Controlling delivery costs of disposables means ordering inventory long before it's needed. This complicates storage and dispersal to use these items. Reusable shop towel service eliminates this problem by providing enough supply for just a week, when the next delivery from the laundry will arrive.

Use what you buy for intended purpose

Employees are tempted to deploy disposable wipers out of the box or off the roll for tasks other than cleaning machinery or parts or other industrial soil removal tasks. Or they use more than necessary for the job at hand. A reusable towel is less attractive for misuse and pilferage. The paper industry admits for some products that a 5%–10% waste factor is normal; so you pay at least 5% more for disposable wipers than you need.

Costs		
	Rental Shop Towels	Disposable Shop Towels
Weekly Rental Rate	\$ High absorbency and low tear rate = 1 shop towel used	\$ Lower absorbency and high tear rate = 2–3 shop towels used
	\$ One size towel works for most applications = only 1 item needed to be ordered	\$\$ Multiple sizes and packaging recommended for each different use = extra costs for ordering and inventory management
	\$ Regular pick-up and delivery = minimal storage requirements and no freight costs	\$\$\$ Storage space required. Freight costs. Multiple orders and purchase order processing expenses
	\$ Laundry service = • \$0 associated disposal costs • \$0 associated can liner costs • \$0 associated custodial costs	\$\$\$\$ Direct • Dumpster service fees • Can liner expense • Custodial expense
Direct Purchase Cost		