

“ It’s not enough to design and build green cleaning equipment; we need to *live green as a company* in order to be true environmental stewards. ”

Christian Cornelius-Knudsen  
President and CEO  
Nilfisk-Advance, Inc.

## Environmental stewardship starts here.

### PHILOSOPHY STATEMENT

Nilfisk-Advance is committed to minimizing our company’s impact on the planet’s outdoor environment and to furthering healthful indoor environments.

To this end, we strive to:

- Design our products to have the lowest possible environmental impact for our customers, both during use and after the products’ useful lives.
- Practice environmentally responsible purchasing for the materials used in our products and in our operations.
- Produce our products using lowest-environmental-impact production processes.
- Operate our facility using sustainable methods and practices.
- Educate our customers, delivery partners and the industry about sustainable cleaning practices.

There’s been a tremendous amount of talk, legislation and product development related to the topic of green cleaning. Green cleaning is typically understood as the use of equipment, cleaning solutions and practices that help minimize the impact of cleaning on people and the environment. But in order to be really green—that is, to be true environmental stewards—the process of making green cleaning products also needs to be environmentally friendly.

That’s why Nilfisk-Advance does more than make green floor-cleaning equipment; at our Plymouth facility, we make that equipment while also using materials, processes and practices that are environmentally sound. Environmental stewardship is the responsibility to take care of natural resources to ensure that they are sustainably managed for current and future generations. We believe that responsibility begins with our own behavior as we design, manufacture and distribute floor-cleaning equipment. That’s why we say: *Environmental stewardship starts here.*

### Corporate practices and processes

Nilfisk-Advance is conscientious at all stages of product manufacturing—from what we purchase, to the processes and practices we follow, to what we do with materials after their use. Our new product design guidelines dictate using more recyclable materials in the products we design, as well as planning for how materials can be reclaimed after use. Furthermore, we have instituted numerous manufacturing and office procedures that support our environmental stewardship.

Here is an overview of the environmentally sound practices and processes used by Nilfisk-Advance at our manufacturing plant in Plymouth, Minnesota:

### MATERIALS MANAGEMENT

*Plastic*—all plastic scrap from the rotomolding operation goes to a recycling company; recycled polyethylene is used in molding battery boxes.

*Metal*—steel is stamped/cut to get the maximum number of parts from a piece and then all scrap is recycled; brass used in inserts for rotomold and injection molding is also recycled.

*Employee consumables*—an office-wide program recycles paper, plastic and aluminum consumables used by our employees.

*Wood pallets*—all wood is recycled and re-used.

*Cardboard*—all cardboard is recycled through a local recycling firm.

*Used batteries, computers, electric motors, light bulbs, oil, ballast, tires*—all are recycled.

*Product packaging*—

- Walk-behinds and small riders are packaged using an innovative system that requires less wood and polyethylene, resulting in less waste for dealers and customers.
- Cardboard shipping cartons are made of recycled materials.
- Suppliers ship parts to us in returnable totes.

*Electronic and electrical equipment*—unique program with our dealers recaptures printed circuit boards for recycling; hazardous materials such as mercury, cadmium, chromium, PBB and PBDE are not used in our electrical components.

## PRODUCTION PROCESSES

*Powder-coating process*—contains no solvents and releases negligible amounts of volatile organic compounds (VOCs) into the atmosphere so there is no need for pollution control equipment. Ninety-nine per cent of all powder that does not adhere to the product is reclaimed.

*Water treatment and conservation*—by eliminating the use of chemicals in production line testing, wastewater treatment is minimized in order to meet federal, state and local regulations.

*Mixed-model design flow*—this manufacturing approach requires less space to build products, which reduces needs for heat and lighting.

*Bar-coding*—eliminates manufacturing work orders, which in turn reduces use of paper/colored paper.

*Lean manufacturing techniques*—continuous development and implementation of lean methods result in reduced energy consumption and reduced requirements for materials movement to produce products.

*Ergonomics*—manufacturing changes have increased worker ease and safety, such as the addition of ergonomic grippers on mixed-model lines to eliminate the need for workers to physically turn products.

## FACILITIES MANAGEMENT

*Lighting*—a major relighting project in all three manufacturing buildings reduced energy consumption a total of 1,319,002 kilowatt-hours per year.

*Other energy conservation*—implemented a variety of electrical energy conservation activities during peak usage hours as defined by the utility company.

*Air quality*—checks are done regularly in the manufacturing facilities. Diesel and propane are vented during product tests, especially during new engine burn-off, so these gases aren't emitted into the manufacturing area.

*In-house cleaning*—contracted with a local commercial cleaning company that does not use solvents.

*Codes compliance*—Nilfisk-Advance complies with all local, state, federal and European standards, including CE, UL, OSHA and more.

Nilfisk-Advance is the parent company of multiple commercial and industrial cleaning equipment brands, including: Advance, Euroclean, Kent and American-Lincoln. Nilfisk-Advance is a Group company of NKT Holding. NKT, headquartered in Denmark, established an environmental department following the adoption of the first Environmental Protection Act (EPA) in 1974. NKT expects its Group companies to act in accordance with good and fair environmental practice and NKT's documented environmental policy. For more information, visit [www.nkt.dk/uk](http://www.nkt.dk/uk).



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