



Lean and Green in Sumter

Interlake Mecalux continues its commitment to environmental excellence in South Carolina

Adopting an ethic of environmental accountability will yield a lasting legacy of sustainability beneficial to future generations. Corporations, normally the slowest sector to embrace the ideals of a habitat stewardship, are finally acknowledging the advantages of bringing about environmental practices that will result in reduced costs and streamlined manufacturing. Nevertheless, measuring the effectiveness of these changes depends on regulatory bodies enforcing environmental laws and recognizing the exceptional compliance among businesses. For over 10 years, the South Carolina Department of Health and Environmental Control has established a program that acknowledges the outstanding ecological contributions that the business sector is making to the state. For the Interlake Mecalux production facility in Sumter, South Carolina, demonstrating environmental excellence and promoting ecological sustainability is part of the company's continuous vision to become a green powerhouse.

Since 1998, the South Carolina Environmental Excellence Program (SCEEP) has been instrumental in impelling local businesses to adopt environmentally conscious measurable efforts and improve production processes. This voluntary program allows companies to proactively commit to improving

green leadership, while also creating a forum for members to exercise corporate mentorship on environmental issues to each other. The SCEEP Advisory Committee is responsible for overseeing how applicants have implemented innovative measures that regulate air and water pollution, material waste, as well as foster sustainable resource management. The company that has demonstrated superior environmental performance is awarded membership into the program for three years. By acknowledging the merits of companies actively pursuing environmental innovation, the state of South Carolina has laid the groundwork for a thriving business collective, of which Interlake Mecalux has been a member for years.

The Sumter facility, having accumulated zero pounds of hazardous waste in 2010 and therefore categorized as a Conditionally Exempt Small Quantity Generator, is one of the major accomplishments Interlake Mecalux has achieved in the last decade. The defining factor was the adoption of powder coat finishing on its rack products, which has resulted in curbing the amount of volatile organic compounds (VOCs) emissions and hazardous solvents. However, the application of powder coating to surfaces can sometimes result in an indirect amount of waste accrued. The biggest hurdle in minimizing material waste has been finding an effective use for the byproduct



PAINT WASTING TIME, NO MORE: Steel beams sprayed along the line in the powder coating process leave a lot of wasted paint in between each beam. The Interlake Mecalux Plant in South Carolina has continually found ways to minimize such waste.

generated by powder coating. In the last year and a half, the facility has reduced waste by applying specific changes to paint formulas and applications, resulting in significantly minimized amounts of solvents, air emissions, and solid and liquid waste.

Presently, the company's environmental concerns have focused on internally implementing specific cleaning and recycling processes without resorting to outside waste management organizations. One major goal being pursued is continuing to reduce water consumption. Since much of it is used to rinse pretreatment washers, the total elimination of rinse tanks for cleaning products is a challenge that will be met in the future. At present, the facility has been using a cleaner-coater agent that allows washed steel pieces to be cleaned and phosphatized before they are painted. The advantages brought about by this cleaner-coater are threefold: it condenses procedure stages, reduces waste levels and cuts operating costs. Since the cleaner-coater both cleans and phosphatizes, it expedites the pretreatment process by combining and eliminating redundant rinse stages. The cleaner-coater produces zero phosphate sludge, so water discharged in the treatment tanks is virtually free of any VOCs. Considering that this chemical agent reduces one of the rinse stages, it eliminates water usage considerably. A further advantage is that it functions at an

ambient temperature. Previously, the treatment tanks needed to be heated to temperatures close to 140 degrees Fahrenheit, so the phosphate coating would adhere to the steel pieces. By switching to an ambient cleaner-coater, the energy costs have been greatly reduced. Currently, a new cleaner for pretreatment washers is in its initial stages of development, which would at first eliminate one rinse stage on two production lines, though ultimately the goal is to eliminate water usage altogether. This would also further minimize the energy consumption used to power water pump motors.

The relevance of the SCEEP affiliation is not only a recognition of the company's merits, but also an opportunity to understand how Interlake Mecalux is able to optimize its environmental needs and those of the communities it serves. The Sumter facility has acquired a wealth of knowledge through its efforts, and plays a valuable role in the mentorship of fellow member companies in their quest to reduce, recycle and conserve. For the company, distinctions of this kind not only lend credence to the company's superior environmental performance, but also serve as an incentive to continue preventing pollution and putting into action responsible waste management. At the end of the day, Interlake Mecalux can add another notch to its belt of excellence for being an exemplary champion for the environment. 