BACKGROUND: Humanscale is the premier designer and manufacturer of ergonomic furniture that improves health and comfort at work. The New York City-based company takes sustainability seriously, summarizing its philosophy as “Everything we do has an impact. We’re aiming to make it a good one.”

CHALLENGE: The company’s production facility in Piscataway, N.J., was undergoing a major energy-efficiency retrofit with the goal of a net zero carbon footprint. Plans created by Pfister Energy, the project leader, called for new roofing, over 2,585 PV solar panels, automated HVAC systems, and new lighting throughout the 110,000 sq.ft. facility. Wayne Pfister, company president, brought in Specified Building Products, to include Solatube Daylighting Systems, which he knew would integrate with solar panels, unlike traditional skylights.

SOLUTION: The project was originally specified with 300 Solatube 750DS units. When Solatube International’s new SkyVault Series was introduced, specs were changed to these much-larger systems which are designed for spaces with ceiling heights of 18-40+ feet.

“The Solatube Daylighting Systems reduce shadows and show color more accurately, so workers can now detect small flaws they weren’t able to before.”

–Willy Duran
Production Supervisor
Ultimately, 87 SkyVault Series units with Amplifiers were installed to focus daylight down to the production work cells. Added benefits of the SkyVault Systems were reduced roof penetrations and savings on installation since fewer were needed.

RESULTS:
As part of the integrated lighting plan, the Solatube Systems substantially reduced dependency on electric lighting during the day, moving Humanscale closer to their net zero goal. Daylighting has delivered additional benefits in quality control and the general work environment.

A portion of the warehouse was not upgraded to the new lighting system and employees can really tell the difference.

“The reaction among Humanscale employees is that they love the daylight. It’s very apparent to them the difference in brightness, quality, and color of light from one side of the facility to the other. They like their work environment better,” according to Tim Neher, Humanscale facility maintenance supervisor.

The Solatube Systems give Tim and his team the flexibility to move work cells without having to rewire and move task lighting, as was the case before.

Neher added, “With the Solatube units, we don’t have task lighting hanging down over each production area. You can see from one end of the floor to the other. It’s a much cleaner, more open space.”