# SOLATUBE.

## Gestamp Chattanooga II Manufacturing Facility Manufacturing



CLIENT Gestamp Automoción

#### CHALLENGE

Integrate energy-efficient natural lighting at the Gestamp Chattanooga II manufacturing facility.

#### RESULTS

Daylighting incorporated throughout the manufacturing facility; no electric lighting needed during the day.

#### PRODUCT

527 Solatube SkyVault Series M74 units with Collector and Amplifier

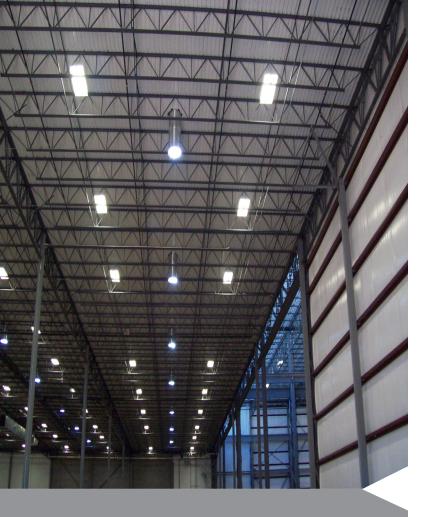
**SOLATUBE INSTALLER** JP Ross & Co., Inc.

ARCHITECT Design Build Project with Wieland BACKGROUND: Founded in 1997, Gestamp is an international group dedicated to the design, development and manufacturing of metal automotive components. The group specializes in developing innovatively designed products to achieve increasingly safer and lighter vehicles, thereby reducing energy consumption and environmental impact. Gestamp also has a history of providing natural light deep into their facilities not only for their green initiative, but for the overall health and happiness of their people.

**CHALLENGE:** When designing the Gestamp Chattanooga II Manufacturing Facility, one of the most significant challenges encountered was how they would add natural light to the massive facility. At 40-foot to 60-foot roof deck heights, traditional skylights were not a viable option to deliver the required amount of daylight to the finished floor.

**SOLUTION:** In order to properly daylight the expansion sights totaling over 500,000 square feet of warehouse space, the project used 527 Solatube M74 SkyVault series units, the largest daylighting system on the market.

To ensure a consistent amount of daylight delivered to the floor where Gestamp employees perform their daily tasks, the design team used Solatube's proprietary design calculator to determine the number of units needed and the amount of light that the Solatube Daylighting Systems would bring into the space.



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Case Study

**RESULTS:** The M74 SkyVault series 29-inch diameter tube allowed for maximum output while minimizing impact on the building envelope and significantly reducing installation costs.

The SkyVault Collector and Amplifier extensions were also added to improve the delivery of daylight to the floor.

Featuring proprietary Raybender HD, LightTracker and Cool Tube Technologies, the SkyVault Collector maximizes daylight delivery by capturing and redirecting low-angle light downward into the system and minimizes solar heat gain by preventing heat-carrying infrared rays from entering the system.

The cone-shaped SkyVault Amplifier with 36 highly reflective facets made of proprietary Spectralight® Infinity material, reorients daylight to the visual task plane in occupied areas and converts daylight at inefficient angles into useable light for increased optical efficiency of diffuser technologies, ensuring proper daylight delivery in the high bay warehouse.

Workers at the Gestamp Chattanooga II manufacturing facility now have a vibrant, energy-efficient facility and the company will create Volkswagen parts in their beautifully daylit plant.

Get design help or information for your next project. Visit <u>http://www.solatube.com/commercia</u>l or call 1-888-SOLATUBE.\_\_\_\_\_\_\_

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