

# PROJECT HIGHLIGHT CASE STUDY



## CONSTRUCTION VEHICLE WINDSHIELD REPLACEMENT WITH FORMED & POST-COATED LEXANTM 9034THO OPTICAL QUALITY SHEET

Maintaining a highly productive fleet of co-dependent vehicles the construction company needed high impact glazing for their Volvo Wheel Loader. Designed for fast-paced loading and a high lifting force in the most demanding of environments the risks of impact to the cab glass windows are high. Experienced with glass failures on their construction vehicles the company prioritized operator safety, while eliminating downtime related to replacing glazing was an added bonus.

## **PRODUCT SOLUTION**

LEXAN<sup>™</sup> Sheet is 50% lighter and 250 times more impact resistant than glass. The formed sheet was treated with SHIELDS<sup>®</sup> abrasion, UV and chemical resistant coating that approaches glass in performance. This is an excellent solution for the requirements of many models of construction equipment. Rather than experiencing repeated glass failure or leaving the operator unshielded from the elements this high optic LEXAN<sup>™</sup> polycarbonate solution can be designed for easy installation and utilize existing framing to offer significant savings. The benefits of easy maintenance, cleanable, higher visibility, UV protection, all add to the comfort and safety of occupant while enhancing productivity.







BEFORE

AFTER



"The front window assembly was originally three pieces. Aesthetically, the idea of bonding 3-pieces together like the original glass design did not meet the highest standards of our engineering team. As a result, SHIELDS® used its extensive experience in solving needs across various applications to create a new high optical quality single-piece front window solution. The new seamless windshield improved the operator's field of vision. We are very proud of how we produced a magnificent high optical quality window that fits and bonds perfectly to the machine. The final customer was impressed and stated this solution looks 100 times better than the original OEM assembly. "

### PRODUCT BENEFITS



EXTREMELY HIGH IMPACT STRENGTH Virtually unbreakable



LIGHTWEIGHT Outstanding light weight properties



2 SIDES UV PROTECTED Resistant to and protects against

harmful UV light exposure



#### EASY TO CLEAN

Cleans with mild water and soap with a simple process to remove graffiti



EASY TO INSTALL Ease of handling and installation



WEATHERABILITY AND DURABILITY Limited warranty against long-term weathering conditions





## **INSTALLED USING EXISTING HARDWARE FOR A SEAMLESS SOLUTION!**

## MORE INFORMATION:

#### SABIC AMERICAS

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Impact Performance Video







SHIELDS Video

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