



Case Study

CUSTOMER NAME: Saskatchewan Nitrogen Fertilizer Facility
BUILDING SIZE & SERIES: 72' x 96' Atlas Building Series
BUILDING USE: Heavy vessel storage for shutdown and upgrade
AUTHORIZED DEALER: Britespan Building Systems of the Prairies

Saskatchewan Nitrogen Fertilizer Facility

Located in Saskatchewan in the heart of the Canadian Prairies, this customer's facility is ideally situated in close proximity to its core markets in Western Canada and the Northern United States. The site has one ammonia plant, one nitric acid plant and one urea granulation plant, and the largest single line granulation plant in North America.



Britespan was tasked with providing a structure to house and prep these vessels within a tight timeline allowing the plant to avoid any downtime prepping these vessels for install. Britespan surpassed expectations and completed the structure ahead of schedule.

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This customer produces an average of 3,000 tons of urea, 700 tons of UAN and 1,950 tons of ammonia per day. The majority of the ammonia produced is used in the production of UAN and granular urea; however some product is sold for agricultural purposes during peak ammonia seasons.

With a commitment to providing the lowest unit costs in the industry, this Britespan customer has always used leading edge technology to ensure that its operation is streamlined, efficient and cost-effective. This is one of the many reasons they chose a building from Britespan when they required a structure for heavy vessel storage. Britespan was tasked with providing a structure to house and prep these vessels within a tight timeline allowing the plant to avoid any downtime prepping these vessels for install. Britespan surpassed expectations and completed the structure ahead of schedule.

One of two Britespan buildings, the 72' wide by 96' long on a 10' high leg Atlas building series houses three high pressure UREA synthesis vessels. Weighting 67,000kg, 70,000kg, and 156,000kg each, they are the main process vessels in the synthesis of UREA fertilizer from CO₂ and Ammonia inputs. They typically run at around 2100psi in pressure and around 180C in temp.

"They are extremely finicky and details are important during operation and installation. For these new vessels, there are a few critical tasks that we had to do within the structure to save massive amounts of time during the shutdown," said a representative for the company.

Within the structure, this customer applies a demineralized water wash to the vessels to wash away any impurities that may cause corrosion under insulation, as well as prepares the nozzles for welding to piping.

"We also install a leak detection system on the vessels," said the representative. This was a complicated system of small bore tubing designed to detect a leak within the vessel lining before a catastrophic failure occurs. "Pre-insulation of the vessels was also critical to saving time. If it was not done, we would have added huge amounts of cost to the shutdown, and risked running a vessel without the critical insulation."

**For more information, call us at
1.800.407.5846 or visit us online.**

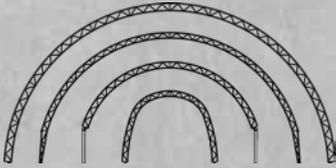
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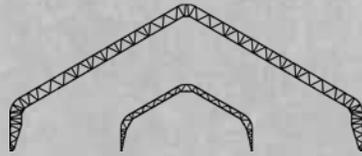
Building Series

Britespan has been in the fabric building industry since 1994, offering the widest product line available today. We design, engineer and manufacture each product line in-house.

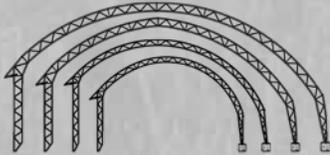
Our structures are engineered to be portable, temporary or permanent, with rapid installs even in remote areas.



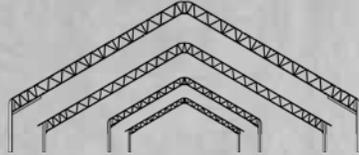
Atlas Series
24' - 108' wide



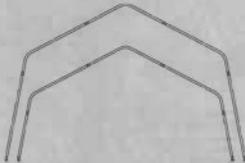
Genesis Series
80' - 200' wide



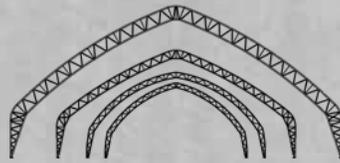
Easy Access Series
38' - 67' wide



Epic Series
80' - 120' wide



Accent Series
26' - 32' wide



Apex Series
53' - 100' wide



Rigid Beam Series
Up to 300' wide

Custom eaves, heights and slopes available

Custom Fabric Colours Available

Contact us for details on our full line of colour options or to request fabric samples.

Why Britespan?



HOT DIP GALVANIZING

Post-weld hot dip galvanizing bonds to steel to provide lifelong corrosion resistance from the inside out.



VENTILATION

Large volumes of interior air space give you superior air quality and ventilation.



CLEARSPAN INTERIOR

With no interior columns, movement throughout the interior is easy for vehicles and equipment.



LIGHT

Naturally bright interiors create comfortable environments and help reduce energy costs.



QUALITY

Constructed from quality North American steel and engineered to comply with the most current building codes.



RETURN ON INVESTMENT

Our structures provide large, bright, secure spaces with reduced operating and maintenance costs.

Britespan buildings can be added onto existing Cover-All Buildings

For more information, call us at
1.800.407.5846 or visit us online.

britespanbuildings.com

