New DALTOFOAM® System from Huntsman Plays Leading Role in BRUGG Pipes' FLEXSTAR Heat Pump Pipes

New Flexible Foam for Pre-Insulated Pipes Turns Up Heat on Existing PE Systems

May 16, 2022 - Huntsman, in close collaboration with BRUGG Pipes, has developed a next generation polyurethane foam system with excellent insulation properties that can be used to create highly flexible, thermally efficient, pre-insulated pipes for connecting ground source heat pumps and local heating units to domestic and commercial buildings. The closed cell SUPRASEC®/DALTOFOAM® TE system solution is already being put to good use by BRUGG Pipes, a specialist in the production of pipe systems for transporting liquids, gases, and heat, safely and efficiently on a global scale.

Worldwide, demand for heat pumps – which capture warmth from outside and move it inside – is growing quickly. Traditionally, expanded polyethylene (PE) has been used to insulate the plastic pipes that join local networks and heat sources to individual buildings. Huntsman's new SUPRASEC®/
DALTOFOAM® TE system produces foam with better insulation properties (low lambda value) than PE. The result is pipes with a thinner layer of insulation compared to PE that still deliver good overall insulation performance (low U-value). In addition, thinner, lighter pipes are more flexible, meaning they are quicker and easier to transport and install as well as reducing heat loss.



Using Huntsman's innovative SUPRASEC®/ DALTOFOAM® TE system solution has been key to ensuring the high flexibility of BRUGG Pipes' FLEXSTAR pipes – which launched in January 2022.

Explaining more, Bora Yayla – Head of Marketing at BRUGG Pipes, said: "We'd been wanting to enter the heat pump market for a while and needed a competitive insulation solution that would enable us to quickly gain ground in this market. Key to our success was achieving a good degree of flex in our preinsulated pipes to ensure ease of handling without compromising insulation performance. Pipes that are more flexible have a smaller winding radius, meaning they are easier to transport and quicker for heating engineers and installers to lay in confined spaces or where there are tight bends and building entry points to navigate. Working with Huntsman, we've achieved all of our project objectives and orders for FLEXSTAR are now being placed around the world."



Tjerk Lenstra, Senior Market Manager at Huntsman, said: "As countries worldwide work to achieve ambitious net zero targets, the spotlight is turning on solutions like ground source heat pumps, which have a much lower carbon footprint. Growth in this sector is evident across all primary heating markets in North America, Europe and North Asia – so the development of a new SUPRASEC®/ DALTOFOAM® TE system solution is timely, exciting and will deliver value – long-term – for our customers, our business and the planet."

Huntsman and BRUGG Pipes have worked together for several years on other pipe projects – including BRUGG Pipes' CALPEX PUR-KING pipe system, which remains the best insulated pipe in its class on the market.

BRUGG Pipes' Flexstar pre-insulated pipes are designed specifically for use in local heat pump systems and are made via a patented production process (according to DIN EN 15632-2 and DIN 4726) that ensures excellent bounding and longitudinal water tightness and a good oxygen diffusion barrier.

For more information about BRUGG Pipes' FLEXSTAR heat pump range, go to: https://www.bruggpipes.com/en/flexstar/
Or watch a video at: https://www.youtube.com/watch?v=MD3yc2X7Th0