



Star Fan Stacks

Butt Flange Style

Why Butt Flange Fan Stacks?

There are some major advantages of butt flange fan stacks.

- Installation is simplified by allowing the entire assembly process to occur from the outside of the fan stack. This means no more scaffolding, planking, etc. to allow for personnel on the backside of the fan stack.
- Hardware requirements are simplified. All hardware consists of short bolts. No more long bolts and FRP bars on the inside of the fan stack, eliminating interference with the fanblades.
- Unique flange overlap provides a more aesthetically pleasing design, eliminating gaps between the seams of adjacent panels. The lip on the flange also provides increased stiffness resulting in a stronger fan stack.
- Tip clearance adjustments are eliminated by providing accurate panel arc lengths and precise fan tip clearance. No more slots and sloppy joints that need constant adjustment. Once the panels are bolted together and rounded out, the tip clearances are set and accurate.



Any Profile Available... If You Can Dream It We Can Build It!

We are continuously expanding our line of butt flange fan stacks, and can custom build a mold to suit your needs. We have multiple molds available and are reproducing some of our most popular molds using the butt flange design. We can accommodate a myriad of design elements due to our CNC capabilities, including various cut circle, fan throat height, and velocity recovery requirements. We can modify rib locations and sizes and are able to recreate customer logos right into the surface of the fan stack. Please contact us for all your custom needs, we would be more than happy to discuss our capabilities.

Molding Makes The Difference!

In the past, the shortcoming of most butt flange fan stacks was the inability to produce molds that would yield precise radius dimensions and fan tip clearances. Star has overcome this issue by utilizing CNC equipment to produce our mold tooling.

CNC machining does make a difference. We CNC our fan stack tooling to 0.001" tolerance to ensure accurate tip clearance without the need for shims or spacers. Precise fan stack radius dimensions eliminate "clover-leaving" that occurs with inaccurate tooling. All this technology results in a fan stack that is accurate and reduces installation issues, providing years of trouble-free service without the need for constant adjustment.



What Makes Star Butt-Flange Fan Stacks Better Than The Competition?

Our fan stacks are constructed using the strongest laminate schedule of any fan stack currently in the industry. The strength of the stack is evident in the laminate schedule and the overall weight of the stack. This results in more material and greater overall strength, and the additional mass results in lower harmonic frequencies. All this adds up to a fan stack that is capable of withstanding high winds and seismic loads while reducing vibration levels across the entire spectrum.

Each fan stack has horizontal and vertical ribs to ensure superior strength, and the top, bottom and side flanges are wider and thicker than our competitor's fan stacks.



- Horizontal ribs are 8" wide versus the competitor's with little or no horizontal ribbing
- Vertical ribs are 6" wide versus 5"
- Sides and top flange are 4" wide versus 2-1/2"
- Bottom flange is 6-1/2" wide versus 4-1/2"
- Sides and bottom flange is 5/16" thick versus 1/4"
- Top flange is 1/4" thick versus 3/16"
- Thickness behind rib is nominal 3/16" versus 1/8"
- Custom profiles available upon request



9007 FM 2759 Richmond, Texas 77469
Toll Free: 800-231-0534
Ph.: 713-645-3323
www.starcoolingtowers.com

