3-A SANITARY STANDARDS, INC. Education Program

Sanitary Stainless Electric Motor Design

Presented by John Oleson, Chief Engineer Stainless Motors, Inc.



Quality Performance Reliability Cleanability

HOW DOES CONTAMINATION HAPPENS?

ENDBELL, FAN AND AREA INSIDE SHROUD ARE NOT ACCESSIBLE FOR CLEANING

Endbell and fan concealed inside fan shroud

Fan shroud

RISK AREAS aka "The Dirty Little Secret"

INSIDE FAN SHROUD









ON ENDBELL, FAN AND HARDWARE









CONVENTIONAL DESIGNS THAT CREATE THE RISK













Question you should ask when choosing a sanitary motor for processing environments:

- 1. Are there any areas that could possibly collect food product and harbor bacteria?
- 2. Is the cooling fan plastic or polished stainless?
- 3. Are the feet securely welded with no gaps or crevices?
- 4. Is there access to areas in and around the fan and fan shroud for thorough spray cleaning?
- 5. Can the motor be integrated into a CIP system?

An example of a motor that meets the criteria and sanitary standards for food safety is a motor that incorporates Sanifan Technology



Sanifan Technology[™] is a patent pending comprehensive solution which dramatically reduces crevices and provides a means of washing areas previously inaccessible.



SIDE BY SIDE COMPARISON







Conventional Design

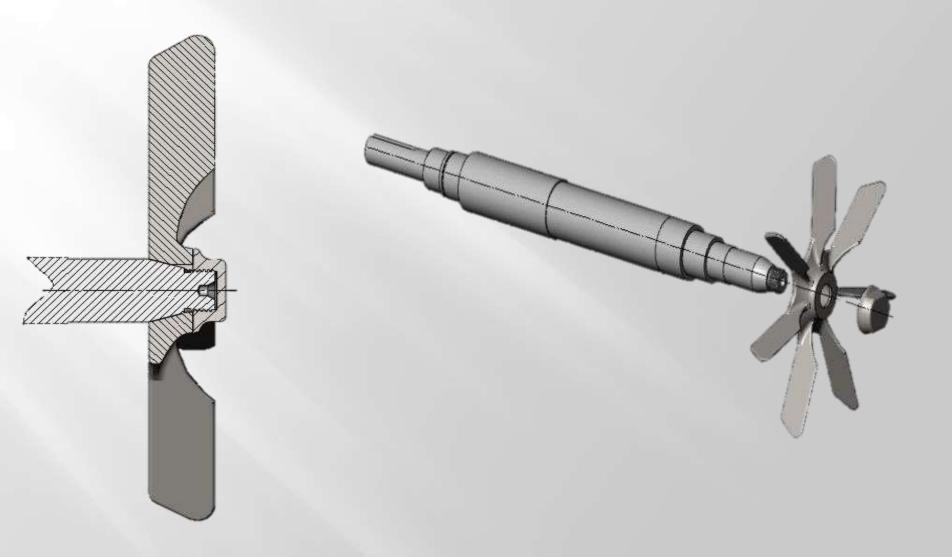
Sanifan Technology Design

Sanifan Technology Design with Optional Spray Cleaning Endbell

POLISHED CREVICE-FREE STAINLESS FAN



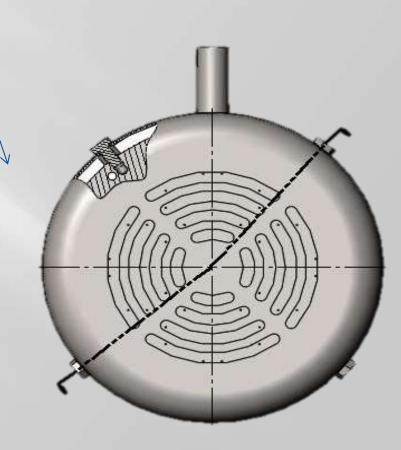
SANITARY FAN TO SHAFT MOUNTING



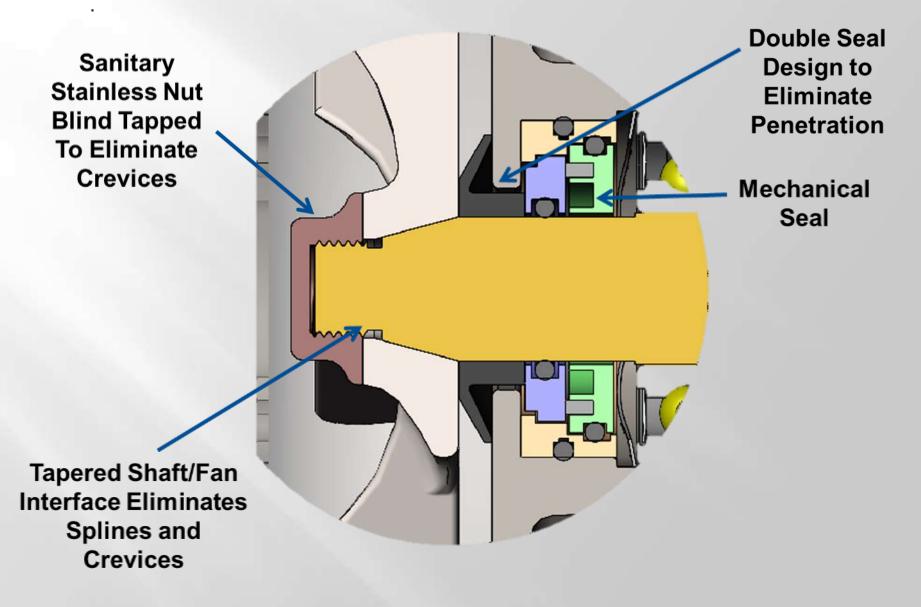
CREVICE FREE FAN SHROUD MOUNTING

EPDM SANITARY STANDOFF

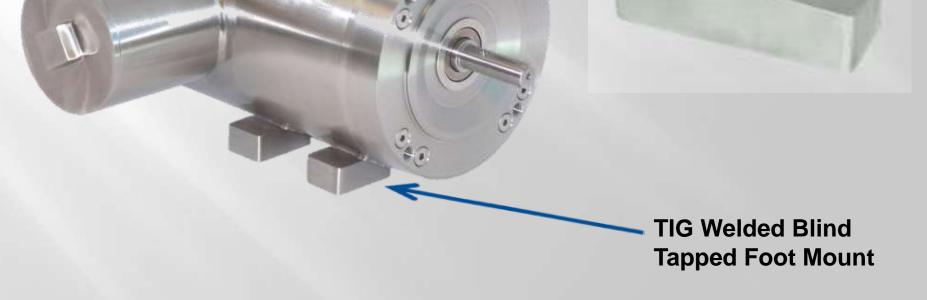




ENDBELL SANITARY SEAL DESIGN



BLIND TAPPED SANITARY FOOT





Stainless washdown duty motors that incorporate Sanifan Technology™ also offer an optional integral wet spray cleaning endbell for the ultimate level of cleanability!





WATER PORT STYLES (spray endbell option only)



Tri Clamp

Capped

Spring valve

Pipe

