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
RISK AREAS
aka
“The Dirty Little Secret”
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**

- Sanitary Stainless Nut Blind Tapped To Eliminate Crevices
- Double Seal Design to Eliminate Penetration
- Mechanical Seal
- Tapered Shaft/Fan Interface Eliminates Splines and Crevices
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