

**Industrial**  
Air Technology Corp.

# STAINLESS STEEL FANS AND BLOWERS

CONSTRUCTION  
OPTIONS



Industrial Air Technology, Corp. Stainless Steel Fan packages are designed for non-sanitary requirements where corrosion resistance is desired. These packages are ideal for wash down applications or to minimize contamination.

As a standard, all housing cheeks and scrolls are continuously welded on the exterior of the housing.

Surfaces and welds may include pits, scratches, crevices, and small pockets, which does not meet 3A and FDA sanitary compliance. When making finish selections, be aware that the higher the grade of finish, the more costly the package will be.

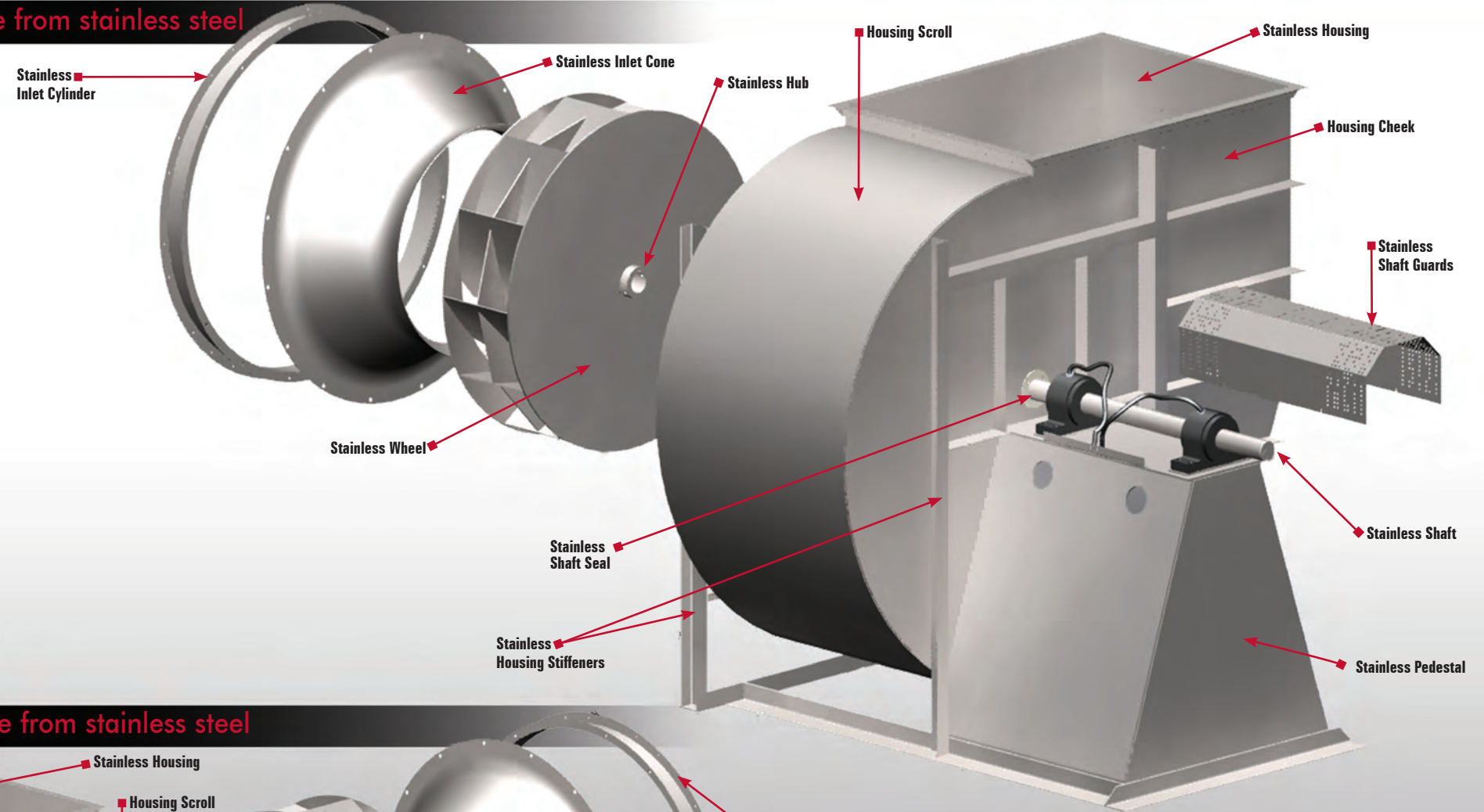
Four standard finish options are available both inside and outside the air stream. These options allow for the selection of different finishes on the inside and outside of the air stream, depending on the application requirement.

## SELECTION PROCESS

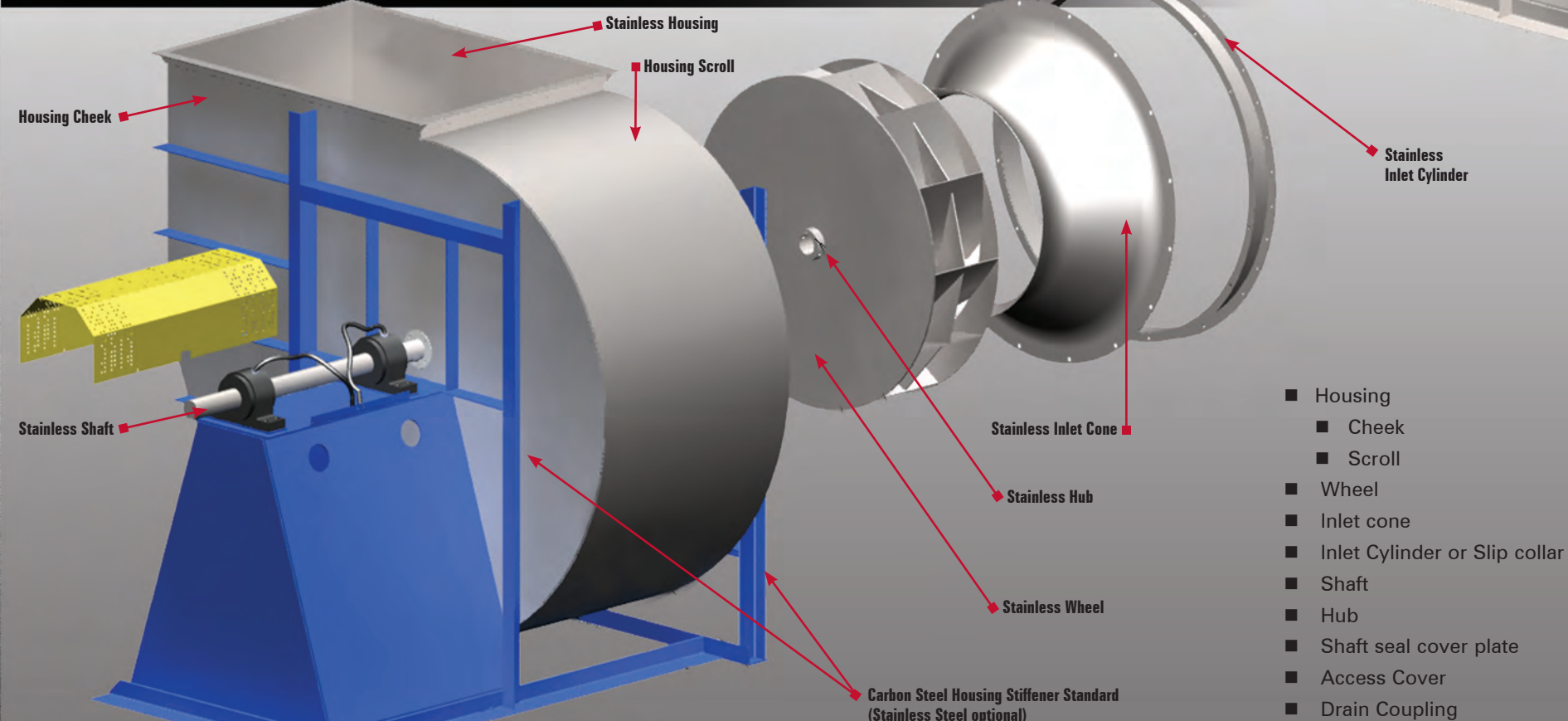
1. Carefully consider the requirements of your application
2. Determine what material you require (304 or 316)
3. Determine which package you require (Air Stream, Entire Fan, Accessory)
4. Determine the surface options for your applications.
  - A. Surface finish (Standard, Plus, Deluxe)
    - a-1. Inside the air stream finish option
    - a-2. Outside the air stream finish option
  - B. Surface treatment
    - b-1. Inside the air stream surface treatment
    - b-2. Outside the air stream surface treatment
5. Determine if passivation is required
6. Determine what options are needed
  - a. Gasket material type
  - b. Type of drain plug coupling (if required)
  - c. Motor type - stainless or wash down (if required)
  - d. Drive package - stainless or wash down (if required)
7. Determine what fan accessories are needed
8. Contact IATC or one of our qualified representatives for a quote.

## Entire Fan Package Components made from stainless steel

- Housing
  - Cheek
  - Scroll
- Wheel
- Inlet cone
- Inlet Cylinder or Slip collar
- Shaft
- Shaft Guard (except arrangement 4)
- Hub
- Shaft seal cover plate
- Belt Guard (arrangements 1, 3, 9)
- Pedestal
- Motor Base (arrangements 1, 3, 9)
- Access Cover
- Drain Coupling



## Air Stream Package Components made from stainless steel



- Housing
  - Cheek
  - Scroll
- Wheel
- Inlet cone
- Inlet Cylinder or Slip collar
- Shaft
- Hub
- Shaft seal cover plate
- Access Cover
- Drain Coupling

# SURFACE OPTIONS

## Premium 125 RA micro finish

- Weld splatter removed
- Welds may include pits, scratches, crevices, and small pockets
- Welds are continuous to minimize crevices and reduce the risk of contamination
- Welds are ground to reduce surface imperfections typical of most welds
- Welds are polished to a 125 RA micro finish further improving the surface
- Welds are polished to a 250 RA micro finish further improving the surface



## Deluxe 250 RA micro finish

- Weld splatter removed
- Welds may include pits, scratches, crevices, and small pockets
- Welds are continuous to minimize crevices and reduce the risk of contamination
- Welds are ground to reduce surface imperfections typical of most welds
- Welds are polished to a 125 RA micro finish further improving the surface
- Welds are polished to a 250 RA micro finish further improving the surface



## Plus No finish spec – Continuous weld

- Weld splatter removed
- Welds may include pits, scratches, crevices, and small pockets
- Welds are continuous to minimize crevices and reduce the risk of contamination
- Welds are ground to reduce surface imperfections typical of most welds
- Welds are polished to a 125 RA micro finish further improving the surface
- Welds are polished to a 250 RA micro finish further improving the surface



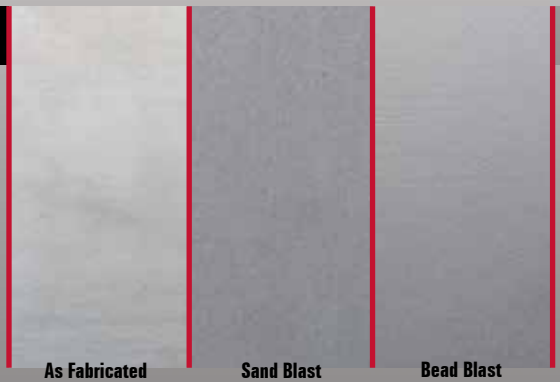
## Standard No finish spec – As fabricated

- Weld splatter removed
- Welds may include pits, scratches, crevices, and small pockets
- Welds are continuous to minimize crevices and reduce the risk of contamination
- Welds are ground to reduce surface imperfections typical of most welds
- Welds are polished to a 125 RA micro finish further improving the surface
- Welds are polished to a 250 RA micro finish further improving the surface



## Surface Treatment

- Sand Blast – Specified surfaces will be sand blasted which results in a rougher surface texture, removes weld heat discoloration and provides a consistent light grey “flat or matte” appearance
- Bead Blast – Specified surfaces will be bead blasted which results in a slightly smoother surface texture, removes weld heat discoloration and provides a consistent deeper grey “semi-gloss” appearance
- Primer Only – Specified surfaces will be primed with 2-3 mils DFT, which provides a paint ready surface
- Prime and Paint – Specified surfaces will be primed and painted with total coverage of 3-6 mils DFT



## Passivation

Passivation improves the corrosion resistance properties of components made of precipitation-hardened, austenitic, ferritic and martensitic steels. Passivation treatments improve the surface condition of stainless steel by dissolving iron that has been imbedded in the surface during forming or machining. If allowed to remain, the iron can corrode and give the appearance of rust spots on the stainless steel.