THE IMPORTANCE OF LOCATION

Providing information as to the location and the environment where the fan will be installed is important. Equipment must be appropriate for environmental conditions — not all fans are designed for corrosive applications. Where the fan resides will make a huge difference on many aspects of selection as well as installation.

Important location considerations include:

Site Elevation Above Sea Level | Density Humidity | Inlet Temperature to the Fan Location Conditions | Concrete on the Ground Building Beams & Floor

The type of foundation at the site directly influences the design of the shaft, bearings and couplings. The geographic location for the fan's installation is also important.

DRAWINGS, PHOTOS & DIGITAL

Provide drawings, pictures or digital files of the location of the fan showing the ductwork, motor location and accessories connected to the fan such as dampers, silencers, diffusers, lubrication units, etc.

Drawings are an excellent place to mark where you need the pressure generated from the fan. Write on the drawing Plane 1 (upstream of the fan) and Plane 2 (downstream of the fan) and then identify the total pressure needed at both locations.

GOOD COMMUNICATION IS KEY

The fan manufacturer will be able to settle on a basic configuration and provide a quote. For the fan selection and quote to be as accurate as possible, please be clear and concise. Provide complete answers and set expectations at in-person and phone meetings. The person most familiar with the requirements of the fan should be the lead communicator. Discussions should span required specifications, challenges experienced with past installations and the concerns regarding the current fan selection.

SPECIFICATIONS INVOLVE GENERAL INFO & IN-DEPTH REQUIREMENTS

General information that should be provided to begin the selection process includes:

Type of Gas Being Moved | Type of Fan Required | Number of Systems | Fans Per System | Application Fan Type: Axial, Centrifugal, Mixed Flow or Turbo | Fan Arrangement and Control Expectations Regarding Equipment Life | Ancillary Items to be Supplied by Fan Manufacturer Noise Levels to be Maintained | Fan Drive | Fan Speed | Corrosiveness Information | Dimensions

It is imperative that requirements for the end-use process, location, installation, schedule and future operation be considered in order to ensure the selection of a highly reliable and efficient fan at a competitive price.

Additional information to achieve necessary performance requirements involves:

Partial Load and Operating Points | Mass Flow | Air Density & Air Analysis at all Operating Points Barometric Pressure at Job Site | Specific Heat Ratio | Inlet Volume Per Fan | Inlet Temperature Estimated Length of Inlet and Discharge Transitions | Total Pressure & Dimensions of Inlet & Outlet Ducts Preferred Fan Speed | Future Demand/Load Conditions

In addition, there are construction and special requirements involving fan rotating assembly, bearings, couplings, drivers, sound, testing, paint requirements, spare parts and storage.





INSTALLATION

While there are very specific installation procedures for all industrial fans, there are basic installation guidelines that should be followed. Before all installations, it is important that the manufacturer's instructions be carefully reviewed and understood. Any questions should be resolved before installation is started.

Installation of all equipment must be handled by qualified and experienced personnel. Although protective devices are standard features on some types of fans, on others these same features are optional accessories based on the type of system, fan location and plant operating procedures. The customer should determine the proper safety devices required to meet company and governmental guidelines and ensure that the fan is not operated without them.

Newly installed fans should have bolts checked for tightness and drives checked after eight hours of operation and again in two weeks. Failure to do this can result in damage to the fan and harm to personnel.

NEW YORK BLOWER

The New York Blower Company is an industry leader in manufacturing premium-quality, engineered fans and blowers to the industrial and OEM marketplace. NYB carries the most complete product portfolio in the business and our products are distributed through an extensive worldwide network of over 300 experienced and knowledgeable representatives.

In addition, NYB has the expertise to upgrade, repair and rebuild any fan regardless of the original manufacturer. Our trained technicians can do a field analysis or transport fans to the closest manfacturing facility where an extensive array of testing is available.

YOUR LOCAL REPRESENTATIVE



HEAVY INDUSTRIAL FAN SELECTION

What Information is Required?

In order to design a heavy industrial fan, there needs to be substantial communication between the user and manufacturer, including the user providing some basic information and an explanation of the application and performance requirements. Initiating the process is easy when the customer is aware of the information needed, as well as what should be avoided

