information bulletin

S-SERIES SELECTION / PLACEMENT / INSTALLATION
VERTICAL INDOOR UPBLAST STAND MOUNTING

Cambridge S-Series heaters can be installed in a variety of configurations. When considering industrial retrofit projects, there are several considerations that should be taken into account.

VERTICAL INDOOR UPBLAST STAND UNITS

Indoor vertical upblast stand units can be can be an excellent choice in plants where overhead cranes are in use. The unit can be mounted close to the exterior wall to minimize infringement into crane space. Being indoors, the heater is protected from the weather. Consideration should be given to vehicle traffic along the exterior wall that may impact the rain hood. In snow country, it is important that the rain hoods not be blocked by piles of snow from snow plows, front end loaders or drifting snow.

If an overhead crane or a gantry crane is present, the clearance required at the side wall must be considered to determine whether there is adequate room to install and service an indoor vertical unit. If a jib crane is present near the exterior wall, the radius of the boom must be considered to prevent the boom from striking the heater or external gas train.

The heater will have an external gas train. It is recommended that the gas train be positioned such that the equivalent distance from the outlet of the gas train to the inlet of the heater does not exceed 4 feet. Usually the best location is to place the gas train perpendicular to the side of the heater, so it can be piped directly into the heater's gas inlet, as illustrated in the S-Series Technical Manual.

Servicing the unit is a potential problem if overhead cranes are present. Accessing the unit via a boom lift or scissors lift will entail entering crane space. This usually means that the work cannot take place until the crane(s) is locked out or other measures (such as a blocking the crane) are taken. Locking out of cranes may seriously affect production, so it should not be taken lightly.

Servicing the units utilizing a ladder is frequently not an option due to requirements for safe ladder use. In addition, it is difficult, if not impossible, to access several of the heater's parts from a ladder.

If a location for an indoor vertical unit is found, then consideration should be given to the impact on local work stations. What will the mounting height of the heater of the heater be? How will the air be distributed? Double deflection grilles are extremely effective when fine tuning air flow.

Since plant production can be affected, scheduling the installation for the installing crew can be problematic. Although the installing crew may be coordinating closely with the production crew, there may still be a potential for cancelling the scheduled crane lock out due to a last minute change of the production schedule. Another potential problem is coordinating the work with the area supervisor. If the supervisor doesn't communicate the need for a crane lock out with the floor personnel, then the installation work may be delayed or postponed, resulting in additional costs for the installation.

Installing the unit may require barricading the floor area where the installing crew is working. Plant vehicle & pedestrian control must be considered. Flag men may be required. These aspects will need to be covered in the safe work plan.

Supporting the heater on a four-legged stand such as Cambridge's mounting stand provides a solid support and it can be secured to the floor. If the floor consists of wooden blocks on a concrete sub floor, the blocks should be removed so the stand can be placed on the concrete sub floor.

The Cambridge mounting stand provides 6" of vertical height adjustment, from 4'0" to 4'6" high. This provides excellent access for most of the service functions from the floor without requiring a lift.

Choosing to utilize a stand higher than the Cambridge stand can significantly impact the serviceability of the heater. The higher the heater is above finished floor, the greater the reliance on accessing the unit with a lift. Maneuvering the lift and positioning the lift to gain ready access to the heater components greatly increases the time, effort and expense required to service the heater.

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Below are installations of indoor vertical upblast units that were installed several years ago. The stands shown were fabricated by Cambridge from 2" square tubing. They became the prototypes for the current adjustable stands supplied by Cambridge. As always with retrofit installations, final mounting configuration and placement depends on "what the building gives you" with which to work.