

Production Gate Check: Control at a Critical Time

A production gate check is a communication between the product manufacturing team and the sales organization (company or manufactures rep) where a check list is used to confirm key customer requirements. The check list consists of items that have in the past caused delivery problems that are not specific to the product's operation.

It is common during the construction of any building to have changes that will impact the HVAC equipment. Most built to order commercial chillers result in the need for one or more order fulfillment CHANGE ORDERS after the build contract has been negotiated and signed. Getting the change orders communicated through the many groups involved in the remodeling or construction of a property can be difficult, but should ultimately be the responsibility of the HVAC company's sales representative to make sure the producing plant knows of any changes to the design specifications submittals before production of the unit. The sales representative's focus is selling and supporting their customers and this is where their communication line is the strongest.

Rule of Thumb:

fix a problem in design for a \$1.00

fix it in the factory for \$10.00

and in the field for \$100.00

Have any of these happened to you?

1. Unit will not fit in the space provided because the installation submittals did not provide the correct dimensions
2. Unit connections to the water lines, duct work, in-coming electric do not match the installation submittals. This can happen when the sales information is not transmitted properly, or there was an architect change order
3. Shipped unit did not include the IOM manuals and auxiliary components such as fan isolators
4. Unit was not built to the local codes and does not include the required UL or ETL certification label.

There are many more that could be added to the list that have I experienced in my career as Director of Quality and Field Technical Support.

Who is impacted by an order problem found in the field?

1. The building owner
2. The person who will occupy the building if it is not the owner
3. The general contractor for the overall project
4. The sub contractors
5. The sales office and sales person who sold the HVAC equipment
6. The sales office's service organization who will be needed to address certain defects
7. The sales office service organization's parts group that needs to order needed replacement parts when needed.
8. The companies, Marketing, Service, Parts, Accounting, Quality, Engineering and Production teams.

The cost of field rework can be significant. The rule of thumb: fix a problem in design for a \$1.00; fix it in the factory for \$10.00 and in the field for \$100.00. Clearly, the earlier a potential problem is defined and corrected the more unnecessary costs can be avoided.

To help the sales person in the field organization, there is a benefit to having a producing plant “GATE CHECK”. This is a communication initiated with the field selling organization during the manufacturing process. The recommendation is once about 2 weeks before production scheduling to ensure that all change orders have been communicated and a second check 2 weeks before schedule build to ensure that there are no last minute changes to delay production. This process when introduced significantly reduces the number of errors experienced at the job site.

If your organization experiences these types of non-function production sales order issues, consider the use of pre-manufacture Gate Checks, they work.



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