

Tuesday, September 02, 2008

Estimated ship dates explained

MH Lighting and Controls has published estimated ship dates for our customers upon initial entry of their orders for over 5 years now.

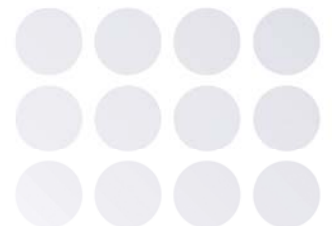
We publish the information within minutes of the order being entered and released with the manufacturer. The estimated dates we publish are created by using historical data on previous shipments from each manufacturer over a recent period of time.

We publish these estimated dates until the manufacturer can provide schedule ship dates based on their current production schedule, parts inventory, and expected vendor shipments. Many times this process can take anywhere from 2 days to 2 weeks depending on the manufacturer and the complexity of the order.

Over the last 10 – 15 years, products in the lighting industry have become much more complex than they were in the preceding years. In the early to mid 1980's, you could only purchase lighting fixtures with a very small set of options. Very few colors were available, ballast's were typically either 120 or 277 volt and that was it. Fluorescent lamps supplied in or with fixtures were very limited in selection, typically only warm white or cool white, and later on energy saving versions of these. This allowed manufactures to carry a larger inventory of products as there were relatively few variations.

Since then, the number of options for lighting fixtures has increased dramatically. Any given fluorescent lighting fixture can be equipped with one of 20 or more styles of ballast's. That same fixture can now be shipped with one of six to eight different lamp variations. And in the case of surface mounted products, they could be supplied in one of several hundred colors, vs. one or two 20 years ago. The possibilities are now endless and change from order to order.

To address this challenge, most manufacturers have shifted from Shipping From Stock for most project related orders, to a Made to Order process using JIT (Just in Time) or Lean Manufacturing. These processes mean that manufacturers rely more heavily on vendors to stock parts, and they order what is needed based on the current demand. This creates a situation where a scheduled ship date can not be provided until the production schedule is checked, and availability of all vendor parts is confirmed. For some manufacturers this can be a matter of days, and others a matter of weeks.



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As manufacturers changed to MTO (made to order) using JIT or Lean manufacturing, providing quick and accurate dating of customer orders became more challenging. Providing our customers with the “canned” lead time estimates from our manufacturers was certainly one way to go. However those canned 4-6 or 6-8 week lead times from the manufacturers are very broad, and typically do not reflect seasonal variations, fluctuations based on volume increases etc. And most manufacturers rarely ever update their “canned” lead times to account for such things.

Utilizing historical shipment data is more accurate than just advising our customers a fixed number of weeks. And, it was something we could provide immediately upon order entry for each manufacturer we show on our MHOSIS information system.

Our internal software runs reporting information at the end of every month. It looks back at all shipments for all manufacturers for the previous 6 months. It then compares the release date of an item, and compares it to the actual ship date. The actual ship date is the date the product was actually shipped, and confirmation of the shipment is provided by means of tracking numbers, and point of shipment information.

For each manufacturer, and each order type (stock order vs. project order) the following information is calculated based on all shipments for each manufacturer during the preceding 6 months;

- a. Min number of days to ship
- b. Maximum numbers of days to ship
- c. Average number of days to ship
- d. Standard deviation of the average

This information is then used by our customer service team to establish a number of days (calendar days not business days) for a given manufacturer to ship an item, based on their recent 6 months performance. By analyzing the standard deviation for each manufacturer and order type, we can understand how closely the manufacturer’s shipments are to the average. Once that information is studied, and some additional human intelligence is introduced (things we know that a computer can not factor in), we apply a calendar number of days to each manufacturer. This value is always rounded to the nearest full week to account for weekends etc. Once this is done, the next new order entered or released for that manufacturer receives the updated number of days added to the release date, and an estimated ship date is published on our web site.

