



Manufacturing Status Update 15, Revision 1

April 7, 2022

Note: This is a revision to update #15 which only changes the lead time and late shipment guidance. If you have been following these updates over the past two years, please excuse the reiteration of many points. The update needs to be written to include information for those reading it for the very first time.

Multiple updates have been issued since March of 2020 regarding the COVID pandemic and explaining its impact. Though COVID remains a global problem, more severe in some areas than others, our challenges today are more from a world that has changed due to COVID, than the disease itself.

Product demand, and the associated incoming orders, increased dramatically in January of 2021. Monthly bookings of orders have consistently been twice our manufacturing capacity since that time, in spite of our efforts to increase capacity. Long lead times are a direct result of the incoming order rate exceeding our ability to produce.

Significant shifts and increases in demand for products have strained the supply chain to the breaking point. The impact is to all industries, not only the semiconductor. Raw materials through finished goods are in short supply. Lead times are increasing and almost everything is shipping far later than commitment dates. AP Tech is dealing with a wide variety and an ever changing list of shortages. Late deliveries range from raw material, machined parts to commodity items like shipping materials, basically everything we need to manufacture products. In addition to shortages, material costs have risen sharply during this period, ranging from 7% to 20% increases.

Russia and the Ukraine provide a variety of key elements, such as nickel, which are used to make the base materials, such as stainless steel, that we use to build our products. It is impossible for us to say at this point what impact the crisis in the Ukraine and the embargos on Russia will have on material availability. There likely will be an impact but we do not know to what extent. We are doing our best to mitigate potential shortages at this time.

AP Tech is operating two full shifts, 10 hours per day including a single shift on both Saturday and Sunday. We increased staff by 25% last year and are continuing to hire more. We are increasing cleanroom and other manufacturing space so that we can continue to add more staff in production. Cleanroom capacity in Napa will be increased by 60% in calendar 2022 coupled with hiring staff to fill the new space. Increasing the flow of parts for manufacturing is critical to increasing production and we are working with our suppliers in this regard to match the supply of parts to increased capacity.

Lead times are now being quoted at 48 to 52 weeks for standard products. A blog is posted to explain what is meant by 'standard'. Larger volume orders and non-standard products (anything not defined by the catalog) will be quoted upon request. These lead times are subject to change at anytime and are

only guidelines which can vary for a variety of reasons. A confirmation copy of the order is sent after the order has been processed which states the actual delivery commitment that may differ from the date requested on the purchase order.

The bad news on delivery is compounded by the fact that we are unable expedite orders or commit to deliveries shorter than our standard lead times today. Manufacturing time has been and is being fully allocated for orders without a buffer (time reserved) to enable shorter deliveries. When asked for our best delivery, that is what is quoted, the first time that it is asked. Many ask us to try again for a better delivery but, unfortunately, we are unable to comply with such requests. The even worse news is that most orders are shipping later than commitment dates. In spite of our best efforts to provide accurate lead times, unforeseen challenges are causing orders to ship an average of 4 weeks later than the commitment date. We are very sorry to say that the guidance for now should be to expect shipments to be later than the due date.

We are doing many things to improve the situation which include expanding and adding cleanroom space to increase capacity, as mentioned. SMC, our parent company, is working closely with us on many fronts, including parts supply. Manufacturing capacity is being added and a cleanroom is being built at the SMC USA headquarters in Noblesville, IN. Machine tools are being added in Vietnam to provide more parts. These steps will add significantly to our capacity. Unfortunately, everything takes time to implement and will not provide immediate relief. We are making incremental progress each month, but more substantial steps, such as the cleanroom expansion, will take until later this year and beyond to achieve. Management of AP Tech and SMC sincerely appreciate the urgency of this product delivery crisis and are moving as quickly as possible to increase production.

Unfortunately, we are still confronted with a very unpredictable situation. This update provides our current status which could change tomorrow due to product demand, pandemic or some other factor.

We still sincerely appreciate everyone's patience, cooperation and understanding throughout this prolonged, multi crisis situation. We hope that everyone is staying safe and healthy.