

Looking for Solutions to the Shipping and Logistics Issue

by Supply Chain Efficiencies Task Force

For the past six months, a group of experts in the supply chain and logistics roles at IAPD member companies have been working together as part of the Supply Chain Efficiencies Task Force led by Chair Craig Saunders of North American Plastics. This group's initial charter was to find innovative ways to streamline the supply chain to make the performance plastics distribution supply chain more competitive and they quickly identified shipping as a pain point for many IAPD members. The task force's first deliverable is the following statement about the shipping industry:

The shipping industry is experiencing a perfect storm. Every industry is feeling the pain.

The new electronic logging device (ELD), reduced hours for drivers and driver shortages are causing disruptions and increased costs. The practice of logging driving time using paper and pencil are gone. Electronic tracking devices are now mandatory on all trucks, which are recording the time more accurately. In addition, many tasks such as loading/unloading freight and safety checks that have, in the past, not been included in the shift time are now being counted as part of their hours of service.

The result is that shipping companies are being more selective about what they ship and where they go, seeking to maximize the space for freight and shipping lanes. For example, at times entire regions of the country may be temporarily embargoed by the shipping companies. Considering that the northern part of the country experiences bad weather for part of the year, it wouldn't be surprising for shipping companies to take that into account when determining the routes that they will serve. Additionally, freight companies are adding surcharges and accessorial fees based off of the rules set forth in the carrier's tariff to offset the capacity issues, most notably to overlength and extreme length freight or misclassified freight.

While some sought relief by using inter-modal shipping (i.e., trains), the rail system is also at capacity and known for unreliable shipping times (current on-time performance is only at 55 percent).

Freight and transportation companies are working on solutions to this issue, including adding more drivers and equipment to keep up with the demand, but don't expect relief much before 2020.

Performance plastics and shipping

The performance plastics industry is experiencing additional freight challenges and costs because the majority of the materials being shipped are density-rated items and are often oversized, heavy and awkward and have limited ways a forklift can pick up and load them onto a truck. Some materials can't be double stacked, which exacerbates the problem. Shipping companies are adding US\$80-85 (plus additional beyond certain lengths) surcharges for materials that are considered extreme length (8' to 12' = approximately US\$85 surcharge, over 12' up to 16' = US\$150; over 16' up to 20' = US\$225; anything over 20' varies by carrier from US\$250 up to US\$600); this could mean 10 percent margin erosion for the industry. Additionally, a few carriers are now also applying additional charges for shipments that have "do not double stack" stickers where they will charge at a higher class/density vs. the actual density of the shipment.

When a shipper ships multiple pallets and/or multiple oversized pallets, the carrier will look at how many actual feet the skids take up which is what is called the carrier's linear foot rule (varies by whatever limit is set forth in a particular carrier's published tariff) which means that once the dimensions of the shipment (all of the loaded pallets) exceed certain parameters, the standard LTL quote based off of the agreed upon discount may be invalid due to the linear foot rule.

The next part of that equation is the carrier's cubic capacity limits — which is the linear feet of how much space the shipment takes up but also factoring in the total weight of the shipment and any unusable spaces beside or above the shipment (if pallets cannot be double-stacked) — which are taken into account by the literal cubic space including empty space the entire shipment occupies with carrier figuring out the pounds per cubic foot of all of that space.

For example, consider 1 pallet of plastic sheets at 732 pounds with dimensions of 96" x 49" x 18" = 14.94 lbs per cubic foot (pcf) = Actual Class 85.

Item	Individual Skid Weight lbs	Length in	Width in	Height in	Units	Density	Class (est)
1	732	96	49	18	1	14.93877	85
2							
3							
4							
5							

TOTALS			
Cube	Weight	Density (avg)	Class (total)
49 cu.ft.	732 lbs	14.94 lbs/cu.ft.	85
1.39 cu.mtr.	332.03 kgs	239.3 kgs/cu.m	

CALCULATE CLEAR CLOSE

- The carrier will make the height to 96", which means: 96" x 49" x 96" = 2.8 (pcf/density) = Actual Class 250.
- This shipment will be rated at a much higher class before any FAK agreements would be applicable.

In the past, IAPD members have taken advantage of entering into FAK agreements with specific carriers for lower rates which often included exemptions from some of these accessorial fees. The recent changes to these accessorial fees — specifically the lowered overlength limits — has meant carriers are not willing to give any of their customers exemptions regardless of whatever FAK agreements are in place.

Due to the scarcity of drivers in general, shipping companies can be more selective about what they transport and they may scale back on their work with performance plastics companies, favoring industries that have "good freight" instead.

Possible solutions

The IAPD Supply Chain Efficiencies Task Force has been studying this issue. Even though the LTL carriers are implementing strategies to address the driver shortage, none of these programs are short-term solutions. The performance plastics industry must address the problem now by making changes to mitigate some of the extra freight costs, as well as positioning itself as preferred freight customer. They suggest the following:

Distributors

- Give manufacturers longer lead times to allow them to maximize their shipments
- Do better sales and inventory forecasting for better planning and discuss with manufacturing partners
- Do everything you can to order full truckloads and increase your inventory of stock material
- Work with manufacturing partners to create a predictive shipping schedule
- Dispersing the US\$85+ per truck fee over greater poundage (of freight on the truck)
- Build the US\$85+ charge into the price of the materials
- Talk to customers to find out what they're doing with the materials; do they really need oversized materials? Can it be cut and shipped in smaller dimensions? If you can, trim the size of the sheets and skids so it's less than 4' x 8' to avoid surcharges
- Consider investing in trucks and drivers or contact with a local shipping company that will pick up orders from a manufacturer's hub location

Packaging

- Add plywood to the top and sides of pallets before adding the corner guards, so the pallets can be stacked
- Build crates with slots for the materials and line with protective material; the crates would then be stackable — including pallets that may be attached to the walls to free up floor space
- Include collapsible wheels on your pallets

Manufacturers

- Remove the self-imposed urgency to ship on demand; implement longer lead times + 2 days
- Have consistency in lead times; agree on standard industry lead times
- Swing capacity based on LTL availability (take advantage of available capacity)
- Offer a cafeteria plan for shipping: one price for 7-day shipping, an additional fee for faster turnaround, drop ship or custom orders
- No breaking of pallets
- Renegotiate shipping fees with major carriers
- Only ship to a distribution center, rather than third-party locations

- Trim the size of the sheets and skids so they are less than 4' x 8' to avoid the additional charge
- Only ship full truckloads and stop 2-3 times in a region
- Have consolidation days for distributors, so all shipments are delivered together
- Offer a freight credit to distributors who pick up orders in their own trucks

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Solutions from IAPD

The Supply Chain Efficiencies Task Force is searching for industry-wide solutions that IAPD can provide to its members. Initial suggestions include:

Education

- Create awareness of this issue
- Share best practices from shipping companies to be optimal shipping partners

Connection with carriers

- IAPD is working with YRC executives on finding ways to make members' freight more attractive to carriers
- YRC is doing an assessment on task force members' companies and will make recommendations for improving their freight; after this initial test, IAPD and YRC will discuss whether to continue these individual assessments and/or provide general best practices for the industry
- A YRC executive will speak at the 2018 IAPD Annual Convention about this issue; plan to attend the session "Freight, Transportation

and Logistics Challenges: Is This the New Norm?" on Wednesday, October 3 from 1:45 p.m. - 3:15 p.m.

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What's next?

IAPD will keep you informed of the recommendations provided by the YRC analysis of IAPD members' shipping patterns, plus any additional information the Supply Chain Efficiencies Task Force identifies. If you have best practices about optional shipping you'd like to share, please let any of the IAPD staff know. If you have other issues you'd like the Supply Chain Efficiencies Task Force to consider, let IAPD staff know and we will bring your concerns to the task force.