Putting the chassis genie back in the bottle

The growth of international trade has forced governments to become vigilant about protecting their ecosystems. Concerns about uncrated wooden pallets from China and organisms in ballast water have become as critical as those related to customs and trade negotiations.

The worry is understandable. Once an outside organism is introduced into a new ecosystem, it is very often difficult — perhaps impossible — to remove.

Many people in our industry would classify the chassis as such an organism. The United States is the only country where steamship lines must provide chassis. This custom is often attributed to the early management of industry pioneer Sea-Land Service, which had its roots in trucking companies.

The intermodal traffic base has grown from one that consisted primarily of truck trailers to one with a majority of containers. This conversion arose out of both the increase in inland international cargo, and the conversion of domestic trailers to domestic containers.

The development of double-stack transportation enabled railroads to greatly enhance the traffic volume they could handle through their line-haul networks. At the same time, it improved the profitability of this traffic segment.

Unfortunately, containerization also created significant terminal operating problems. A container cannot move on the highway without the wheels provided by the chassis.

The chassis now represents a real challenge to the industry.

Chassis generally fall into several categories. Dedicated chassis are compatible with specific containers (i.e., those of J.B. Hunt). These are easy to manage and control, because they operate in a set system and they are relatively useless to other users. The railroads do a fairly good job because these assets are intensively managed in a closed system.

Steamship lines position the chassis they own to support their own business. Often, their supply swings between surplus, which causes parking congestion, and shortage, which disrupts operations.

Both problems are serious. To handle surplus, some railroads have invested in chassis-stacking systems that enable chassis to be stored upright (up to eight chassis in the amount of parking space previously used by one). This is an expensive operation and frequently leads to rancorous disputes over damage.

A steamship line chassis shortage forces a railroad to either "ground" the boxes (in other words, place it on the ground without any wheels) or to use another line's chassis. Both of these options require additional lifts and both are disruptive.

A ground container can often end up with other containers stacked on top of it. It may take many moves to get to the proper load once a chassis is available.

An intermediate chassis can be a problem, as it penalizes a line that actually had an adequate supply of chassis available. That line can then be thrown into chassis shortage — further compounding the problem.

Leasing companies provide chassis pools, but because of their famously high daily rates, these pools are viewed by steamship lines as a chassis supply of last resort.

But chassis utilization is not well tracked by lines, and this alternative may not be as expensive as it appears. Although the daily rates appear high when compared with steamship-line cost of ownership, cost here is only incurred when the chassis is in service.

Ownership and control of chassis are not always clearly identifiable by examination of the physical asset. And the reporting of empty (or "bare") chassis moves is far from comprehensive. Railroads are only recently keeping track of chassis in their terminal operating systems.

The result is stress and confusion. There is a large number of empty-chassis moves between terminals. Like cross-town moves, chassis-relocation moves simply add to the burden of gate processing and equipment tracking. In most cases, the expense is buried amid trucking costs and is never recognized as an equipment cost.

We are facing an industrywide chassis problem. In a few locations, the problem has been addressed by creating chassis pools. Some cooperative arrangements exist whereby steamship lines place their chassis in a common-user pool administered by an outside party (usually a leasing company or terminal operator) for all parties. The lines contributing equipment usually form some sort of oversight body.

Some pools have been effective in reducing the number of chassis required, in turn reducing terminal capacity consumed by empty-chassis storage and repositioning.

To date, chassis pools have been limited to discrete locations controlled by a single authority (for example, a single port location or marine terminal). In theory, these pool arrangements could work in larger areas, but the disparate operating authorities have precluded such an initiative.

Perhaps there is a role for the trucker to provide the chassis. Truckers are better managers and closer to the actual movement.

But one thing is certain. As container traffic grows, so does the need to solve chassis problems. Scarce terminal resources cannot be devoted to chassis storage. It is time, once again, for the industry to find a solution.

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