

SEPTEMBER 2023



From Experience

Flexible Arrangements: Key Considerations for Plants with Mobile Equipment

At many plants, production equipment is in a fixed position and, while labels and packaging material may change, little else does. However, other facilities may have batch systems running multiple SKUs throughout the day or week. In such situations, equipment is constantly being moved in and out of place...ideally, quickly – to keep downtime to a minimum...and easily – for the workers tasked with making the moves.

When creating a facility requiring flexible lines, a number of factors must be considered, including:

- 1. Casters.** Equipment which falls under certain weight limits can be placed on casters. Locking casters are best so that equipment can be held in place once docked (see below). Floor slopes also play a factor if having equipment on casters. Care should be taken when moving equipment on sloped floors.
- 2. Docking.** Equipment docking stations can be used so any pieces of mobile equipment can have the same relative position each time they are brought into place on the line. Placement is key for the docking station that remains on the floor so that it does not become a

trip hazard. In addition, the location of the docking pin on the piece of equipment should be easily accessible.

- 3. Utility connections.** All utility connections, whether air, steam, water, or electrical, need to be able to be quickly disconnected/re-connected. Having unused cords hanging from the ceiling is not a good solution. Therefore, how do you bring these connections down from the ceiling, and do it in a way that is seamless, safe, and simple? Utility ladders are a good solution to this issue, but must be located in the appropriate locations to foster flexibility.

Continued on next page. >

EXPERIENCE IN BRIEF

A fifth consideration to note: Movement pathways. Regardless of where the equipment is stored when not in use, keep in mind the pathway that will need to be used to move it in and out of place. If the equipment is too big for casters, will a forklift be required? This may require additional square footage for the move pathway.

4. **Storage options.** Equipment that is not in use needs to go somewhere. Ideally, this is away from the production floor – not pushed into a corner with plastic sheeting thrown over it – so that it can remain clean while out of use.

Of course, every facility is different, and will have different needs for how to arrange equipment while building in as much flexibility as possible. Check with your manufacturing engineer to determine if any of the above considerations can be considered for your particular situation.



RELATED CONTENT

[Aligning Vendor Utilities](#)

[All Shook Up? Understanding Seismic Design Categories](#)

FREE WEBINAR SERIES!

Go to www.hixson-inc.com/insights/foodplant-of-the-future to register or access archives of Hixson's webinars.



CONTACT US

Direct any comments or questions to:

Scott Wever

Manager, Manufacturing Engineering

swever@hixson-inc.com

Phone: 513.241.1230

www.hixson-inc.com