14 Considerations When Designing an AutoStore™ System

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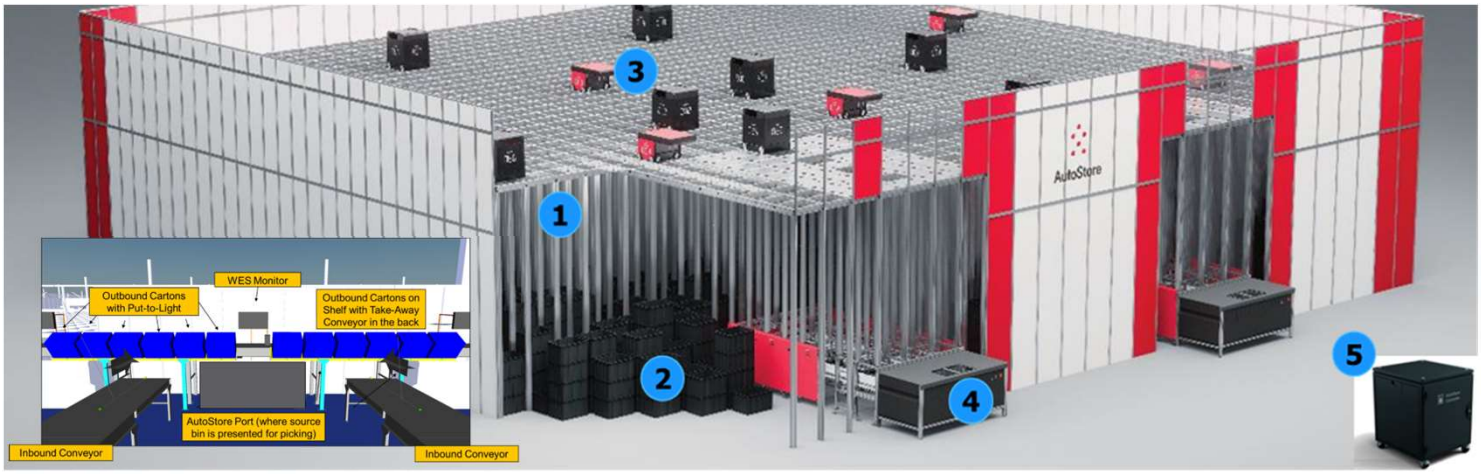
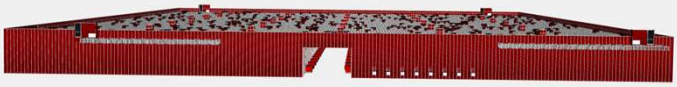


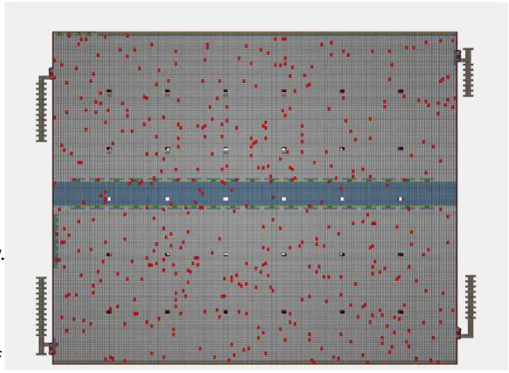
1. Aluminium **Grid** structure creates the storage space as well as top tracks for Robot travel.
2. **Bins** are stacked on top of one another within the Grid providing highly dense storage.
3. **Robots (Bots)** travel along top of Grid, able to access any Bin within the system for delivery to any Port.
4. Bins are delivered to picking **Ports** from within the Grid for final SKU picking by associates.
5. AutoStore **Controller** (will be located on service mezzanine, which is not shown)

Designing an AutoStore™ system is a complex undertaking with many interacting decision variables.

Tradeoffs to be considered in the design process that are detailed in the paper:

- Bin Height
- Grid Height
- Grid Shape
- Port Type
- Robot Type
- Number of Chargers and their Placement
- Robot Orientation
- Percentage of Holes





Conclusion

AutoStore systems are increasingly being used in industry. Designing an AutoStore system is a complex optimization problem with many interacting decisions. We hope that along with the description of the AutoStore operation, the research community can provide guidance in some of these decisions.

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