

## AGVs Integration with ASRS Systems

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### Abstract

A technique for modeling large-scale AS/RS-AGV systems is offered in an effort to accurately and flexibly specify the AS/RS in which a massive number of items are stored and retrieved. This study takes into consideration the large-scale AS/RS with stacker cranes, the looped-track AGV system, aisle conveyors linking these two systems, and arriving and departing conveyors. To simulate large-scale AS/RS-AGV systems and undertake simulation testing, there are two basic processes. For starters, develop a simulation program by entering desired character stats like the amount of banks, bays, AS/RS levels and agvs into an input field on a computer. The second phase is doing simulation tests. Every item number put on each rack, the matching number of cases for each item, the time of arrival to the warehouse, and the time of departure from the system are all preserved and documented in the recommended model. We will compare the performance of three different rack configurations in a big warehouse using an AS/RS system. Each configuration has the same number of racks. Both the average flowtime and the equivalent annual cost are used as performance metrics in this research.

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### Biography

Mahmoud SABRA is a former Software Engineer and currently the Dean of the College of Computer Studies in University of Perpetual Help System Dalta, Molino campus in the Philippines. He is a candidate in Doctor of Philosophy Major in Technology Education from Rizal Technological University in Manila, Philippines. He is a recipient of

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