

Metal Storage Bins: An Industry First

With a legacy of innovation in warehouse fulfillment spanning over two decades, metal bins by OIA significantly raise the bar in fire safety and asset protection while maximizing storage density and minimizing fixed costs.

Storage bins are an integral component of the Ocado Storage and Retrieval System (OSRS), our vertical cubic storage solution. The new OIA metal bin represents the culmination of five years of dedicated research, development and extensive testing by Ocado and third party entities.

Now in production in the UK, North America and Japan, our metal bins set a new benchmark for safe storage within Automated Storage and Retrieval Systems (ASRS). Designed to accommodate and protect a diverse range of products, our metal bins virtually eliminate the risk of fire spread without compromising the exceptional throughput and storage density of OSRS. A mix of plastic and metal bins can be deployed within the grid to achieve the appropriate level of protection for your application.

Technical Specifications

	Metal Bin	Plastic Bin	
Material	Galvanized Steel	Polypropylene (PP)	
Internal Dimensions	L 609mm x W 409mm x H 358mm	L 606mm x W 406mm (bottom), 411mm (top) x H 344mm	
Internal Capacity	89.2 liters	85.2 liters	
Payload	29.3 kg	30.6 kg	



Talk to An OIA Expert >

Our expert team is ready to discuss your requirements and deliver a solution to future-proof your fulfilment operations.

v10



Enhanced Resistance

Our galvanized steel bins have undergone comprehensive testing, including exposure to extreme temperatures and high humidity for extended periods. The bins are resistant to corrosion and are watertight, offering a secure solution for diverse storage use cases.

Industry-Leading Fire Suppression

Our new solid-sided metal bins shield your stock from direct flame impingement. In doing so, they effectively partition the grid into thousands of individual fireproof boxes. This represents a game-changing reduction in risk.

Reduced Footprint and Fixed Costs

In cubic ASRS systems using plastic bins, fire breaks are recommended to help control horizontal spread in the event of a fire. These fire breaks must remain empty, reducing the overall capacity of the grid.

Metal bins do not require fire breaks, resulting in the reclamation of up to 20 percent of cubic storage space, a reduced (or better leveraged) physical footprint, and lower real estate costs.

Fixed costs typically associated with cubic ASRS are reduced, too, as auxiliary fire suppression systems such as in-rack sprinklers, monitor nozzles, cameras, and false ceilings are typically no longer required.



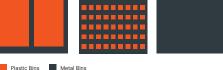
Lower Insurance Premiums

Our metal bins have been developed in conjunction with leading commercial insurance company FM Global. Metal bins are recognised to set an industry benchmark for fire risk reduction in complex cubic storage environments, equating to reduced overall property insurance premiums.

Bin Storage Configuration Options

Plastic and metal bins can be combined to achieve the appropriate level of protection for your application. During operation, our warehouse execution system (WES) actively orchestrates the moving of metal bins to designated areas to maintain firebreaks 24/7.

	Classic	Enhanced	Premium
Metal Bin %	20%	55%	100%
Plastic Bin %	80%	45%	0%
Additional Fire Mitigation Requirements	Enhanced sprinklers, false ceiling, 4-hour water supply	No	No
Improved Insurance Terms & Conditions	No	Yes	Yes
Fire Spread Potential	Defined by layout	84 bins (4×21)	1 bin
Grid Pattern			



C OCCACO INTELLIGENT AUTOMATION