



# Technical Comparison of Jungheinrich PowerCube with AutoStore

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Parameter	Jungheinrich PowerCube	AutoStore
Storage Bins		
Inner dimensions (LxWxH)	604 mm x 404 mm x 290 mm	603 mm x 403 mm x (202 mm or 312 mm or 404 mm)
Outer dimensions (LxWxH)	650 mm x 450 mm x 330 mm	649 mm x 449 mm x (220 mm or 330 mm or 425 mm)
Max. Net Load	50 kg	30 kg
Bin Weight	4 kg	3, 4, or 5 kg for 220 mm, 330 mm, or 425 mm bin height, respectively
ESD <sup>1</sup> Bins Available	No	Yes
Bin Use Outside Cube	Bins conveyable outside storage cube, can leave warehouse, manual handling possible.	Bins can leave storage cube, are conveyable, should not be handled manually or used as a multi-purpose bin.
Bin Storage	In rack	On floor
Cube Characteristics		
Max. Stack Height	30 bins (with 330 mm height per bin); max. stack weight 750 kg (= max. 14 levels with all bins of 50 kg net load)	24 bins (with 220 mm bin height) / 16 bins (with 330 mm bin height) / 14 bins (with 425 mm bin height)
Max. System Height	12 m	6.3 m (+ 2m clear height necessary). > 2 systems can be “stacked” with mezzanines.
Layout Flexibility	Flexible footprint, flexible rack height in same system	Flexible footprint, but bin stacks need to have same max. height.
Floor Slab Requirements	DIN 18202. Surface irregularities can be offset by rack.	Floor free of surface irregularities. See category “More stringent requirements than finished floors” of DIN 18202. Grinding of floor slab often necessary in brownfields.
Fire Protection	Sprinkling or oxygen-reduction. Oxy-reduct variant available off-the-shelf. Workstations outside oxy-reduct area.	Sprinkling or oxygen-reduction
Fire Insurance / Approval	Approval currently potentially painful with local authorities. Certification with insurance companies ongoing.	Certified by major insurance companies, but still potentially painful with local authorities.
Robot Characteristics		
Robot Charging	Opportunity charging during picking	Dedicated charging stations; bot offline while charging. One charging station per robot for up to 11 robots. Fewer stations per robot for higher numbers. B1 can swap battery and leave used battery at charger.
Robot Types	One	Three (R5, R5+, B1)
Storage/Retrieval Depth	Double-deep transportation inside cube, single-deep transportation to and from workstations	Single-deep
Temperature Regime	Ambient (5° C – 35° C)	Ambient, Chilled (as of 2022), Deep Freeze (as of 2022)
Sales and Execution		
Sales Partner	Jungheinrich	22 licensed distributors
Sales Region	Germany, Austria, Switzerland	Global (currently in 46 countries)
Time to Budget Offer	2-4 weeks incl. dedicated material flow simulation	Budget price within 1 day. 3D layout within 15 min with configuration tool.
Target System Size	Currently smaller systems: approx. 15.000 storage bins, 300 bins/h throughput. Larger systems to follow once next development cycle is finished.	Flexible. Largest system with approx. 1.200.000 bin locations, 9.800 bins/h throughput; systems with up to 16.000 bins/h throughput exist.
References	First commercial site sold in 2022 (system launched in 2022)	> 1.000 (system launched in 1996)

<sup>1</sup> ESD = Electrostatic discharge