



Concept II® VTR5 to MAG7 Upgrade

VTR5 to MAG 7:

- Replacement of the legacy VTR5 vacuum robot with the state of the art MAG 7 robot.
- MAG7 is the most advanced and reliable robot for vacuum and isolation environments.



Value Proposition:

The MAG 7 vacuum robot upgrade is for customers who are looking to dramatically increase wafer throughput with less than a 6 month return on their investment.



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Features

- Field proven direct drive
(No belts, cables, or pulleys)
- No stepper motors
(less vibration)
- Continuous 360 degrees rotation
- No dynamic seals
- No rotating cables

Benefits

- Direct-drive reliability > 10 Million MCBF
- Increased throughput (optimal trajectory control)
- Better particle performance
- Reduced PM and downtime
- Ease of maintenance (independent pitch and roll adjustment)
- Better vacuum performance
- Average ROI in 6 month
- Increase of productivity (50% faster wafer exchange rate)



VTR5 to MAG7 Comparison

Feature	VTR 5	MAG 7
Reliability MCBF	2.3 million	10 million
Repeatability	0.26 mm (TIR)	0.1 mm (TIR)
Maximum Temperature	50° C	120° C (Mounting Flange)
Base Vacuum	5×10^{-8} Torr	5×10^{-9} Torr
300mm Compatible	No	Yes
Dynamic Seals	Ferrofluidic and Lip Seals	None