



PWMS AMR Budgetary Supplement

Five handling methods and a two dock MiR250 box jack pilot

Prepared for PWMS by Aetec Private Limited

Revision 7 | 14 September 2026 | SGD excluding GST

This supplement retains the scope-specific selling allowances from the end-to-end quotation Rev 6 and adds an engineering ROM for the new C05 direct box jack pilot. The pilot allowance covers one AMR and two fixed docks on one defined route. It is not a 17-station factory system price. Supplier package confirmation and Aetec commercial approval are required before an order quotation is issued.

Rev 6 reference	Scope	Retained selling ROM
1A	One Hook, complete route and initial 20-trolley batch	S\$603,900
1B	Six Hooks, complete route and same initial batch	S\$1,168,200
1B expansion	Eight-Hook indicative total	S\$1,374,600
2	FG-ASRS base	S\$1,580,000
2A	FG-ASRS plus conveyor-top MiR250	S\$1,770,000
2B	FG-ASRS plus provisional fixed conveyor	S\$1,890,000
3A	Common-container platform plus six lift AMRs	S\$3,000,000
3B	Common-container platform plus five Shelf Lift AMRs	S\$2,960,200
3C	One downstream MC600 and UR30 application add-on	S\$420,000
3D / 3F	Fixed guarded raw-load cell / lift-tilt station	S\$345,000 / S\$45,000
3E	Custom heavy mobile handling study allowance	S\$650,000

These packages are not five directly comparable vehicle prices. Their routes, fleets, storage and integration inclusions differ. Select the architecture and reconcile shared scope before combining any package. The 3C allowance predates the revised side-presentation mechanism and must be reconciled before reuse.



C05 two dock pilot engineering allowance

Planning scope: one MiR250, one guided and braked custom box lift with positive retention, one qualified box interface, two fixed raised docks, local controls and one defined route. All figures below are selling-side planning allowances. They are not current supplier quotations.

Ref	Allowance	Qty	Unit rate	Amount
D01	MiR250 base and delivered hardware allowance	1	S\$95,000	S\$95,000
D02	Docking charger allowance	1	S\$8,400	S\$8,400
D03	Custom guided and braked jack module	1	S\$24,000	S\$24,000
D04	Positive restraint and box-support qualification	1	S\$12,000	S\$12,000
D05	Fixed raised docking station	2	S\$8,500	S\$17,000
D06	Local power, I/O and station controls	1	S\$8,000	S\$8,000
D07	Mission setup and basic movement logs	1	S\$12,000	S\$12,000
D08	Route engineering, FAT, SAT and training	1	S\$18,000	S\$18,000
	Total engineering ROM			S\$194,400

Planning sensitivity of $\pm 30\%$ gives S\$136,080 to S\$252,720. This band is an estimate range, not a contractual contingency entitlement or a supplier accuracy claim. D01 and D02 use historical project hardware allowances as anchors; D03–D08 are new engineering allowances for this pilot scope.

Scope boundary

This allowance excludes a 17-station rollout, fleet expansion, full MES/WMS/QMS integration, ASRS, machine-tool part loading, bulk production containers, building upgrades and powered box transfer beyond setdown on fixed rails. A different box structure, gross load, lift stroke or station geometry can change the price.

Application basis

The current C05 geometry uses an 840 × 450 × 330 mm qualified rigid-bottom box, 650 mm fixed support height and 100 mm pad stroke. No capacity is approved until box, top-module mass, load centre, restraint and MiR application acceptance are resolved. The old corrugated-plastic box construction is not assumed suitable for direct lifting.



Scope reconciliation and commercial basis

Preserve the existing commercial boundaries

Rev 6 remains the detailed line-item source for previously priced scope. H07–H10 already include S\$120,000 for platform, traceability, PWMS integration and orchestration. The initial trolley repeat batch is $20 \times S\$300 = S\$6,000$. Do not add those items again when using the complete Hook package.

The common-container platform is S\$2,220,000 before selecting its fleet. It contains a separate S\$1,520,000 ASRS, S\$170,000 for container development and quantities, S\$255,000 for 17 gateways and 34 standard docks, S\$55,000 Wi-Fi and S\$220,000 software and integration. It is an alternative to the FG-only ASRS architecture.

Extra standard call-enabled docks beyond the first 34 retain the S\$4,500 allowance. Expanding 17 stations from two to six positions adds 68 docks, or S\$306,000. Powered conveyors, lifting stations and robot-ready interfaces need separate engineering. The C05 fixed docks have a different scope and are priced in D05.

The MC600-30 package already contains its UR30; do not charge a second arm. Retain the conservative 30 kg arm screen, 12 kg tool allowance and 16 kg preferred complete loaded-carrier target. Reconcile the revised presentation lifts, final stations and demonstrated payload with the S\$420,000 historical application ROM.

Pricing and terms

Item	Basis
Hardware markup	The retained 10% agreement applies to new supplier buy-cost calculations. Do not add it again to the selling ROM values in this supplement or Rev 6.
Payment milestones	Retain 30% / 30% / 20% / 20%: order; approved design and procurement; FAT and shipment; SAT and handover. Final contract defines acceptance.
Warranty basis	Retain 12 months after SAT or 15 months after delivery, whichever occurs first, subject to supplier conditions and final scope.
Estimate status	Non-binding planning ROM; confirm scope, supplier inclusions, delivery schedule and final selling approval.
Exclusions	Civil and structural work, floor upgrades, building electrical or fire-system changes, customer IT changes, machine automation and staffing unless expressly included.

This supplement supersedes earlier figures only for the explicitly added C05 two-dock pilot. It does not reset the validity of the 5 September 2026 Rev 6 quotation or authorize procurement. Source register: end-to-end quotation Rev 6, technical proposal Rev 10, practicality review Rev 11 and the C05 direct-lift concept prepared for this continuation.