

Inspection Plus with SupaTouch

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Specification

Part number	A-5755-4101	
Control memory requirements	46 kilobytes (typical); 69 kilobytes (maximum)	
Supported controls	Fanuc 0iM, 15iM, 16iM, 18iM, 21iM and Series 3xi Meldas 700 series or later	
Compatible probe types	All Renishaw touch-trigger – RENGAGE™ or kinematic – probes	
Cycle features	<p>Protected positioning.</p> <p>Measurement of internal and external features to determine size and position, including:</p> <ul style="list-style-type: none"> Obtaining a hard copy printout of the feature data. Applying tolerances to both size and position. <p>Additional features for feedback of errors, including:</p> <ul style="list-style-type: none"> Application of experience values to the measured size. Application of percentage feedback of the error. Null-band zone for no tool offset update. Statistical process control (SPC) feedback based on average value. <p>Calculation of feature-to-feature data.</p> <p>Measurement of external and internal corners for corner surfaces which may not be parallel to an axis.</p> <p>Calibration of multiple probes (with individual probe turn-on methods).</p> <p>4th axis datum setting and tolerancing.</p> <p>Angular measurement of features.</p> <p>Software option to turn off the tolerance alarms and provide a flag-only alarm. (Suitable for FMS and unmanned applications.)</p> <p>Built in stylus collision and false trigger protection for all cycles.</p> <p>Diagnostic and format error checking routines for all cycles.</p> <p>Self-optimisation for optimum performance.</p>	
Calibration cycles	Calibration options	<p>Calibrating the probe length: probe-free length setting for improved pre-positioning.</p> <p>Calibrating the stylus ball offsets and radii.</p> <p>Calibrating on a reference sphere.</p>
	Special calibration cycles	<p>Optimisation report.</p> <p>Centring on a calibration feature.</p> <p>Calibrating the stylus X and Y offsets.</p> <p>Calibrating the stylus ball radius.</p>

Measurement cycles	Standard measuring cycles	<p>XYZ single surface measurement.</p> <p>Web measurement.</p> <p>Pocket measurement.</p> <p>Bore measurement.</p> <p>Boss measurement.</p> <p>Finding an internal corner.</p> <p>Finding an external corner.</p> <p>5-point external rectangle feature.</p> <p>5-point internal rectangle feature.</p> <p>Probe start.</p> <p>Probe stop.</p>
	Vector measuring cycles	<p>Angled surface measurement using A and D inputs.</p> <p>Angled surface measurement using X, Y and Z inputs.</p> <p>Angled web measurement.</p> <p>Angled pocket measurement.</p> <p>3-point bore measurement.</p> <p>3-point boss measurement.</p>
	Additional cycles	<p>4th axis measurement.</p> <p>Bore on PCD measurement.</p> <p>Boss on PCD measurement.</p> <p>Stock allowance.</p> <p>Determining feature-to-feature data in the XY plane.</p> <p>Determining feature-to-feature data in the Z plane.</p> <p>Updating the statistical process control (SPC) tool offset.</p> <p>Angled measurement in the X or Y plane.</p>
Add-ons		<p>Automatic selection of one-touch or two-touch measurement.</p> <p>Automatic optimisation cycle providing:</p> <ul style="list-style-type: none"> Optimised feedrates for measuring. Optimised protected positioning feedrates. Optimised back-off (two-touch) and recovery (one-touch) for quick and reliable measurement. <p>A printed optimisation report.</p>
Operation modes		<p>Prove-out mode: use to validate programmed measurement cycles.</p> <p>Production mode: provides fast, unprotected positioning once cycles are proven.</p>

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