

CATALOG PUBLICATION

**NEW VISTA ROBOTIC GAGING AND REMEDIATION UNITS
— FOR THREAD GAGING, PLAIN HOLE GAGING AND THREAD REMEDIATION —**



The servo-driven RTU-SM2 Gaging Unit shown here is used for thread verification work. The chuck supplied with it is the auto-detachable Type J.

U.S. PATENTS 7,059,055 and 7,513,720B2
CANADIAN PATENT 2,521,347
OTHER PATENTS PENDING

NEW VISTA UNITS FOR THREAD GAGING AND THREAD REMEDIATION:

- ◆ Quickly and automatically verifies or reconditions (chases) threaded holes (or external threads) by powering a suitable tool into (or onto) and back out of (or off of) the part. Versions are capable of “GO” gaging, “NO GO” gaging, combination gaging or thread chasing.
- ◆ Sensitive high speed drive allows the tool to stop in case of missing, short, or improperly formed threads. This creates a “reject” signal.
- ◆ Spring-biased spindle nose prevents damage to end of thread at start of engagement.
- ◆ Will verify blind holes (or male threads) accurately for thread depth (length). Will work in any orientation.
- ◆ Will not jam or stick in short or obstructed (reject) threads.
- ◆ Does not subject the part (or the spindle) to high force or torque levels...even with a reject.
- ◆ A single RTU Unit will work with a variety of threads. No leadscrew is employed.
- ◆ Proven out for your application before shipping.
- ◆ Shipped with complete installation instructions. Integration is simple.

SPECIFICATIONS AND CAPACITIES FOR NEW VISTA RTU UNITS:

- ◆ Cycle times shown below are for thread verification applications, and where the thread length is equal to the thread diameter. Long threads, long holes, external threads and long outside diameters can take longer.

<u>MODEL SERIES</u>	<u>GEAR REDUCTION</u>	<u>WILL VERIFY THREAD SIZES</u>	<u>MAX. THREAD LENGTH</u>	<u>APPROXIMATE CYCLE TIME</u>
RTU-250-SM2-1X-12.7	1:1	M2 – M5 (#2 thru #10)	32mm (1.75 in.)	0.8 seconds
RTU-500-SM2-1X-12.7	1:1	M5 – M22 (#10 thru 7/8")	32mm (1.75 in.)	1.0 seconds
RTU-2000-SM2-4X-16	4:1	M12 – M50 (1/2" thru 2")	32mm (1.75 in.)	2.0 seconds
RTU-2500-SM2-7X-16	7:1	M19 – M64 (3/4" thru 2-1/2")	32mm (1.75 in.)	3.2 seconds
RTU-3000-SM2-7X-16	7:1	M50 – M100 (2" thru 4")	38mm (1.75 in.)	4.0 seconds (for M50 size)

- ◆ Dash-number designations:
 - Add **-ES** suffix for greater thread length versions.
 - Add **-CMB** suffix for "GO / NO GO" (combination gaging) versions. Also for verifying high/low thread length limits.
- ◆ Included with every Unit:
 - Mounted servomotor, with drive.
 - Complete PLC control system.
 - Mounted depth sensors.
 - Type J Chuck.
 - Cables for motor, sensors and controls.



An RTU-SM2 with mounted Supercompliant Toolholder. This arrangement will pick up holes that are ± 1 mm out of position and angularly mispositioned as well — and gage them as if they were positioned perfectly.



An RTU-SM2 approaching a New Vista Type J Tool Dock. The two tools at the left are for thread gaging. The two at the right are for thread remediation — chasing out existing threads.

APPLICATIONS ASSISTANCE:

- ◆ An Application Form is available from the New Vista website: <https://www.newvistacorp.com/contact/>. Fill in the blanks and send it to main@newvistacorp.com. Or you can get help by calling this U.S. telephone number: 1-410-342-3820, then 0, and then ask for Applications Assistance. We speak English, Spanish and Russian. A New Vista Applications Engineer will help you select the proper Thread Unit and Thread Gage or Chasing Members — and work with you if you need a special, or a system.