

**NEW VISTA STH THREAD UNITS**  
— FOR AUTOMATED INSTALLATIONS —

...In use internationally, for thread verification and thread remediation.  
The most popular Thread Units in the world!



**SHOWN:** Bank of servo-driven STHs for oil filter application.

- “GO” verification (pitch diameter and thread length).
- “NO GO” verification (pitch diameter).
- “NO GO” verification (minor diameter).
- Rate: 60 filters per minute (a 2-second cycle, with two up).

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

**SERIES STH FEATURES:**

- ◆ 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 mount 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 STH 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.

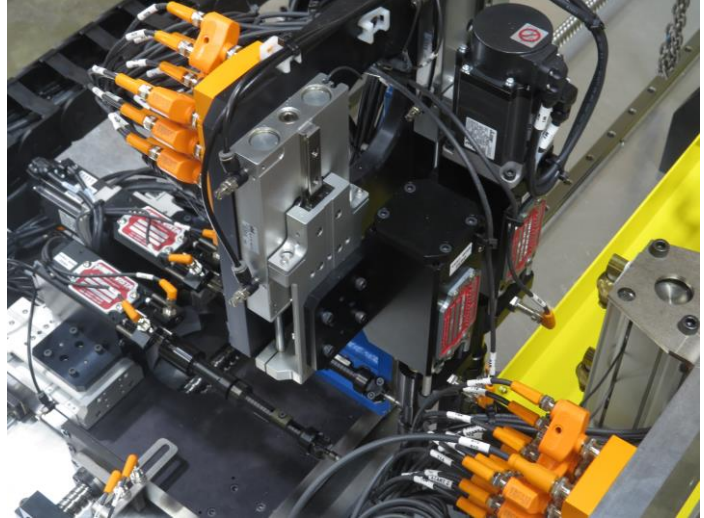
## MOTORS; VOLTAGES; GEARING:

A typical callout looks like this: STH-500-SM2-1X-12.7

- STH is the basic model designation.
- 500 = an 'L' torque unit.
- SM2 = Mitsubishi servomotor; D = DC motor.
- 1X = direct drive; 4X = 4:1 gear reduction; 7X = 7:1 gear reduction.
- 12.7 (or 16) is the output shaft diameter in millimeters.

**This New Vista-built Thread-Verification Machine, supplied to an Eastern European customer, employs four STH Thread Units: two for "GO" and two for "NO GO".**

The part is a long extrusion, with threaded holes in a variety of positions throughout its length. New Vista DDG Compliant Toolholders accommodate mispositioned holes.



## SPECIFICATIONS AND CAPACITIES FOR STH UNITS:

- ◆ Cycle times are dependent on thread length and thread pitch. For short holes of small diameters, cycle times as low as 0.6 seconds are attained in production.
- ◆ The maximum thread lengths that can be gaged are 6mm (1/4") less than the maximum stroke figures shown. If more stroke is required, order an -ES version.

<u>MODEL SERIES</u>	<u>TORQUE UNIT</u>	<u>WILL VERIFY THREAD SIZES</u>	<u>MAX. STROKE</u>
250-SM2-1X-12.7	S	M2 – M5 (#2 thru #10)	32mm (1.25 in.)
500-SM2-1X-12.7	L	M5 – M22 (#10 thru 7/8")	32mm (1.25 in.)
2000-SM2-4X-16	XL	M18 – M50 (11/16" thru 2")	32mm (1.25 in.)
3000-SM2-7X-16	XXL	M50 – M100 (2" thru 4")	38mm (1.50 in.)

- ◆ Additional dash-number designations:
  - Add **-ES** suffix for extra stroke versions.
  - Add **-PD** suffix to mount the Programmable Thread Depth Option.
  - Add **-CMB** suffix for "GO / NO GO" (combination gaging) versions. Also for verifying high/low thread pitch diameter limits, as with pipe threads.
- ◆ New Vista can additionally provide you with:
  - Thread Gage Members, Thread Ring Gages, and Chasing and Retapping Tools.
  - Various Compliant Toolholders that permit unencumbered access to out-of-position and off-angle holes.
  - A Slide to rapid advance the Unit: A RAM-250 or RAM-350 Slide Unit from New Vista can be employed for this purpose.
  - Programmable Thread Depth Option.

## 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](mailto: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 and Spanish. 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.