



A BRAND AT-2 R-SPEC

High-Efficiency Thread Mill with End-Cutting Edge

Super High Efficiency Threading

PRIMARY TARGETS

- Customers threading Aluminum material.
- Customers threading into Cast hole.
- Customers looking for thread processing efficiency.

SOLUTIONS

- Threading time can be dramatically reduced.
- Useful for preventing shifting of cutting position in cast hole.
- Possible to thread with air blow.

WHAT OUR CUSTOMERS SEE

- Achieves drilling and threading by continuous helical with single tool.
- ***Fastest threading process in the world!***

HOW DOES IT WORK?

End cutting geometry with roughing teeth

- Helical drilling while rough cutting the thread form suppress bending of the tool with load.

Left hand cutting

- Tool specification enables climb cutting which prolong tool life.

DLC-IGUSS coating

- Prevent welding achieves long tool life also semi dry cutting.



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The OSG A Brand AT-2 R-SPEC high-efficiency thread mill is engineered to dramatically reduce machining time in non-ferrous metal applications such as aluminum alloy by its continuous helical cutting ability, which combines drilling and threading into a single process. The AT-2 R-SPEC is also effective as a countermeasure against cutting position misalignment in cast holes.



Features & Benefits

- **Left-Hand Cut Configuration** for climb milling.
- **End Cutting Edge** for simultaneous helical drilling and threading.
- **Special Cutting Edge Shape** so bending of the tool can be controlled.
- **2-Flute** provides wide chip room.
- **Roughing Teeth (2 Ridges)** provides higher efficiency by load distribution.

List Numbers

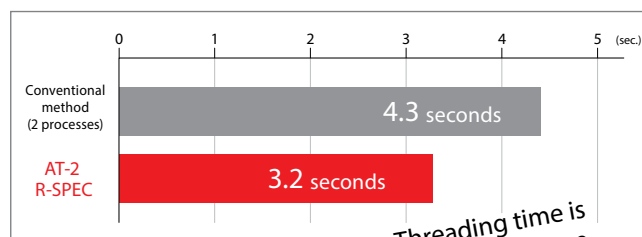
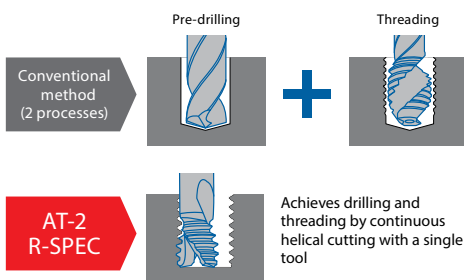
16647 - A Brand AT-2 R-SPEC (Inch)
16642 - A Brand AT-2 R-SPEC (Metric)

Size Range

#4-1/2"
M3-M12

Threading Time Dramatically Reduced

Time Comparison with Conventional Method

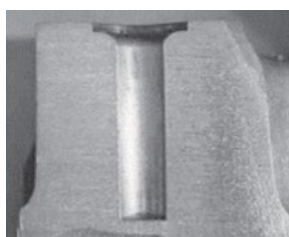


M6x1 Threading length 10mm ADC12 material
Conventional drill : Vc=126m/min, f=0.6mm/rev
Tap : Vc=94m/min (ATC: 1 time)
AT-2 R-SPEC : Vc=220m/min, f=1.2mm/rev

Threading time is reduced by more than **25%**!

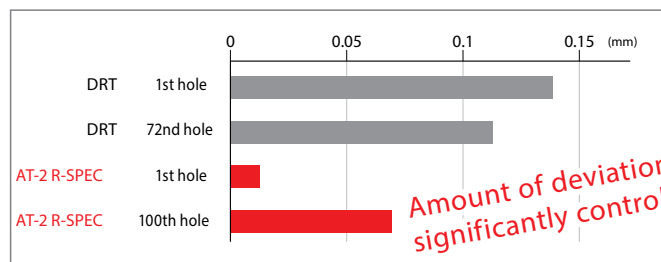
Prevent Shifting of Cutting Position in Cast Hole

Comparison of Hole Position Accuracy with Drill Tap (DRT)



Rough position settings and inclined nature of cast holes can cause position shifting in following processes...

Comparison of hole position accuracy with drill tap (DRT)



M8x1.25 Depth 18mm AC material
 Cutting test by shifting the axial center of Ø4.3 pilot hole by 0.7 mm
Drill tap : Vc=100m/min, f=1.25mm/rev
AT-2 R-SPEC : Vc=220m/min, f=1.2mm/rev

Amount of deviation is significantly controlled!

For more information use your phone to scan the QR code to the right and visit: osgtool.com/at-2-r-spec

