

16ER/IR-ISO-S

ZANHO Cutting Tools



16ER/IR-ISO-S

Threading Inserts

Feature

ZANHO ISO-S series: Precision threading inserts featuring the **S-type spiral 3D chipbreaker**. Engineered specifically to solve the problem of long continuous chips in internal and deep-hole

threading, this spiral pattern forces chips into short curls to prevent surface scratching and entanglement. The variable-depth geometry ensures maximum edge strength while providing ample space for chip evacuation, making it the ideal choice for automated mass production.

Descriptions

Technical Features

- **Spiral 3D Chipbreaker:** Spiral pattern changes chip flow path, breaking long chips into short curls.
- **Thread Protection:** Effectively reduces the risk of chips scratching or damaging thread surfaces.
- **Internal Thread Specialist:** Preferred for blind holes and deep internal threading where chip evacuation is critical.
- **Variable Depth Design:** Shallow groove near the tip for high tip strength; deep cavity for efficient chip room.
- **Vibration Control:** Passivated edge with negative land reduces cutting vibration and burr formation.

ISO-S Specification Table

Internal (IR)	External (ER)	Pitch P (mm)	Height h (mm)	Radius r? (mm)
16IR-100ISO-S	16ER-100ISO-S	1.0	0.541	0.108
16IR-125ISO-S	16ER-125ISO-S	1.25	0.677	0.135
16IR-150ISO-S	16ER-150ISO-S	1.5	0.812	0.162
16IR-175ISO-S	16ER-175ISO-S	1.75	0.947	0.189
16IR-200ISO-S	16ER-200ISO-S	2.0	1.083	0.216
16IR-250ISO-S	16ER-250ISO-S	2.5	1.353	0.27
16IR-300ISO-S	16ER-300ISO-S	3.0	1.624	0.324

Insert Physical Parameters

- I.C: 9.525mm
- Thickness (S): 3.97mm
- Hole (d): 4.40mm
- Profile Angle: 60° (Metric)
- Holder Compatibility: SER-16