



# SUPER ALLOY FOUR EDGES HIGH FEED MILLING SOE(M)T+MKT113&213



## 01 // Product Feature

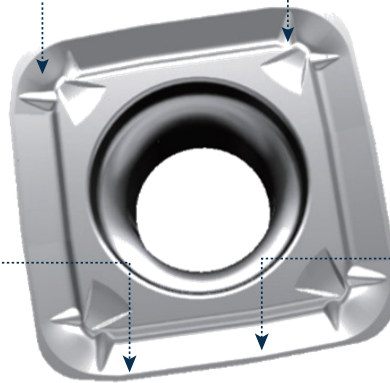
### 1 Geometry Feature - SM

**Curved surface design on cutting edge**

- Enforced cutting edge strength

**Wiper design**

- Excellent surface quality in face and side milling



**Reinforcement + guide grooving design**

- Enhanced edge strength and chip removal, gives better performance on cooling

**Positive rake angle + Cutting edge Variation**

- Light cutting, suitable for different cutting depth

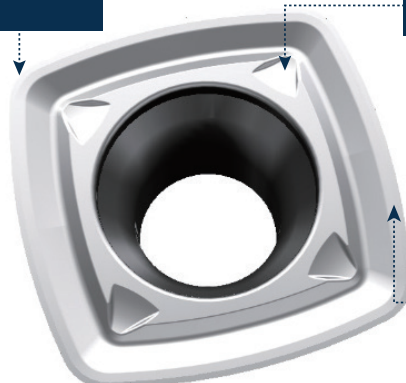
### 2 Geometry Feature - ST

**Big arc curve edge design**

- Provides enough strength and small impact force in high feeding

**Wiper design**

- Excellent surface quality in face milling and side milling



**Guide grooving design**

- Increased cooling contact area

**Special edge structure design**

- Gives light and quick cutting performance and strong cutting edge strength

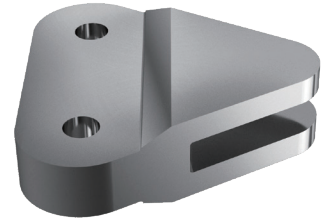
### ③ Typical Application



Undercarriage

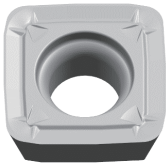





Super alloy sliding rail



Super alloy joint

### ④ Application Range

Geometry	Insert	Geometry Drawing	Application Condition
SM			Positive rake angle, suitable for light cutting
ST			Gradient rake angle, suitable for medium cutting

SOE(M)T+MKT113&213

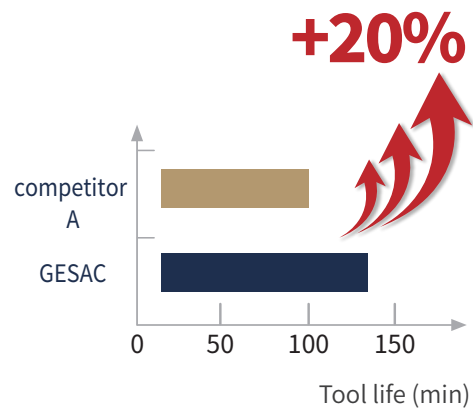
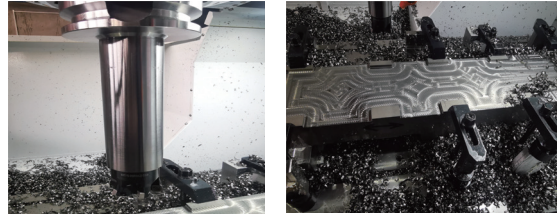


- ① Suitable for high efficient rough milling at low and medium speed
- ② Workpiece material : super alloy such as TC4, TC18, TC21 etc.
- ③ Face milling, cavity milling, plunge milling, slot milling, slope milling

## 02 // Application Cases

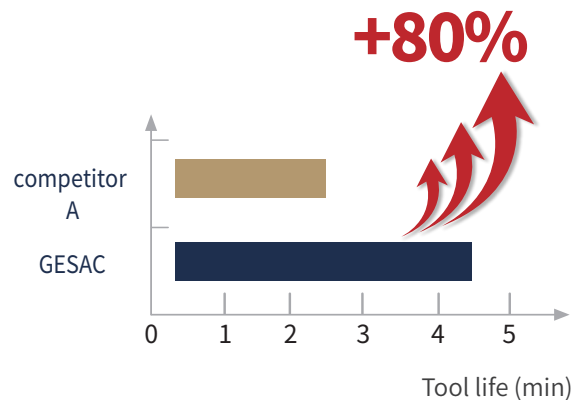
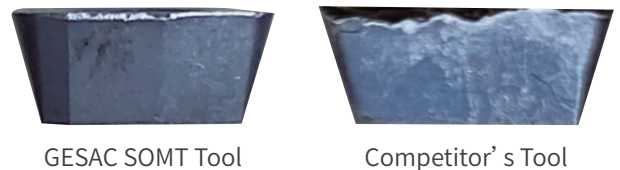
### ① Super alloy hanging rear spar machining

Inserts	SOET09T312-SM
Grade	GSM7130
Cutter	MKT113-050R06A22-SO09
Workpiece	TC4
Speed	47m/min
Feed	0.6mm/z
Depth	ap=0.6 mm, ae=40 mm
Mode	Cavity milling
Cooling	Wet cooling / External cooling
Result	GESAC insert tool life is 20% longer than competitor A






### ② External auxiliary actuator rough machining

Inserts	SOMT09T312-SM
Grade	GSM7130
Cutter	MKT113-025R02P25-SO09
Workpiece	TC18 (HRC40-45)
Speed	35m/min
Feed	0.11mm/z
Depth	ap=0.5mm, ae=10-35mm
Mode	Cavity milling
Cooling	Wet cooling / External cooling
Result	GESAC insert tool life is 80% longer than competitor A



## 03 / Specification

### ① MKT113 Series

Type	Cutter	Dia. Range	Teeth Range	Inserts
Arbor		Φ40-Φ63	4-8	SOE(M)T09T3-SM
		Φ50-Φ125	5-8	SOE(M)T1204-SM
Cylindrical Straight Type		Φ25-Φ35	2-4	SOE(M)T09T3-SM
		Φ32-Φ35	2-3	SOE(M)T1204-SM
Replaceable Tool Head		Φ25-Φ40	2-5	SOE(M)T09T3-SM
		Φ32-Φ42	2-4	SOE(M)T1204-SM

### ② MKT213 Series

Type	Cutter	Range	Teeth Range	Inserts
Arbor		Φ40-Φ63	4-8	SOMT0904-ST
		Φ50-Φ125	5-8	SOMT1205-ST
Cylindrical Straight Type		Φ25-Φ35	2-4	SOMT0904-ST
		Φ32-Φ35	2-3	SOMT1205-ST
Replaceable Tool Head		Φ25-Φ40	2-5	SOMT0904-ST
		Φ32-Φ42	2-4	SOMT1205-ST

