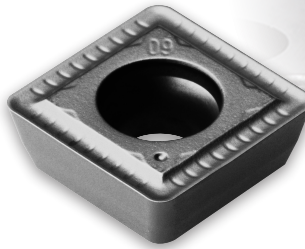


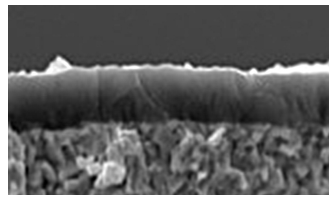
**KORLOY Premium KING DRILL inserts**

# KEP8545

- Super High resistance against chipping, optimized grades for multiple types of drilling
- It is a product with high toughness of substrate, improved heat resistance and wear resistance of the film, also it can be processed normally without damaging the insert even if the cutting condition is adjusted up to 20% against the existing grades.



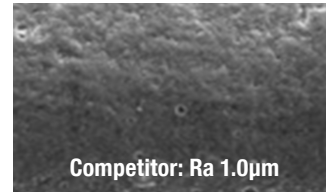
## Features



**Higher chipping resistance and superior substrate**

- High hardness, high lubricity thin film
- Low coefficient of friction
- Improved heat resistance and wear resistance
- Higher chipping resistance and superior coating layer

## Edge surface roughness



## Recommended Cutting Conditions

ISO	Workpiece	Hardness (HB)	Chip Breaker	Central	Peripheral	vc (m/min)	Depth of cut = 2D, 3D, 4D, 5D Feed rate (mm/rev) per drill dia. (mm)				
							Ø12 - Ø16	Ø17 - Ø23	Ø24 - Ø29	Ø30 - Ø42	Ø43 - Ø60
Stainless steel	Stainless steel	135 - 275	PD	PC5300	PC5300	130 (100 - 160)	0,04 - 0,07	0,04 - 0,07	0,04 - 0,07	0,04 - 0,08	0,04 - 0,08
		135 - 275		KEP8545	KEP8545	160 (130 - 210)	0,04 - 0,09	0,04 - 0,09	0,04 - 0,09	0,04 - 0,10	0,04 - 0,10
Heat resisting alloy	Ni-heat resisting alloy	130 - 400		PC5300	PC5300	50 (30 - 100)	0,04 - 0,10	0,04 - 0,10	0,04 - 0,10	0,04 - 0,10	0,04 - 0,10
		130 - 400		KEP8545	KEP8545	70 (50 - 130)	0,04 - 0,13	0,04 - 0,13	0,04 - 0,13	0,04 - 0,13	0,04 - 0,13
	Ti-heat resisting alloy	130 - 400		PC5300	PC5300	60 (40 - 80)	0,04 - 0,08	0,04 - 0,10	0,04 - 0,12	0,04 - 0,14	0,04 - 0,16
		130 - 400		KEP8545	KEP8545	80 (60 - 100)	0,04 - 0,10	0,04 - 0,13	0,04 - 0,15	0,04 - 0,17	0,04 - 0,19

Please reduce the cutting conditions to 70 - 80% of the max. conditions of 2D/3D/4D holders when using 5D holders.

## Available Stock

No	Insert		Grade	Workpiece
	Central	Peripheral		
1	XOMT040204-PD	SPMT040204-PD	KEP8545	Stainless Steel  Heat resistant Super Alloy
2	XOMT050204-PD	SPMT050204-PD		
3	XOMT060204-PD	SPMT060205-PD		
4	XOMT070205-PD	SPMT07T208-PD		
5	XOMT090305-PD	SPMT090308-PD		
6	XOMT11T306-PD	SPMT11T308-PD		
7	XOMT130406-PD	SPMT130410-PD		
8	XOMT15M508-PD	SPMT15M510-PD		
9	XOMT180508-PD	SPMT180510-PD		

## Field test result

### Heat resistance super alloy

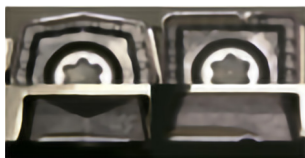
- **Workpiece**
- **Cutting conditions**
- **Tool**

Heat resistance super alloy (IN718)

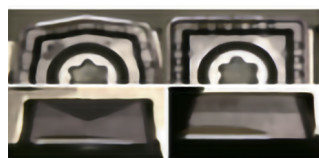
vc = 30 m/mm · fn = 0,1 mm/rev · ap = 45 mm · wet

**Insert** SPMT07T208-PD · XOMT07T205-PD

**Holder** E3D-22025-07



**Conventional grade**  
Machining holes: 4 holes  
Cutting length: 0,2 m



**KEP8545**  
Machining holes: 12 holes  
Cutting length: 0,6 m

### Stainless steel

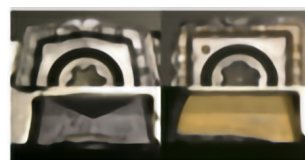
- **Workpiece**
- **Cutting conditions**
- **Tool**

Stainless steel (1.4301)

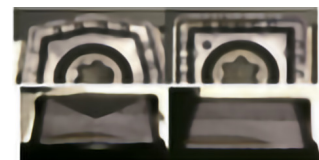
vc = 120 m/mm · fn = 0,08 mm/rev · ap = 50 mm · wet

**Insert** SPMT07T208-PD · XOMT07T205-PD

**Holder** E3D-22025-07



**Competitor**  
Machining holes: 7 holes  
Cutting length: 0,35 m



**KEP8545**  
Machining holes: 14 holes  
Cutting length: 0,7 m

### Heat resistance super alloy

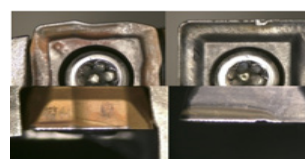
- **Workpiece**
- **Cutting conditions**
- **Tool**

Heat resistance super alloy (Ti-6Al-4V)

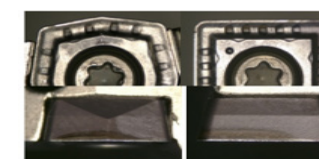
vc = 80 m/mm · fn = 0,08 mm/rev · ap = 45 mm · wet

**Insert** SPMT130410-PD · XOMT130406-PD

**Holder** K3D38040-13



**Competitor**  
Machining holes: 10 holes  
Cutting length: 0,5 m



**KEP8545**  
Machining holes: 12 holes  
Cutting length: 0,6 m

### Heat resistance super alloy

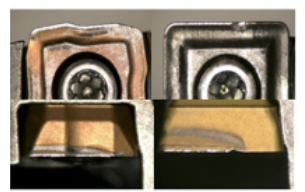
- **Workpiece**
- **Cutting conditions**
- **Tool**

Heat resistance super alloy (Hastelloy)

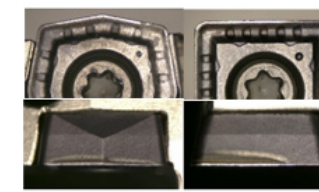
vc = 75 m/mm · fn = 0,07 mm/rev · ap = 30 mm · wet

**Insert** SPMT050204-PD · XOMT050204-PD

**Holder** K3D14020-05



**Competitor**  
Machining holes: 14 holes  
Cutting length: 0,7 m



**KEP8545**  
Machining holes: 16 holes  
Cutting length: 0,8 m