



Inserts for Heavy-Duty Turning

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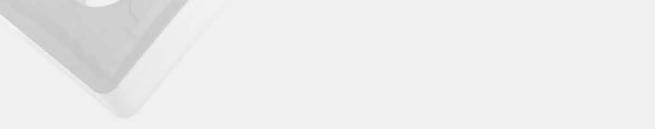
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VKD154C

High hardness substrate, thick TiCN and thick Al2O3 coating. xcellent wear resistance, suitable for heavy-duty machining under continuous working conditions.



It has both hardness and strength matrix, thick TiCN and Al2O3 coating. xcellent wear resistance, taking into account continuous and weak intermittent processing, and good general performance.0

VKD354C

High-strength substrate, thick TiCN and Al2O3 coating. xcellent impact resistance, suitable for strong intermittent heavy turning.



HLR—Light turning

The chip breaking range is wide, the cutting islight and fast, and it is suitable for continuous cutting or allowance. Smaller heavy turning.





HIR—Interrupted turning

The cutting edge is strengthened, which is highly safe and suitable for heavy turning in unstable working conditions such as intermittent turning.



HGR—General turning

The groove structure takes into account both chip control and strength requirements. Suitable for continuous and weak intermittent heavy turning.



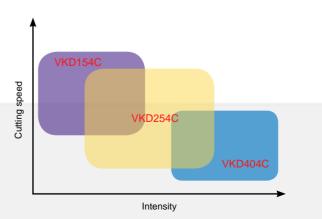
HMR—Light turning

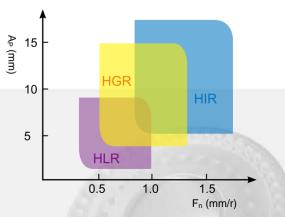
The double-sided heavy-duty stainless steel machining geometry has good chip flow control and is suitable for



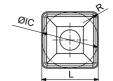
HPR - general cutting

Double-sided universal machining geometry, the structure takes into account chip control and strength requirements. It has extremely high economy under stable working conditions.



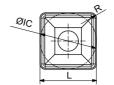


Single-sided heavy turning





		Dimension (mm)							Grade		
Insert Shape	e Model	L	IC	d	S	R	VKD154C	VKD254C	VKD354C	VKD404C	
	CNMM160608-HLR	16.1	15.875	6.35	6.35	0.8	*		•	0	
	CNMM160612-HLR	16.1	15.875	6.35	6.35	1.2	*		•	0	
) e	CNMM160616-HLR	16.1	15.875	6.35	6.35	1.6	*		•	0	
	CNMM190612-HLR	19.3	19.05	6.35	7.94	1.2	*		•	0	
	CNMM190616-HLR	19.3	19.05	6.35	7.94	1.6	*		•	0	
	CNMM190624-HLR	19.3	19.05	6.35	7.94	2.4	*		•	0	
	CNMM250924-HLR	25.8	25.4	9.525	9.12	2.4	*		•	0	
	SNMM150608-HLR	15.875	15.875	6.35	6.35	0.8	*		•	0	
	SNMM150612-HLR	15.875	15.875	6.35	6.35	1.2	*		•	0	
	SNMM150616-HLR	15.875	15.875	6.35	6.35	1.6	*		•	0	
	SNMM190612-HLR	19.05	19.05	6.35	7.94	1.2	*		•	0	
	SNMM190616-HLR	19.05	19.05	6.35	7.94	1.6	*		•	0	
	SNMM190624-HLR	19.05	19.05	6.35	7.94	2.4	*		•	0	
	SNMM250724-HLR	25.4	25.4	9.12	7.94	2.4	*		•	0	
	SNMM250924-HLR	25.4	25.4	9.12	9.525	2.4	*		•	0	
	CNMM190612-HGR	19.3	19.05	6.35	6.35	1.2		*		0	
3333	CNMM190616-HGR	19.3	19.05	6.35	6.35	1.6		*		0	
	CNMM190624-HGR	19.3	19.05	6.35	6.35	2.4		*		0	
	CNMM250724-HGR	25.8	25.4	9.12	7.94	2.4		*		0	
	CNMM250924-HGR	25.8	25.4	9.12	9.525	2.4		*		0	
	SNMM190612-HGR	19.05	19.05	6.35	6.35	1.2		*		0	
	SNMM190616-HGR	19.05	19.05	6.35	6.35	1.6		*		0	
	SNMM190624-HGR	19.05	19.05	6.35	6.35	2.4		*		0	
	SNMM250724-HGR	25.4	25.4	9.12	7.94	2.4		*		О	
	SNMM250924-HGR	25.4	25.4	9.12	9.525	2.4		*		0	
B1111119	CNMM190624-HIR	19.3	19.05	6.35	6.35	2.4		•		*	
	CNMM250724-HIR	25.8	25.4	9.12	7.94	2.4		•		*	
	CNMM250924-HIR	25.8	25.4	9.12	9.525	2.4		•		*	





Single-sided heavy turning

		Dimension (mm)					Grade			
Insert Shape	Model	L	IC	d	S	R	VKD154C	VKD254C	VKD354C	VKD404C
	SNMM190624-HIR	19.05	19.05	6.35	6.35	2.4		•		*
	SNMM250724-HIR	25.4	25.4	9.12	7.94	2.4		•		*
	SNMM250924-HIR	25.4	25.4	9.12	9.525	2.4		•		*
	SNMM250932-HIR	25.4	25.4	9.12	9.525	3.2		•		*
	CNMM190616-HPR	19.3	19.05	6.35	7.94	1.6	*		•	
	CNMM190624-HPR	19.3	19.05	6.35	7.94	2.4	*		•	
	CNMM250724-HPR	25.8	25.4	7.94	9.12	2.4	*		•	
	CNMM250924-HPR	25.8	25.4	9.525	9.12	2.4	*		•	
	SNMM190616-HPR	19.05	19.05	6.35	7.94	1.6	*		•	
	SNMM190624-HPR	19.05	19.05	6.35	7.94	2.4	*		•	
	SNMM250724-HPR	25.4	25.4	7.94	9.12	2.4	*		•	
	SNMM250924-HPR	25.4	25.4	9.525	9.12	2.4	*		•	
	CNMM190624-HZ	19.3	19.05	6.35	7.94	2.4	*		•	
	CNMM250924-HZ	25.8	25.4	9.525	9.12	2.4	*		•	
	SNMM190624-HZ	19.05	19.05	6.35	7.94	2.4	*		•	
	SNMM250924-HZ	25.4	25.4	9.525	9.12	2.4	*		•	
	SNMM250932-HZ	25.4	25.4	9.525	9.12	3.2	*		•	

[★]Mainly grade brands are in stock

Optional grades

Made to Order

Double-sided heavy turning





		Dimension (mm)					Grade			
Insert Shape	Model	L	IC	d	S	R	VKD154C	VKD254C	VKD354C	VKD404C
	CNMG160608-HGR	16.1	15.875	6.35	6.35	0.8	*		•	
	CNMG160612-HGR	16.1	15.875	6.35	6.35	1.2	*		•	
1	CNMG160616-HGR	16.1	15.875	6.35	6.35	1.6	*		•	
	CNMG190612-HGR	19.3	19.05	6.35	6.35	1.2	*		•	
	CNMG190616-HGR	19.3	19.05	6.35	6.35	1.6	*		•	
	CNMG190624-HGR	19.3	19.05	6.35	6.35	2.4	*		•	
	CNMG250924-HGR	25.8	25.4	9.12	9.525	2.4	*		•	
	SNMG160612-HGR	15.875	15.875	6.35	6.35	1.2	*		•	
	SNMG160616-HGR	15.875	15.875	6.35	6.35	1.6	*		•	
	SNMG190612-HGR	19.05	19.05	6.35	6.35	1.2	*		•	
	SNMG190616-HGR	19.05	19.05	6.35	6.35	1.6	*		•	
	SNMG190624-HGR	19.05	19.05	6.35	6.35	2.4	*		•	
	SNMG250724-HGR	25.4	25.4	9.12	7.94	2.4	*		•	
	SNMG250924-HGR	25.4	25.4	9.12	9.525	2.4	*		•	
	CNMG160608-HMR	16.1	15.875	6.35	6.35	0.8		*		•
	CNMG160612-HMR	16.1	15.875	6.35	6.35	1.2		*		•
	CNMG160616-HMR	16.1	15.875	6.35	6.35	1.6		*		•
(\$) \$	CNMG190612-HMR	19.3	19.05	6.35	6.35	1.2		*		•
	CNMG190616-HMR	19.3	19.05	6.35	6.35	1.6		*		•
	CNMG190624-HMR	19.3	19.05	6.35	6.35	2.4		*		•
	CNMG250924-HMR	25.8	25.4	9.12	9.525	2.4		*		•
	SNMG160612-HMR	15.875	15.875	6.35	6.35	1.2		*		•
	SNMG160616-HMR	15.875	15.875	6.35	6.35	1.6		*		•
	SNMG190612-HMR	19.05	19.05	6.35	6.35	1.2		*		•
	SNMG190616-HMR	19.05	19.05	6.35	6.35	1.6		*		•
	SNMG190624-HMR	19.05	19.05	6.35	6.35	2.4		*		•
	SNMG250724-HMR	25.4	25.4	9.12	7.94	2.4		*		•
	SNMG250924-HMR	25.4	25.4	9.12	9.525	2.4		*		•

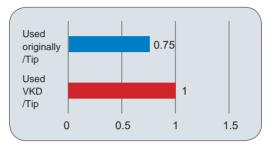
★Mainly grade brands are in stock

Optional grades

Made to Order

Wind turbine main shaft

- ●Work piece material: alloy steel
- Lathe type: Horizontal CNC lathe
- ●insert: VKD254C SNMM250924-HGR
- Compare insert: A well-known manufacturer





- Processing content: Outer circle
- ●Insert change criteria:

Surface processing quality, excessive wear of inserts.

- Cooling type: None
- Cutting parameters:

Vc=80-120m/min Fn=0.9mm/r Ap=5~10mm

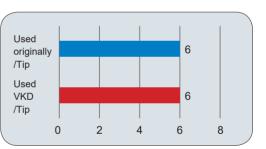
Slewing bearing

- ●Work piece material: 40CrNiMo
- Lathe type: CNC Lathe
- ●insert: VKD254C CNMG190616-HGR
- ■Compare insert: A well-known manufacturer
- Processing content: Outer circle
- •Insert change criteria:

Surface processing quality, excessive wear of inserts.

- Cooling type: Dry Cut • Cutting parameters:
- Vc=80-120m/min Fn=0.63mm/r Ap=2~8mm





Oil tubular joint

- ●Work piece material: 40CrNiMo
- Lathe type: CNC Lathe
- ●insert: VKD404C CNMM250924-HIR
- ■Compare insert: A well-known manufacturer
- Processing content: Outer circle and end face
- •Insert change criteria:

Surface processing quality, excessive wear of inserts.

- Cooling type: Dry Cut
- Cutting parameters:

Vc=80-120m/min Fn=1.3mm/r Ap=8~15mm







■Recommended turning speed (Vc: m/min)

Continuous	Big intermittent		
VKD154C	VKD254C	VKD404C	
160(100-220)	140(80-200)	120(70-150)	

■Recommended turning depth and feed(Ap: mm Fn: mm/r)

	Continuous	Light Intermittent	Intermittent 🔀	Big intermittent 🔷
HLR (Single)	Ap: 2~8 Fn: 0.3~1.0	Ap: 2~8 Fn: 0.3~0.6		
HGR (Single)		Ap: 4~15 Fn: 0.5~1.3	Ap: 4~10 Fn: 0.5~0.9	
HIR (Single)			Ap: 5~20 Fn: 0.7~1.5	Ap: 5~15 Fn: 0.7~1.0
HPR (Single)	AP:4-12 Fn: 0.35-1.3	AP:4-12 Fn: 0.35-1.0		
HZ (Single)	AP:4-15 Fn: 0.5-1.	AP:4-15 Fn: 0.5-1.1		
HGR (Double)	Ap: 4~12 Fn: 0.5~1.0	Ap: 4~8 Fn: 0.5~1.0		
HMR (Double)	Ap: 2~8 Fn: 0.3~1.0	Ap: 2~8 Fn: 0.3~0.6		

