

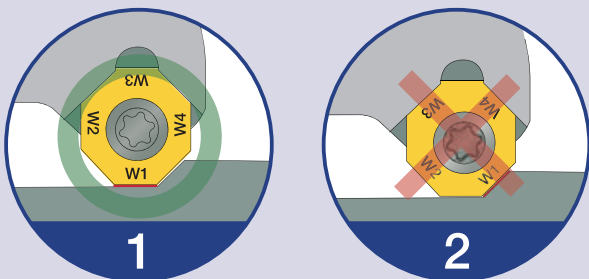
STANDARD CUTTING CONDITIONS

NEGATIVE TYPE (ONMU / ONHU / SNMU / SNHU)

ISO	Workpiece material	Hardness	Priority	Recommendation		Cutting speed Vc (m/min)	Feed per tooth fz (mm/t)
				Grade	Chipbreaker		
P	Low carbon steel C15E, etc.	- 200 HB	First choice	AH3135	MJ	100 - 250	0.2 - 0.5
		- 200 HB	For wear resistance	T3225	MJ	200 - 350	0.2 - 0.4
		- 200 HB	For fracture resistance	AH3135	ML	100 - 250	0.2 - 0.4
	High carbon steel C45E, C55E, etc.	200 - 300 HB	First choice	AH3135	MJ	100 - 230	0.2 - 0.4
		200 - 300 HB	For wear resistance	T3225	MJ	180 - 300	0.2 - 0.4
		200 - 300 HB	For fracture resistance	AH3135	ML	100 - 230	0.2 - 0.4
	Alloy steel 42CrMo4, 17Cr3, etc.	150 - 330 HB	First choice	AH3135	MJ	100 - 200	0.2 - 0.4
		150 - 330 HB	For wear resistance	T3225	MJ	150 - 250	0.2 - 0.4
		150 - 330 HB	For fracture resistance	AH3135	ML	100 - 200	0.2 - 0.4
M	Stainless steel X5CrNi18-9, etc.	- 200 HB	First choice	AH3135	MJ	100 - 200	0.1 - 0.3
		- 200 HB	For wear resistance	T3225	MJ	100 - 250	0.1 - 0.3
K	Grey cast iron 250, 300, etc.	150 - 250 HB	First choice	T1215	MJ	150 - 300	0.1 - 0.5
		150 - 250 HB	For fracture resistance	AH725	MJ	100 - 250	0.1 - 0.5
		150 - 250 HB	For wear resistance	AH120	ML	100 - 250	0.1 - 0.5
	Ductile cast iron 600-3, etc.	150 - 300HB	First choice	T1215	MJ	100 - 300	0.1 - 0.5
		150 - 300 HB	For fracture resistance	AH725	MJ	80 - 200	0.1 - 0.5
		150 - 300 HB	For wear resistance	AH120	ML	80 - 200	0.1 - 0.5
H	Hardened steel	HRC 40 - 50	First choice	AH725	MJ	80 - 130	0.1 - 0.2
		HRC 50 - 60	First choice	AH725	MJ	50 - 70	0.05 - 0.1

Attention for wiper inserts

ONHU0705ANPR-W

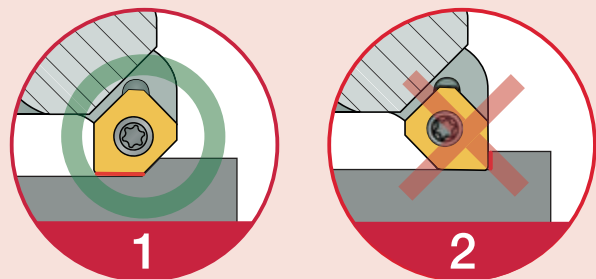


Attach only one wiper insert on the cutter and make sure the wiper edge faces the machining surface.

Feed rate: $f < 5.5$ mm/rev

Do not use this insert mixed with SNMU, SNHU, or OWMT inserts on the same cutter.

SNHU1706ANFN-W



Attach only one wiper insert on the cutter and make sure the wiper edge faces the machining surface.

Feed rate: $f < 9.5$ mm/rev

Do not use this insert mixed with ONMU, ONHU, or OWMT inserts on the same cutter.

STANDARD CUTTING CONDITIONS

POSITIVE TYPE (OWMT)

ISO	Workpiece material	Hardness	Priority	Grade	Cutting speed Vc (m/min)	Feed per tooth : fz (mm/t)	
						ML	HJ*
P	Low carbon steel C15E, etc.	- 200 HB	First choice	AH3135	100 - 300	0.1 - 0.4	0.5 - 1.5
		- 200 HB	For fracture resistance	AH130	100 - 300	0.1 - 0.4	-
	High carbon steel C45E, C55E, etc.	200 - 300 HB	First choice	AH3135	100 - 230	0.1 - 0.3	0.5 - 1.5
		200 - 300 HB	For fracture resistance	AH130	100 - 230	0.1 - 0.3	-
M	Alloy steel 42CrMo4, 17Cr3, etc.	150 - 330 HB	First choice	AH3135	100 - 200	0.1 - 0.3	0.5 - 1.5
		150 - 330 HB	For fracture resistance	AH130	100 - 200	0.1 - 0.3	-
M	Stainless steel X5CrNi18-9, etc.	- 200 HB	First choice	AH3135	100 - 150	0.1 - 0.3	0.3 - 0.7
		- 200 HB	For fracture resistance	AH130	100 - 150	0.1 - 0.3	-
K	Grey cast iron 250, 300, etc.	150 - 250 HB	First choice	AH3135	100 - 250	0.1 - 0.4	0.5 - 1.5
		150 - 250 HB	For fracture resistance	AH130	100 - 250	0.1 - 0.4	-
	Ductile cast iron 600-3, etc.	150 - 250 HB	First choice	AH3135	80 - 200	0.1 - 0.3	0.5 - 1.5
		150 - 250 HB	For fracture resistance	AH130	80 - 200	0.1 - 0.3	-
S	Titanium alloy Ti-6Al-4V, etc.	- HRC 40	First choice	AH3135	30 - 60	0.1 - 0.3	0.3 - 0.7
		- HRC 40	For fracture resistance	AH130	30 - 60	0.1 - 0.3	-
	Heat resistant alloy Inconel718, etc.	- HRC 40	First choice	AH3135	10 - 40	0.05 - 0.15	0.1 - 0.3
		- HRC 40	For fracture resistance	AH130	10 - 40	0.05 - 0.15	-
H	Hardened steel	HRC 40 - 50	First choice	AH3135	80 - 130	-	0.1 - 0.3
		HRC 50 - 60	First choice	AH3135	50 - 70	-	0.03 - 0.07