

For grooving | Swiss CNC lathes / Conventional CNC lathes

SCRUM DUO



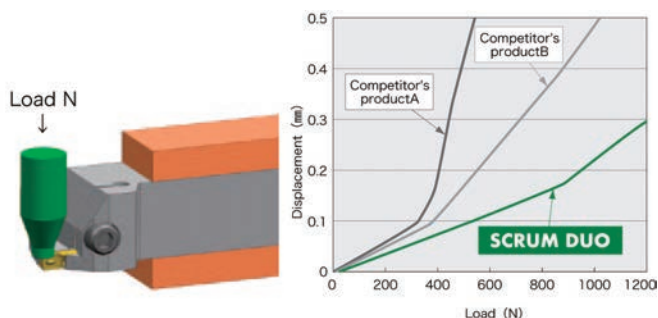
Exceptionally rigid design to ensure stable grooving

Prevents the insert from shifting during machining and achieves a good machined surface

Performance

- Applicable groove width: 3.0mm-6.0mm
- Highly rigid holder achieves a 3.5mm depth of cut during side turning operation

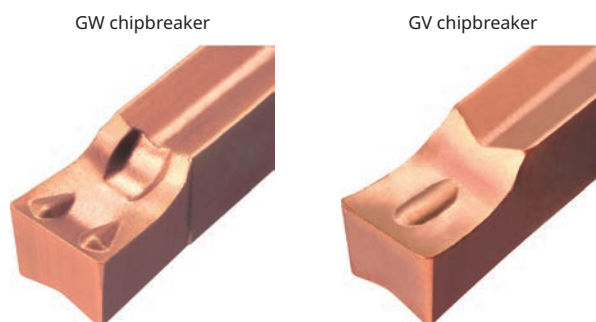
Tool pressure comparison when grooving



Two chipbreaker styles - select the best fit for your grooving application

GW chipbreaker: A versatile design with edge sharpness and chip control. Multi-functional for grooving and side turning.

GV chipbreaker: Features superior sharpness with high rake face. Ideal for applications requiring low tool pressure.



Grooving

	New GW chipbreaker	Competitor's product
Chip		
Surface finish		

[Cutting conditions] SCM415 groove width: 5.0mm Vc=150m/min f=0.1mm/rev ap=7.0mm No step feed with coolant

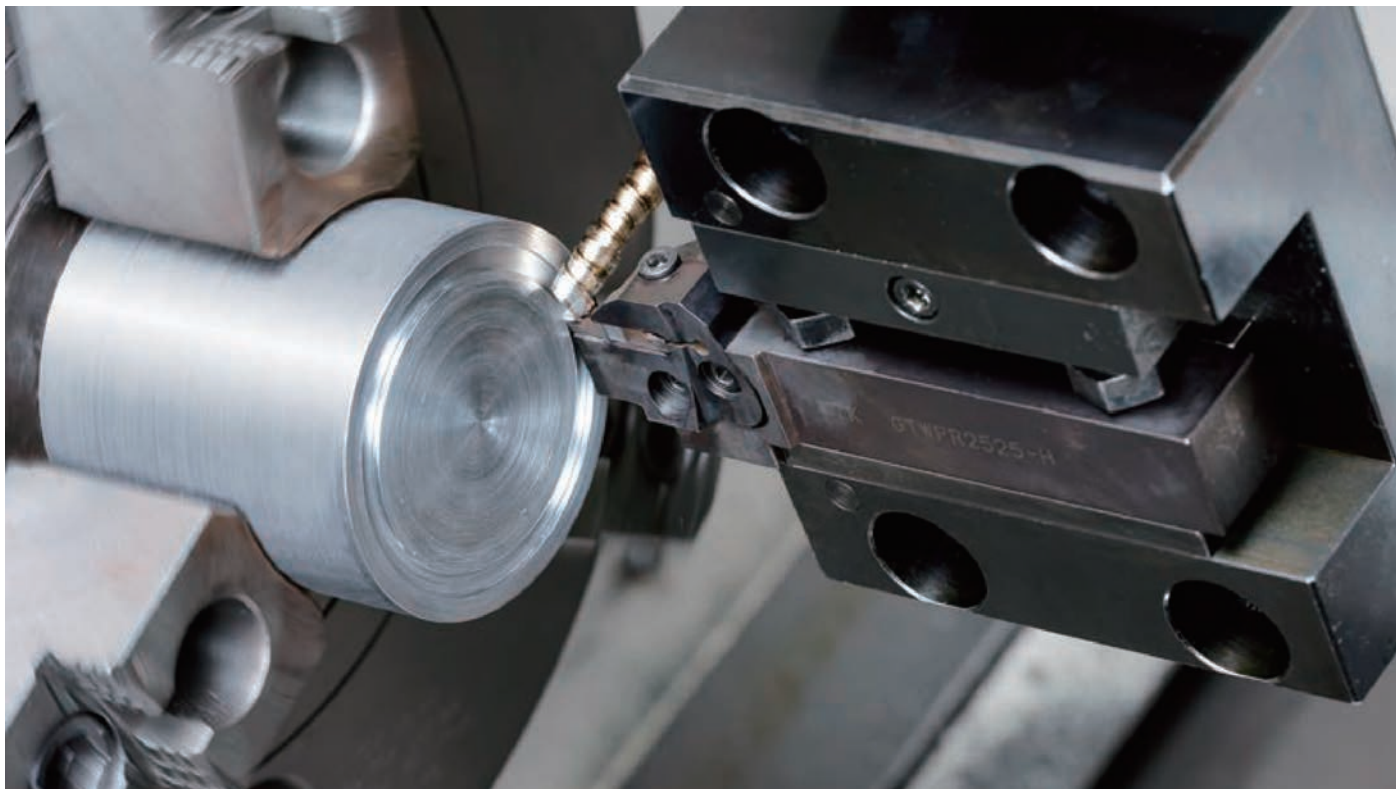
[Tools] Insert: DM4 GWPG500N04F-GW Holder: GTWPR2525M-5F10

Side turning

	New GW chipbreaker	Competitor's product
Chip		
Surface finish		

[Cutting conditions] Material: SCM415 Groove width: 5.0mm Vc=150m/min f=0.1mm/rev ap=1.0mm No step feed With coolant

[Tools] Insert: DM4 GWPG500N04F-GW Holder: GTWPR2525M-5F10



For face grooving

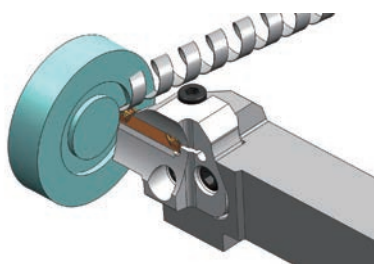
SCRUM DUO BLADE

Strongest rigidity in a modular style system





Unique S-shaped chipbreaker designed specifically for face grooving. The blade lineup supports a wide range of machining applications.

Groove widths range from 3 to 6mm and a minimum machining diameter of 29mm.

Chip Comparison Grooving

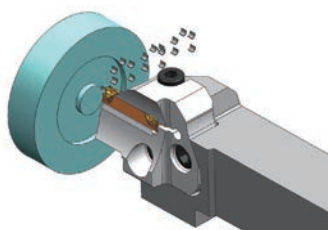


Good chip control and good machined surfaces
with or without step feed


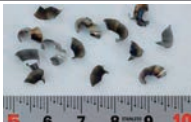

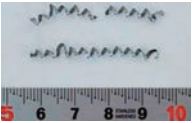
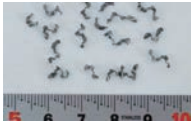
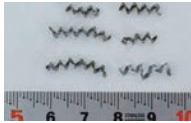

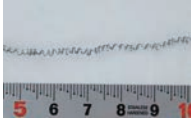
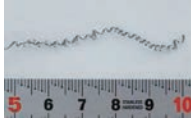
	GT chipbreaker	Competitor's
Chip		 Tangled chips during deep grooving
Grooved face		 Scratches inside bottom

SCM415 Vc=150m/min f=0.1mm/rev Dia.φ50 Groove depth ap=10mm
No step feed with coolant
Insert: DM4 GWPFM500N04-GT Holder: GBWPFR-5T15-050120

Chip Comparison Side Turning



Excellent chip control and shiny groove
bottom surface during side turning

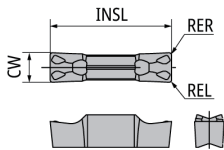
		Feed(mm/rev)		
		0.05	0.1	0.2
DOC(mm)	3.0			
	1.0			
	0.2			

SCM415 =150m/min with coolant
Insert: DM4 GWPFM500N04-GT Holder: GBWPFR-5T15-050120

OD Grooving
SCRUM DUO

GWPG(M).. series/Insert Carbide

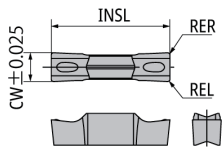
GWPG(M)-GW Best for side turning



Item Number	Hand	Chip-breaker	CW	INSL	REL	RER	Carbide
			mm	mm	mm	mm	PVD DM4
GWPG300N02D-GW	N	Yes	3	20.6	0.2	0.2	●
GWPG300N04D-GW	N	Yes	3	20.6	0.4	0.4	●
GWPG400N02E-GW	N	Yes	4	20.6	0.2	0.2	●
GWPG400N04E-GW	N	Yes	4	20.6	0.4	0.4	●
GWPG400N08E-GW	N	Yes	4	20.6	0.8	0.8	●
GWPG500N02F-GW	N	Yes	5	20.6	0.2	0.2	●
GWPG500N04F-GW	N	Yes	5	20.6	0.4	0.4	●
GWPG500N08F-GW	N	Yes	5	20.6	0.8	0.8	●
GWPG600N02G-GW	N	Yes	6	25.6	0.2	0.2	●
GWPG600N04G-GW	N	Yes	6	25.6	0.4	0.4	●
GWPG600N08G-GW	N	Yes	6	25.6	0.8	0.8	●
GWPM300N04D-GW	N	Yes	3	20.6	0.4	0.4	●
GWPM400N04E-GW	N	Yes	4	20.6	0.4	0.4	●
GWPM500N04F-GW	N	Yes	5	20.6	0.4	0.4	●
GWPM600N04G-GW	N	Yes	6	25.6	0.4	0.4	●

GWPG.. : Outside ground
Width tolerance ±0.025
GWPM.. : Full-molded
Width tolerance ±0.05

GWPG-GV Generates less tool pressure



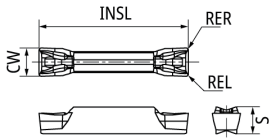
Item Number	Hand	Chip-breaker	CW	INSL	REL	RER	Carbide
			mm	mm	mm	mm	PVD DM4
GWPG300N02D-GV	N	Yes	3	20.6	0.2	0.2	●
GWPG300N04D-GV	N	Yes	3	20.6	0.4	0.4	●
GWPG400N02E-GV	N	Yes	4	20.6	0.2	0.2	●
GWPG400N04E-GV	N	Yes	4	20.6	0.4	0.4	●
GWPG500N02F-GV	N	Yes	5	20.6	0.2	0.2	●
GWPG500N04F-GV	N	Yes	5	20.6	0.4	0.4	●
GWPG600N02G-GV	N	Yes	6	25.6	0.2	0.2	●
GWPG600N04G-GV	N	Yes	6	25.6	0.4	0.4	●

Face Grooving

SCRUM DUO BLADE

GWPFM.. series/Insert Carbide

GWPFM-GT



Item Number	Hand	Chip-breaker	CW	INSL	REL	RER	S	Carbide PVD DM4
			mm	mm	mm	mm	mm	
GWPFM300N02-GT	N	Yes	3	24.5	0.2	0.2	4.2	●
GWPFM300N04-GT	N	Yes	3	24.5	0.4	0.4	4.2	●
GWPFM400N04-GT	N	Yes	4	26.5	0.4	0.4	4.2	●
GWPFM400N08-GT	N	Yes	4	26.5	0.8	0.8	4.2	●
GWPFM500N04-GT	N	Yes	5	26.5	0.4	0.4	4.2	●
GWPFM500N08-GT	N	Yes	5	26.5	0.8	0.8	4.2	●
GWPFM600N04-GT	N	Yes	6	26.5	0.4	0.4	4.2	●
GWPFM600N08-GT	N	Yes	6	26.5	0.8	0.8	4.2	●