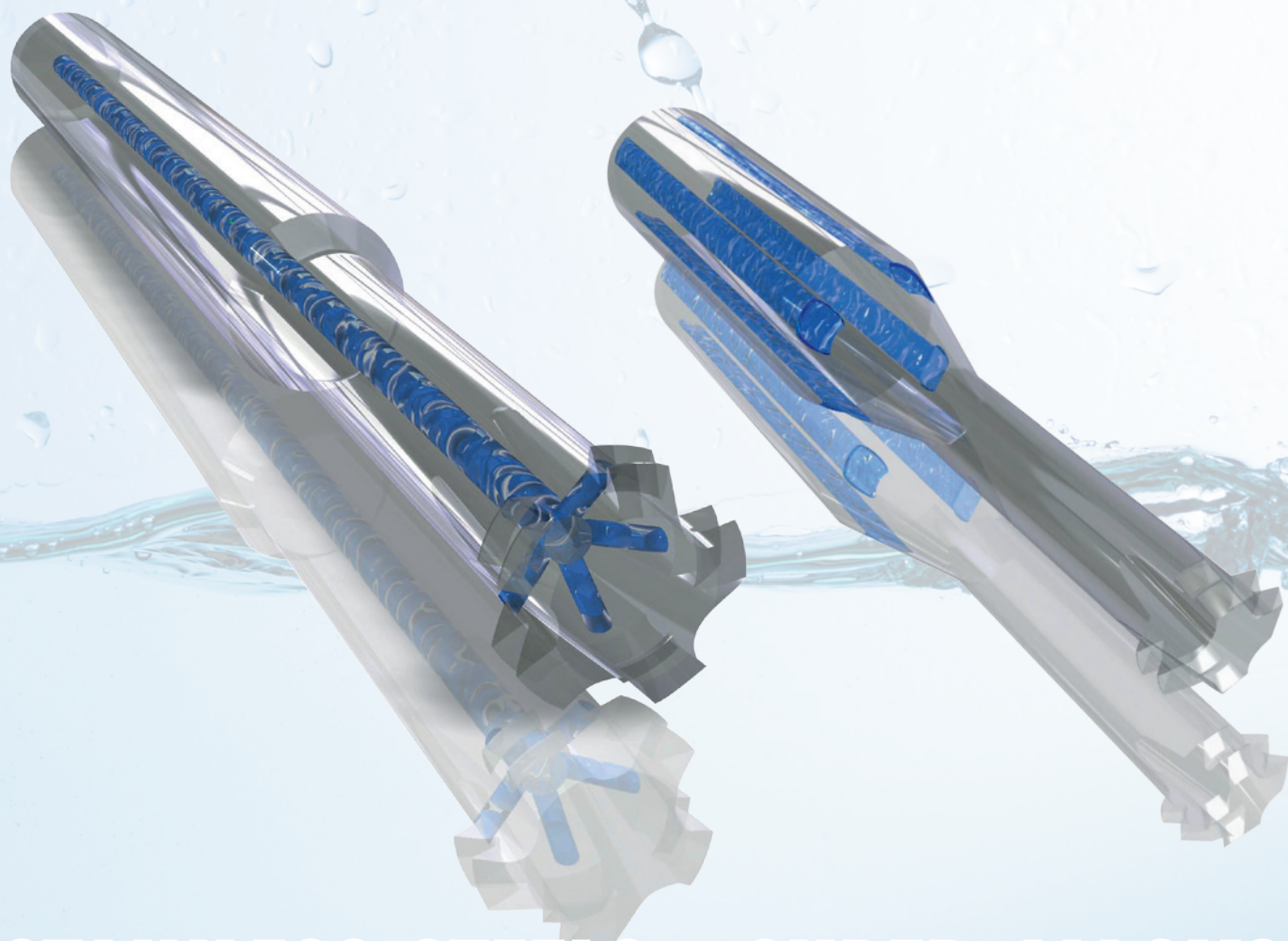


GW*i*

SERIES 3000



STAINLESS STEELS - SUPER ALLOYS



**THREADING
TECHNOLOGY**

TIME TO SET A **GWi**



Double performance

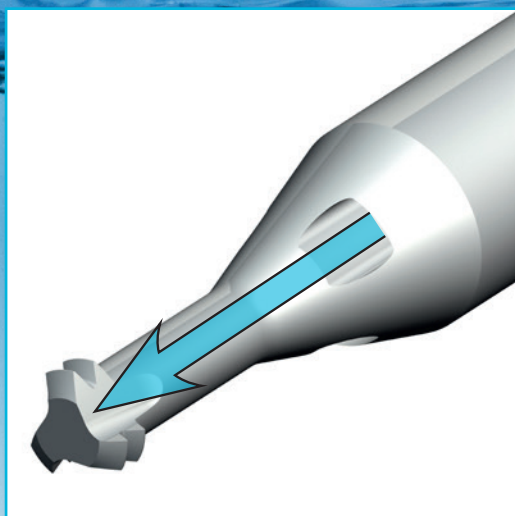


Thread quality

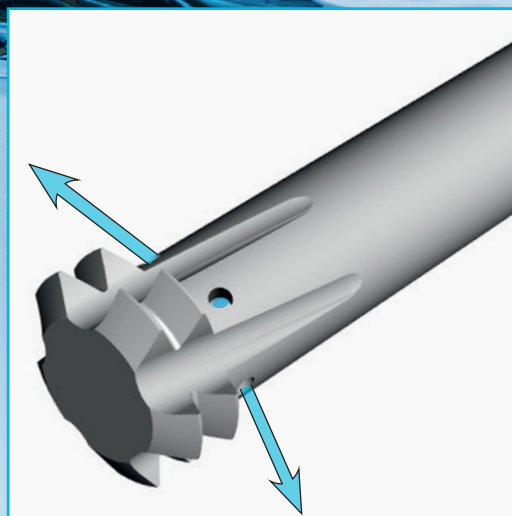


Chip evacuation

« *GWi*, the best solution for high performance thread manufacturing in **STAINLESS STEELS AND SUPER ALLOYS** »



Cooling system: 0.8 - 6.5 mm



Cooling system: 6.5 - 20 mm

NEW BENCHMARK



High wear resistance

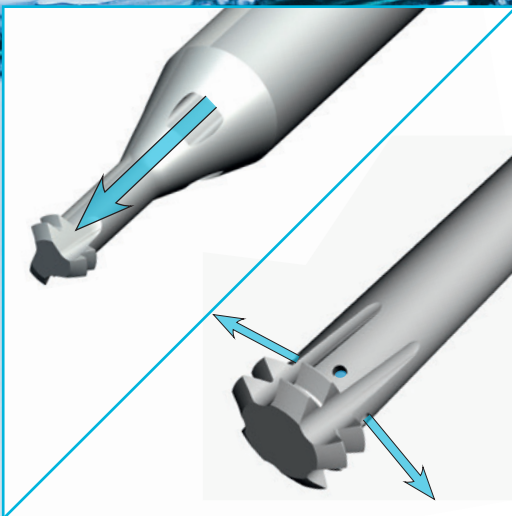


No sticking



Process security

« *VX solution for reliable production of critical and expensive components in **MEDICAL AND AEROSPACE*** »



**Available for internal coolant
GWi-VX**



**Available for external coolant
GW-VX**

PERFORMANCE

Material: Stainless steel, 1.4301

Machine: DMC 650V

Kind of hole: Blind hole

Thread size: M3 6H

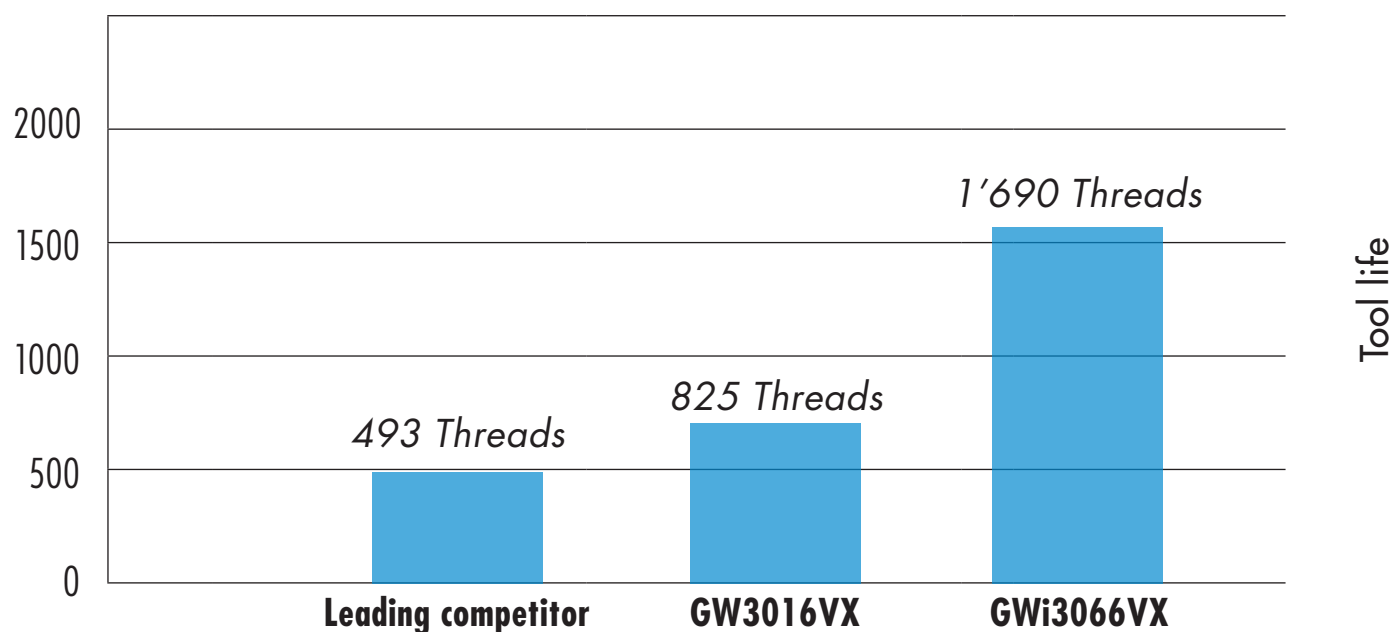
Thread length: $2 \times D_1$

Lubricant: Emulsion 8%

Vc & Feed: 50 m/min & 0.02 mm/tooth

1'690 Threads in 1.4301

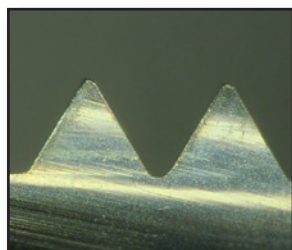
Numbers of NC-corrections: 2 (Competitor 5)



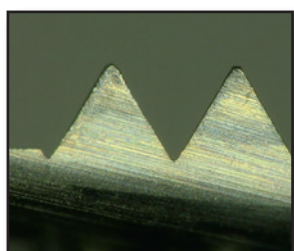
WEAR OUT

SURFACE QUALITY

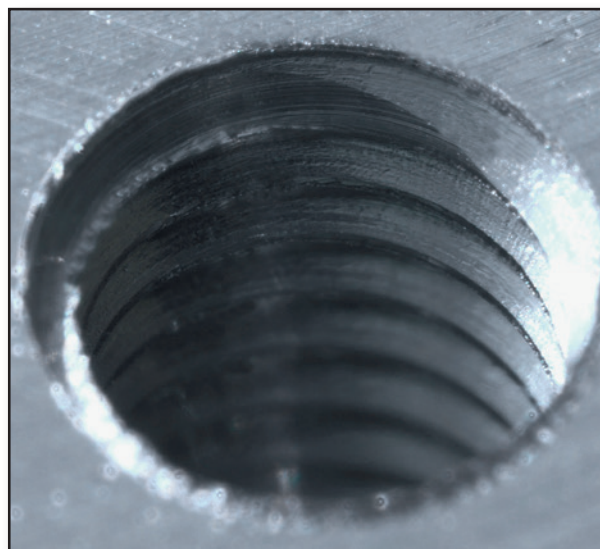
GWi VX
1'690 Threads



GW VX
825 Threads



1'690 threads



APPLICATION

Use

-  Optimal with cutting oil
 Optimal with emulsion



Material classification

Material groups			Material designation	Hardness (HB)	Tensile strength Rm (N/mm ²)	Elongation A (%)
10	Steels	11	Free-cutting steels	< 200	< 700	< 10
		12	Structural / cementation steels	< 200	< 700	< 30
		13	Carbon steels	< 300	< 1000	< 20
		14	Alloy steels <850 N/mm ²	< 250	< 850	< 30
		15	Alloy steels hard. / temp. >850 - <1150 N/mm ²	> 250	> 850	< 30
		16	High tensile alloy steels	> 250	> 850	< 12
20	Stainless Steels	21	Free machining stainless steels	< 250	< 850	< 25
		22	Austenitic stainless steels	< 250	< 850	> 20
		23	Ferritic and martensitic <850 N/mm ²	< 250	< 850	> 20
		24	Ferritic and martens. >850 - <1150 N/mm ²	> 250	> 850	> 15
30	Cast iron	31	Cast iron	< 250	< 850	< 10
		32	Spheroidal graphite + malleable cast iron	< 250	< 850	> 10
40	Titan	41	Pure titanium	< 250	< 850	> 20
		42	Titanium alloys	> 250	> 850	< 20
50	Nickel	51	Nickel alloys 1 <850 N/mm ²	< 250	< 850	> 25
		52	Nickel alloys 2 >850 - <1150 N/mm ²	> 250	> 850	< 25
		53	Nickel alloys 3 >1150 - ≤1600 N/mm ²	> 340	> 1150	< 20
60	Copper	61	Pure copper (electrolitic copper)	< 120	< 400	> 12
		62	Short chip brass, phosphor bronze, gun metal	< 200	< 700	< 12
		63	Long chip brass	< 200	< 700	> 12
70	Aluminium Magnesium	71	Al unalloyed	< 100	< 350	> 15
		72	Al alloyed Si < 1.5 %	< 150	< 500	> 15
		73	Al alloyed Si > 1.5 % - < 10 %	< 120	< 400	< 15
		74	Al alloyed Si > 10 %, Mg-Alloys	< 120	< 400	< 10

Pictographs



Thread length $2.5 \times D_1$



Wear-protective coating



Solid carbide



Tolerance class



Thread length $3 \times D_1$



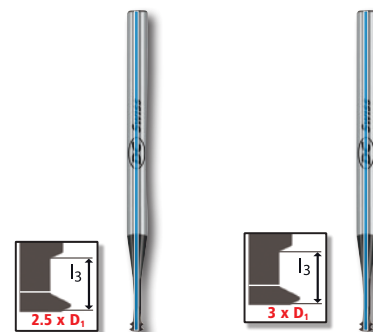
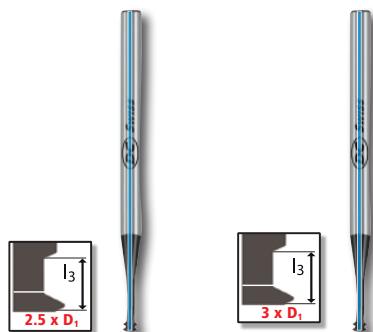
Internal coolant GWi



Internal thread



High speed cutting



M	P	GWi3066VX	GWi3067VX
0.8	0.2	✓	
0.9	0.225	✓	
1.0	0.25	✓	
1.2	0.25	✓	
1.4	0.3	✓	✓
1.6	0.35	✓	✓
1.8	0.35	✓	✓
2.0	0.4	✓	✓
2.5	0.45	✓	✓
3.0	0.5	✓	✓
3.5	0.6	✓	✓
4.0	0.7	✓	✓
5.0	0.8	✓	✓
6.0	1	✓	✓
8.0	1.25	✓	✓
10.0	1.5	✓	✓
12.0	1.75	✓	✓
14.0	2	✓	✓
16.0	2	✓	✓
18.0	2.5	✓	✓
20.0	2.5	✓	✓

UNC	P	GWi3066VX	GWi3067VX
2	56	✓	
3	48	✓	
4	40	✓	✓
5	40	✓	✓
6	32	✓	✓
8	32	✓	✓
10	24	✓	✓
12	24	✓	✓
1/4	20	✓	✓
5/16	18	✓	✓
3/8	16	✓	✓
7/16	14	✓	✓
1/2	13	✓	✓

MF	P	GWi3066VX	GWi3067VX
2.0	0.2	✓	✓
2.0	0.25	✓	✓
2.5	0.2	✓	✓
2.5	0.25	✓	✓
3.0	0.35	✓	✓
4.0	0.5	✓	✓
5.0	0.5	✓	✓
6.0	0.75	✓	✓
8.0	1	✓	✓
10.0	1	✓	✓
10.0	1.25	✓	✓
12.0	1.5	✓	✓
14.0	1.5	✓	✓
16.0	1.5	✓	✓
18.0	1.5	✓	✓
20.0	1.5	✓	✓

✓ In stock
✓ Delivery in 3 weeks

UNF	P	GWi3066VX	GWi3067VX
0	80	✓	
1	72	✓	
2	64	✓	
4	48	✓	✓
5	44	✓	✓
6	40	✓	✓
8	36	✓	✓
10	32	✓	✓
12	28	✓	✓
1/4	28	✓	✓
5/16	24	✓	✓
3/8	24	✓	✓
7/16	20	✓	✓
1/2	20	✓	✓

World's FIRST thread whirl cutter

PROGRAMME

GW



M	P	GW3016VX	GW3017VX
0.8	0.2	✓	✓
0.9	0.225	✓	✓
1.0	0.25	✓	✓
1.2	0.25	✓	✓
1.4	0.3	✓	✓
1.6	0.35	✓	✓
1.8	0.35	✓	✓
2.0	0.4	✓	✓
2.5	0.45	✓	✓
3.0	0.5	✓	✓
3.5	0.6	✓	✓
4.0	0.7	✓	✓
5.0	0.8	✓	✓
6.0	1	✓	✓
8.0	1.25	✓	✓
10.0	1.5	✓	✓
12.0	1.75	✓	✓
14.0	2	✓	✓
16.0	2	✓	✓
18.0	2.5	✓	✓
20.0	2.5	✓	✓

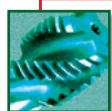
UNC	P	GW3016VX	GW3017VX
2	56	✓	✓
3	48	✓	✓
4	40	✓	✓
5	40	✓	✓
6	32	✓	✓
8	32	✓	✓
10	24	✓	✓
12	24	✓	✓
1/4	20	✓	✓
5/16	18	✓	✓
3/8	16	✓	✓
7/16	14	✓	✓
1/2	13	✓	✓

MF	P	GW3016VX	GW3017VX
2.0	0.2	✓	✓
2.0	0.25	✓	✓
2.5	0.2	✓	✓
2.5	0.25	✓	✓
3.0	0.35	✓	✓
4.0	0.5	✓	✓
5.0	0.5	✓	✓
6.0	0.75	✓	✓
8.0	1	✓	✓
10.0	1	✓	✓
10.0	1.25	✓	✓
12.0	1.5	✓	✓
14.0	1.5	✓	✓
16.0	1.5	✓	✓
18.0	1.5	✓	✓
20.0	1.5	✓	✓

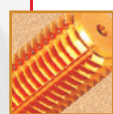
✓ In stock
✓ Delivery in 3 weeks

UNF	P	GW3016VX	GW3017VX
0	80	✓	✓
1	72	✓	✓
2	64	✓	✓
4	48	✓	✓
5	44	✓	✓
6	40	✓	✓
8	36	✓	✓
10	32	✓	✓
12	28	✓	✓
1/4	28	✓	✓
5/16	24	✓	✓
3/8	24	✓	✓
7/16	20	✓	✓
1/2	20	✓	✓

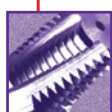
programme with internal coolant!



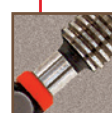
► Thread cutting



► Thread forming



► Thread milling



► Thread gauges



► Tapping chucks



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TECHNOLOGY**

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