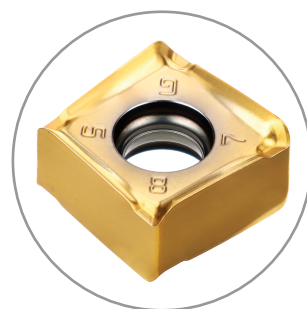


DIPOSQUAD

90° SHOULDER MILLING WITH 8-EDGED INSERT SQGU10

- ▶ Economical, double-sided 8-corner insert
- ▶ Precision 90-degree machining
- ▶ Insert's wiping flat improves surface finish
- ▶ Reinforced cutting edge enhances machining stability

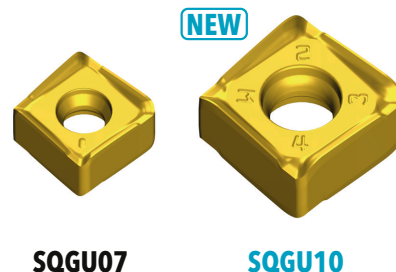


PRODUCT OVERVIEW

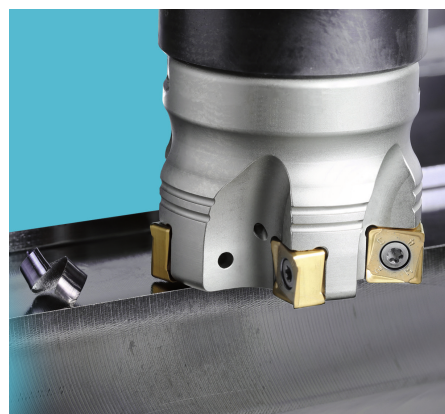
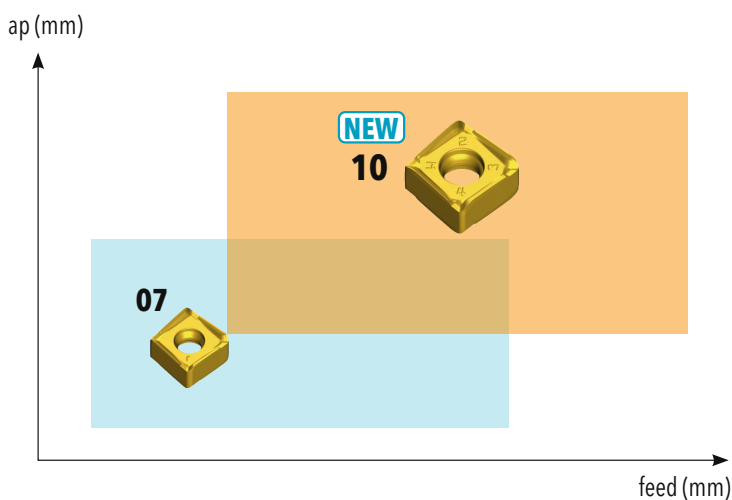
Ingersoll introduces a new **SQGU10** insert and dedicated cutter to the **DiPosQuad** product line.

With the growing demand and popularity of the SQGU07 insert line Ingersoll has now added the **SQGU10** insert. The M chip former, which has already proven its worth in the 7 mm version, is now also the first choice for the 10 mm insert.

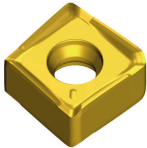
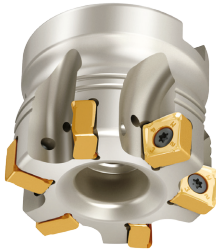
The type M chip former is also suitable for multi-step milling of shoulders and really produces 90° here. This is a major plus, especially for an 8-edged insert and of course makes the new **DiPosQuad** line extremely interesting from an economic point of view.



APPLICATION RANGE OF SQGU INSERT



CUTTER DIAMETER RANGE

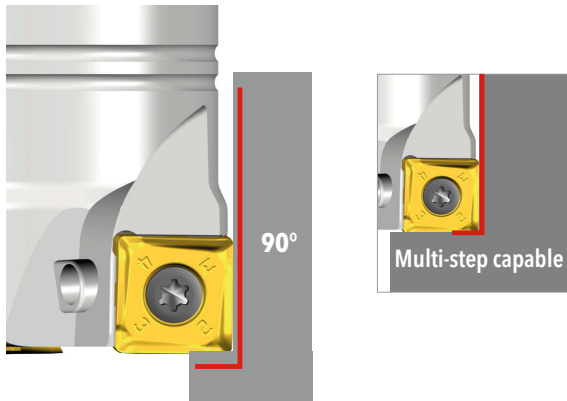
Insert	Screw-in Type Mill	End Mill	Shoulder Mill
			
SQGU 07	Ø16-Ø40	Ø16-Ø40	Ø32-Ø63
NEW SQGU 10	Ø25-Ø40	Ø25-Ø40	Ø40-Ø125

FEATURES

- Economical, double-sided 8-corner insert
- Precision 90-degree machining with **-M chip former**

- M chip former

Minimizes mismatch in multi-step machining

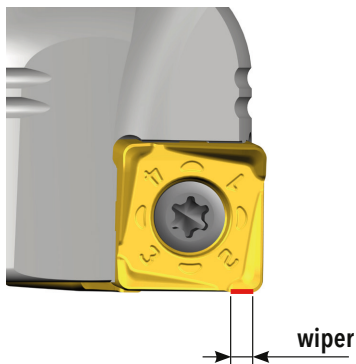


- MP and -MMP chip former

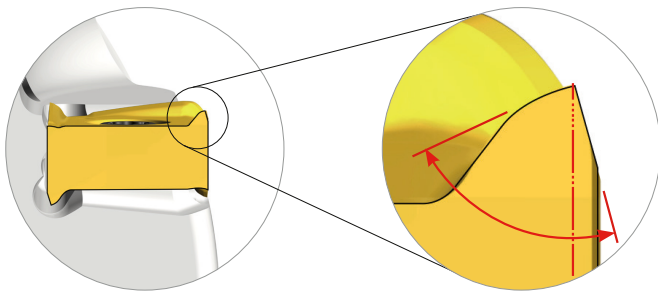
Not suitable for multi-step machining!



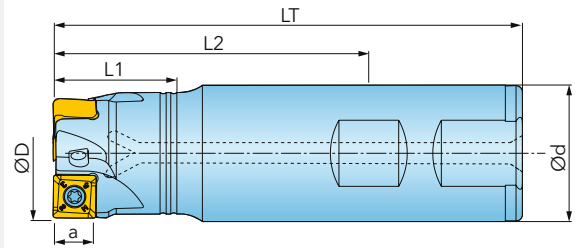
- The insert's integrated wiping flat improves surface finish



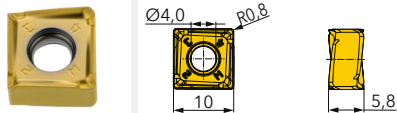
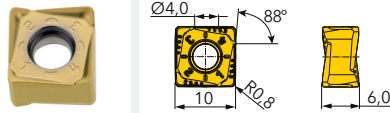
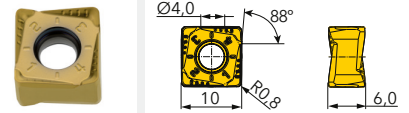
- The insert's reinforced cutting edge enhances machining stability



ADAPTION ACC. TO DIN 1835 B

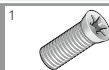


Designation	D	d	LT	L1	L2	a	Z	IK	kg
1DJ1R025030W5R00	25	25	100	30	68,5	7	2	✓	0,34
1DJ1R032035W6R00	32	32	110	35	74,5	7	3	✓	0,61
1DJ1R040040W6R00	40	32	110	40	74,5	7	4	✓	0,66

SQGU100408TR-M

SQGU100408PNR-MP

SQGU100408PNR-MMP


Designation	fz(min/max)	Design	Grade	IN2504	IN2505	IN2510	IN2530				
SQGU100408TR-M	0,10/0,20	positive geometry R0,8 for 90° shoulder		●	●	●	●				
SQGU100408PNR-MP	0,10/0,20	positive cast iron geometry		●	●	●	●				
SQGU100408PNR-MMP	0,10/0,20	high positive cast iron geometry			●	●	●				

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS


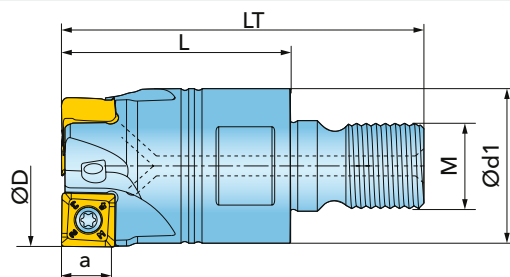
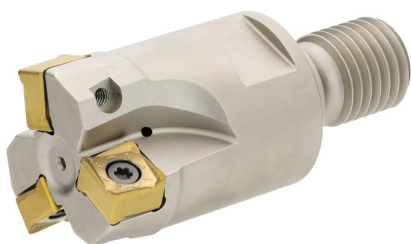
TS 35A088I/HG



TX10x90-B

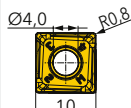
1 = insert screw 2 = Torx-bit

SCREW-IN TYPE ADAPTION

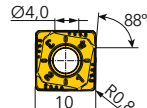


Designation	D	d1	LT	L	a	M	Z	IK	kg
1DJ1R025035X7R00	25	22	57	35	7	M12	2	✓	0,11
1DJ1R032043X8R00	32	29	68	43	7	M16	3	✓	0,23
1DJ1R040043X8R00	40	29	68	43	7	M16	4	✓	0,29

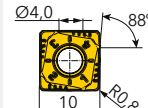
SQGU100408TR-M



SQGU100408PNR-MP



SQGU100408PNR-MMP



Designation	fz(min/max)	Design	Grade	IN2504	IN2505	IN2510	IN2530				
SQGU100408TR-M	0,10/0,20	positive geometry R0,8 for 90° shoulder		●	●	●	●				
SQGU100408PNR-MP	0,10/0,20	positive cast iron geometry		●	●	●					
SQGU100408PNR-MMP	0,10/0,20	high positive cast iron geometry			●	●					

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS

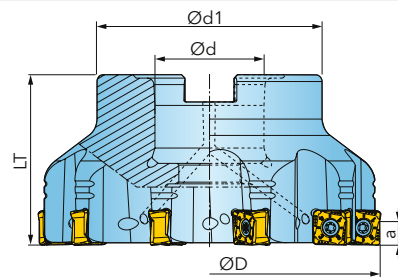


TS 35A088I/HG

TX10x90-B

1 = insert screw 2 = Torx-bit

ADAPTION ACC. TO DIN 8030



Designation	D	d	d1	LT	a	Z	IK	kg
DJ5R040R00 ¹⁾	40	16	38	40	7	4	✓	0,2
DJ6R050R00	50	22	45	40	7	5	✓	0,3
DJ5R050R00 ¹⁾	50	22	45	40	7	6	✓	0,4
DJ6R063R00	63	22	47	40	7	6	✓	0,5
DJ5R063R00 ¹⁾	63	22	47	40	7	8	✓	0,5
DJ6R080R00	80	27	58	50	7	8	✓	1,1
DJ5R080R00 ¹⁾	80	27	58	50	7	10	✓	1,1
DJ6R100R00	100	32	66	50	7	10	✓	1,6
DJ5R100R00 ¹⁾	100	32	66	50	7	14	✓	1,7
DJ6R125R00	125	40	85	63	7	12	✓	3,4
DJ5R125R00 ¹⁾	125	40	85	63	7	16	✓	3,5

¹⁾ fine pitch (only for short chipping materials)

SQGU100408TR-M			SQGU100408PNR-MP			SQGU100408PNR-MMP		
Designation	fz(min/max)	Design	Grade	IN2504	IN2505	IN2510	IN2530	
SQGU100408TR-M	0,10/0,20	positive geometry R0,8 for 90° shoulder						
SQGU100408PNR-MP	0,10/0,20	positive cast iron geometry						
SQGU100408PNR-MMP	0,10/0,20	high positive cast iron geometry						

● = P ● = M ● = K ● = N ● = S ○ = H

SPARE PARTS		1	2
		TS 35A088I/HG	TX10x90-B

1 = insert screw 2 = Torx-bit

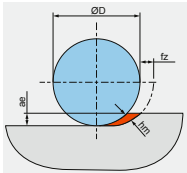
RECOMMENDED CUTTING DATA FOR SQGU100408_


Insert:	SQGU100408TR-M	SQGU100408PNR-MP	SQGU100408PNR-MMP
Average chip thickness:	hm = 0,10 mm	hm = 0,10 mm	hm = 0,10 mm
max. cutting depth:	ap = 7,0 mm	ap = 7,0 mm	ap = 7,0 mm

ISO	material	cutting speed Vc [m/min]				feed per tooth fz [mm]
		1st choice dry machining resp. wear resistant carbide		1st choice wet machining resp. rough carbide		
P	unalloyed steel	IN2505	250 – 290	IN2530	200 – 240	0,10 – 0,15
	alloyed steel 800 N/mm²	IN2505	210 – 250	IN2530	160 – 200	0,10 – 0,12
	alloyed steel 1100 N/mm²	IN2505	160 – 180	IN2530	110 – 130	0,10
M	stainless steel	IN2505	120 – 180	IN2530	80 – 130	0,10 – 0,12
K	gray cast iron	IN2510	180 – 250	IN2530	150 – 200	0,10 – 0,20
	nodular cast iron	IN2510	140 – 210	IN2530	110 – 160	0,10 – 0,12
N	aluminum	–	–	–	–	–
S	high temperature alloys	IN2505	110 – 125	IN2530	60 – 80	0,10
	titanium alloys	IN2505	40 – 50	IN2530	30 – 40	0,10
H	hard machining < 54 HRC	IN2504	30 - 40	–	–	–
	hard machining < 63 HRC	–	–	–	–	–

TIPS

- The worse the material machinability, the smaller the tool engagement should be chosen.
- The smaller the cutting tool diameter, the higher the cutting speed can be.
- If tool engagement is less than 1/3 of cutting tool diameter, the feed per tooth should be calculated with the following formula:

$$fz = hm \times \sqrt{\frac{D}{ae}}$$


GENERAL INFORMATION

 Insert screw: **TS 35A088I/HG**

 Torque: **3,0 Nm**

 Torque wrench: **DTN030S with bit DS-TP10TB**

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