

# CoroMill® 690

The cutting edge for titanium milling

## Application

- 2D profile milling of titanium
- Edging and full slotting

ISO application area:

S

## Benefits and features

- High-productivity milling of titanium
- iLock™ interface gives a secure process, increased feed and longer tool life
- Cutting fluid supply, individual to each insert pocket
- Fully controlled flow and pressure through threaded holes - either for nozzles or plug screws
- Unique end- and side inserts for optimum performance



[www.sandvik.coromant.com/coromill690](http://www.sandvik.coromant.com/coromill690)

## Couplings

- Coromant Capto®
- Arbor
- HSK
- Oversized version available

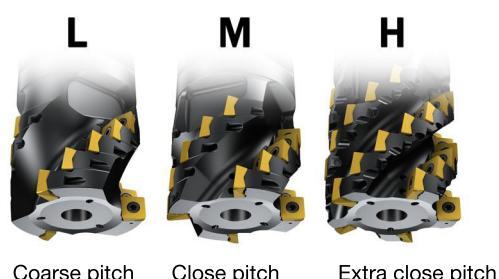
## Inserts

- Four cutting edges
- SL geometry optimized for titanium



P-SL = Side (or Periphery) insert

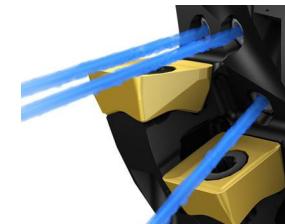
E-SL = End insert



Coarse pitch      Close pitch      Extra close pitch

## Coolant supply

During cutting, the chips can be prone to sticking to the cutting edge. This means that the next cutter rotation is re-cutting the chip. By equipping every insert pocket with threaded coolant holes with nozzles for high pressure coolant delivery, you can apply maximum coolant where required. This effectively eliminates the problem for a constant cutting edge performance. Supplying cutting fluid to all the insert pockets in the long edge cutter requires high pump volumes and pressure capability.



I 70



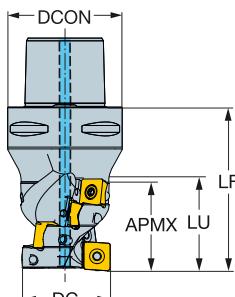
I 73

# CoroMill® 690 long edge square shoulder milling cutter

Coromant Capto® - Internal coolant supply



KAPR      90°



							Dimensions, mm									
DC	APMX <sub>FW</sub>	CZC <sub>MS</sub>	CNSC	Ordering code			DCON	DCX	LF	LU	RPMX	CICT <sub>E</sub>	MIID <sub>E</sub>	CICT <sub>P</sub>	MIID <sub>P</sub>	
40.0	46.0	10E 10P	C6	3	2	690-040C6-1046H	63.0	40.0	83.0	49.0	1.49	5000	2	690-100508M-E-SL	10	690-100510M-P-SL
	53.0	10E 10P	C6	3	2	690-040C6-1053H	63.0	40.0	95.0	55.0	1.54	5000	2	690-100508M-E-SL	10	690-100510M-P-SL
44.0	46.0	10E 10P	C4	3	3	690-044C4-1046H	40.0	44.0	82.0		0.81	5000	3	690-100508M-E-SL	15	690-100510M-P-SL
50.0	53.0	10E 10P	C5	3	3	690-050C5-1053H	50.0	50.0	90.0	70.0	1.16	5000	3	690-100508M-E-SL	18	690-100510M-P-SL
54.0	53.0	10E 10P	C5	3	3	690-054C5-1053H	50.0	54.0	90.0		1.31	5000	3	690-100508M-E-SL	18	690-100510M-P-SL
	61.0	14E 14P	C5	3	3	690-054C5-1461H	50.0	54.0	97.0		1.39	5000	3	690-140608M-E-SL	12	690-140610M-P-SL
63.0	60.0	10E 10P	C6	3	3	690-063C6-1060M	63.0	63.0	100.0	78.0	2.21	5000	3	690-100508M-E-SL	21	690-100510M-P-SL
	61.0	14E 14P	C6	3	3	690-063C6-1461H	63.0	63.0	103.0	79.0	2.13	5000	3	690-140608M-E-SL	12	690-140610M-P-SL
112.0	10E 10P	C6	3	4		690-063C6-1011H	63.0	63.0	156.0	134.0	2.85	5000	4	690-100508M-E-SL	56	690-100510M-P-SL
66.0	49.0	14E 14P	C6	3	3	690-066C6-1449H	63.0	66.0	90.0		2.01	5000	3	690-140608M-E-SL	9	690-140610M-P-SL
	53.0	10E 10P	C6	3	3	690-066C6-1053M	63.0	66.0	95.0		2.28	5000	3	690-100508M-E-SL	18	690-100510M-P-SL
	53.0	10E 10P	C6	3	4	690-066C6-1053H	63.0	66.0	92.0		2.19	5000	4	690-100508M-E-SL	24	690-100510M-P-SL
	105.0	10E 10P	C6	3	4	690-066C6-1010H	63.0	66.0	150.0		2.88	5000	4	690-100508M-E-SL	52	690-100510M-P-SL
80.0	73.0	14E 14P	C8	3	3	690-080C8-1473M	80.0	80.0	128.0	98.0	4.27	5000	3	690-140608M-E-SL	15	690-140610M-P-SL
	73.0	14E 14P	C8	3	4	690-080C8-1473H	80.0	80.0	128.0	92.0	4.24	5000	4	690-140608M-E-SL	20	690-140610M-P-SL
	105.0	10E 10P	C8	3	5	690-080C8-1010H	80.0	80.0	153.0	120.0	4.79	5000	5	690-100508M-E-SL	65	690-100510M-P-SL
84.0	61.0	14E 14P	C8	3	3	690-084C8-1461L	80.0	84.0	112.0		3.99	5000	3	690-140608M-E-SL	12	690-140610M-P-SL
	61.0	14E 14P	C8	3	4	690-084C8-1461M	80.0	84.0	110.0		3.93	5000	4	690-140608M-E-SL	16	690-140610M-P-SL
	84.0	14E 14P	C8	3	5	690-084C8-1484H	80.0	84.0	132.0		4.57	5000	5	690-140608M-E-SL	30	690-140610M-P-SL
100.0	108.0	14E 14P	C8	3	4	690-100C8-1410H	80.0	100.0	160.0		7.12	5000	4	690-140608M-E-SL	32	690-140610M-P-SL

Spare parts		
DC	Insert screw	Plug screw
40.00-44.00	10E 5513 020-68	3214 010-202
50.00-80.00	10E 5513 020-68	3214 010-253
54.00-100.00	14E 5513 020-55	3214 010-253

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



I73



L4



N22



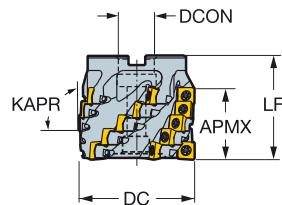
N9



N15

# CoroMill® 690 long edge square shoulder milling cutter

Arbor

STDNO  
KAPRISO 6462:2011  
90°

							Dimensions, mm										
DC	APMX <sub>FWN</sub>	10E	10P	22	3	CZC <sub>MS</sub>	Ordering code	DCON	ISO	DCX	LF	RPMX	CICT <sub>E</sub>	MIID <sub>E</sub>	CICT <sub>P</sub>	MIID <sub>P</sub>	
50.0	46.0	10E	10P	22	3		690-050Q22-1046H	22.0	A	50.0	75.0	0.98	5000	3	690-100508M-E-SL	15	690-100510M-P-SL
63.0	46.0	10E	10P	27	3		690-063Q27-1046M	27.0	A	63.0	80.0	1.48	5000	3	690-100508M-E-SL	15	690-100510M-P-SL
	49.0	14E	14P	27	3		690-063Q27-1449H	27.0	A	63.0	80.0	1.30	5000	3	690-140608M-E-SL	9	690-140610M-P-SL
80.0	61.0	14E	14P	32	3		690-080Q32-1461M	32.0	A	80.0	98.0	2.42	5000	3	690-140608M-E-SL	12	690-140610M-P-SL
100.0	61.0	14E	14P	32	5		690-100Q32-1461H	32.0	A	100.0	90.0	3.56	5000	5	690-140608M-E-SL	20	690-140610M-P-SL

		Spare parts	
DC		Insert screw	Plug screw
50.00-63.00	10E	5513 020-68	3214 010-253
63.00-100.00	14E	5513 020-55	3214 010-253

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)

I73



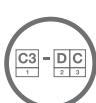
L4



M2



N22



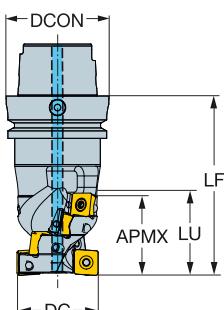
N9

## CoroMill® 690 long edge square shoulder milling cutter

HSK - Internal coolant supply



KAPR      90°



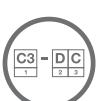
							Dimensions, mm										
DC	APMX <sub>FW</sub>	10E	10P	CZC <sub>MS</sub>	CNSC	Ordering code	DCON	DCX	LF	LU	RPM <sub>X</sub>	CICT <sub>E</sub>	MIID <sub>E</sub>	CICT <sub>P</sub>	MIID <sub>P</sub>		
40.0	46.0	10E	10P	63	1	2	63.0	40.0	104.0	48.0	1.62	5000	2	690-100508M-E-SL	10	690-100510M-P-SL	
63.0	60.0	10E	10P	63	1	3	690-040HA06-1046H	63.0	63.0	120.0	94.0	2.30	5000	3	690-100508M-E-SL	21	690-100510M-P-SL
	105.0	10E	10P	125	1	4	690-063HA06-1060M	125.0	63.0	180.0	110.0	7.51	5000	4	690-100508M-E-SL	52	690-100510M-P-SL
80.0	84.0	14E	14P	125	1	4	690-063HA12-10105H	125.0	80.0	162.0	88.0	8.32	5000	4	690-140608M-E-SL	24	690-140610M-P-SL
	105.0	10E	10P	100	1	4	690-080HA10-10105M	100.0	80.0	180.0	110.0	6.70	5000	4	690-100508M-E-SL	52	690-100510M-P-SL
100.0	105.0	10E	10P	100	1	4	690-100HA10-10105M	100.0	100.0	180.0	151.0	8.85	5000	4	690-100508M-E-SL	52	690-100510M-P-SL

Spare parts		
DC	Insert screw	Plug screw
40.00	10E	5513 020-68
63.00-100.00	10E	5513 020-68
80.00	14E	5513 020-55
		3214 010-202
		3214 010-253
		3214 010-253

For complete list of spare parts, see [www.sandvik.coromant.com](http://www.sandvik.coromant.com)



N22



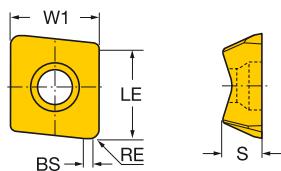
N9



N15

## CoroMill® 690 insert for milling

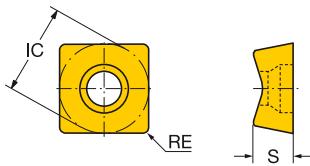
KRINS 90°



### End insert

				S	Dimensions, mm			
		RE	Ordering code	1030	2040	S30T	S40T	W1 LE S BS
Light	SL	10E	690-100508M-E-SL	☆ ☆ ★ ☆				10.0 10.0 5.20 1.0
		1.20	690-100512M-E-SL	☆ ☆ ★ ☆				10.0 10.0 5.20 1.0
		1.60	690-100516M-E-SL	☆ ☆ ★ ☆				10.0 10.0 5.20 1.0
		2.00	690-100520M-E-SL	☆ ☆ ★ ☆				10.0 10.0 5.20 1.0
		3.10	690-100531M-E-SL	☆ ☆ ★ ☆				10.0 10.0 5.20 1.0
	SL	14E	690-140608M-E-SL	☆ ☆ ★ ☆	14.5	14.7	6.35	1.0
		1.20	690-140612M-E-SL	☆ ☆ ★ ☆	14.5	14.7	6.35	1.0
		1.60	690-140616M-E-SL	☆ ☆ ★ ☆	14.5	14.7	6.35	1.0
		2.00	690-140620M-E-SL	☆ ☆ ★ ☆	14.5	14.7	6.35	1.0
		2.40	690-140624M-E-SL	☆ ☆ ★ ☆	14.5	14.7	6.35	1.0
		3.10	690-140631M-E-SL	☆ ☆ ★ ☆	14.5	14.7	6.35	1.0
		5.00	690-140650M-E-SL	☆ ☆ ★ ☆	14.5	15.7	6.35	1.0
		6.00	690-140660M-E-SL	☆ ☆ ★ ☆	14.5	16.5	6.35	1.0
		6.35	690-140664M-E-SL	☆ ☆ ★ ☆	14.5	16.7	6.35	1.0

KRINS 90°

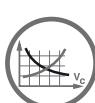


### Peripheral insert

				S	Dimensions, mm			
		RE	Ordering code	1030	2040	S30T	S40T	IC LE S
Light	SL	10P	690-100510M-P-SL	☆ ☆ ★ ☆				10.0 9.0 5.20
		14P	690-140610M-P-SL	☆ ☆ ★ ☆				14.5 13.5 6.35



I70



I146



I168



N22



N10