

# INDUSTRIAL TOOLING

*Engraving*



***trend***<sup>®</sup>  
*industrial tooling*

CNC  
CNC



# Engraving system



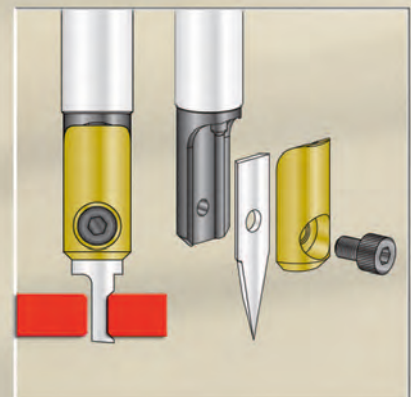
The Engraving Insert system features one tool body with 40 unique insert knives designed for a variety of applications: Straight cut, core box, round corner, V grooves and cutting + chamfering.

Industrial quality insert knives ensure clean cuts and a longer life time than the standard solid router bits.

The engraving system was engineered to quickly interchange inserts while mounted in CNC machines to eliminate setup-time and to maintain consistent cutting accuracy.

Balanced design to minimize vibration and to provide superior cutting results.

Ideal for cutting laminated materials, veneers, MDF, plastics, wood and solid surfaces.



# Plastic Engraving System

**V-Groove 30° Engraving Insert Knives**

Code No.	A	D	C
IT/318 500 5 *	30	0.12	16
IT/318 500 6 *	30	0.24	16
IT/318 500 7	30	0.5	16
IT/318 500 8	30	0.75	16
IT/318 500 9	30	1	16
IT/318 501 0	30	1.5	16
IT/318 501 1	30	2.25	16

**V-Groove 60° Engraving Insert Knives**

Code No.	A	D	C
IT/318 501 8 *	60	0.12	7.5
IT/318 501 9 *	60	0.24	7.5
IT/318 502 0	60	0.5	7.5
IT/318 502 1	60	0.75	7.5
IT/318 502 2	60	1	7.5
IT/318 502 3	60	1.5	7.5
IT/318 502 4	60	2.25	7.5

**V-Groove 90° Engraving Insert Knives**

Code No.	A	D	C
IT/318 501 4	90	0.12	4.0
IT/318 501 5	90	0.24	4.0
IT/318 501 6	90	0.5	4.0
IT/318 501 7	90	1	4.0

**Straight Engraving Insert Knives**

Code No.	D	C
IT/318 503 2	3.2	5
IT/318 503 3	4.76	6
IT/318 503 4	7.94	7
IT/318 503 5	6.35	8

**Core box Engraving Insert Knives**

Code No.	R	C
IT/318 502 8	1.6	5
IT/318 502 9	2.4	6
IT/318 503 0	3.2	7
IT/318 503 1	4.0	8

**Corner Round Engraving Insert Knives**

Code No.	R	D	C
IT/318 502 5	1.6	3.2	8
IT/318 502 6	2.4	3.2	8
IT/318 502 7	3.2	3.2	8

**Cutting and Chamfering Engraving Insert Knives**

Code No.	D	D2	C
IT/318 504 0	6	3.5	0.5
IT/318 503 6	6	3.5	1.0
IT/318 500 2	6	3.5	1.5
IT/318 503 7	6	3.5	1.8
IT/318 504 1	6	3.5	2.3
IT/318 504 2	6	3.5	3.3
IT/318 501 2	6	3.5	3.6

Code No.	C
IT/318 504 3	4.3
IT/318 501 3	4.6
IT/318 500 3 ♦	5.0
IT/318 504 4 ♦	5.5
IT/318 503 8 ♦	6.3
IT/318 503 9 ♦	8.3

**Body Only**  
Knife not included

Code No.	D	OL	S
IT/G185 3X0 5	12	65	8
IT/G185 3X0 9	12	65	12

Code No.	Description
IT/193 807 0	Hex Screw M4x6

\* Only for use with controllable feed rate machines. ♦ Only for Chamfer operation.

## Recommended Feed Rates

### V Groove Routing

### Sizing & Chamfering

### Straight & Core Box Corner Round

Head Diameter D (mm)					Material Thickness (mm)						Head Diameter D (mm)				Knife Radius (mm)				
					Sizing and Chamfering			Chamfering Only			Cutting Depth 1 x D								
0.1	0.25	0.5	0.75		2	3	4.6	5.6	6	7.2	8	3.2	4.76	6.35	7.93	1.6	2.4	3.2	
RPM					Recommended Feed Rate (mm/min)												Feed Rate (mm/min)		
Max. Feed Rate (mm/min)																			
6000	480	1200	2400	3600	1500	1320	1200	1080	1500	1320	1200	600	780	900	1080	1500	1320	1200	
7000	560	1400	2800		1750	1540	1400	1260	1750	1540	1400	700	910	1050	1260	1750	1540	1400	
8000	640	1600	3200		2000	1760	1600	1440	2000	1760	1600	800	1040	1200	1440	2000	1760	1600	
9000	720	1800	3600		2250	1980	1800	1620	2250	1980	1800	900	1170	1350	1620	2250	1980	1800	
10000	800	2000	4000		2500	2200	2000	1800	2500	2200	2000	1000	1300	1500	1800	2500	2200	2000	
11000	880	2200			2750	2420	2200	1980	2750	2420	2200	1100	1430	1650	1980	2750	2420	2200	
12000	960	2400			3000	2640	2400	2160	3000	2640	2400	1200	1560	1800	2160	3000	2640	2400	
13000	1040	2600			3250	2860	2600	2340	3250	2860	2600	1300	1690	1950	2340	3250	2860	2600	
14000	1120	2800			3500	3080	2800	2520	3500	3080	2800	1400	1820	2100	2520	3500	3080	2800	
15000	1200	3000			3750	3300	3000	2700	3750	3300	3000	1500	1950	2250	2700	3750	3300	3000	
16000	1280	3200			4000	3520	3200	2880	4000	3520	3200	1600	2080	2400	2880	4000	3520	3200	
17000	1360	3400			4250	3740	3400	3060	4250	3740	3400	1700	2210	2550	3060	4250	3740	3400	
18000	1440	3600			4500	3960	3600	3240	4500	3960	3600	1800	2340	2700	3240	4500	3960	3600	
19000	1520	3800			4750	4180	3800	3420	4750	4180	3800	1900	2470	2850	3420	4750	4180	3800	
20000	1600				5000	4400	4000	3600	5000	4400	4000	2000	2600	3000	3600	5000	4400	4000	
21000	1680				5250	4620	4200	3780	5250	4620	4200	2100	2730	3150	3780	5250	4620	4200	
22000	1760				5500	4840	4400	3960	5500	4840	4400	2200	2860	3300	3960	5500	4840	4400	
23000	1840				5750	5060	4600	4140	5750	5060	4600	2300	2990	3450	4140	5750	5060	4600	
24000	1920				6000	5280	4800	4320	6000	5280	4800	2400	3120	3600	4320	6000	5280	4800	
25000	2000				6250	5500	5000	4500	6250	5500	5000	2500	3250	3750	4500	6250	5500	5000	
26000	2080				6500	5720	5200	4680	6500	5720	5200	2600	3380	3900	4680	6500	5720	5200	
27000	2160				6750	5940	5400	4860	6750	5940	5400	2700	3510	4050	4860	6750	5940	5400	
28000	2240				7000	6160	5600	5040	7000	6160	5600	2800	3640	4200	5040	7000	6160	5600	

Vars. RPM mm/min

All prices are exclusive of VAT.

Available from:



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