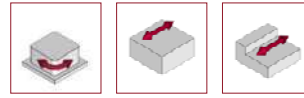
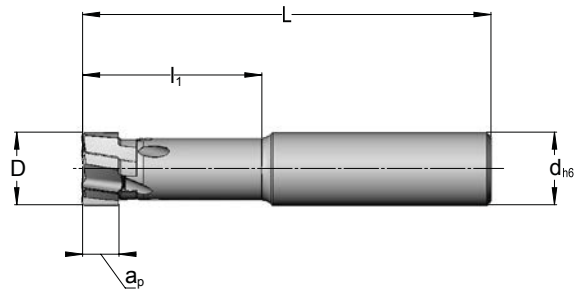


SHOULDER MILLING CUTTERS

XS90



Alternative to carbide shank end milling cutters in combination with small depths of cut
 Utmost change accuracy
 Form and force locking cross and/or star drive keys
 Ensures maximum smooth cutting
 Multi-tooth



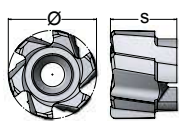
XS90
Smooth shank tool holders

Article	D	d _{h6}	L	l ₁	lc	kg	INS
20G.16.1327.10	16	16	90	40	yes	0.12	ECE1612.R
20G.20.1624.10	20	20	100	48	yes	0.24	ECE2014.R
20G.25.2013.01	25	25	120	30	yes	0.42	ECE2512.R
20G.25.2033.01	25	25	130	71	yes	0.39	ECE2512.R
20G.25.2126.10	25	25	110	53	yes	0.36	ECE2516.R
20G.32.2526.10	28	32	120	58	yes	0.62	ECE2818.R

Data
Interchangeable heads ECE

Article	D	z _{eff}	a _p	Weight in g
EC.E1612.67.10 SKY77	16	6	8.0	33.0
EC.E2014.84.10 SKY77	20	8	10.0	33.0
EC.E2512.53.02 SKY77	25	5	8.5	40.8
EC.E2516.86.10 SKY77	25	8	12.5	63.6
EC.E2818.86.10 SKY77	28	8	15.0	100.0

INTERCHANGEABLE HEADS EC



ECE		
AS	Ø	s
5	25	16
	25	16

ECE		
AS	Ø	s
6	16	12
	16	12

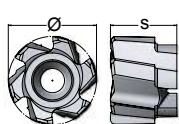
ECE						
AS	Ø			s		
	8	20	25	28	14	16
20		25	28	14	16	18.5

Matching of machining parameters
with the AV material groups

	Article	Designation	Recomm. a_e $0.7 \times D$	Steel						
				A22	A21	A20	A19	A18	A17	A16
ECE1612...	EC.E1612.67.10 SKY77	ECE 161210TR-28	h_{max}	0.16	0.16	0.14	0.14	0.12	0.10	–
				v_c	280-320	240-280	210-240	180-210	140-180	110-140
ECE2014...	EC.E2014.84.10 SKY77	ECE 201410TR-28	h_{max}	0.18	0.16	0.14	0.14	0.12	0.10	–
				v_c	280-320	240-280	210-240	180-210	140-180	110-140
ECE2512...	EC.E2512.53.02 SKY77	ECE 251210TR-25	h_{max}	0.20	0.18	0.15	0.15	0.13	0.11	–
				v_c	280-320	240-280	210-240	180-210	140-180	110-140
ECE2516...	EC.E2516.86.10 SKY77	ECE 251610TR-28	h_{max}	0.18	0.16	0.14	0.14	0.12	0.10	–
				v_c	280-320	240-280	210-240	180-210	140-180	110-140
ECE2818...	EC.E2818.86.10 SKY77	ECE 281810TR-28	h_{max}	0.18	0.16	0.14	0.14	0.12	0.10	–
				v_c	280-320	240-280	210-240	180-210	140-180	110-140

	Article	Designation	Recomm. a_e $0.7 \times D$	Cast iron					
				D21	D20	D19	D18	D17	D16
ECE1612...	EC.E1612.67.10 SKY77	ECE 161210TR-28	h_{max}	0.16	0.15	0.14	0.14	0.10	0.10
				v_c	290-340	270-300	240-280	210-240	180-210
ECE2014...	EC.E2014.84.10 SKY77	ECE 201410TR-28	h_{max}	0.16	0.15	0.14	0.14	0.10	0.10
				v_c	290-340	270-300	240-280	210-240	180-210
ECE2512...	EC.E2512.53.02 SKY77	ECE 251210TR-25	h_{max}	0.18	0.16	0.15	0.15	0.11	0.10
				v_c	290-340	270-300	240-280	210-240	180-210
ECE2516...	EC.E2516.86.10 SKY77	ECE 251610TR-28	h_{max}	0.16	0.15	0.14	0.14	0.10	0.10
				v_c	290-340	270-300	240-280	210-240	180-210
ECE2818...	EC.E2818.86.10 SKY77	ECE 281810TR-28	h_{max}	0.16	0.15	0.14	0.14	0.10	0.10
				v_c	290-340	270-300	240-280	210-240	180-210



INTERCHANGEABLE HEADS **EC**



ECE			ECE			ECE						
AS	Ø	s	AS	Ø	s	AS	Ø			s		
5	25	16	6	16	12	8	20	25	28	14	16	18
	25	16		16	12		20	25	28	14	16	18.5

Matching of machining parameters with the AV material groups

	Article	Designation	Recomm. a_e 0.7 x D	NF metals		
				E82	E81	E80
ECE1612...	EC.E1612.67.10 SKY77	ECE 161210 TR-28	h_{max}	0.15	0.15	-
			v_c	650-1000	450-650	-
ECE2014...	EC.E2014.84.10 SKY77	ECE 201410 TR-28	h_{max}	0.15	0.15	-
			v_c	650-1000	450-650	-
ECE2512...	EC.E2512.53.02 SKY77	ECE 251210 TR-25	h_{max}	0.15	0.15	-
			v_c	650-1000	450-650	-
ECE2516...	EC.E2516.86.10 SKY77	ECE 251610 TR-28	h_{max}	0.15	0.15	-
			v_c	650-1000	450-650	-
ECE2818...	EC.E2818.86.10 SKY77	ECE 281810 TR-28	h_{max}	0.15	0.15	-
			v_c	650-1000	450-650	-

INS		
ECE1612...	08B.0416.7991	TX215
ECE2014....	08B.0520.7991	TX220
ECE2512....	08B.0520.7991	TX220
ECE2516....	08B.0627.7991	TX225
ECE2818....	08B.0627.7991	TX225