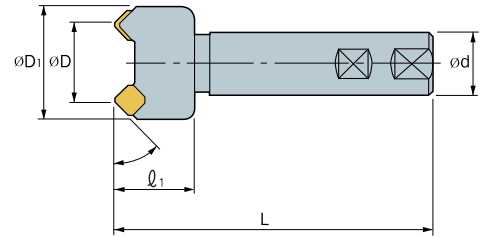


ECO SHEAR 45° ENDMILL



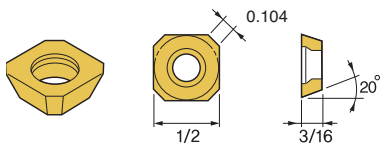
(Inch)

Designation	Stock				ØD	ØD ₁	Ød	L	l ₁	No. of Tooth	Maximum depth of cut	Approach Angle	Axial Rake Angle	Radial Rake Angle
	R	Price \$	L	Price \$										
ESEM 4032R/L	146-736	301.20			1.260	1.890	.750	4.724	1.575	3		45°	20°	-12°
4050R/L	146-737	387.30			1.900	2.598	1.000	4.724	1.575	4		45°	20°	-4.5

Milling Cutters

Available Insert

SECA



Designation

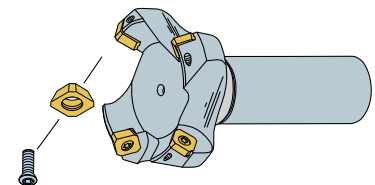
SECA 43 AFTN

P. 470

Parts

Screw	Wrench
FTNC 04511 146-424 - \$4.90	TW20S 147-216 - \$24.50

Assembling

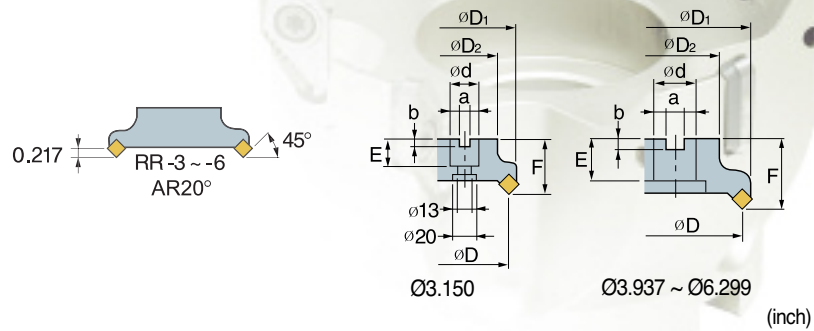
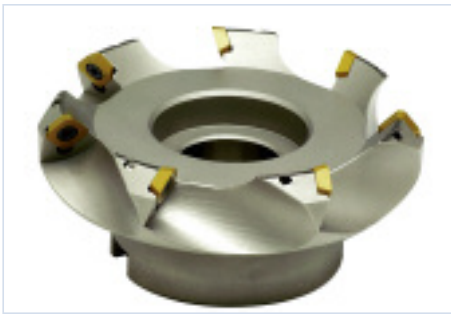


Recommended cutting condition

Work piece	Cutting Condition		Grade
	V(sfm)	f(ipt)	
P	490~980	.004~.012	Coated (PM10,25,30C ,PM30P) Uncoated (PM20U),PTM30U,PT20S
M	290~600	.004~.010	Coated (MM30P)
K	Alum 500~1000	.003~.012	Uncoated (KTM10U)



ECO SHEAR 45° Face Mill



Designation	Stock	Price \$	ØD	ØD ₁	ØD ₂	Ød	a	b	E	F		
ESFM	4150R	146-738	215.20	1.500	1.921	1.417	0.500	0.252	0.169	0.629	1.575	3
	4200R	146-739	215.20	2.000	2.440	1.772	0.750	0.321	0.220	0.787	1.575	4
	4250R	146-742	258.20	2.500	2.913	2.205	1.000	0.384	0.248	0.787	1.772	4
	4300R	146-743	301.20	3.000	3.465	2.205	1.000	0.384	0.248	0.866	1.969	5
	4400R	146-744	333.00	4.000	4.409	2.874	1.250	0.510	0.319	0.866	1.969	6
	4500R	146-745	370.70	5.000	5.385	3.386	1.500	0.636	0.394	1.181	2.480	7
	4600R	146-746	587.52	6.000	6.378	4.882	2.000	0.758	0.433	1.181	2.480	9

Available Insert

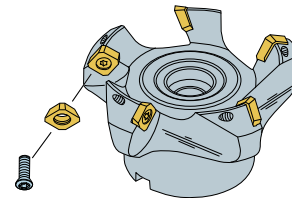
SECA	Designation
	SECA 43AFTN

P. 470

Parts

Screw	Wrench
FTNC 04511 146-424 - \$4.90	TW20S 147-216 - \$24.50

Assembling



Recommended cutting condition

Work piece	Cutting Condition		Grade
	V(sfm)	f(ipt)	
P	490~980	.004~.012	Coated (PM10,25,30C ,PM30P) Uncoated (PM20U),PTM30U,PT20S
M	290~600	.004~.010	Coated (MM30P)
K	Alum 500~1000	.003~.012	Uncoated (KTM10U)