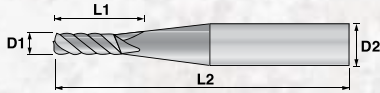


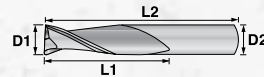
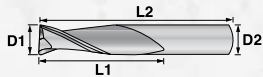
Solid Carbide End Mill Program - Square Nose

Square nose tools Series EMS / EIS with sharp corner or square nose tools Series EIB / EMB with corner radius, all with medium-high helix and strong cutting edges and tool body, work extremely well in materials up to 65HRc as well as in softer materials.



EIS - Square End

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.0004	Corner Radius	Shank Diameter (D2)	No. of Flutes	Neck Diameter	Cutting Length (L1)	Nose Taper	Overall Length (L2)
EIS-.020-	0.020	-	0.250 / (1/4)	3	0.020	0.060	7.500° / side	2.500
EIS-.031-	0.031 / (1/32)	-	0.250 / (1/4)	3	0.031	0.100	7.500° / side	2.500
EIS-.062-	0.062 / (1/16)	-	0.250 / (1/4)	4	0.062	0.200	7.500° / side	2.500
EIS-.093-	0.093 / (3/32)	-	0.250 / (1/4)	4	0.093	0.300	7.500° / side	2.500
EIS-.125-	0.125 / (1/8)	-	0.250 / (1/4)	5	0.125	0.375	7.500° / side	3.000
EIS-.187-	0.187 / (3/16)	-	0.250 / (1/4)	6	0.187	0.600	7.500° / side	3.000
EIS-.250-	0.250 / (1/4)	-	0.250 / (1/4)	6	0.250	0.750	-	3.000
EIS-.312-	0.312 / (5/16)	-	0.312 / (5/16)	6	0.312	1.000	-	3.500
EIS-.375-	0.375 / (3/8)	-	0.375 / (3/8)	6	0.375	1.125	-	3.500
EIS-.437-	0.437 / (7/16)	-	0.437 / (7/16)	6	0.437	1.315	-	4.000
EIS-.500-	0.500 / (1/2)	-	0.500 / (1/2)	6	0.500	1.500	-	4.000



EIS2 - 2 Flute Endmill, Square End

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.0006	Corner Radius (R1)	Shank Dia. (D2)	Cutting Length (L1)	Total Length (L2)	Nose Taper Per Side
EIS2-031-	1/32"	XX	0.125	0.094	1.500	7.5 Deg
EIS2-062-	1/16"	XX	0.125	0.250	1.500	7.5 Deg
EIS2-093-	3/32"	XX	0.125	0.375	1.500	7.5 Deg
EIS2-0125-	1/8"	XX	0.125	0.500	1.500	-
EIS2-0187-	3/16"	XX	0.187	0.625	2.000	-
EIS2-0250-	1/4"	XX	0.250	0.750	2.500	-
EIS2-0312-	5/16"	XX	0.312	0.750	2.500	-
EIS2-0375-	3/8"	XX	0.375	0.875	2.500	-
EIS2-0437-	7/16"	XX	0.437	0.875	2.500	-
EIS2-0500-	1/2"	XX	0.500	1.250	3.000	-
EIS2-0625-	5/8"	XX	0.625	1.250	3.500	-
EIS2-0750-	3/4"	XX	0.750	1.500	4.000	-
EIS2-0875-	7/8"	XX	0.875	1.500	4.000	-
EIS2-1000-	1"	XX	1.000	1.500	4.000	-

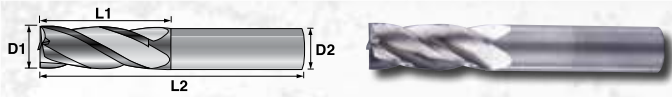
EIS2...LL - 2 Flute Long Series Endmill, Sq. End

Tool Ordering No.	Cutter Diameter (D1) tol. +0 / -0.0006	Corner Radius (R1)	Shank Diameter (D1)	Cutting Length (L1)	Total Length (L2)
EIS2-0125-LL	1/8"	XX	0.125	0.625	2.000
EIS2-0187-LL	3/16"	XX	0.187	1.000	3.000
EIS2-0250-LL	1/4"	XX	0.250	1.000	3.000
EIS2-0312-LL	5/16"	XX	0.312	1.000	3.000
EIS2-0375-LL	3/8"	XX	0.375	1.000	4.000
EIS2-0437-LL	7/16"	XX	0.437	1.000	4.000
EIS2-0500-LL	1/2"	XX	0.500	1.500	4.000
EIS2-0625-LL	5/8"	XX	0.625	2.000	6.000
EIS2-0750-LL	3/4"	XX	0.750	2.000	6.000
EIS2-1000-LL	1"	XX	1.000	2.000	6.000

All products on this page come in both TLN and HSN coatings.

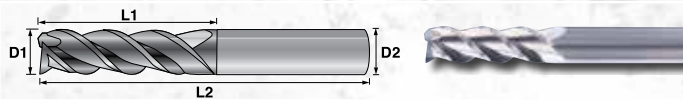
Example: EIS-.020-TLN

Solid Carbide End Mill Program - Square Nose continued



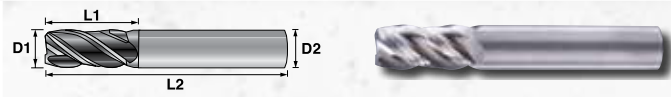
EIS4 - 4 Flute Endmill, Square End

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.0006	Corner Radius (R1)	Shank Dia. (D1)	Cutting Length (L1)	Total Length (L2)	Nose Taper Per Side
EIS4-031-	1/32"	XX	0.125	0.094	1.500	7.5 Deg
EIS4-062-	1/16"	XX	0.125	0.250	1.500	7.5 Deg
EIS4-093-	3/32"	XX	0.125	0.375	1.500	7.5 Deg
EIS4-0125-	1/8"	XX	0.125	0.500	1.500	-
EIS4-0187-	3/16"	XX	0.187	0.625	2.000	-
EIS4-0250-	1/4"	XX	0.250	0.750	2.500	-
EIS4-0312-	5/16"	XX	0.312	0.750	2.500	-
EIS4-0375-	3/8"	XX	0.375	0.875	2.500	-
EIS4-0437-	7/16"	XX	0.437	0.875	2.500	-
EIS4-0500-	1/2"	XX	0.500	1.250	3.000	-
EIS4-0625-	5/8"	XX	0.625	1.250	3.500	-
EIS4-0750-	3/4"	XX	0.750	1.500	4.000	-
EIS4-0875-	7/8"	XX	0.875	1.500	4.000	-



AlumiSTAR EISA - 3 Flute Endmill 45° - Aluminum

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.0006	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EISA-0125-	1/8"	XX	0.125	0.500	1.500
EISA-0187-	3/16"	XX	0.187	0.625	2.000
EISA-0250-	1/4"	XX	0.250	0.750	2.500
EISA-0312-	5/16"	XX	0.312	0.750	2.500
EISA-0375-	3/8"	XX	0.375	0.875	2.500
EISA-0437-	7/16"	XX	0.437	0.875	2.500
EISA-0500-	1/2"	XX	0.500	1.250	3.000
EISA-0625-	5/8"	XX	0.625	1.250	3.500
EISA-0750-	3/4"	XX	0.750	1.500	4.000
EISA-1000-	1"	XX	1.000	1.500	4.000



EIS4...LL - 4 Flute Long Series Endmill, Sq. End

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.0006	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EIS4-0125-LL-	1/8"	XX	0.125	0.625	2.000
EIS4-0187-LL-	3/16"	XX	0.187	1.000	3.000
EIS4-0250-LL-	1/4"	XX	0.250	1.000	3.000
EIS4-0312-LL-	5/16"	XX	0.312	1.000	3.000
EIS4-0375-LL-	3/8"	XX	0.375	1.000	4.000
EIS4-0437-LL-	7/16"	XX	0.437	1.000	4.000
EIS4-0500-LL-	1/2"	XX	0.500	1.500	4.000
EIS4-0625-LL-	5/8"	XX	0.625	2.000	6.000
EIS4-0750-LL-	3/4"	XX	0.750	2.000	6.000
EIS4-1000-LL-	1"	XX	1.000	2.000	6.000



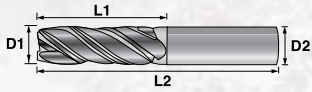
EIV4 - 4 Flute Variable Fluted Endmill, Square End w/45° Chamfer

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.0006	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EIV4-0125-	1/8"	XX	0.125	0.500	1.500
EIV4-0187-	3/16"	XX	0.187	0.625	2.00
EIV4-0250-	1/4"	XX	0.250	0.750	2.500
EIV4-0312-	5/16"	XX	0.312	0.750	2.500
EIV4-0375-	3/8"	XX	0.375	0.875	2.500
EIV4-0437-	7/16"	XX	0.437	0.875	2.500
EIV4-0500-	1/2"	XX	0.500	1.250	3.000
EIV4-0625-	5/8"	XX	0.625	1.250	3.500
EIV4-0750-	3/4"	XX	0.750	1.500	4.000
EIV4-1000-	1"	XX	1.000	1.500	4.000

All products on this page come in both TLN and HSN coatings.

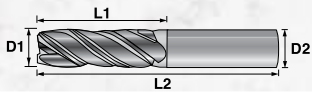
Example: EISA-.0125-TLN

Solid Carbide End Mill Program - Square Nose continued



EIV5 - 5 Flute Variable Flute, Variable Helix Endmill, Square End

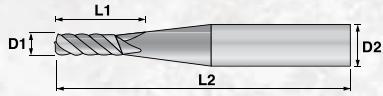
Tool Ordering No.	Cutter Dia. (D1) tol. +0/-0.001	Corner Radius (R1)	No. of Flutes	Shank Dia. (D2)	Cutting Length (L1)	Total Length (L2)
EIV5-.125-HSN	0.125	XX	5	0.125	0.313	1.500
EIV5-.125-.250-HSN	0.125	XX	5	0.250	0.313	3.000
EIV5-.250-HSN	0.250	XX	5	0.250	0.625	2.500
EIV5-.375-HSN	0.375	XX	5	0.375	0.938	2.500
EIV5-.500-HSN	0.500	XX	5	0.500	1.250	3.000
EIV5-.625-HSN	0.625	XX	5	0.625	1.563	3.500



EIV5 - 5 Flute Variable Flute, Variable Helix Endmill, With Corner Radius

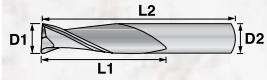
Tool Ordering No.	Cutter Dia. (D1) tol. +0/-0.001	Corner Radius (R1)	No. of Flutes	Shank Dia. (D2)	Cutting Length (L1)	Total Length (L2)
EIV5-.125-.015-HSN	0.125	0.015	5	0.125	0.313	1.500
EIV5-.250-.015-HSN	0.250	0.015	5	0.250	0.625	2.500
EIV5-.250-.030-HSN	0.250	0.030	5	0.250	0.625	2.500
EIV5-.375-.015-HSN	0.375	0.015	5	0.375	0.938	2.500
EIV5-.375-.030-HSN	0.375	0.030	5	0.375	0.938	2.500
EIV5-.500-.015-HSN	0.500	0.015	5	0.500	1.250	3.000
EIV5-.500-.030-HSN	0.500	0.030	5	0.500	1.250	3.000
EIV5-.500-.060-HSN	0.500	0.060	5	0.500	1.250	3.000
EIV5-.625-.015-HSN	0.625	0.015	5	0.625	1.563	3.500
EIV5-.625-.030-HSN	0.625	0.030	5	0.625	1.563	3.500
EIV5-.625-.060-HSN	0.625	0.060	5	0.625	1.563	3.500

Solid Carbide End Mill Program - Square Nose



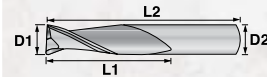
EMS - Square End

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.01	Corner Radius	Shank Diameter (D2)	No. of Flutes	Neck Diameter	Cutting Length (L1)	Nose Taper	Overall Length (L2)
EMS-0.5	0,5	-	6	3	0,5	1,5	7.5° / side	63
EMS-1.0	1	-	6	4	1	3	7.5° / side	63
EMS-1.5	1,5	-	6	4	1,5	4,5	7.5° / side	63
EMS-2.0	2	-	6	4	2,0	6	7.5° / side	63
EMS-3.0	3	-	6	5	3,0	9	7.5° / side	75
EMS-4.0	4	-	6	6	4,0	12	7.5° / side	75
EMS-5.0	5	-	6	6	5	15	-	75
EMS-6.0	6	-	6	6	6	18	-	75
EMS-8.0	8	-	8	6	8	24	-	90
EMS-10.0	10	-	10	6	10	30	-	100
EMS-12.0	12	-	12	6	12	36	-	100
EMS-16.0	16	-	16	6	16	48	-	100



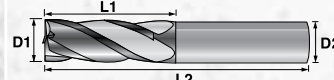
EMS2 - 2 Flute Endmill, Square End

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D1)	Cutting Length (L1)	Total Length (L2)
EMS2-01-	1*	XX	3,000	4	38
EMS2-02-	2*	XX	3,000	8	38
EMS2-03-	3	XX	3,000	12	38
EMS2-04-	4	XX	4,000	14	50
EMS2-06-	6	XX	6,000	19	63
EMS2-08-	8	XX	8,000	22	63
EMS2-10-	10	XX	10,000	25	63
EMS2-12-	12	XX	12,000	25	76
EMS2-16-	16	XX	16,000	38	92
EMS2-20-	20	XX	20,000	38	101



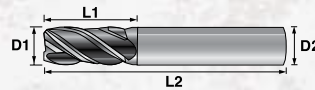
EMS2...LL - 2 Flute Long Series Endmill, Sq. End

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EMS2-03-LL-	3	XX	3	16	50
EMS2-04-LL-	4	XX	4	20	76
EMS2-06-LL-	6	XX	6	25	76
EMS2-08-LL-	8	XX	8	25	76
EMS2-10-LL-	10	XX	10	25	101
EMS2-12-LL-	12	XX	12	25	101
EMS2-16-LL-	16	XX	16	50	152
EMS2-20-LL-	20	XX	20	50	152



EMS4 - 4 Flute Endmill, Square End

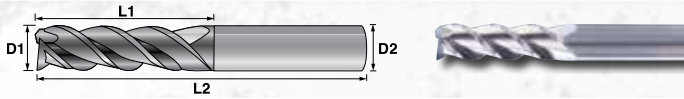
Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EMS4-03-	3	XX	3,000	12	38
EMS4-04-	4	XX	4,000	14	50
EMS4-06-	6	XX	6,000	19	63
EMS4-08-	8	XX	8,000	22	63
EMS4-10-	10	XX	10,000	25	63
EMS4-12-	12	XX	12,000	25	76
EMS4-16-	16	XX	16,000	38	92
EMS4-20-	20	XX	20,000	38	101



EMS4...LL - 4 Flute Long Series Endmill, Sq. End

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EMS4-03-LL-	3	XX	3	16	50
EMS4-04-LL-	4	XX	4	20	76
EMS4-06-LL-	6	XX	6	25	76
EMS4-08-LL-	8	XX	8	25	76
EMS4-10-LL-	10	XX	10	25	101
EMS4-12-LL-	12	XX	12	25	101
EMS4-16-LL-	16	XX	16	50	152
EMS4-20-LL-	20	XX	20	50	152

Solid Carbide End Mill Program - Square Nose continued



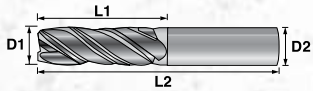
AlumiSTAR EMSA - 3 Flute Endmill, 45° - Aluminum

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EMSA-04-	4	XX	4,000	14	50
EMSA-06-	6	XX	6,000	19	63
EMSA-08-	8	XX	8,000	22	63
EMSA-10-	10	XX	10,000	25	63
EMSA-12-	12	XX	12,000	25	76
EMSA-16-	16	XX	16,000	38	92
EMSA-20-	20	XX	20,000	38	101



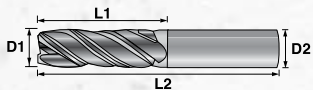
EMV4 - 4 Flute Variable Fluted Endmill, Square End w/45° Chamfer

Tool Ordering No.	Cutter Diameter (D1) tol. +0/-0.015	Corner Radius (R1)	Shank Diameter (D2)	Cutting Length (L1)	Total Length (L2)
EMV4-03-	3	XX	3	16	38
EMV4-04-	4	XX	4	20	50
EMV4-06-	6	XX	6	25	63
EMV4-08-	8	XX	8	25	63
EMV4-10-	10	XX	10	25	63
EMV4-12-	12	XX	12	25	76
EMV4-16-	16	XX	16	50	92
EMV4-20-	20	XX	20	50	101



EMV5 - 5 Flute Variable Flute, Variable Helix Endmill, Square End

Tool Ordering No.	Cutter Dia. (D1) tol. +0/-0.001	Corner Radius (R1)	No. of Flutes	Shank Dia. (D2)	Cutting Length (L1)	Total Length (L2)
EMV5-3.0-HSN	3,0	XX	5	3,0	7,5	38
EMV5-4.0-HSN	4,0	XX	5	4,0	10,0	50
EMV5-6.0-HSN	6,0	XX	5	6,0	15,0	63
EMV5-8.0-HSN	8,0	XX	5	8,0	20,0	63
EMV5-10.0-HSN	10,0	XX	5	10,0	25,0	63
EMV5-12.0-HSN	12,0	XX	5	12,0	30,0	76
EMV5-16.0-HSN	16,0	XX	5	16,0	40,0	100



EMV5 - 5 Flute Variable Flute, Variable Helix Endmill, With Corner Radius

Tool Ordering No.	Cutter Dia. (D1) tol. +0/-0.001	Corner Radius (R1)	No. of Flutes	Shank Dia. (D2)	Cutting Length (L1)	Total Length (L2)
EMV5-3.0-0.5-HSN	3,0	0,5	5	3,0	7,5	38
EMV5-4.0-0.5-HSN	4,0	0,5	5	4,0	10,0	50
EMV5-6.0-0.5-HSN	6,0	0,5	5	6,0	15,0	63
EMV5-6.0-1.0-HSN	6,0	1,0	5	6,0	15,0	63
EMV5-8.0-0.5-HSN	8,0	0,5	5	8,0	20,0	63
EMV5-8.0-1.0-HSN	8,0	1,0	5	8,0	20,0	63
EMV5-10.0-0.5-HSN	10,0	0,5	5	10,0	25,0	63
EMV5-10.0-1.0-HSN	10,0	1,0	5	10,0	25,0	63
EMV5-12.0-0.5-HSN	12,0	0,5	5	12,0	30,0	76
EMV5-12.0-1.0-HSN	12,0	1,0	5	12,0	30,0	76
EMV5-16.0-0.5-HSN	16,0	0,5	5	16,0	40,0	100
EMV5-16.0-1.0-HSN	16,0	1,0	5	16,0	40,0	100