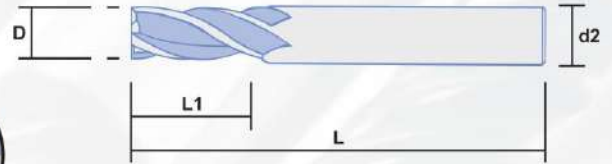


YS - Solid Carbide Endmill

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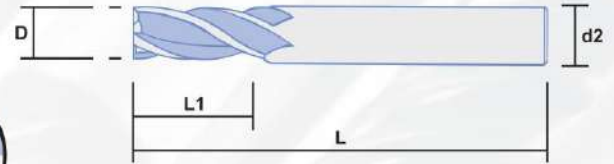


CARBIDE MG	HELIX ANGLE 35°	COATING UNCOATED	HRC <50	FLUTES 2
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Item Code	D (h6)	L1	L	d2(h6)
MDWW-0010	0.10	0.2	39	4
MDWW-0015	0.15	0.3	39	4
MDWW-0020	0.20	0.4	50	4
MDWW-0025	0.25	0.5	50	4
MDWW-0030	0.30	0.9	50	4
MDWW-0035	0.35	1.0	50	4
MDWW-0040	0.40	1.0 / 1.2	50	4
MDWW-0045	0.45	0.8 / 1.0	50	4
MDWW-0050	0.5	1.5	50	4
MDWW-0060	0.6	1.5 / 1.8	50	4
MDWW-0070	0.7	2.0	50	4
MDWW-0080	0.8	2.0 / 2.5	50	4
MDWW-0090	0.9	2.5	50	4
352WW-010	1.0	3.0	50	4
352WW-015	1.5	4.5	50	4
352WW-020J	2.0	6.0	50	2
352WW-020	2.0	6.0	50	4
352WW-025	2.5	7.0	50	4
352WW-030C	3.0	9.0	50	3
352WW-030F	3.0	9.0	50	4
352WW-030	3.0	9.0	50	6
352WW-035	3.5	12.0	50	6
352WW-035F	3.5	12.0	50	4
352WW-040F	4.0	12.0	50	4
352WW-040	4.0	12.0	50	6
352WW-045	4.5	13.0	50	6
352WW-050	5.0	14.0	50	6
352WW-050K	5.0	14.0	50	5
352WW-055	5.5	16.0	50	6
352WW-060	6.0	16.0	50	6
352WW-065	6.5	20.0	60	8
352WW-070	7.0	20.0	60	8
352WW-075	7.5	20.0	60	8
352WW-080	8.0	20.0	60	8
352WW-085	8.5	25.0	75	10
352WW-090	9.0	25.0	75	10
352WW-095	9.5	25.0	75	10
352WW-100	10.0	25.0	75	10
352WW-105	10.5	30.0	75	12
352WW-110	11.0	30.0	75	12
352WW-115	11.5	30.0	75	12
352WW-120	12.0	30.0	75	12
352WW-140	14.0	40.0	100	16
352WW-160	16.0	40.0	100	16
352WW-180	18.0	40.0	100	18
352WW-200	20.0	45.0	100	20
352WW-250	25.0	50.0	100	25

YS - Solid Carbide Endmill

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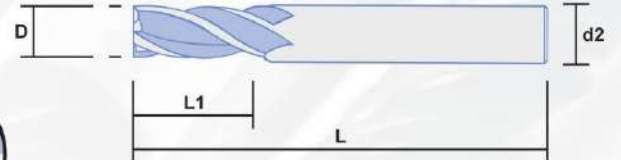


CARBIDE MG	HELIX ANGLE 35°	COATING TIALN	HRC <50	FLUTES 2
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Item Code	D (h6)	L1	L	d2(h6)
MD-0010	0.10	0.2	39	4
MD-0015	0.15	0.3	39	4
MD-0020	0.20	0.4	50	4
MD-0025	0.25	0.5	50	4
MD-0030	0.30	0.9	50	4
MD-0035	0.35	1.0	50	4
MD-0040	0.40	1.0 / 1.2	50	4
MD-0045	0.45	0.8 / 1.0	50	4
MD-0050	0.5	1.5	50	4
MD-0060	0.6	1.5 / 1.8	50	4
MD-0070	0.7	2.0	50	4
MD-0080	0.8	2.0 / 2.5	50	4
MD-0090	0.9	2.5	50	4
352-010	1.0	3.0	50	4
352-015	1.5	4.5	50	4
352-020J	2.0	6.0	50	2
352-020	2.0	6.0	50	4
352-025	2.5	7.0	50	4
352-030C	3.0	9.0	50	3
352-030F	3.0	9.0	50	4
352-030	3.0	9.0	50	6
352-035	3.5	12.0	50	6
352-035F	3.5	12.0	50	4
352-040F	4.0	12.0	50	4
352-040	4.0	12.0	50	6
352-045	4.5	13.0	50	6
352-050	5.0	14.0	50	6
352-050K	5.0	14.0	50	5
352-055	5.5	16.0	50	6
352-060	6.0	16.0	50	6
352-065	6.5	20.0	60	8
352-070	7.0	20.0	60	8
352-075	7.5	20.0	60	8
352-080	8.0	20.0	60	8
352-085	8.5	25.0	75	10
352-090	9.0	25.0	75	10
352-095	9.5	25.0	75	10
352-100	10.0	25.0	75	10
352-105	10.5	30.0	75	12
352-110	11.0	30.0	75	12
352-115	11.5	30.0	75	12
352-120	12.0	30.0	75	12
352-140	14.0	40.0	100	16
352-160	16.0	40.0	100	16
352-180	18.0	40.0	100	18
352-200	20.0	45.0	100	20
352-250	25.0	50.0	100	25

YS - Solid Carbide Endmill

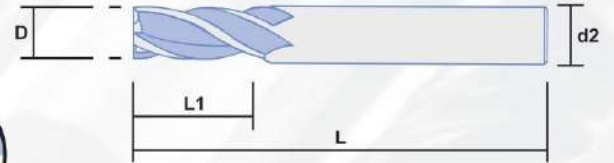
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CARBIDE MG	HELIX ANGLE 35°	COATING UNCOATED	HRC <50	FLUTES 4
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Item Code	D (h6)	L1	L	d2(h6)
354WW-010	1.0	3.0	50	4
354WW-010B	1.0	5.3	50	4
354WW-015	1.5	4.5	50	4
354WW-020J	2.0	4.5	50	2
354WW-020	2.0	6.0	50	4
354WW-025	2.5	7.0	50	4
354WW-030C	3.0	9.0	50	3
354WW-030F	3.0	9.0	50	4
354-WW030	3.0	9.0	50	6
354WW-035	3.5	12.0	50	6
354WW-035F	3.5	12.0	50	4
354WW-040F	4.0	12.0	50	4
354WW-040	4.0	12.0	50	6
354WW-045	4.5	13.0	50	6
354WW-050	5.0	14.0	50	6
354WW-050K	5.0	14.0	50	5
354WW-055	5.5	16.0	50	6
354WW-060	6.0	16.0	50	6
354WW-065	6.5	20.0	60	8
354WW-070	7.0	20.0	60	8
354WW-075	7.5	20.0	60	8
354WW-080B	8.0	24.0	60	8
354WW-085	8.5	25.0	75	10
354WW-090	9.0	25.0	75	10
354WW-095	9.5	25.0	75	10
354WW-100B	10.0	30.0	75	10
354WW-105	10.5	30.0	75	12
354WW-110	11.0	30.0	75	12
354WW-115	11.5	30.0	75	12
354WW-120B	12.0	35.0	75	12
354WW-140	14.0	40.0	100	16
354WW-160	16.0	40.0	100	16
354WW-180	18.0	40.0	100	18
354WW-200	20.0	45.0	100	20
354WW-250	25.0	50.0	100	25

YS - Solid Carbide Endmill



CARBIDE MG	HELIX ANGLE 35°	COATING TiALN	HRC <50	FLUTES 4
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Item Code	D (h6)	L1	L	d2(h6)
354-010	1.0	3.0	50	4
354-010B	1.0	5.3	50	4
354-015	1.5	4.5	50	4
354-020J	2.0	4.5	50	2
354-020	2.0	6.0	50	4
354-025	2.5	7.0	50	4
354-030C	3.0	9.0	50	3
354-030F	3.0	9.0	50	4
354-030	3.0	9.0	50	6
354-035	3.5	12.0	50	6
354-035F	3.5	12.0	50	4
354-040F	4.0	12.0	50	4
354-040	4.0	12.0	50	6
354-045	4.5	13.0	50	6
354-050	5.0	14.0	50	6
354-050K	5.0	14.0	50	5
354-055	5.5	16.0	50	6
354-060	6.0	16.0	50	6
354-065	6.5	20.0	60	8
354-070	7.0	20.0	60	8
354-075	7.5	20.0	60	8
354-080B	8.0	24.0	60	8
354-085	8.5	25.0	75	10
354-090	9.0	25.0	75	10
354-095	9.5	25.0	75	10
354-100B	10.0	30.0	75	10
354-105	10.5	30.0	75	12
354-110	11.0	30.0	75	12
354-115	11.5	30.0	75	12
354-120B	12.0	35.0	75	12
354-140	14.0	40.0	100	16
354-160	16.0	40.0	100	16
354-180	18.0	40.0	100	18
354-200	20.0	45.0	100	20
354-250	25.0	50.0	100	25

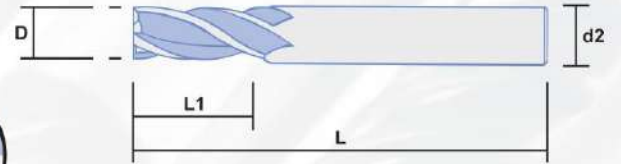
CARBIDE UF	HELIX ANGLE 45°	COATING TiALN	HRC <50	FLUTES 4
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*** New Product**
ROUGHING PURPOSE

Item Code	D (h6)	L1	L	d2(h6)
SP454-060	6.0	16.0	50	6
SP454-080	8.0	20.0	60	8
SP454-100	10.0	25.0	75	10
SP454-120	12.0	30.0	75	12

YS - Long Series Carbide Endmill

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CARBIDE MG	HELIX ANGLE 35°	COATING UNCOATED	HRC <50	FLUTES 2&4
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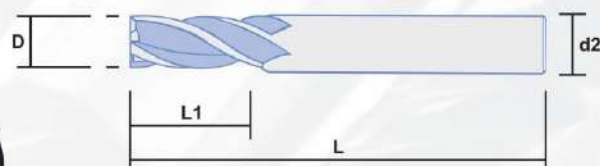
Item Code	D (h6)	L1	L	d2(h6)
35L2WW/35L4WW-010	1.0	7.0	50	4
35L2WW/35L4WW-015	1.5	9.0	50	4
35L2WW/35L4WW-020	2.0	12.0	50	4
35L2WW/35L4WW-025	2.5	15.0	50	4
35L2WW/35L4WW-030	3.0	20.0	60	3 / 6
35L2WW/35L4WW-040	4.0	25.0	75	4 / 6
35L2WW/35L4WW-050	5.0	30.0	75	6
35L2WW/35L4WW-060	6.0	35.0	75	6
35L2WW/35L4WW-070	7.0	40.0	100	8
35L2WW/35L4WW-080	8.0	40.0	100	8
35L2WW/35L4WW-100	10.0	45.0	100	10
35L2WW/35L4WW-120	12.0	75.0	100	12
35L2WW/35L4WW-140	14.0	75.0	150	16
35L2WW/35L4WW-160	16.0	75.0	150	16
35L2WW/35L4WW-180	18.0	75.0	150	20
35L2WW/35L4WW-200	20.0	75.0	150	20
35L2WW/35L4WW-220	22.0	75.0	150	25
35L2WW/35L4WW-250	25.0	75.0	150	25

CARBIDE MG	HELIX ANGLE 35°	COATING TiALN	HRC <50	FLUTES 2&4
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Item Code	D (h6)	L1	L	d2(h6)
35L2/35L4-010	1.0	7.0	50	4
35L2/35L4-015	1.5	9.0	50	4
35L2/35L4-020	2.0	12.0	50	4
35L2/35L4-025	2.5	15.0	50	4
35L2/35L4-030	3.0	20.0	60	3 / 6
35L2/35L4-040	4.0	25.0	75	4 / 6
35L2/35L4-050	5.0	30.0	75	6
35L2/35L4-060	6.0	35.0	75	6
35L2/35L4-070	7.0	40.0	100	8
35L2/35L4-080	8.0	40.0	100	8
35L2/35L4-100	10.0	45.0	100	10
35L2/35L4-120	12.0	75.0	100	12
35L2/35L4-140	14.0	75.0	150	16
35L2/35L4-160	16.0	75.0	150	16
35L2/35L4-180	18.0	75.0	150	20
35L2/35L4-200	20.0	75.0	150	20
35L2/35L4-220	22.0	75.0	150	25
35L2/35L4-250	25.0	75.0	150	25

YS - Solid Carbide Endmill

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Item Code	D (h6)	L1	L	d2(h6)
453WW-010C	1.0	3	50	3
453WW-010	1.0	4	50	4
453WW-015C	1.5	6	50	3
453WW-015F	1.5	6	50	4
453WW-020F	2.0	8	50	4
453WW-025F	2.5	10	50	4
453WW-030C	3.0	12	50	3
453WW-030F	3.0	13	50	4
453WW-040F	4.0	13	50	4
453WW-050K	5.0	16	50	5
453WW-050	5.0	16	50	6
453WW-055	5.5	20	50	6
453WW-060B	6.0	20	50	6
453WW-065	6.5	20	60	8
453WW-070	7.0	20	60	8
453WW-080B	8.0	25	60	8
453WW-085	8.0	25	75	10
453WW-090	9.0	25	75	10
453WW-095	9.5	25	75	10
453WW-100B	10.0	30	75	10
453WW-105	10.5	30	75	12
453WW-110	11.0	30	75	12
453WW-120B	12.0	40	75	12
453WW-130	13.0	40	100	16
453WW-140	14.0	40	100	16
453WW-150	15.0	40	100	16
453WW-160B	16.0	40	100	16
453WW-180	18.0	45	100	18
453WW-200	20.0	50	100	20
453WW-220	22.0	50	100	22
453WW-250	25.0	50	100	25

YS - Solid Carbide Endmill

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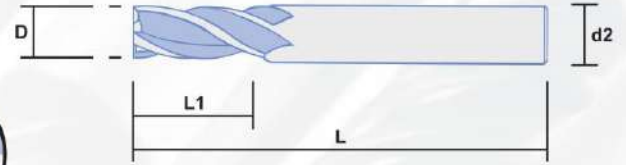


CARBIDE MG	HELIX ANGLE 45°	COATING TiALN	HRC <50	FLUTES 3
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Item Code	D (h6)	L1	L	d2(h6)
453-010C	1.0	3	50	3
453-010	1.0	4	50	4
453-015C	1.5	6	50	3
453-015F	1.5	6	50	4
453-020F	2.0	8	50	4
453-025F	2.5	10	50	4
453-030C	3.0	12	50	3
453-030F	3.0	13	50	4
453-040F	4.0	13	50	4
453-050K	5.0	16	50	5
453-050	5.0	16	50	6
453-055	5.5	20	50	6
453-060B	6.0	20	50	6
453-065	6.5	20	60	8
453-070	7.0	20	60	8
453-080B	8.0	25	60	8
453-085	8.0	25	75	10
453-090	9.0	25	75	10
453-095	9.5	25	75	10
453-100B	10.0	30	75	10
453-105	10.5	30	75	12
453-110	11.0	30	75	12
453-120B	12.0	40	75	12
453-130	13.0	40	100	16
453-140	14.0	40	100	16
453-150	15.0	40	100	16
453-160B	16.0	40	100	16
453-180	18.0	45	100	18
453-200	20.0	50	100	20
453-220	22.0	50	100	22
453-250	25.0	50	100	25

YS - High Performance Carbide Endmill

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 CARBIDE UF	 HELIX ANGLE 35°	 COATING ICE	 HRC <50	 FLUTES 2&4
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Item Code	D (h6)	L1	L	d2(h6)
DK502/DK504-010	1.0	3.0	50	4
DK502/DK504-015	1.5	4.5	50	4
DK502/DK504-020	2.0	6.0	50	4
DK502/DK504-025	2.5	7.0	50	4
DK502/DK504-030F	3.0	9.0	50	4
DK502/DK504-040F	4.0	12.0	50	4
DK502/DK504-050	5.0	14.0	50	6
DK502/DK504-060	6.0	16.0	50	6
DK502/DK504-070	7.0	20.0	60	8
DK502/DK504-080	8.0	20.0	60	8
DK502/DK504-100	10.0	25.0	75	10
DK502/DK504-120	12.0	30.0	75	12
DK502/DK504-140	14.0	40.0	100	16
DK502/DK504-160	16.0	40.0	100	16
DK502/DK504-180	18.0	45.0	100	20
DK502/DK504-200	20.0	45.0	100	20
DK502/DK504-220	22.0	45.0	100	25
DK502/DK504-250	25.0	50.0	100	25

 CARBIDE UF	 HELIX ANGLE 35°	 COATING EX	 HRC <60	 FLUTES 2&4
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Item Code	D (h6)	L1	L	d2(h6)
EX502/EX504-010	1.0	3.0	50	4
EX502/EX504-015	1.5	4.5	50	4
EX502/EX504-020	2.0	6.0	50	4
EX502/EX504-025	2.5	7.0	50	4
EX502/EX504-030F	3.0	9.0	50	4
EX502/EX504-040F	4.0	12.0	50	4
EX502/EX504-050	5.0	14.0	50	6
EX502/EX504-060	6.0	16.0	50	6
EX502/EX504-070	7.0	20.0	60	8
EX502/EX504-080	8.0	20.0	60	8
EX502/EX504-100	10.0	25.0	75	10
EX502/EX504-120	12.0	30.0	75	12
EX502/EX504-140	14.0	40.0	100	16
EX502/EX504-160	16.0	40.0	100	16
EX502/EX504-180	18.0	45.0	100	20
EX502/EX504-200	20.0	45.0	100	20
EX502/EX504-220	22.0	45.0	100	25
EX502/EX504-250	25.0	50.0	100	25