

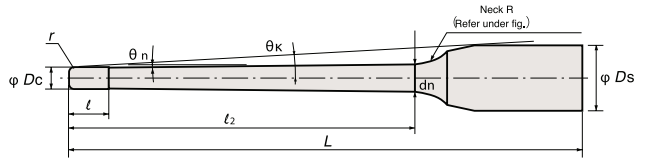
# END MILL

ดอกเอ็นมิลล์

DEEP SERIES  
ตระกูลดีพี



## ดอกเอ็นมิลล์ EPOCH TURBO RIB ETRP4-TH



DEEP SERIES  
เอ็นมิลล์ตระกูลดีพี

CBN END MILL  
CBN เอ็นมิลล์

Carbide Endmill  
เอ็นมิลล์คาร์ไบด์

HSS Endmill  
เอ็นมิลล์ไฮสปีด

Ball  
หัวบอล

Radius  
หัวกึ่งกลม R

Square  
หัวสี่

Taper Ball  
หัวตaperบอล

Roughing

Pencil Neck



±0.01



h5 0~-0.005

(mm)

Suppresses chattering to enable deeper, faster machining.

Order No.	Stock	Size (mm)											The effective under-neck length for the various draft angles				
		Dc Mill Dia.	r Corner radius	l2 Under Neck Length	θn Neck angle	l Flute Length	D1 Neck Dia.	L Overall length	Ds shank Dia.	Neck R	θk Interference Angle	0.5°	1°	1.5°	2°	3°	
ETRP4010-5-0902-TH	●			5			1.066	60		4	8.67	2.91	5.70	5.96	6.17	6.51	
ETRP4010-7.5-0902-TH	★			7.5			1.144	60		7	7.61	2.91	8.50	8.97	9.34	9.93	
ETRP4010-10-0902-TH	●			10			1.223	60		7	6.78	2.91	11.04	11.60	12.03	12.70	
ETRP4010-15-0902-TH	●			15			1.380	60			5.57	2.91	16.35	17.25	17.89	18.89	
ETRP4010-20-0902-TH	●			20			1.537	70			4.72	2.91	21.42	22.49	23.22	24.80	
ETRP4010-25-0902-TH	●			25			1.694	70			4.10	2.91	26.49	27.70	28.52	30.95	
ETRP4010-30-0902-TH	●	1	0.2	30	0.9	1	1.851	80	6	10	3.62	2.91	31.55	32.90	33.79	37.09	
ETRP4010-35-0902-TH	●			35			2.008	80			3.24	2.91	36.61	38.08	39.03	43.24	
ETRP4010-40-0902-TH	●			40			2.165	90			2.94	2.91	41.67	43.25	44.54	No interference	
ETRP4010-45-0902-TH	●			45			2.322	90			2.68	2.91	46.73	48.41	50.08	No interference	
ETRP4010-50-0902-TH	●			50			2.480	100			2.47	2.91	51.78	53.56	55.62	No interference	
ETRP40125-10-0902-TH	●			10			1.455	60		7	6.62	3.47	11.10	11.65	12.06	12.73	
ETRP40125-15-0902-TH	★			15			1.612	60			5.41	3.47	16.42	17.29	17.92	18.91	
ETRP40125-20-0902-TH	●			20			1.769	70			4.57	3.47	21.49	22.52	23.25	24.86	
ETRP40125-30-0902-TH	●	1.25	0.2	30	0.9	1.25	2.083	80	6	10	3.49	3.47	31.61	32.93	33.81	37.15	
ETRP40125-40-0902-TH	●			40			2.397	90			2.82	3.47	41.73	43.28	44.59	No interference	
ETRP40125-50-0902-TH	●			50			2.712	100			2.37	3.47	51.83	53.59	55.67	No interference	
ETRP4015-10-0903-TH	●			10			1.687	60		7	6.47	4.04	11.15	11.67	12.08	12.74	
ETRP4015-15-0903-TH	★			15			1.844	60			5.26	4.04	16.21	16.89	17.40	18.73	
ETRP4015-20-0903-TH	●			20			2.001	70			4.43	4.04	21.54	22.55	23.27	24.88	
ETRP4015-30-0903-TH	●	1.5	0.3	30	0.9	1.5	2.315	80	6	10	3.36	4.04	31.66	32.95	33.83	37.17	
ETRP4015-40-0903-TH	●			40			2.630	90			2.71	4.04	41.77	43.30	44.62	No interference	
ETRP4015-50-0903-TH	●			50			2.944	100			2.24	4.04	51.88	53.60	55.70	No interference	
ETRP40175-10-0903-TH	●			10			1.909	60		7	6.28	4.93	11.24	11.74	12.13	12.77	
ETRP40175-15-0903-TH	★			15			2.066	60			5.07	4.93	16.29	16.95	17.44	18.82	
ETRP40175-20-0903-TH	●			20			2.223	70			4.26	4.93	21.64	22.61	23.32	24.97	
ETRP40175-30-0903-TH	●	1.75	0.3	30	0.9	1.75	2.538	80	6	10	3.22	4.93	31.75	33.00	33.86	37.26	
ETRP40175-40-0903-TH	●			40			2.852	90			2.59	4.93	41.86	43.34	44.70	No interference	
ETRP40175-50-0903-TH	●			50			3.166	100			2.16	4.93	51.95	53.64	55.78	No interference	
ETRP4020-15-0905-TH	●			15			2.328	60		7	4.95	4.54	16.23	16.91	17.40	18.72	
ETRP4020-20-0905-TH	●			20			2.486	70			4.12	4.54	21.29	22.10	22.67	24.86	
ETRP4020-25-0905-TH	●			25			2.643	70			3.54	4.54	26.63	27.77	28.57	31.01	
ETRP4020-30-0905-TH	●			30			2.800	80			3.1	4.54	31.69	32.96	33.83	37.16	
ETRP4020-35-0905-TH	●	2	0.5	35	0.9	2	2.957	80	6	10	2.75	4.54	36.75	38.14	39.09	No interference	
ETRP4020-40-0905-TH	●			40			3.114	90			2.48	4.54	41.80	43.31	44.63	No interference	
ETRP4020-45-0905-TH	●			45			3.271	90			2.25	4.54	46.85	48.46	50.17	No interference	
ETRP4020-50-0905-TH	●			50			3.428	100			2.07	4.54	51.90	53.61	55.71	No interference	
ETRP4020-55-0905-TH	●			55			3.585	100			1.91	4.54	56.95	58.75	No interference	No interference	
ETRP4020-60-0905-TH	●			60			3.742	110			1.77	4.54	62.00	63.89	No interference	No interference	
ETRP4025-20-0905-TH	●			20			2.950	70		7	3.76	5.68	21.39	22.16	22.72	24.98	
ETRP4025-30-0905-TH	●			30			3.264	80			2.79	5.68	31.80	33.02	33.88	No interference	
ETRP4025-40-0905-TH	●	2.5	0.5	40	0.9	2.5	3.578	90	6	10	2.22	5.68	41.90	43.36	44.73	No interference	
ETRP4025-50-0905-TH	●			50			3.892	100			1.85	5.68	52.00	53.66	No interference	No interference	
ETRP4025-60-0905-TH	●			60			4.207	110			1.58	5.68	62.09	63.93	No interference	No interference	
ETRP4030-20-0908-TH	●			20			3.394	70		7	3.39	7.45	21.50	22.22	22.76	25.05	
ETRP4030-30-0908-TH	●			30			3.708	80			2.49	7.45	31.59	32.54	33.74	No interference	
ETRP4030-40-0908-TH	●	3	0.8	40	0.9	3	4.022	90	6	10	1.96	7.45	42.03	43.42	No interference	No interference	
ETRP4030-50-0908-TH	●			50			4.337	100			1.62	7.45	52.12	53.72	No interference	No interference	
ETRP4030-60-0908-TH	●			60			4.651	110			1.37	7.45	62.20	No interference	No interference	No interference	

★: Stocked Items of New Products. ●: Stocked item