

ESTNR20 SERIES

Workpiece				Carbon Steels, Alloy Steels (180-250HB)		Prehardened Steels (HRc35-45)		Hardened Steels (HRc45-55)		Hardened Steels (HRc55-65)			
Ratio to standard depth of cut				Depth of Cut X 100%		Depth of Cut X 80%		Depth of Cut X 65%		Depth of Cut X 60%			
Mill Dia (mm)	Diameter (mm)	Neck Length (mm)	Depth of Cut (mm)	n (min-1)	Vf (mm/min)	n (min-1)	Vf (mm/min)	n (min-1)	Vf (mm/min)	n (min-1)	Vf (mm/min)		
0.2	0.05	2	0.007	39,660	887	33,660	754	29,700	591	27,720	483		
0.4	0.05	4	0.009	30,096	899	25,582	764	22,572	599	21,067	489		
		5	0.007	26,752	710	22,739	528	20,064	466	18,726	373		
	0.1	4	0.009	31,680	946	26,928	804	23,760	631	22,176	515		
		5	0.007	28,160	747	23,936	556	21,120	490	19,712	392		
0.5	0.1	5	0.013	30,413	1,090	25,851	753	22,810	562	21,289	453		
		8	0.008	24,330	678	20,681	468	18,248	350	17,031	282		
		10	0.007	18,248	509	15,511	351	13,686	262	12,773	211		
0.6	0.1	12	0.01	20,377	791	17,320	546	15,282	408	14,264	329		
		15	0.006	16,727	649	14,218	448	12,545	335	11,709	270		
0.8	0.2	6	0.045	31,680	1,084	26,928	921	23,760	723	22,176	590		
		12	0.02	28,160	943	23,936	695	21,120	613	19,712	490		
1	0.2	8	0.04	28,512	1,463	24,235	1,244	21,384	976	19,958	797		
		10	0.035	28,512	1,596	24,235	1,357	21,384	1,064	19,958	869		
		15	0.028	25,344	1,261	21,542	938	19,008	828	17,741	662		
		20	0.02	19,008	828	16,157	653	14,256	532	13,306	414		
		25	0.017	15,840	690	13,464	544	11,880	443	11,088	345		
		30	0.017	15,840	690	13,464	544	11,880	443	11,088	345		
		35	0.01	15,840	690	13,464	544	11,880	443	11,088	345		
	0.3	8	0.04	28,512	1,463	24,235	1,244	21,384	976	19,958	797		
		15	0.028	25,344	1,261	21,542	938	19,008	828	17,741	662		
		25	0.017	15,840	690	13,464	544	11,880	443	11,088	345		
		30	0.017	15,840	690	13,464	544	11,880	443	11,088	345		
		1.5	0.2	10	0.05	21,683	1,079	18,431	803	16,262	708	15,178	567
				15	0.045	19,712	981	16,755	730	14,784	644	13,798	515
				20	0.042	17,347	863	14,745	642	13,010	567	12,143	453
25	0.032			14,784	644	12,566	508	11,088	414	10,349	322		
30	0.028			12,320	536	10,472	423	9,240	345	8,624	268		
0.3	10	0.05	21,683	1,079	18,431	803	16,262	708	15,178	567			
	20	0.042	17,347	863	14,745	642	13,010	567	12,143	453			
	25	0.032	14,784	644	12,566	508	11,088	414	10,349	322			
	30	0.028	12,320	536	10,472	423	9,240	345	8,624	268			
	2	0.2	30	0.045	13,440	1,254	11,424	933	10,080	823	9,408	658	
40			0.035	10,080	823	8,568	650	7,560	529	7,056	412		
50			0.017	8,400	686	7,140	541	6,300	441	5,880	343		
0.3		12	0.088	22,680	1,814	19,278	1,427	17,010	1,191	15,876	1,048		
		20	0.054	18,144	1,452	15,422	1,141	13,608	953	12,701	838		
		30	0.045	13,440	1,393	11,424	1,036	10,080	914	9,408	732		
		40	0.035	10,080	914	8,568	722	7,560	588	7,056	457		
		50	0.017	8,400	762	7,140	601	6,300	490	5,880	381		
0.5		8	0.17	22,680	1,814	19,278	1,427	17,010	1,191	15,876	1,048		
		12	0.088	22,680	1,814	19,278	1,427	17,010	1,191	15,876	1,048		
		16	0.088	19,278	1,542	16,386	1,213	14,459	1,012	13,495	891		
		20	0.054	18,114	1,452	15,422	1,141	13,608	953	12,701	838		

ESTNR20 SERIES

Workpiece				Carbon Steels, Alloy Steels (180-250HB)		Prehardened Steels (HRc35-45)		Hardened Steels (HRc45-55)		Hardened Steels (HRc55-65)	
Ratio to standard depth of cut				Depth of Cut X 100%		Depth of Cut X 80%		Depth of Cut X 65%		Depth of Cut X 60%	
Mill Dia (mm)	Diameter (mm)	Neck Length (mm)	Depth of Cut (mm)	n (min-1)	Vf (mm/min)	n (min-1)	Vf (mm/min)	n (min-1)	Vf (mm/min)	n (min-1)	Vf (mm/min)
2	0.5	25	0.054	15,876	1,270	13,495	999	11,907	833	11,113	733
		30	0.045	13,440	1,393	11,424	1,036	10,080	914	9,408	732
		40	0.035	10,080	914	8,568	722	7,560	588	7,056	457
		50	0.017	8,400	762	7,140	601	6,300	490	5,880	381
3	0.2	40	0.07	10,240	956	8,704	711	7,680	627	7,168	502
		50	0.05	7,680	627	6,528	495	5,760	403	5,376	314
		60	0.03	6,400	523	5,440	412	4,800	336	4,480	261
	0.3	40	0.07	10,240	1,062	8,704	790	7,680	697	7,168	557
		50	0.05	7,680	697	6,528	550	5,760	448	5,376	348
		60	0.03	6,400	581	5,440	458	4,800	373	4,480	290
	0.5	40	0.07	10,240	1,062	8,704	790	7,680	697	7,168	557
		50	0.05	7,680	697	6,528	550	5,760	448	5,376	348
		60	0.03	6,400	581	5,440	458	4,800	373	4,480	290

RPM = rev/min
FEED = mm/min



- The above recommendation table may differ from the actual situation, adjust it according to the machine condition, processing type and purpose.
- In the case of low RPM, reduce the feed rate at the same rate.