

# Technical Section

## ISO Turning

ISO	MATERIAL	HB (BRINELL)		CVD COATING												PVD COATING										
		GRADE	PH5115			PH5125			PH5135			PH5740			PH6910/PH7910			PH6920/PH7920			PH6325		PH6225			
		FN	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8
		(MM/ROT)	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8	0.2	0.4	0.8
P	UNALLOYED STEEL	125-170	250-350	180-270	170-220	200-295	170-240	150-215	180-250	150-220	130-210	135-230	120-210	115-200	140-230	130-225	115-215	130-225	120-230	150-210	190-230	170-220	150-200	170-220	160-210	140-190
	LOW-ALLOYED STEEL	180-350	190-250	170-230	140-180	170-230	140-210	120-190	150-210	120-200	100-170	125-205	105-185	95-185	130-220	125-215	110-210	125-215	115-210	150-210	180-220	160-210	150-200	170-210	150-200	140-190
	HIGH-ALLOY STEEL	200-325	135-220	120-205	110-200	125-215	110-185	100-170	115-210	95-180	90-155	105-205	75-175	50-135												

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		GRADE	PH5115			PH5125			PH5740			PH6910/PH7910			PH6920/PH7920			PH6325					
		FN	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6			
		(MM/ROT)	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6			
M	SS-FERRITIC/MARTENSITIC	200-330	125-260	100-220	80-200	110-230	70-175	50-135	85-180	65-160	45-135	245-330	195-305	160-245	180-310	150-255	120-200	170-300	140-245	110-190			
	SS-AUSTENITIC	180-330	130-290	100-240	80-190	100-240	70-175	55-130	85-170	65-145	45-125	220-410	175-330	145-265	185-265	150-215	120-165	175-255	140-205	110-155			
	SSS-AUSTENITIC-FERRETIC (DUPLEX)	230-260	190-220	150-185	120-145	150-190	120-150	90-110	130-160	110-135	85-105	280-315	225-255	185-205	230-260	170-205	130-155	220-250	160-195	120-145			

ISO	MATERIAL	HB (BRINELL)		CVD COATING												PVD COATING					
		GRADE	PH5705			PH5320			PH5740			PH6705			PH6325			SMU10			
		FN	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	
		(MM/ROT)	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.6	
K	MALLEABLE CAST IRON	130-230	160-360	140-280	120-235	150-330	130-240	110-220	110-230	100-215	100-190	180-250	170-230	160-210	180-220	170-210	160-200	125-140	110-125	90-110	
	GREY CAST IRON	180-220	220-380	190-330	150-290	200-330	170-280	150-230	150-230	140-220	110-210	160-230	150-220	140-200	160-210	140-200	140-190	140-180	115-145	95-110	
	NODULAR CAST IRON	160-380	150-280	135-265	120-220	140-250	125-230	110-220	125-220	115-205	105-185	160-230	150-220	140-200	160-200	140-190	130-180	100-135	85-125	65-95	

ISO	MATERIAL	HB (BRINELL)		UNCOATED	
		GRADE	SMU10		
		FN	0.15	0.8	
		(MM/ROT)	0.15	0.8	
H	ALLUMINIUM ALLOYS	60-130	375-2400	40-240	
	COPPER AND COPPER ALLOYS	90-110	375-630	35-65	

ISO	MATERIAL	HB (BRINELL)		PVD COATING												UNCOATED		
		GRADE	PH6910/PH7910			PH6705			PH7920			PH6325			SMU10			
		FN	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	
		(MM/ROT)	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	
S	HEAT RESISTANT SUPER ALLOYS (IRON BASE)	200-280	120-150	80-100	60-70	95-120	65-80	50-75	55-75	45-60	35-50	55-75	45-60	35-50	60-80	50-65	40-50	
	HEAT RESISTANT SUPER ALLOYS (NICKEL BASE)	250-320	70-90	45-55	24-30	60-80	37-55	19-35	22-50	15-35		22-50	15-35		25-50	20-40	15-30	
	HEAT RESISTANT SUPER ALLOYS (COBALT BASE)	200-320	70-90	45-60	24-30	60-80	37-55	19-35	23-45	17-35		23-45	17-35		25-50	20-40	15-30	
	TITANIUM ALLOYS		80-205	60-170	50-145	75-185	55-155	45-130	65-160	50-135	40-115	65-160	50-135	40-115	70-180	55-150	45-125	