QCMT INSERTS - CUTTING DATA

General Cutting parameters for Turning

Material	Hardness HB	Cutting Speed VC: m/min	Depth of Cut ap(mm)	Feed f(mm)	Application Choice
Low Carbon Steel <0.25% C	80-180	90-170	0.5-2.5	0.05-0.16	Good
High Carbon Steel >0.25% C	180-280	80-150	0.5-2.5	0.05-0.16	Good
Low Alloy Steel	140-260	65-110	0.5-2.5	0.05-0.16	Good
High Alloy Steel	200-350	50-100	0.5-2.0	0.05-0.12	Good
Stainless Austenitic	135-275	80-150	0.5-2.0	0.05-0.12	Good
Stainless Martensitic	135-275	70-170	0.5-2.0	0.05-0.12	Good
Hi-temp Alloys	130-350	25-65	0.5-2.0	0.05-0.10	OK
Cast iron Grey	150-220	120-200	0.5-2.5	0.05-0.16	OK
Cast iron Ductile	130-240	100180	0.5-2.5	0.05-0.16	OK

General Cutting parameters for Facing

Material	Hardness HB	Cutting Speed VC: m/min	Depth of Cut ap(mm)	Feed f(mm)	Application Choice
Low Carbon Steel <0.25% C	80-180	90-170	0.8-1.8	0.05-0.14	Good
High Carbon Steel >0.25% C	180-280	80-150	0.8-1.8	0.05-0.14	Good
Low Alloy Steel	140-260	65-110	0.8-1.8	0.05-0.14	Good
High Alloy Steel	200-350	50-100	0.8-1.6	0.05-0.10	Good
Stainless Austenitic	135-275	80-150	0.8-1.6	0.05-0.12	Good
Stainless Martensitic	135-275	70-170	0.8-1.6	0.05-0.12	Good
Hi-temp Alloys	130-350	25-65	0.8-1.4	0.05-0.10	OK
Cast iron Grey	150-220	120-200	0.8-1.8	0.05-0.14	OK
Cast iron Ductile	130-240	100-180	0.8-1.8	0.05-0.14	OK

General Cutting parameters for Drilling

Material	Hardness HB	Cutting Speed VC: m/min	Min dia - Max dia (mm)	Feed f(mm)	Application Choice
Low Carbon Steel <0.25% C	80-180	100-150	9.85-10.35	0.015-0.040	Good
High Carbon Steel >0.25% C	180-280	60-140	9.85-10.35	0.015-0.040	Good
Low Alloy Steel	140-260	50-120	9.85-10.35	0.015-0.040	Good
High Alloy Steel	200-350	50-100	9.85-10.35	0.015-0.040	Good
Stainless Austenitic	135-275	50-100	9.85-10.35	0.015-0.040	Good
Stainless Martensitic	135-275	50-120	9.85-10.35	0.015-0.040	Good
Hi-temp Alloys	130-350	20-50	9.85-10.35	0.015-0.040	OK
Cast iron Grey	150-220	110-190	9.85-10.35	0.015-0.040	OK
Cast iron Ductile	130-240	100-160	9.85-10.35	0.015-0.040	OK