

DEBURRING TOOL HSS 8% COBALT

C1109 Series

CUTTING DATA

DEBURRING

MATERIAL	Hardness	Cutting Speed (mm/min.)	Feed (mm/rev.)		
			< Ø10	Ø10 ~ Ø20	Ø20 ~ Ø30
STEELS	< 500N/mm ²	35 ~ 45	0.20	0.22	0.24
	500-800N/mm ²	20 ~ 30	0.14	0.17	0.20
	800-1000N/mm ²	15 ~ 20	0.11	0.12	0.14
STEEL/STAINLESS STEEL	1000-1300N/mm ²	12 ~ 15	0.10	0.12	0.15
STAINLESS STEEL	-	6 ~ 8	0.07	0.08	0.09
CAST IRON		20 ~ 40	0.15	0.24	0.28
ALUMINIUM	-	50 ~ 60	0.22	0.25	0.27
BRASS/BRONZE	-	30 ~ 40	0.23	0.25	0.28
COPPER	-	20 ~ 30	0.22	0.25	0.27
PLASTICS	-	50 ~ 100	0.50	0.60	0.65

3 FLUTE COUNTERSINKS HSS 8% COBALT

C1136, C1139 & C1132 Series

CUTTING DATA

COUNTERSINKING

MATERIAL	Hardness	Cutting Speed (mm/min.)	Feed (mm/rev.)		
			< Ø10	Ø10 ~ Ø20	Ø20 ~ Ø30
STEELS	< 500N/mm ²	35 ~ 45	0.20	0.22	0.24
	500-800N/mm ²	20 ~ 30	0.14	0.17	0.20
	800-1000N/mm ²	15 ~ 20	0.11	0.12	0.14
STEEL/STAINLESS STEEL	1000-1300N/mm ²	12 ~ 15	0.10	0.12	0.15
STAINLESS STEEL	-	6 ~ 8	0.07	0.08	0.09
CAST IRON		20 ~ 40	0.15	0.24	0.28
ALUMINIUM	-	50 ~ 60	0.22	0.25	0.27
BRASS/BRONZE	-	30 ~ 40	0.23	0.25	0.28
COPPER	-	20 ~ 30	0.22	0.25	0.27
PLASTICS	-	50 ~ 100	0.50	0.60	0.65

CHAMFER MILL HSS 8% COBALT

C1119 Series

CUTTING DATA

CHAMFERING

MATERIAL	Hardness	Cutting Speed (mm/min.)	Feed (mm/rev.)		
			< Ø10	Ø10 ~ Ø20	Ø20 ~ Ø30
STEELS	< 500N/mm ²	17-22	0.30	0.32	0.36
	500-800N/mm ²	10-15	0.28	0.30	0.31
	800-1000N/mm ²	8-12	0.24	0.26	0.28
STEEL/STAINLESS STEEL	1000-1300N/mm ²	6-8	0.20	0.20	0.22
STAINLESS STEEL	-	4-6	0.08	0.09	0.10
CAST IRON		15-25	0.13	0.19	0.24
ALUMINIUM	-	35-45	0.27	0.30	0.35
BRASS/BRONZE	-	20-30	0.30	0.30	0.31
COPPER	-	10-15	0.29	0.30	0.31
PLASTICS	-	35-70	0.40	0.45	0.50

EDGE PREPARATION

HOLE MAKING

TAPS & DIES

THREAD & GROOVE MILLING

TOOL HOLDING