AXC SERIES

PRECISION CUTTING TOOLS
Member IMC Group

		Wrought Aluminum Alloys <12% Si 1000- 8000 Series		High Silicon Aluminum Alloys >12% 4000 Series & Castings		Copper & Copper Alloys <190 BHN		Nylon, Plastics, Phenolics, Rubbers, Resins, Toolboard	
Length	**Diameter**	**N1 SFM**	**N1 IPR**	**N2 SFM**	**N2 IPR**	**N3 SFM**	**N3 IPR**	**N4 SFM**	**N4 IPR**
3xD	0.118-0.236	1115	0.0120	1066	0.0110	520	0.0090	372	0.0040
	0.236-0.354	1115	0.0140	1066	0.0150	520	0.0110	372	0.0047
	0.354-0.472	1115	0.0200	1066	0.0190	520	0.0150	372	0.0067
	0.472-0.630	1115	0.0250	1066	0.0230	520	0.0160	372	0.0084
	0.630-0.787	1115	0.0260	1066	0.0240	520	0.0180	372	0.0087
	0.787 & above	1115	0.0270	1066	0.0250	520	0.0210	372	0.0090
5xD	0.118-0.236	1181	0.0120	1148	0.0110	525	0.0090	394	0.0040
	0.236-0.354	1181	0.0140	1148	0.0150	525	0.0110	394	0.0047
	0.354-0.472	1181	0.0200	1148	0.0190	525	0.0150	394	0.0067
	0.472-0.591	1181	0.0250	1148	0.0230	525	0.0160	394	0.0084
	0.591-0.709	1181	0.0260	1148	0.0240	525	0.0180	394	0.0087
	0.709&above	1181	0.0270	1148	0.0250	525	0.0210	394	0.0090
8xD	0.118-0.236	1050	0.0120	1018	0.0110	450	0.0090	350	0.0040
	0.236-0.354	1050	0.0140	1018	0.0150	450	0.0110	350	0.0047
	0.354-0.472	1050	0.0200	1018	0.0190	450	0.0150	350	0.0067
	0.472-0.591	1050	0.0250	1018	0.0230	450	0.0160	350	0.0084
	0.591-0.787	1050	0.0260	1018	0.0240	450	0.0180	350	0.0087
	0.787&above	1050	0.0270	1018	0.0250	450	0.0210	350	0.0090
12xD	0.118-0.236	820	0.0120	804	0.0110	400	0.0090	273	0.0040
	0.236-0.354	820	0.0140	804	0.0150	400	0.0110	273	0.0047
	0.354-0.472	820	0.0200	804	0.0190	400	0.0150	273	0.0067
	0.472-0.630	820	0.0250	804	0.0230	400	0.0160	273	0.0084
	0.630-0.787	820	0.0260	804	0.0240	400	0.0180	273	0.0087
	0.787&above	820	0.0270	804	0.0250	400	0.0210	273	0.0090
16xD	0.118-0.236	525	0.0120	459	0.0110	300	0.0090	175	0.0040
	0.236-0.354	525	0.0140	459	0.0150	300	0.0110	175	0.0047
	0.354-0.472	525	0.0200	459	0.0190	300	0.0150	175	0.0067
	0.472-0.630	525	0.0250	459	0.0230	300	0.0160	175	0.0084
	0.630&above	525	0.0260	459	0.0240	300	0.0180	175	0.0087
20xD	0.118-0.236	492	0.0080	426	0.0080	250	0.0080	164	0.0027
	0.236-0.354	492	0.0110	426	0.0110	250	0.0100	164	0.0037
	0.354-0.472	492	0.0140	426	0.0140	250	0.0120	164	0.0047
	0.472-0.551	492	0.0160	426	0.0160	250	0.0140	164	0.0054
	0.551&above	492	0.0180	426	0.0180	250	0.0160	164	0.0060
25xD	0.118-0.236	426	0.0080	393	0.0080	200	0.0080	142	0.0027
	0.236-0.354	426	0.0110	393	0.0110	200	0.0100	142	0.0037
	0.354-0.472	426	0.0140	393	0.0140	200	0.0120	142	0.0047
	0.472&above	426	0.0160	393	0.0160	200	0.0140	142	0.0054
30xD	0.118-0.236	397	0.0080	377	0.0080	200	0.0080	132	0.0027
	0.236-0.354	397	0.0110	377	0.0110	200	0.0100	132	0.0037
	0.354-0.394	397	0.0140	377	0.0140	200	0.0120	132	0.0047
	0.394&above	397	0.0160	377	0.0160	200	0.0140	132	0.0054
40xD	0.118-0.236	361	0.0070	344	0.0060	180	0.0060	120	0.0024
	0.236-0.315	361	0.0090	344	0.0070	180	0.0070	120	0.0030
	0.315 & above	361	0.0120	344	0.0100	180	0.0080	120	0.0040
50xD	0.157-0.197	361	0.0070	344	0.0060	180	0.0060	120	0.0024
	0.197-0.236	361	0.0080	344	0.0070	180	0.0070	120	0.0030
	0.236 & above	361	0.0090	344	0.0090	180	0.0080	120	0.0040

USING A G73 PECK CYCLE HELPS CHIP EVACUATION IN DEEP HOLE DRILLING & MATERIALS WHICH HAVE A POOR CHIP FORMATION
16xD - 30xD MUST UTILIZE A PILOT HOLE DRILL
40xD - 50xD MUST UTILIZE A 20xD INTERMEDIARY DRILL ALONG WITH A PILOT DRILL
TIR, SFM, & TOOL ALIGNMENT WITH MATERIAL ARE THE MOST IMPORTANT FACTORS IN DEEP HOLE DRILLING
USE HIGH PRESSURE COOLANT WHEN DEEP HOLE DRILLING
USE LOW PRESSURE COOLANT WHEN DRILLING THE PILOT HOLE
SLOW THE FEED RATE TO 50% WHEN BREAKING THROUGH THE MATERIAL