DRILLS

	SERIES	PAGE	COATING	DESCRIPTION
1180	-222	12	ALUMASTAR	Jobber length, 3 flute, High performance
1520		42	BRIGHT	Stub length, 2 flute, General purpose
1520H		45	HARDLUBE	Stub length, 2 flute, General purpose
1205		48	BRIGHT	Jobber length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, General purpose
1800H		74	HARDLUBE	Taper length, 2 flute, Parabolic

	SERIES	PAGE	COATING	DESCRIPTION
143M		82	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Square end
143R	727	84	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Corner radius
142M	25	80	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Square end
142B	25	81	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Ball end
242M / 842M		86	BRIGHT	High performance, 2 flute, For 4000-8000 RPM, Square end
253M / 853M		89	BRIGHT	High performance, 3 flute, Profiling and finishing, Square end
253MC		91	TiCN	High performance, 3 flute, Profiling and finishing, Square end
160M / 860M		118	BRIGHT	Stub length, 2 flute, General purpose, Square end
180M / 980M		121	BRIGHT	Stub length, 2 flute, General purpose, Ball end
220M / 820M		127	BRIGHT	Standard length, 2 flute, General purpose, Square end
220MC		130	TiCN	Standard length, 2 flute, General purpose, Square end
320M / 920M		138	BRIGHT	Standard length, 2 flute, General purpose, Ball end
320MC		141	TiCN	Standard length, 2 flute, General purpose, Ball end
620M / 640M		153	BRIGHT	Extra length, 2 flute, General purpose, Square end
620MC		155	TiCN	Extra length, 2 flute, General purpose, Square end
720M / 740M		164	BRIGHT	Extra length, 2 flute, General purpose, Ball end
720MC		166	TiCN	Extra length, 2 flute, General purpose, Ball end

DRILLS

	SERIES	PAGE	COATING	DESCRIPTION
1580HD		17	HELICA	Stub length, 2 flute, High performance, Common shank
1580H		14	HARDLUBE	Stub length, 2 flute, High performance
1280H		25	HARDLUBE	Jobber length, 2 flute, High performance
1580KD		20	HELICA	Stub length, 2 flute, High performance, Coolant fed, Common shank
1280KD		30	HELICA	Jobber length, 2 flute, High performance, Coolant fed, Common shank
1580KH		23	HELICA	Stub length, 2 flute, High performance, Coolant fed
1280KH		28	HELICA	Jobber length, 2 flute, High performance, Coolant fed
1880KH		33	HELICA	Taper length, 2 flute, High performance, Coolant fed
1520H		45	HARDLUBE	Stub length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, General Purpose
1180		12	ALUMASTAR	Jobber length, 3 flute, High performance

FND MILLS

END WILLS					
	SERIES	PAGE	COATING	DESCRIPTION	
VRX		102 - 107	X.CEED	High performance, 4 flute, Variable flute rougher/finisher,	
253MA / 853MA	-138	87	X.CEED	High performance, 3 flute, Profiling and finishing, Square end	
255MA / 855MA	1000c	92	X.CEED	High performance, 5 flute, Square end	
255RA / 855RA	MARK-	97	X.CEED	High performance, 5 flute, Corner radius	
143M		82	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Square end	
143R	727	84	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Corner radius	
142M	25	80	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Square end	
142B	25	81	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Ball end	
242M / 842M		86	BRIGHT	High performance, 2 flute, For 4000-8000 RPM, Square end	
170MA / 870MA		120	FUTURA	Stub length, 4 flute, General purpose, Square end	
190MA / 990MA		122	FUTURA	Stub length, 4 flute, General purpose, Ball end	
223MA / 823MA		131	FUTURA	Standard length, 3 flute, General purpose, Square end	
230MA / 830MA		131	FUTURA	Standard length, 4 flute, General purpose, Square end	
230RA / 830RA		135	FUTURA	Standard length, 4 flute, General purpose, Corner radius	
323MA / 923MA		142	FUTURA	Standard length, 3 flute, General purpose, Ball end	
330MA / 930MA		142	FUTURA	Standard length, 4 flute, General purpose, Ball end	
623MA / 643MA		156	FUTURA	Extra length, 3 flute, General purpose, Square end	
630MA / 650MA		156	FUTURA	Extra length, 4 flute, General purpose, Square end	
630RA		161	FUTURA	Extra length, 4 flute, General purpose, Corner radius	
723MA / 743MA		167	FUTURA	Extra length, 3 flute, General purpose, Ball end	
730MA / 750MA		167	FUTURA	Extra length, 4 flute, General purpose, Ball end	

DRILLS

	SERIES	PAGE	COATING	DESCRIPTION
1580HD		17	HELICA	Stub length, 2 flute, High performance, Common shank
1580H		14	HARDLUBE	Stub length, 2 flute, High performance
1280H		25	HARDLUBE	Jobber length, 2 flute, High performance
1580KD		20	HELICA	Stub length, 2 flute, High performance, Coolant fed, Common shank
1280KD		30	HELICA	Jobber length, 2 flute, High performance, Coolant fed, Common shank
1580KH		23	HELICA	Stub length, 2 flute, High performance, Coolant fed
1280KH		28	HELICA	Jobber length, 2 flute, High performance, Coolant fed
1880KH		33	HELICA	Taper length, 2 flute, High performance, Coolant fed
1510H		39	HARDLUBE	Stub length, 2 flute, 15° helix, General purpose
1520H		45	HARDLUBE	Stub length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, General Purpose

	SERIES	PAGE	COATING	DESCRIPTION
VRX		102 - 107	X.CEED	High performance, 4 flute, Variable flute rougher/finisher
VHM		101	X.CEED	High performance, 4 flute, Variable flute hog mill rougher
253MA / 853MA	200	87	X.CEED	High performance, 3 flute, Profiling and finishing, Square end
253MC	361-	91	TiCN	High performance, 3 flute, Profiling and finishing, Square end
255MA / 855MA	- 1000E	92	X.CEED	High performance, 5 flute, Square end
255RA / 855RA	NAFE.	97	X.CEED	High performance, 5 flute, Corner radius
170MA / 870MA		120	FUTURA	Stub length, 4 flute, General purpose, Square end
190MA / 990MA		122	FUTURA	Stub length, 4 flute, General purpose, Ball end
223MA / 823MA		131	FUTURA	Standard length, 3 flute, General purpose, Square end
230MA / 830MA		131	FUTURA	Standard length, 4 flute, General purpose, Square end
230RA / 830RA		135	FUTURA	Standard length, 4 flute, General purpose, Corner radius
323MA / 923MA		142	FUTURA	Standard length, 3 flute, General purpose, Ball end
330MA / 930MA		142	FUTURA	Standard length, 4 flute, General purpose, Ball end
623MA / 643MA		156	FUTURA	Extra length, 3 flute, General purpose, Square end
630MA / 650MA		156	FUTURA	Extra length, 4 flute, General purpose, Square end
630RA		161	FUTURA	Extra length, 4 flute, General purpose, Corner radius
723MA / 743MA		167	FUTURA	Extra length, 3 flute, General purpose, Ball end
730MA / 750MA	650	167	FUTURA	Extra length, 4 flute, General purpose, Ball end

COBALT, NICKEL, IRON-BASED ALLOYS

DRILLS

	SERIES	PAGE	COATING	DESCRIPTION
1580HD		17	HELICA	Stub length, 2 flute, High performance, Common shank
1580H	-22	14	HARDLUBE	Stub length, 2 flute, High performance
1280H		25	HARDLUBE	Jobber length, 2 flute, High performance
1580KD		20	HELICA	Stub length, 2 flute, High performance, Coolant fed, Common shank
1280KD		30	HELICA	Jobber length, 2 flute, High performance, Coolant fed, Common shank
1580KH		23	HELICA	Stub length, 2 flute, High performance, Coolant fed
1280KH		28	HELICA	Jobber length, 2 flute, High performance, Coolant fed
1880KH		33	HELICA	Taper length, 2 flute, High performance, Coolant fed
1510H		39	HARDLUBE	Stub length, 2 flute, Slow helix, General purpose
1520H		45	HARDLUBE	Stub length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, General Purpose
1120H		62	HARDLUBE	Stub length, 3 flute, General purpose
1100H		66	HARDLUBE	Jobber length, 3 flute, General Purpose

LIND WILLS					
	SERIES	PAGE	COATING	DESCRIPTION	
VRX		102 - 107	X.CEED	High performance, 4 flute, Variable flute rougher/finisher	
VHM		101	X.CEED	High performance, 4 flute, Variable flute hog mill rougher	
255MA / 855MA	7000	92	X.CEED	High performance, 5 flute, Square end	
255RA / 855RA	ELECT-	97	X.CEED	High performance, 5 flute, Corner radius	
545MA	CONT.	108	X.CEED	High performance, High Rc finisher, Square end	
545RA	EXCE-	109	X.CEED	High performance, High Rc finisher, Corner radius	
545BA	STATE OF THE PARTY	110	X.CEED	High performance, High Rc finisher, Ball end	
170MA / 870MA		120	FUTURA	Stub length, 4 flute, General purpose, Square end	
190MA / 990MA		122	FUTURA	Stub length, 4 flute, General purpose, Ball end	
230MA / 830MA		131	FUTURA	Standard length, 4 flute, General purpose, Square end	
230RA / 830RA		135	FUTURA	Standard length, 4 flute, General purpose, Corner radius	
330MA / 930MA	CE TO	142	FUTURA	Standard length, 4 flute, General purpose, Ball end	
630MA / 650MA		156	FUTURA	Extra length, 4 flute, General purpose, Square end	
630RA		161	FUTURA	Extra length, 4 flute, General purpose, Corner radius	
730MA / 750MA		167	FUTURA	Extra length, 4 flute, General purpose, Ball end	

Recommended tools for:

BRASS, BRONZE, COPPER, MAGNESIUM

DRILLS

	SERIES	PAGE	COATING	DESCRIPTION
1180	-1112	12	ALUMASTAR	Jobber length, 3 flute, High performance
1520		42	BRIGHT	Stub length, 2 flute, General purpose
1520H		45	HARDLUBE	Stub length, 2 flute, General purpose
1205		48	BRIGHT	Jobber length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, General purpose
1800H	00000	74	HARDLUBE	Taper length, 2 flute, Parabolic

	SERIES	PAGE	COATING	DESCRIPTION
143M	200	82	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Square end
143R	7.7	84	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Corner radius
142M	225	80	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Square end
142B	S-15-	81	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Ball end
242M / 842M		86	BRIGHT	High performance, 2 flute, For 4000-8000 RPM, Square end
253M / 853M		89	BRIGHT	High performance, 3 flute, Profiling and finishing, Square end
253MC		91	TiCN	High performance, 3 flute, Profiling and finishing, Square end
160M / 860M		118	BRIGHT	Stub length, 2 flute, General purpose, Square end
180M / 980M		121	BRIGHT	Stub length, 2 flute, General purpose, Ball end
220M / 820M		127	BRIGHT	Standard length, 2 flute, General purpose, Square end
220MC		130	TiCN	Standard length, 2 flute, General purpose, Square end
320M / 920M		138	BRIGHT	Standard length, 2 flute, General purpose, Ball end
320MC		141	TiCN	Standard length, 2 flute, General purpose, Ball end
620M / 640M		153	BRIGHT	Extra length, 2 flute, General purpose, Square end
620MC		155	TiCN	Extra length, 2 flute, General purpose, Square end
720M / 740M		164	BRIGHT	Extra length, 2 flute, General purpose, Ball end
720MC		166	TiCN	Extra length, 2 flute, General purpose, Ball end

HARDENED TOOL STEELS

DRILLS

	SERIES	PAGE	COATING	DESCRIPTION
1580HD		17	HELICA	Stub length, 2 flute, High performance, Common shank
1580H		14	HARDLUBE	Stub length, 2 flute, High performance
1280H		25	HARDLUBE	Jobber length, 2 flute, High performance
1580KD		20	HELICA	Stub length, 2 flute, High performance, Coolant fed, Common shank
1280KD		30	HELICA	Jobber length, 2 flute, High performance, Coolant fed, Common shank
1580KH		23	HELICA	Stub length, 2 flute, High performance, Coolant fed
1280KH		28	HELICA	Jobber length, 2 flute, High performance, Coolant fed
1880KH		33	HELICA	Taper length, 2 flute, High performance, Coolant fed
1500H		70	HARDLUBE	Stub length, 2 flute, straight flute hard metal
1510H		39	HARDLUBE	Stub length, 2 flute, 15° helix, General purpose
1520H		45	HARDLUBE	Jobber length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, High performance

	SERIES	PAGE	COATING	DESCRIPTION
545MA	STEEL STEEL	108	X.CEED	High performance, High Rc finisher, Square end
545RA	\$500°	109	X.CEED	High performance, High Rc finisher, Corner radius
545BA	4000	110	X.CEED	High performance, High Rc finisher, Ball end
VRX		102 - 107	X.CEED	High performance, 4 flute, Variable flute rougher/finisher
350MX / 950MX		111	X.CEED	High performance, High Rc finisher, Ball end
170MA / 870MA		120	FUTURA	Stub length, 4 flute, General purpose, Square end
190MA / 990MA		122	FUTURA	Stub length, 4 flute, General purpose, Ball end
230MA / 830MA		131	FUTURA	Standard length, 4 flute, General purpose, Square end
230RA / 830RA		135	FUTURA	Standard length, 4 flute, General purpose, Corner radius
330MA / 930MA		142	FUTURA	Standard length, 4 flute, General purpose, Ball end
630MA / 650MA		156	FUTURA	Extra length, 4 flute, General purpose, Square end
630RA		161	FUTURA	Extra length, 4 flute, General purpose, Corner radius
730MA / 750MA		167	FUTURA	Extra length, 4 flute, General purpose, Ball end

COMPOSITE MATERIALS

DRILLS

SERIES		PAGE	COATING	DESCRIPTION
1180	-222	12	ALUMASTAR	Jobber length, 3 flute, High performance
1520H		45	HARDLUBE	Stub length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, General purpose
1120H		62	HARDLUBE	Stub length, 3 flute, General purpose
1100H		66	HARDLUBE	Jobber length, 3 flute, General purpose
1800H	0000	74	HARDLUBE	Taper length, 2 flute, Parabolic

SERIES		PAGE	COATING	DESCRIPTION
210D		112	DIAMOND	Standard length, 4 flute, Square end
310D		114	DIAMOND	Standard length, 4 flute, Ball end
210RD		113	DIAMOND	Standard length, 4 flute, Corner radius
610D		115	DIAMOND	Extra length, 4 flute, Square end
710D		116	DIAMOND	Extra length, 4 flute, Ball end
143M	(E)	82	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Square end
143R	727	84	ALUMASTAR	High velocity, 3 flute, High metal removal rate, Corner radius
142M	355	80	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Square end
142B	35	81	ALUMASTAR	High velocity, 2 flute, High metal removal rate, Ball end
253M / 853M		89	BRIGHT	High performance, 3 flute, Profiling and finishing, Square end
253MC	301	91	TiCN	High performance, 3 flute, Profiling and finishing, Square end
255MC	1999	96	TiCN	High performance, 5 flute, Profiling and finishing, Square end
220MC		130	TiCN	Standard length, 2 flute, General purpose, Square end
320MC		141	TiCN	Standard length, 2 flute, General purpose, Ball end
620MC		155	TiCN	Extra length, 2 flute, General purpose, Square end
720MC		166	TiCN	Extra length, 2 flute, General purpose, Ball end

Recommended tools for: CARBON STEELS, MEDIUM ALLOY STEELS

DRILLS

SERIES		PAGE	COATING	DESCRIPTION
1580HD		17	HELICA	Stub length, 2 flute, High performance, Common shank
1580H		14	HARDLUBE	Stub length, 2 flute, High performance
1280H		25	HARDLUBE	Jobber length, 2 flute, High performance
1580KD		20	HELICA	Stub length, 2 flute, High performance, Coolant fed, Common shank
1280KD		30	HELICA	Jobber length, 2 flute, High performance, Coolant fed, Common shank
1580KH		23	HELICA	Stub length, 2 flute, High performance, Coolant fed
1280KH		28	HELICA	Jobber length, 2 flute, High performance, Coolant fed
1880KH		33	HELICA	Taper length, 2 flute, High performance, Coolant fed
1510H		39	HARDLUBE	Stub length, 2 flute, 15° helix, General purpose
1520H		45	HARDLUBE	Stub length, 2 flute, General purpose
1205H		51	HARDLUBE	Jobber length, 2 flute, General Purpose

SERIES		PAGE	COATING	DESCRIPTION
VRX		102 - 107	X.CEED	High performance, 4 flute, Variable flute rougher/finisher
VHM	33	101	X.CEED	High performance, 4 flute, Variable flute hog mill rougher
253MA / 853MA	300	87	X.CEED	High performance, 3 flute, Profiling and finishing, Square end
255MA / 855MA	2000	92	X.CEED	High performance, 5 flute, Square end
255RA / 855RA	ALC:	97	X.CEED	High performance, 5 flute, Corner radius
170MA / 870MA		120	FUTURA	Stub length, 4 flute, General purpose, Square end
190MA / 990MA		122	FUTURA	Stub length, 4 flute, General purpose, Ball end
223MA / 823MA		131	FUTURA	Standard length, 3 flute, General purpose, Square end
230MA / 830MA		131	FUTURA	Standard length, 4 flute, General purpose, Square end
230RA / 830RA		135	FUTURA	Standard length, 4 flute, General purpose, Corner radius
323MA / 923MA		142	FUTURA	Standard length, 3 flute, General purpose, Ball end
330MA / 930MA		142	FUTURA	Standard length, 4 flute, General purpose, Ball end
623MA / 643MA		156	FUTURA	Extra length, 3 flute, General purpose, Square end
630MA / 650MA		156	FUTURA	Extra length, 4 flute, General purpose, Square end
630RA		161	FUTURA	Extra length, 4 flute, General purpose, Corner radius
723MA / 743MA		167	FUTURA	Extra length, 3 flute, General purpose, Ball end
730MA / 750MA		167	FUTURA	Extra length, 4 flute, General purpose, Ball end