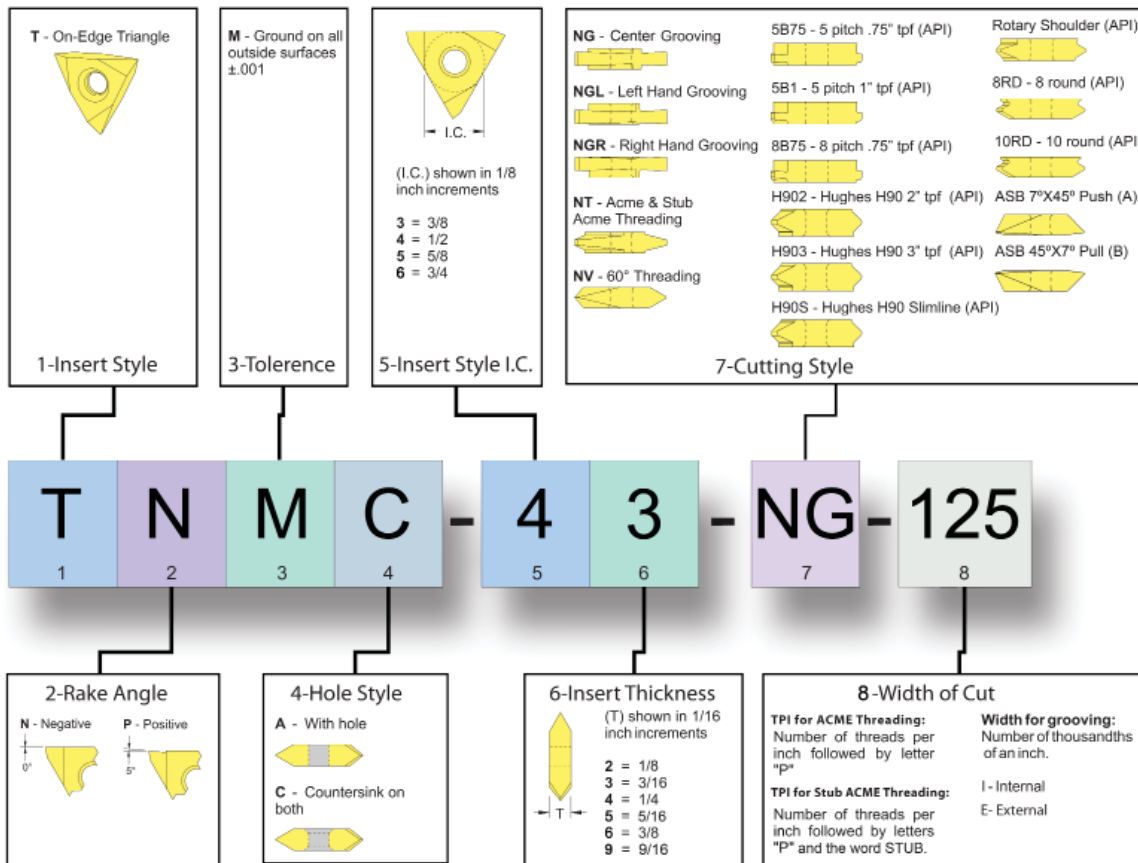
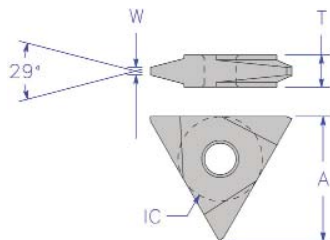




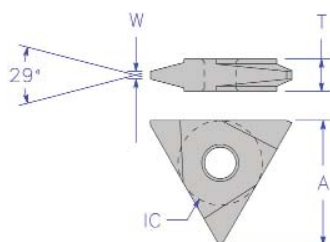
Threading			
Grade	Description	Uses	Stock
200	Uncoated tough submicron - wear resistant	Non-ferrous, stainless steel alloys, aluminum & composites at slower speeds	Item specific
210	TiN coated tough submicron - wear resistant	Non-ferrous, stainless steel alloys, aluminum & composites at medium speeds	Standard
221	AlTiN coated tough submicron chip resistant	Ductile iron, stainless steel, nickel-based & high-temp alloys at high speeds	Item specific
231	TiAlN coated tough submicron chip resistant	Non-ferrous, stainless steel, nickel-based & high-temp alloys at medium speeds	Standard
232	TiAlN coated tough submicron - chip, wear & heat resistant	Non-ferrous, stainless steel, nickel-based & high-temp alloys at medium speeds	Item specific
613	TiN coated premium substrate for threading	4140 and similar steels at slow to medium speeds	Standard
623	AlTiN coated premium substrate for threading	All steels at high speeds - maximum heat protection	Item specific
633	TiAlN coated premium substrate for threading	All steels at high speeds - medium heat protection	Item specific
Grooving			
Grade	Description	Uses	Stock
200	Uncoated tough submicron	Non-ferrous, stainless steel alloys composites aluminum at slower speeds	Item specific
210	TiN coated tough submicron	Non-ferrous, stainless steel alloys composites aluminum at medium speeds	Item specific
230	TiAlN coated tough submicron - great combination	Non-ferrous, stainless steel, nickel-based & high-temp alloys at high speeds - most popular grooving grade	Standard
612	TiN coated medium tough - long lasting, smooth cutting	4140 and similar steels at slow to medium speeds - most common steel cutting grade	Standard
632	TiAlN coated medium tough - long lasting heat resistant	All steels at high speeds - medium heat protection	Item specific

TNMA 32 ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 32 NT 6P	20000	6	.0566	.375	.127	.550
TNMA 32 NT 8P	20010	8	.0411	.375	.127	.550
TNMA 32 NT 10P	20020	10	.0319	.375	.127	.550
TNMA 32 NT 12P	20030	12	.0283	.375	.127	.550
TNMA 32 NT 14P	20040	14	.0239	.375	.127	.550
TNMA 32 NT 16P	20050	16	.0206	.375	.127	.550

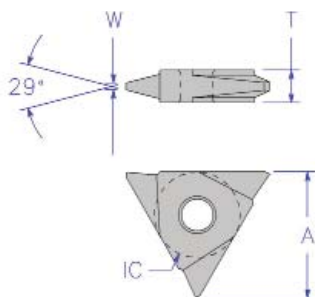
TNMA 32 STUB ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 32 NT 6P STUB	20100	6	.0652	.375	.127	.550
TNMA 32 NT 8P STUB	20110	8	.0476	.375	.127	.550
TNMA 32 NT 10P STUB	20120	10	.037	.375	.127	.550
TNMA 32 NT 12P STUB	20130	12	.0326	.375	.127	.550
TNMA 32 NT 14P STUB	20140	14	.0276	.375	.127	.550
TNMA 32 NT 16P STUB	20150	16	.0238	.375	.127	.550

TPMA 32 ACME

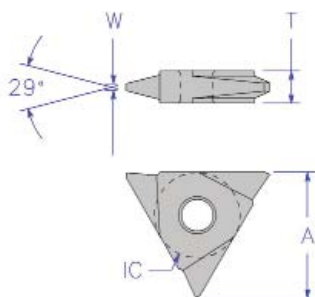
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 32 NT 6P	20200	6	.0566	.375	.127	.550
TPMA 32 NT 8P	20210	8	.0411	.375	.127	.550
TPMA 32 NT 10P	20220	10	.0319	.375	.127	.550
TPMA 32 NT 12P	20230	12	.0283	.375	.127	.550
TPMA 32 NT 14P	20240	14	.0239	.375	.127	.550
TPMA 32 NT 16P	20250	16	.0206	.375	.127	.550

TPMA 32 STUB ACME

5° POSITIVE RAKE



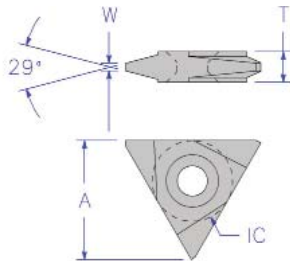
DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 32 NT 6P STUB	20300	6	.0652	.375	.127	.550
TPMA 32 NT 8P STUB	20310	8	.0476	.375	.127	.550
TPMA 32 NT 10P STUB	20320	10	.037	.375	.127	.550
TPMA 32 NT 12P STUB	20330	12	.0326	.375	.127	.550
TPMA 32 NT 14P STUB	20340	14	.0276	.375	.127	.550
TPMA 32 NT 16P STUB	20350	16	.0238	.375	.127	.550

TNMA holders and bars on page 107 & 109.

On Edge

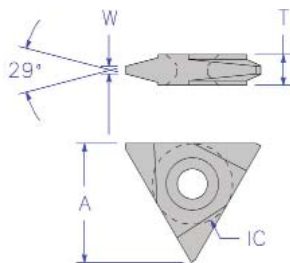


TNMC 32 ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 32 NT 6P	20400	6	.0566	.375	.127	.550
TNMC 32 NT 8P	20410	8	.0411	.375	.127	.550
TNMC 32 NT 10P	20420	10	.0319	.375	.127	.550
TNMC 32 NT 12P	20430	12	.0283	.375	.127	.550
TNMC 32 NT 14P	20440	14	.0239	.375	.127	.550
TNMC 32 NT 16P	20450	16	.0206	.375	.127	.550

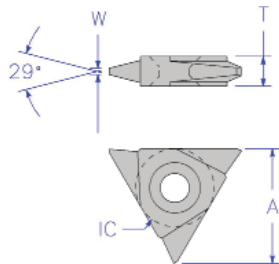
TNMC 32 STUB ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 32 NT 6P STUB	20500	6	.0652	.375	.127	.550
TNMC 32 NT 8P STUB	20510	8	.0476	.375	.127	.550
TNMC 32 NT 10P STUB	20520	10	.037	.375	.127	.550
TNMC 32 NT 12P STUB	20530	12	.0326	.375	.127	.550
TNMC 32 NT 14P STUB	20540	14	.0276	.375	.127	.550
TNMC 32 NT 16P STUB	20550	16	.0238	.375	.127	.550

TPMC 32 ACME

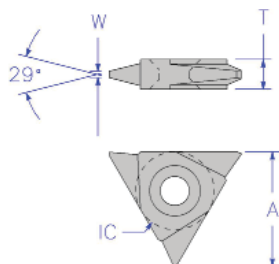
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 32 NT 6P	20600	6	.0566	.375	.127	.550
TPMC 32 NT 8P	20610	8	.0411	.375	.127	.550
TPMC 32 NT 10P	20620	10	.0319	.375	.127	.550
TPMC 32 NT 12P	20630	12	.0283	.375	.127	.550
TPMC 32 NT 14P	20640	14	.0239	.375	.127	.550
TPMC 32 NT 16P	20650	16	.0206	.375	.127	.550

TPMC 32 STUB ACME

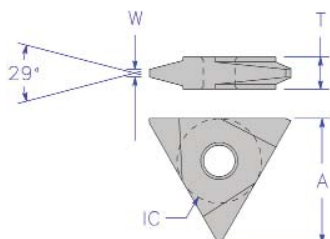
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 32 NT 6P STUB	20700	6	.0652	.375	.127	.550
TPMC 32 NT 8P STUB	20710	8	.0476	.375	.127	.550
TPMC 32 NT 10P STUB	20720	10	.037	.375	.127	.550
TPMC 32 NT 12P STUB	20730	12	.0326	.375	.127	.550
TPMC 32 NT 14P STUB	20740	14	.0276	.375	.127	.550
TPMC 32 NT 16P STUB	20750	16	.0238	.375	.127	.550

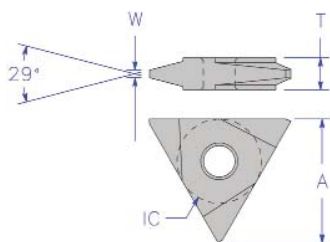
TNMC holders and bars on pages 108-109.

TNMA 43 ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 43 NT 4P	20800	4	.0875	.500	.190	.737
TNMA 43 NT 5P	20810	5	.0689	.500	.190	.737
TNMA 43 NT 6P	20820	6	.0566	.500	.190	.737
TNMA 43 NT 8P	20830	8	.0411	.500	.190	.737
TNMA 43 NT 10P	20840	10	.0319	.500	.190	.737
TNMA 43 NT 12P	20850	12	.0283	.500	.190	.737
TNMA 43 NT 14P	20860	14	.0239	.500	.190	.737
TNMA 43 NT 16P	20870	16	.0206	.500	.190	.737

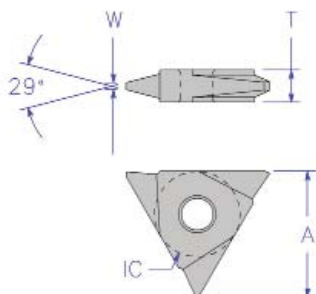
TNMA 43 STUB ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 43 NT 4P STUB	20900	4	.1004	.500	.190	.737
TNMA 43 NT 5P STUB	20910	5	.0793	.500	.190	.737
TNMA 43 NT 6P STUB	20920	6	.0652	.500	.190	.737
TNMA 43 NT 8P STUB	20930	8	.0476	.500	.190	.737
TNMA 43 NT 10P STUB	20940	10	.037	.500	.190	.737
TNMA 43 NT 12P STUB	20950	12	.0326	.500	.190	.737
TNMA 43 NT 14P STUB	20960	14	.0276	.500	.190	.737
TNMA 43 NT 16P STUB	20970	16	.0238	.500	.190	.737

TPMA 43 ACME

5° POSITIVE RAKE



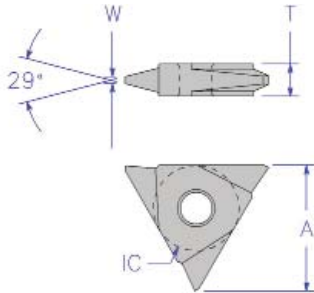
DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 43 NT 4P	21000	4	.0875	.500	.190	.737
TPMA 43 NT 5P	21010	5	.0689	.500	.190	.737
TPMA 43 NT 6P	21020	6	.0566	.500	.190	.737
TPMA 43 NT 8P	21030	8	.0411	.500	.190	.737
TPMA 43 NT 10P	21040	10	.0319	.500	.190	.737
TPMA 43 NT 12P	21050	12	.0283	.500	.190	.737
TPMA 43 NT 14P	21060	14	.0239	.500	.190	.737
TPMA 43 NT 16P	21070	16	.0206	.500	.190	.737

TNMA holders and bars on page 107 & 109.



TPMA 43 STUB ACME

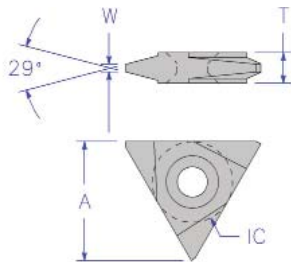
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 43 NT 4P STUB	21100	4	.1004	.500	.190	.737
TPMA 43 NT 5P STUB	21110	5	.0793	.500	.190	.737
TPMA 43 NT 6P STUB	21120	6	.0652	.500	.190	.737
TPMA 43 NT 8P STUB	21130	8	.0476	.500	.190	.737
TPMA 43 NT 10P STUB	21140	10	.037	.500	.190	.737
TPMA 43 NT 12P STUB	21150	12	.0326	.500	.190	.737
TPMA 43 NT 14P STUB	21160	14	.0276	.500	.190	.737
TPMA 43 NT 16P STUB	21170	16	.0238	.500	.190	.737

TNMA holders and bars on page 107 & 109.

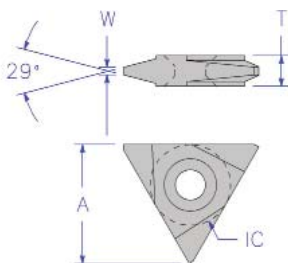
TNMC 43 ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 43 NT 4P	21200	4	.0875	.500	.190	.737
TNMC 43 NT 5P	21210	5	.0689	.500	.190	.737
TNMC 43 NT 6P	21220	6	.0566	.500	.190	.737
TNMC 43 NT 8P	21230	8	.0411	.500	.190	.737
TNMC 43 NT 10P	21240	10	.0319	.500	.190	.737
TNMC 43 NT 12P	21250	12	.0283	.500	.190	.737
TNMC 43 NT 14P	21260	14	.0239	.500	.190	.737
TNMC 43 NT 16P	21270	16	.0206	.500	.190	.737

TNMC holders and bars on pages 108-109.

TNMC 43 STUB ACME

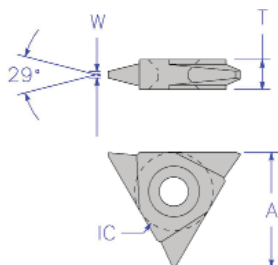


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 43 NT 4P STUB	21300	4	.1004	.500	.190	.737
TNMC 43 NT 5P STUB	21310	5	.0793	.500	.190	.737
TNMC 43 NT 6P STUB	21320	6	.0652	.500	.190	.737
TNMC 43 NT 8P STUB	21330	8	.0476	.500	.190	.737
TNMC 43 NT 10P STUB	21340	10	.037	.500	.190	.737
TNMC 43 NT 12P STUB	21350	12	.0326	.500	.190	.737
TNMC 43 NT 14P STUB	21360	14	.0276	.500	.190	.737
TNMC 43 NT 16P STUB	21370	16	.0238	.500	.190	.737

TNMC holders and bars on pages 108-109.

TPMC 43 ACME

5° POSITIVE RAKE

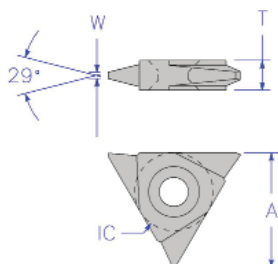


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 43 NT 4P	21400	4	.0875	.500	.190	.737
TPMC 43 NT 5P	21410	5	.0689	.500	.190	.737
TPMC 43 NT 6P	21420	6	.0566	.500	.190	.737
TPMC 43 NT 8P	21430	8	.0411	.500	.190	.737
TPMC 43 NT 10P	21440	10	.0319	.500	.190	.737
TPMC 43 NT 12P	21450	12	.0283	.500	.190	.737
TPMC 43 NT 14P	21460	14	.0239	.500	.190	.737
TPMC 43 NT 16P	21470	16	.0206	.500	.190	.737

TNMC holders and bars on pages 108-109.

TPMC 43 STUB ACME

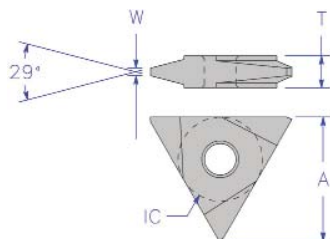
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 43 NT 4P STUB	21500	4	.1004	.500	.190	.737
TPMC 43 NT 5P STUB	21510	5	.0793	.500	.190	.737
TPMC 43 NT 6P STUB	21520	6	.0652	.500	.190	.737
TPMC 43 NT 8P STUB	21530	8	.0476	.500	.190	.737
TPMC 43 NT 10P STUB	21540	10	.037	.500	.190	.737
TPMC 43 NT 12P STUB	21550	12	.0326	.500	.190	.737
TPMC 43 NT 14P STUB	21560	14	.0276	.500	.190	.737
TPMC 43 NT 16P STUB	21570	16	.0238	.500	.190	.737

TNMC holders and bars on pages 108-109.

TNMA 54 ACME

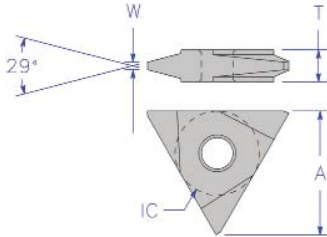


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 54 NT 3P	21600	3	.1184	.625	.252	.925
TNMA 54 NT 3.5P	21610	3.5	.1007	.625	.252	.925
TNMA 54 NT 4P	21620	4	.0875	.625	.252	.925
TNMA 54 NT 5P	21630	5	.0689	.625	.252	.925
TNMA 54 NT 6P	21640	6	.0566	.625	.252	.925
TNMA 54 NT 8P	21650	8	.0411	.625	.252	.925

TNMA holders and bars on page 107 & 109.



TNMA 54 STUB ACME

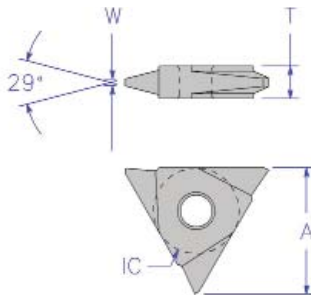


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 54 NT 3P STUB	21700	3	.1356	.625	.252	.925
TNMA 54 NT 3.5P STUB	21710	3.5	.1155	.625	.252	.925
TNMA 54 NT 4P STUB	21720	4	.1004	.625	.252	.925
TNMA 54 NT 5P STUB	21730	5	.0793	.625	.252	.925
TNMA 54 NT 6P STUB	21740	6	.0652	.625	.252	.925
TNMA 54 NT 8P STUB	21750	8	.0476	.625	.252	.925

TNMA holders and bars on page 107 & 109.

TPMA 54 ACME

5° POSITIVE RAKE

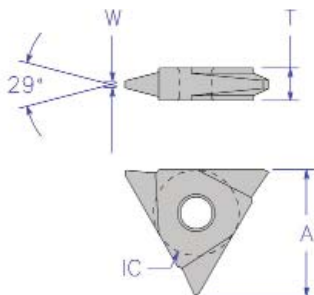


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 54 NT 3P	21800	3	.1184	.625	.252	.925
TPMA 54 NT 3.5P	21810	3.5	.1007	.625	.252	.925
TPMA 54 NT 4P	21820	4	.0875	.625	.252	.925
TPMA 54 NT 5P	21830	5	.0689	.625	.252	.925
TPMA 54 NT 6P	21840	6	.0566	.625	.252	.925
TPMA 54 NT 8P	21850	8	.0411	.625	.252	.925

TNMA holders and bars on page 107 & 109.

TPMA 54 STUB ACME

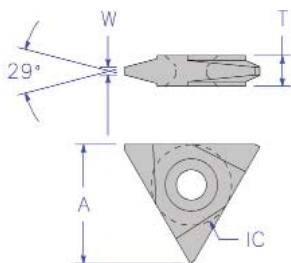
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 54 NT 3P STUB	21900	3	.1356	.625	.252	.925
TPMA 54 NT 3.5P STUB	21910	3.5	.1155	.625	.252	.925
TPMA 54 NT 4P STUB	21920	4	.1004	.625	.252	.925
TPMA 54 NT 5P STUB	21930	5	.0793	.625	.252	.925
TPMA 54 NT 6P STUB	21940	6	.0652	.625	.252	.925
TPMA 54 NT 8P STUB	21950	8	.0476	.625	.252	.925

TNMA holders and bars on page 107 & 109.

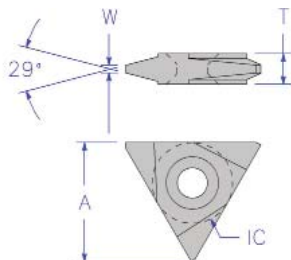
TNMC 54 ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 54 NT 3P	22000	3	.1184	.625	.252	.925
TNMC 54 NT 3.5P	22010	3.5	.1007	.625	.252	.925
TNMC 54 NT 4P	22020	4	.0875	.625	.252	.925
TNMC 54 NT 5P	22030	5	.0689	.625	.252	.925
TNMC 54 NT 6P	22040	6	.0566	.625	.252	.925
TNMC 54 NT 8P	22050	8	.0411	.625	.252	.925

TNMC holders and bars on pages 108-109.

TNMC 54 STUB ACME

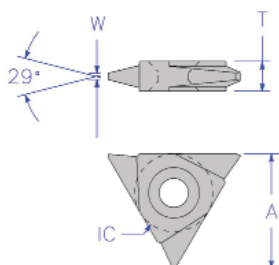


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 54 NT 3P STUB	22100	3	.1356	.625	.252	.925
TNMC 54 NT 3.5P STUB	22110	3.5	.1155	.625	.252	.925
TNMC 54 NT 4P STUB	22120	4	.1004	.625	.252	.925
TNMC 54 NT 5P STUB	22130	5	.0793	.625	.252	.925
TNMC 54 NT 6P STUB	22140	6	.0652	.625	.252	.925
TNMC 54 NT 8P STUB	22150	8	.0476	.625	.252	.925

TNMC holders and bars on pages 108-109.

TPMC 54 ACME

5° POSITIVE RAKE

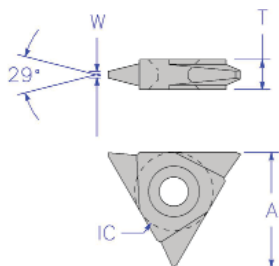


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 54 NT 3P	22200	3	.1184	.625	.252	.925
TPMC 54 NT 3.5P	22210	3.5	.1007	.625	.252	.925
TPMC 54 NT 4P	22220	4	.0875	.625	.252	.925
TPMC 54 NT 5P	22230	5	.0689	.625	.252	.925
TPMC 54 NT 6P	22240	6	.0566	.625	.252	.925
TPMC 54 NT 8P	22250	8	.0411	.625	.252	.925

TNMC holders and bars on pages 108-109.

TPMC 54 STUB ACME

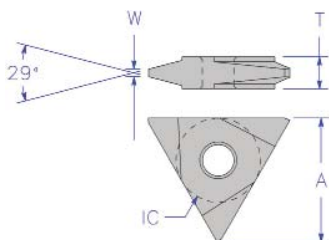
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 54 NT 3P STUB	22300	3	.1356	.625	.252	.925
TPMC 54 NT 3.5P STUB	22310	3.5	.1155	.625	.252	.925
TPMC 54 NT 4P STUB	22320	4	.1004	.625	.252	.925
TPMC 54 NT 5P STUB	22330	5	.0793	.625	.252	.925
TPMC 54 NT 6P STUB	22340	6	.0652	.625	.252	.925
TPMC 54 NT 8P STUB	22350	8	.0476	.625	.252	.925

TNMC holders and bars on pages 108-109.

TNMA 66 ACME

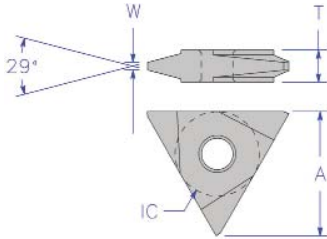


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 66 NT 2P	22400	2	.1802	.750	.377	1.112
TNMA 66 NT 2.5P	22410	2.5	.1431	.750	.377	1.112
TNMA 66 NT 3P	22420	3	.1184	.750	.377	1.112
TNMA 66 NT 3.5P	22430	3.5	.1007	.750	.377	1.112

TNMA holders and bars on page 107 & 109.



TNMA 66 STUB ACME

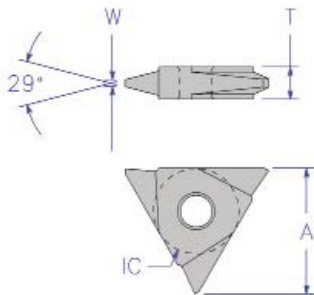


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMA 66 NT 2P STUB	22450	2	.206	.750	.377	1.112
TNMA 66 NT 2.5P STUB	22460	2.5	.1638	.750	.377	1.112
TNMA 66 NT 3P STUB	22470	3	.1356	.750	.377	1.112
TNMA 66 NT 3.5P STUB	22480	3.5	.1155	.750	.377	1.112

TNMA holders and bars on page 107 & 109.

TPMA 66 ACME

5° POSITIVE RAKE

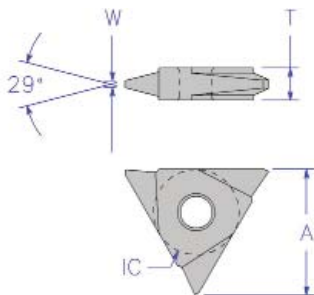


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 66 NT 2P	22500	2	.1802	.750	.377	1.112
TPMA 66 NT 2.5P	22510	2.5	.1431	.750	.377	1.112
TPMA 66 NT 3P	22520	3	.1184	.750	.377	1.112
TPMA 66 NT 3.5P	22530	3.5	.1007	.750	.377	1.112

TNMA holders and bars on page 107 & 109.

TPMA 66 STUB ACME

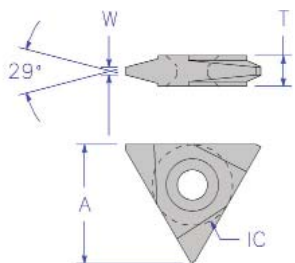
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMA 66 NT 2P STUB	22550	2	.206	.750	.377	1.112
TPMA 66 NT 2.5P STUB	22560	2.5	.1638	.750	.377	1.112
TPMA 66 NT 3P STUB	22570	3	.1356	.750	.377	1.112
TPMA 66 NT 3.5P STUB	22580	3.5	.1155	.750	.377	1.112

TNMA holders and bars on page 107 & 109.

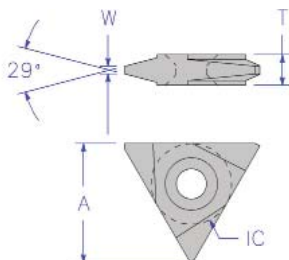
TNMC 66 ACME



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 66 NT 2P	22600	2	.1802	.750	.377	1.112
TNMC 66 NT 2.5P	22610	2.5	.1431	.750	.377	1.112
TNMC 66 NT 3P	22620	3	.1184	.750	.377	1.112
TNMC 66 NT 3.5P	22630	3.5	.1007	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TNMC 66 STUB ACME

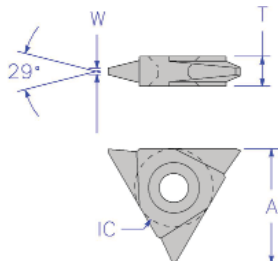


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TNMC 66 NT 2P STUB	22650	2	.206	.750	.377	1.112
TNMC 66 NT 2.5P STUB	22660	2.5	.1638	.750	.377	1.112
TNMC 66 NT 3P STUB	22670	3	.1356	.750	.377	1.112
TNMC 66 NT 3.5P STUB	22680	3.5	.1155	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TPMC 66 ACME

5° POSITIVE RAKE

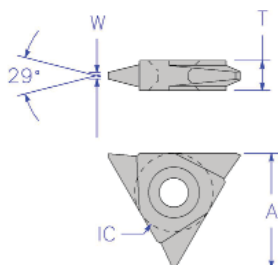


DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 66 NT 2P	22700	2	.1802	.750	.377	1.112
TPMC 66 NT 2.5P	22710	2.5	.1431	.750	.377	1.112
TPMC 66 NT 3P	22720	3	.1184	.750	.377	1.112
TPMC 66 NT 3.5P	22730	3.5	.1007	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TPMC 66 STUB ACME

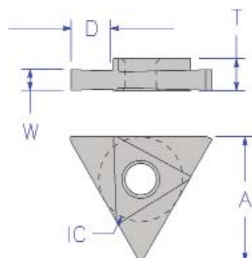
5° POSITIVE RAKE



DESCRIPTION	EDP	PITCH	WIDTH	IC	T	A
TPMC 66 NT 2P STUB	22750	2	.206	.750	.377	1.112
TPMC 66 NT 2.5P STUB	22760	2.5	.1638	.750	.377	1.112
TPMC 66 NT 3P STUB	22770	3	.1356	.750	.377	1.112
TPMC 66 NT 3.5P STUB	22780	3.5	.1155	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TNMA 32 NGR



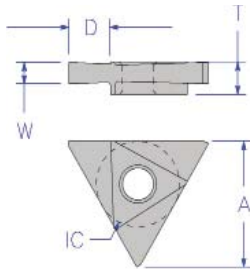
DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 32 NGR .031W	22800	.031	.080	.375	.127	.550
TNMA 32 NGR .047W	22810	.047	.100	.375	.127	.550
TNMA 32 NGR .0625W	22820	.0625	.156	.375	.127	.550
TNMA 32 NGR .094W	22830	.094	.156	.375	.127	.550

TNMA holders and bars on page 107 & 109.

On Edge

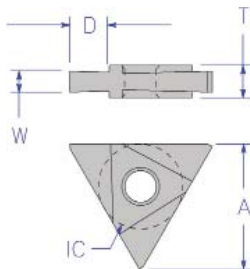


TNMA 32 NGL



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 32 NGL .031W	22900	.031	.080	.375	.127	.550
TNMA 32 NGL .047W	22910	.047	.100	.375	.127	.550
TNMA 32 NGL .0625W	22920	.0625	.156	.375	.127	.550
TNMA 32 NGL .094W	22930	.094	.156	.375	.127	.550

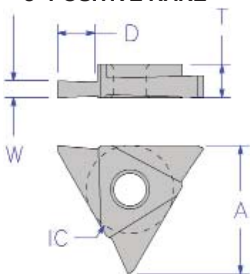
TNMA 32 NGC



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 32 NGC .031W	23000	.031	.080	.375	.127	.550
TNMA 32 NGC .047W	23010	.047	.100	.375	.127	.550
TNMA 32 NGC .0625W	23020	.0625	.156	.375	.127	.550
TNMA 32 NGC .094W	23030	.094	.156	.375	.127	.550
TNMA 32 NGC .125W	23040	.125	.156	.375	.127	.550

TPMA 32 NGR

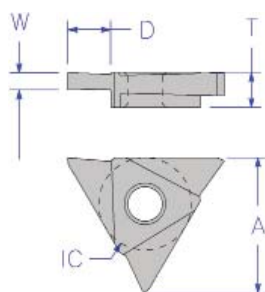
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 32 NGR .031W	23100	.031	.080	.375	.127	.550
TPMA 32 NGR .047W	23110	.047	.100	.375	.127	.550
TPMA 32 NGR .0625W	23120	.0625	.156	.375	.127	.550
TPMA 32 NGR .094W	23130	.094	.156	.375	.127	.550

TPMA 32 NGL

5° POSITIVE RAKE

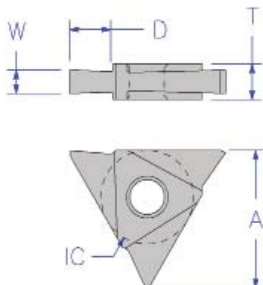


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 32 NGL .031W	23200	.031	.080	.375	.127	.550
TPMA 32 NGL .047W	23210	.047	.100	.375	.127	.550
TPMA 32 NGL .0625W	23220	.0625	.156	.375	.127	.550
TPMA 32 NGL .094W	23230	.094	.156	.375	.127	.550

TNMA holders and bars on page 107 & 109.

TPMA 32 NGC

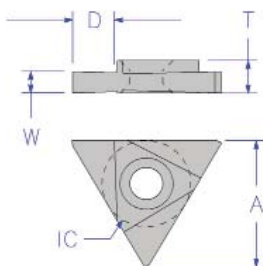
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 32 NGC .031W	23300	.031	.080	.375	.127	.550
TPMA 32 NGC .047W	23310	.047	.100	.375	.127	.550
TPMA 32 NGC .0625W	23320	.0625	.156	.375	.127	.550
TPMA 32 NGC .094W	23330	.094	.156	.375	.127	.550
TPMA 32 NGC .125W	23340	.125	.156	.375	.127	.550

TNMA holders and bars on page 107 & 109.

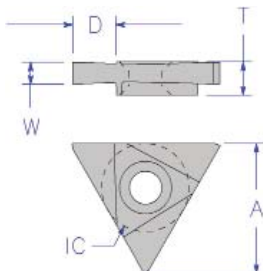
TNMC 32 NGR



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 32 NGR .031W	23400	.031	.080	.375	.127	.550
TNMC 32 NGR .047W	23410	.047	.100	.375	.127	.550
TNMC 32 NGR .0625W	23420	.0625	.156	.375	.127	.550
TNMC 32 NGR .094W	23430	.094	.156	.375	.127	.550

TNMC holders and bars on pages 108-109.

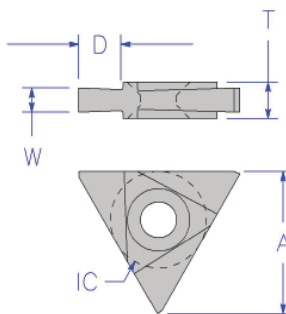
TNMC 32 NGL



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 32 NGL .031W	23500	.031	.080	.375	.127	.550
TNMC 32 NGL .047W	23510	.047	.100	.375	.127	.550
TNMC 32 NGL .0625W	23520	.0625	.156	.375	.127	.550
TNMC 32 NGL .094W	23530	.094	.156	.375	.127	.550

TNMC holders and bars on pages 108-109.

TNMC 32 NGC



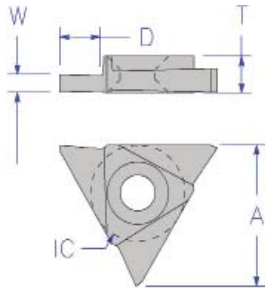
DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 32 NGC .031W	23600	.031	.080	.375	.127	.550
TNMC 32 NGC .047W	23610	.047	.100	.375	.127	.550
TNMC 32 NGC .0625W	23620	.0625	.156	.375	.127	.550
TNMC 32 NGC .094W	23630	.094	.156	.375	.127	.550
TNMC 32 NGC .125W	23640	.125	.156	.375	.127	.550

TNMC holders and bars on pages 108-109.

On Edge

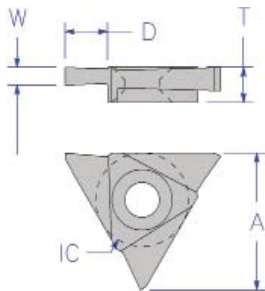


TPMC 32 NGR	DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
5° POSITIVE RAKE	TPMC 32 NGR .031W	23700	.031	.080	.375	.127	.550
	TPMC 32 NGR .047W	23710	.047	.100	.375	.127	.550
	TPMC 32 NGR .0625W	23720	.0625	.156	.375	.127	.550
	TPMC 32 NGR .094W	23730	.094	.156	.375	.127	.550



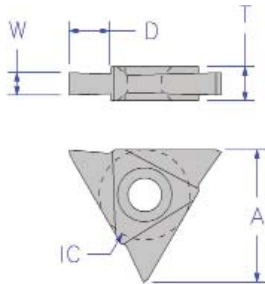
TNMC holders and bars on pages 108-109.

TPMC 32 NGL	DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
5° POSITIVE RAKE	TPMC 32 NGL .031W	23800	.031	.080	.375	.127	.550
	TPMC 32 NGL .047W	23810	.047	.100	.375	.127	.550
	TPMC 32 NGL .0625W	23820	.0625	.156	.375	.127	.550
	TPMC 32 NGL .094W	23830	.094	.156	.375	.127	.550



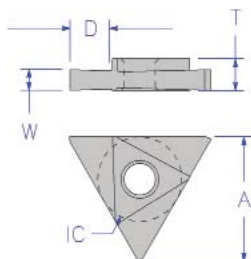
TNMC holders and bars on pages 108-109.

TPMC 32 NGC	DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
5° POSITIVE RAKE	TPMC 32 NGC .031W	23900	.031	.080	.375	.127	.550
	TPMC 32 NGC .047W	23910	.047	.100	.375	.127	.550
	TPMC 32 NGC .0625W	23920	.0625	.156	.375	.127	.550
	TPMC 32 NGC .094W	23930	.094	.156	.375	.127	.550
	TPMC 32 NGC .125W	23940	.125	.156	.375	.127	.550



TNMC holders and bars on pages 108-109.

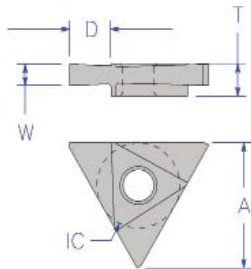
TNMA 43 NGR	DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
	TNMA 43 NGR .031W	24000	.031	.080	.500	.190	.737
	TNMA 43 NGR .047W	24010	.047	.100	.500	.190	.737
	TNMA 43 NGR .0625W	24020	.0625	.156	.500	.190	.737
	TNMA 43 NGR .094W	24030	.094	.187	.500	.190	.737
	TNMA 43 NGR .125W	24040	.125	.234	.500	.190	.737
	TNMA 43 NGR .156W	24050	.156	.234	.500	.190	.737



TNMA holders and bars on page 107 & 109.

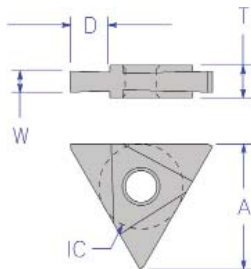


TNMA 43 NGL



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 43 NGL .031W	24100	.031	.080	.500	.190	.737
TNMA 43 NGL .047W	24110	.047	.100	.500	.190	.737
TNMA 43 NGL .0625W	24120	.0625	.156	.500	.190	.737
TNMA 43 NGL .094W	24130	.094	.187	.500	.190	.737
TNMA 43 NGL .125W	24140	.125	.234	.500	.190	.737
TNMA 43 NGL .156W	24150	.156	.234	.500	.190	.737

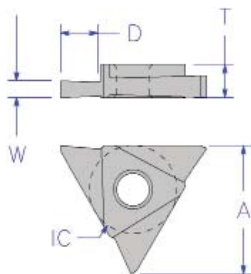
TNMA 43 NGC



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 43 NGC .031W	24200	.031	.080	.500	.190	.737
TNMA 43 NGC .047W	24210	.047	.100	.500	.190	.737
TNMA 43 NGC .0625W	24220	.0625	.156	.500	.190	.737
TNMA 43 NGC .094W	24230	.094	.187	.500	.190	.737
TNMA 43 NGC .125W	24240	.125	.234	.500	.190	.737
TNMA 43 NGC .156W	24250	.156	.234	.500	.190	.737
TNMA 43 NGC .1875W	24260	.1875	.234	.500	.190	.737

TPMA 43 NGR

5° POSITIVE RAKE



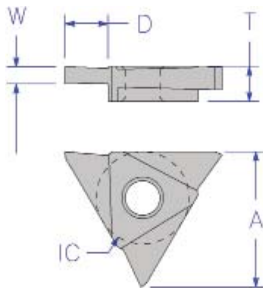
DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 43 NGR .031W	24300	.031	.080	.500	.190	.737
TPMA 43 NGR .047W	24310	.047	.100	.500	.190	.737
TPMA 43 NGR .0625W	24320	.0625	.156	.500	.190	.737
TPMA 43 NGR .094W	24330	.094	.187	.500	.190	.737
TPMA 43 NGR .125W	24340	.125	.234	.500	.190	.737
TPMA 43 NGR .156W	24350	.156	.234	.500	.190	.737

TNMA holders and bars on page 107 & 109.



TPMA 43 NGL

5° POSITIVE RAKE

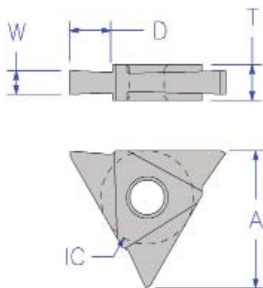


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 43 NGL .031W	24400	.031	.080	.500	.190	.737
TPMA 43 NGL .047W	24410	.047	.100	.500	.190	.737
TPMA 43 NGL .0625W	24420	.0625	.156	.500	.190	.737
TPMA 43 NGL .094W	24430	.094	.187	.500	.190	.737
TPMA 43 NGL .125W	24440	.125	.234	.500	.190	.737
TPMA 43 NGL .156W	24450	.156	.234	.500	.190	.737

TNMA holders and bars on page 107 & 109.

TPMA 43 NGC

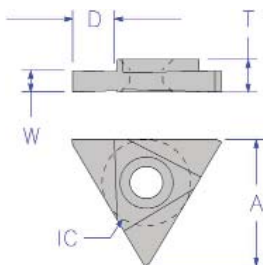
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 43 NGC .031W	24500	.031	.080	.500	.190	.737
TPMA 43 NGC .047W	24510	.047	.100	.500	.190	.737
TPMA 43 NGC .0625W	24520	.0625	.156	.500	.190	.737
TPMA 43 NGC .094W	24530	.094	.187	.500	.190	.737
TPMA 43 NGC .125W	24540	.125	.234	.500	.190	.737
TPMA 43 NGC .156W	24550	.156	.234	.500	.190	.737
TPMA 43 NGC .1875W	24560	.1875	.234	.500	.190	.737

TNMA holders and bars on page 107 & 109.

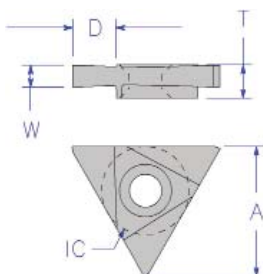
TNMC 43 NGR



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 43 NGR .031W	24600	.031	.080	.500	.190	.737
TNMC 43 NGR .047W	24610	.047	.100	.500	.190	.737
TNMC 43 NGR .0625W	24620	.0625	.156	.500	.190	.737
TNMC 43 NGR .094W	24630	.094	.187	.500	.190	.737
TNMC 43 NGR .125W	24640	.125	.234	.500	.190	.737
TNMC 43 NGR .156W	24650	.156	.234	.500	.190	.737

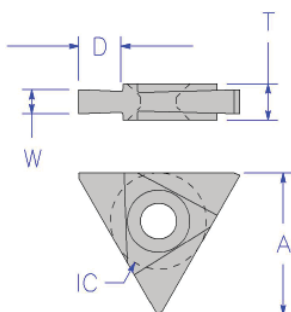
TNMC holders and bars on pages 108-109.

TNMC 43 NGL



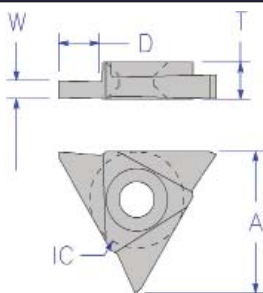
DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 43 NGL .031W	24700	.031	.080	.500	.190	.737
TNMC 43 NGL .047W	24710	.047	.100	.500	.190	.737
TNMC 43 NGL .0625W	24720	.0625	.156	.500	.190	.737
TNMC 43 NGL .094W	24730	.094	.187	.500	.190	.737
TNMC 43 NGL .125W	24740	.125	.234	.500	.190	.737
TNMC 43 NGL .156W	24750	.156	.234	.500	.190	.737

TNMC 43 NGC



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 43 NGC .031W	24800	.031	.080	.500	.190	.737
TNMC 43 NGC .047W	24810	.047	.100	.500	.190	.737
TNMC 43 NGC .0625W	24820	.0625	.156	.500	.190	.737
TNMC 43 NGC .094W	24830	.094	.187	.500	.190	.737
TNMC 43 NGC .125W	24840	.125	.234	.500	.190	.737
TNMC 43 NGC .156W	24850	.156	.234	.500	.190	.737
TNMC 43 NGC .1875W	24860	.1875	.234	.500	.190	.737

TPMC 43 NGR



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 43 NGR .031W	24900	.031	.080	.500	.190	.737
TPMC 43 NGR .047W	24910	.047	.100	.500	.190	.737
TPMC 43 NGR .0625W	24920	.0625	.156	.500	.190	.737
TPMC 43 NGR .094W	24930	.094	.187	.500	.190	.737
TPMC 43 NGR .125W	24940	.125	.234	.500	.190	.737
TPMC 43 NGR .156W	24950	.156	.234	.500	.190	.737

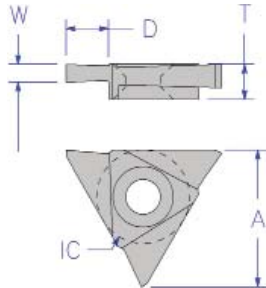
TNMC holders and bars on pages 108-109.

On Edge



TPMC 43 NGL

5° POSITIVE RAKE

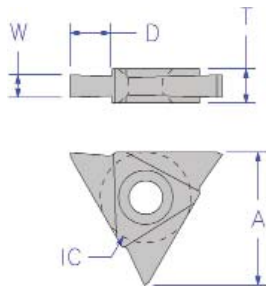


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 43 NGL .031W	25000	.031	.080	.500	.190	.737
TPMC 43 NGL .047W	25010	.047	.100	.500	.190	.737
TPMC 43 NGL .0625W	25020	.0625	.156	.500	.190	.737
TPMC 43 NGL .094W	25030	.094	.187	.500	.190	.737
TPMC 43 NGL .125W	25040	.125	.234	.500	.190	.737
TPMC 43 NGL .156W	25050	.156	.234	.500	.190	.737

TNMC holders and bars on pages 108-109.

TPMC 43 NGC

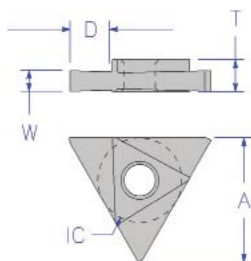
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 43 NGC .031W	25100	.031	.080	.500	.190	.737
TPMC 43 NGC .047W	25110	.047	.100	.500	.190	.737
TPMC 43 NGC .0625W	25120	.0625	.156	.500	.190	.737
TPMC 43 NGC .094W	25130	.094	.187	.500	.190	.737
TPMC 43 NGC .125W	25140	.125	.234	.500	.190	.737
TPMC 43 NGC .156W	25150	.156	.234	.500	.190	.737
TPMC 43 NGC .1875W	25160	.1875	.234	.500	.190	.737

TNMC holders and bars on pages 108-109.

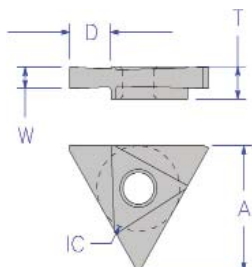
TNMA 54 NGR



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 54 NGR .0625W	25200	.0625	.156	.625	.252	.925
TNMA 54 NGR .094W	25210	.094	.187	.625	.252	.925
TNMA 54 NGR .125W	25220	.125	.296	.625	.252	.925
TNMA 54 NGR .156W	25230	.156	.296	.625	.252	.925
TNMA 54 NGR .1875W	25240	.1875	.296	.625	.252	.925

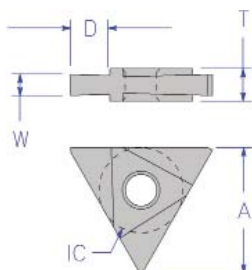
TNMA holders and bars on page 107 & 109.

TNMA 54 NGL



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 54 NGL .0625W	25300	.0625	.156	.625	.252	.925
TNMA 54 NGL .094W	25310	.094	.187	.625	.252	.925
TNMA 54 NGL .125W	25320	.125	.296	.625	.252	.925
TNMA 54 NGL .156W	25330	.156	.296	.625	.252	.925
TNMA 54 NGL .1875W	25340	.1875	.296	.625	.252	.925

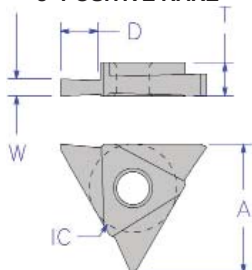
TNMA 54 NGC



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 54 NGC .0625W	25400	.0625	.156	.625	.252	.925
TNMA 54 NGC .094W	25410	.094	.187	.625	.252	.925
TNMA 54 NGC .125W	25420	.125	.296	.625	.252	.925
TNMA 54 NGC .156W	25430	.156	.296	.625	.252	.925
TNMA 54 NGC .1875W	25440	.1875	.296	.625	.252	.925
TNMA 54 NGC .250W	25450	.250	.296	.625	.252	.925

TPMA 54 NGR

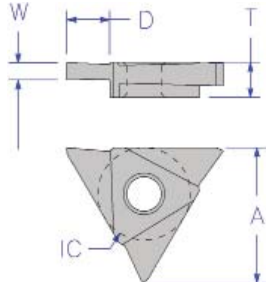
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 54 NGR .0625W	25500	.0625	.156	.625	.252	.925
TPMA 54 NGR .094W	25510	.094	.187	.625	.252	.925
TPMA 54 NGR .125W	25520	.125	.296	.625	.252	.925
TPMA 54 NGR .156W	25530	.156	.296	.625	.252	.925
TPMA 54 NGR .1875W	25540	.1875	.296	.625	.252	.925

TPMA 54 NGL

5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 54 NGL .0625W	25600	.0625	.156	.625	.252	.925
TPMA 54 NGL .094W	25610	.094	.187	.625	.252	.925
TPMA 54 NGL .125W	25620	.125	.296	.625	.252	.925
TPMA 54 NGL .156W	25630	.156	.296	.625	.252	.925
TPMA 54 NGL .1875W	25640	.1875	.296	.625	.252	.925

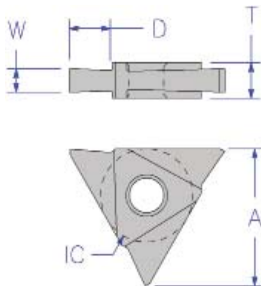
TNMA holders and bars on page 107 & 109.

On Edge



TPMA 54 NGC

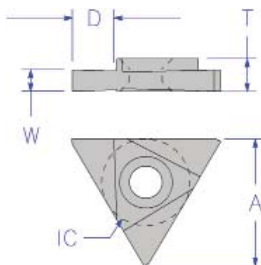
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 54 NGC .0625W	25700	.0625	.156	.625	.252	.925
TPMA 54 NGC .094W	25710	.094	.187	.625	.252	.925
TPMA 54 NGC .125W	25720	.125	.296	.625	.252	.925
TPMA 54 NGC .156W	25730	.156	.296	.625	.252	.925
TPMA 54 NGC .1875W	25740	.1875	.296	.625	.252	.925
TPMA 54 NGC .250W	25750	.250	.296	.625	.252	.925

TNMA holders and bars on page 107 & 109.

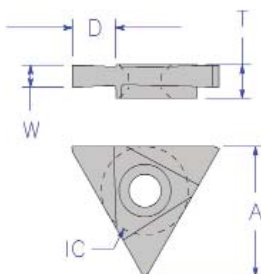
TNMC 54 NGR



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 54 NGR .0625W	25800	.0625	.156	.625	.252	.925
TNMC 54 NGR .094W	25810	.094	.187	.625	.252	.925
TNMC 54 NGR .125W	25820	.125	.296	.625	.252	.925
TNMC 54 NGR .156W	25830	.156	.296	.625	.252	.925
TNMC 54 NGR .1875W	25840	.1875	.296	.625	.252	.925

TNMC holders and bars on pages 108-109.

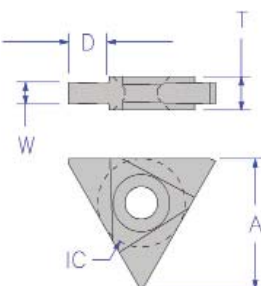
TNMC 54 NGL



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 54 NGL .0625W	25900	.0625	.156	.625	.252	.925
TNMC 54 NGL .094W	25910	.094	.187	.625	.252	.925
TNMC 54 NGL .125W	25920	.125	.296	.625	.252	.925
TNMC 54 NGL .156W	25930	.156	.296	.625	.252	.925
TNMC 54 NGL .1875W	25940	.1875	.296	.625	.252	.925

TNMC holders and bars on pages 108-109.

TNMC 54 NGC



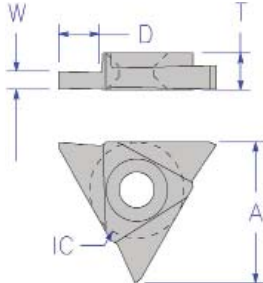
DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 54 NGC .0625W	26000	.0625	.156	.625	.252	.925
TNMC 54 NGC .094W	26010	.094	.187	.625	.252	.925
TNMC 54 NGC .125W	26020	.125	.296	.625	.252	.925
TNMC 54 NGC .156W	26030	.156	.296	.625	.252	.925
TNMC 54 NGC .1875W	26040	.1875	.296	.625	.252	.925
TNMC 54 NGC .250W	26050	.250	.296	.625	.252	.925

TNMC holders and bars on pages 108-109.



TPMC 54 NGR

5° POSITIVE RAKE

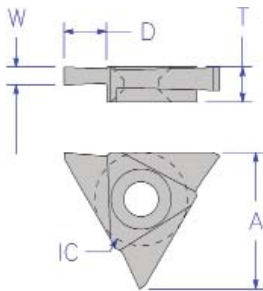


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 54 NGR .0625W	26100	.0625	.156	.625	.252	.925
TPMC 54 NGR .094W	26110	.094	.187	.625	.252	.925
TPMC 54 NGR .125W	26120	.125	.296	.625	.252	.925
TPMC 54 NGR .156W	26130	.156	.296	.625	.252	.925
TPMC 54 NGR .1875W	26140	.1875	.296	.625	.252	.925

TNMC holders and bars on pages 108-109.

TPMC 54 NGL

5° POSITIVE RAKE

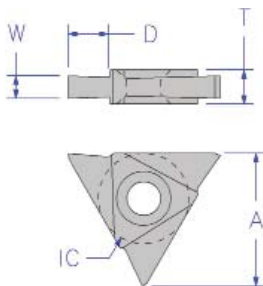


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 54 NGL .0625W	26200	.0625	.156	.625	.252	.925
TPMC 54 NGL .094W	26210	.094	.187	.625	.252	.925
TPMC 54 NGL .125W	26220	.125	.296	.625	.252	.925
TPMC 54 NGL .156W	26230	.156	.296	.625	.252	.925
TPMC 54 NGL .1875W	26240	.1875	.296	.625	.252	.925

TNMC holders and bars on pages 108-109.

TPMC 54 NGC

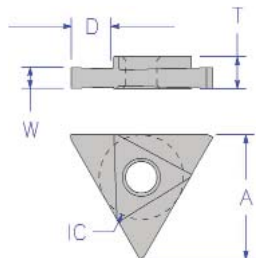
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 54 NGC .0625W	26300	.0625	.156	.625	.252	.925
TPMC 54 NGC .094W	26310	.094	.187	.625	.252	.925
TPMC 54 NGC .125W	26320	.125	.296	.625	.252	.925
TPMC 54 NGC .156W	26330	.156	.296	.625	.252	.925
TPMC 54 NGC .1875W	26340	.1875	.296	.625	.252	.925
TPMC 54 NGC .250W	26350	.250	.296	.625	.252	.925

TNMC holders and bars on pages 108-109.

TNMA 66 NGR



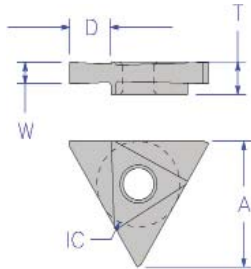
DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 66 NGR .1875W	26400	.1875	.296	.750	.377	1.112
TNMA 66 NGR .250W	26410	.250	.375	.750	.377	1.112

TNMA holders and bars on page 107 & 109.

On Edge

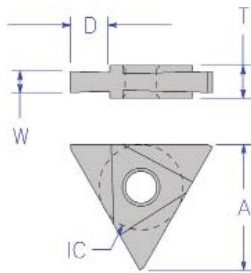


TNMA 66 NGL



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 66 NGL .1875W	26450	.1875	.296	.750	.377	1.112
TNMA 66 NGL .250W	26460	.250	.375	.750	.377	1.112

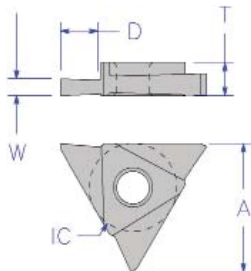
TNMA 66 NGC



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMA 66 NGC .1875W	26500	.1875	.296	.750	.377	1.112
TNMA 66 NGC .250W	26510	.250	.375	.750	.377	1.112
TNMA 66 NGC .375W	26520	.375	.375	.750	.377	1.112

TPMA 66 NGR

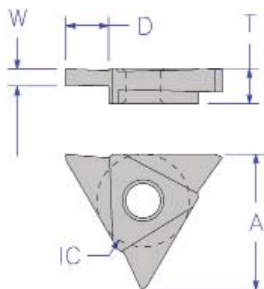
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 66 NGR .1875W	26550	.1875	.296	.750	.377	1.112
TPMA 66 NGR .250W	26560	.250	.375	.750	.377	1.112

TPMA 66 NGL

5° POSITIVE RAKE

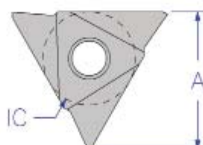
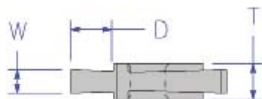


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 66 NGL .1875W	26600	.1875	.296	.750	.377	1.112
TPMA 66 NGL .250W	26610	.250	.375	.750	.377	1.112

TNMA holders and bars on page 107 & 109.

TPMA 66 NGC

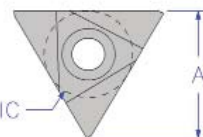
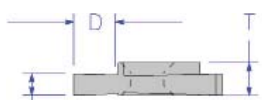
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMA 66 NGC .1875W	26650	.1875	.296	.750	.377	1.112
TPMA 66 NGC .250W	26660	.250	.375	.750	.377	1.112
TPMA 66 NGC .375W	26670	.375	.375	.750	.377	1.112

TNMA holders and bars on page 107 & 109.

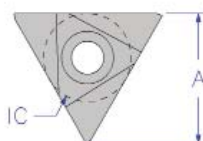
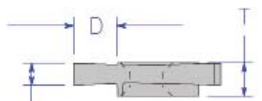
TNMC 66 NGR



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 66 NGR .1875W	26700	.1875	.296	.750	.377	1.112
TNMC 66 NGR .250W	26710	.250	.375	.750	.377	1.112

TNMC holders and bars on pages 108-109.

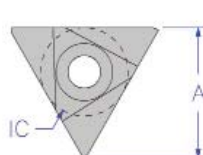
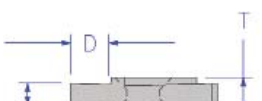
TNMC 66 NGL



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 66 NGL .1875W	26750	.1875	.296	.750	.377	1.112
TNMC 66 NGL .250W	26760	.250	.375	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TNMC 66 NGC



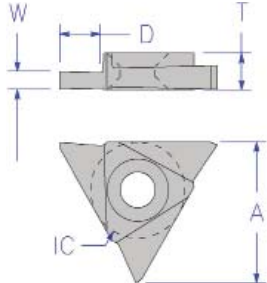
DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TNMC 66 NGC .1875W	26800	.1875	.296	.750	.377	1.112
TNMC 66 NGC .250W	26810	.250	.375	.750	.377	1.112
TNMC 66 NGC .375W	26820	.375	.375	.750	.377	1.112

TNMC holders and bars on pages 108-109.



TPMC 66 NGR

5° POSITIVE RAKE

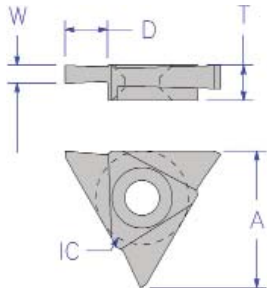


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 66 NGR .1875W	26850	.1875	.296	.750	.377	1.112
TPMC 66 NGR .250W	26860	.250	.375	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TPMC 66 NGL

5° POSITIVE RAKE

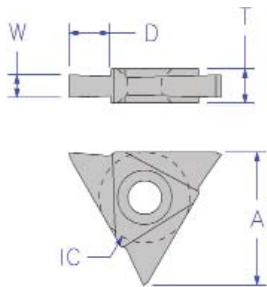


DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 66 NGL .1875W	26900	.1875	.296	.750	.377	1.112
TPMC 66 NGL .250W	26910	.250	.375	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TPMC 66 NGC

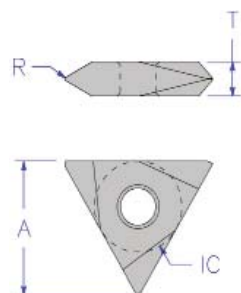
5° POSITIVE RAKE



DESCRIPTION	EDP	WIDTH	DEPTH	IC	T	A
TPMC 66 NGC .1875W	26950	.1875	.296	.750	.377	1.112
TPMC 66 NGC .250W	26960	.250	.375	.750	.377	1.112
TPMC 66 NGC .375W	26970	.375	.375	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TNMA NV 60° V-Threading

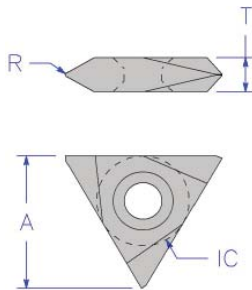


DESCRIPTION	EDP	PITCH	R	IC	T	A
TNMA 32 NV	33000	8-36	.003	.375	.127	.550
TNMA 43 NV	33010	5-24	.004	.500	.190	.737
TNMA 43 NV .010R	33020	4-20	.010	.500	.190	.737
TNMA 54 NV	33030	4-20	.008	.625	.252	.925
TNMA 54 NV .010R	33040	4-20	.010	.625	.252	.925
TNMA 54 NV .020R	33050	4-12	.020	.625	.252	.925
TNMA 54 NV .025R	33060	4-8	.025	.625	.252	.925
TNMA 54 NV .038R	33070	4-6	.038	.625	.252	.925
TNMA 66 NV	33080	3-12	.009	.750	.377	1.112

TNMA holders and bars on page 107 & 109.



TNMC NV 60° V-Threading

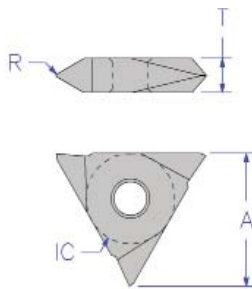


DESCRIPTION	EDP	PITCH	R	IC	T	A
TNMC 32 NV	33200	8-36	.003	.375	.127	.550
TNMC 43 NV	33210	5-24	.004	.500	.190	.737
TNMC 43 NV .010R	33220	4-20	.010	.500	.190	.737
TNMC 54 NV	33230	4-20	.008	.625	.252	.925
TNMC 54 NV .010R	33240	4-20	.010	.625	.252	.925
TNMC 54 NV .020R	33250	4-12	.020	.625	.252	.925
TNMC 54 NV .025R	33260	4-8	.025	.625	.252	.925
TNMC 54 NV .038R	33270	4-6	.038	.625	.252	.925
TNMC 66 NV	33280	3-12	.009	.750	.377	1.112

TNMC holders and bars on pages 108-109.

TPMA NV 60° V-Threading

5° POSITIVE RAKE

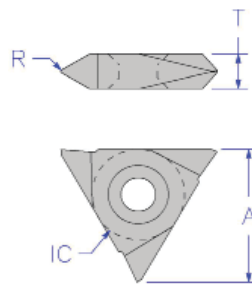


DESCRIPTION	EDP	PITCH	R	IC	T	A
TPMA 32 NV	33400	8-36	.003	.375	.127	.550
TPMA 43 NV	33410	5-24	.004	.500	.190	.737
TPMA 43 NV .010R	33420	4-20	.010	.500	.190	.737
TPMA 54 NV	33430	4-20	.008	.625	.252	.925
TPMA 54 NV .010R	33440	4-20	.010	.625	.252	.925
TPMA 54 NV .020R	33450	4-12	.020	.625	.252	.925
TPMA 54 NV .025R	33460	4-8	.025	.625	.252	.925
TPMA 54 NV .038R	33470	4-6	.038	.625	.252	.925
TPMA 66 NV	33480	3-12	.009	.750	.377	1.112

TNMA holders and bars on page 107 & 109.

TPMC NV 60° V-Threading

5° POSITIVE RAKE



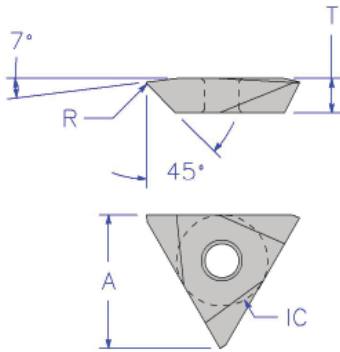
DESCRIPTION	EDP	PITCH	R	IC	T	A
TPMC 32 NV	33600	8-36	.003	.375	.127	.550
TPMC 43 NV	33610	5-24	.004	.500	.190	.737
TPMC 43 NV .010R	33620	4-20	.010	.500	.190	.737
TPMC 54 NV	33630	4-20	.008	.625	.252	.925
TPMC 54 NV .010R	33640	4-20	.010	.625	.252	.925
TPMC 54 NV .020R	33650	4-12	.020	.625	.252	.925
TPMC 54 NV .025R	33660	4-8	.025	.625	.252	.925
TPMC 54 NV .038R	33670	4-6	.038	.625	.252	.925
TPMC 66 NV	33680	3-12	.009	.750	.377	1.112

TNMC holders and bars on pages 108-109.



TNMA / TNMC AMERICAN STANDARD BUTTRESS

**7° LEADING
PUSH BUTTRESS**

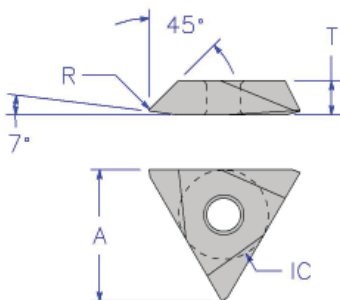


DESCRIPTION	EDP	PITCH	R	IC	T	A
TNMA 43 7° X 45° INT A (SHOWN)	33700	8-12	.006	.500	.190	.737
TNMA 43 7° X 45° EXT A	33710	8-12	.006	.500	.190	.737
TNMA 54 7° X 45° INT A	33720	4-6	.010	.625	.252	.925
TNMA 54 7° X 45° EXT A	33730	4-6	.010	.625	.252	.925
TNMC 43 7° X 45° INT A	33740	8-12	.006	.500	.190	.737
TNMC 43 7° X 45° EXT A	33750	8-12	.006	.500	.190	.737
TNMC 54 7° X 45° INT A	33760	4-6	.010	.625	.252	.925
TNMC 54 7° X 45° EXT A	33770	4-6	.010	.625	.252	.925

TNMA holders and bars on page 107 & 109. TNMC holders and bars on pages 108-109.

TNMA / TNMC AMERICAN STANDARD BUTTRESS

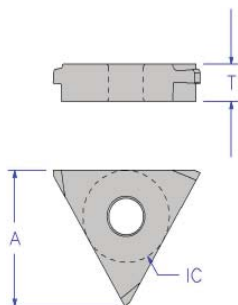
**45° LEADING
PULL BUTTRESS**



DESCRIPTION	EDP	PITCH	R	IC	T	A
TNMA 43 45° X 7° INT B (SHOWN)	33800	8-12	.006	.500	.190	.737
TNMA 43 45° X 7° EXT B	33810	8-12	.006	.500	.190	.737
TNMA 54 45° X 7° INT B	33820	4-6	.010	.625	.252	.925
TNMA 54 45° X 7° EXT B	33830	4-6	.010	.625	.252	.925
TNMC 43 45° X 7° INT B	33840	8-12	.006	.500	.190	.737
TNMC 43 45° X 7° EXT B	33850	8-12	.006	.500	.190	.737
TNMC 54 45° X 7° INT B	33860	4-6	.010	.625	.252	.925
TNMC 54 45° X 7° EXT B	33870	4-6	.010	.625	.252	.925

TNMA holders and bars on page 107 & 109. TNMC holders and bars on pages 108-109.

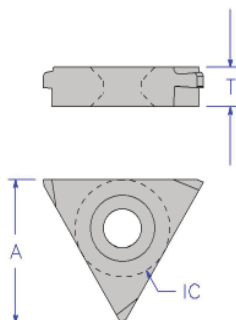
TNMA API BUTTRESS



DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMA 43 8B75 INT	39901	8	3/4	.500	.190	.737
TNMA 43 8B75 EXT	39912	8	3/4	.500	.190	.737
TNMA 54 5B75 INT	47531	5	3/4	.625	.252	.925
TNMA 54 5B75 EXT	48422	5	3/4	.625	.252	.925
TNMA 54 5B1 INT	39941	5	1	.625	.252	.925
TNMA 54 5B1 EXT	39952	5	1	.625	.252	.925

TNMA holders and bars on page 107 & 109.

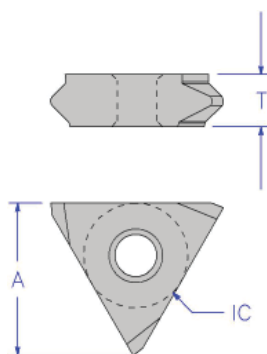
TNMC API BUTTRESS



DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMC 43 8B75 INT	39921	8	3/4	.500	.190	.737
TNMC 43 8B75 EXT	39932	8	3/4	.500	.190	.737
TNMC 54 5B75 INT	56521	5	3/4	.625	.252	.925
TNMC 54 5B75 EXT	66842	5	3/4	.625	.252	.925
TNMC 54 5B1 INT	44821	5	1	.625	.252	.925
TNMC 54 5B1 EXT	45622	5	1	.625	.252	.925

TNMC holders and bars on pages 108-109.

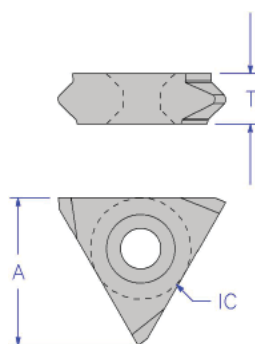
TNMA API HUGHES H90 THREADING



DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMA 55 H902 INT	47551	3.5	2	.625	.315	.925
TNMA 55 H902 EXT	47552	3.5	2	.625	.315	.925
TNMA 55 H903 INT	74041	3.5	3	.625	.315	.925
TNMA 55 H903 EXT	74042	3.5	3	.625	.315	.925
TNMA 55 H90S INT	74051	3	1 1/4	.625	.315	.925
TNMA 55 H90S EXT	74052	3	1 1/4	.625	.315	.925

TNMA holders and bars on page 107 & 109.

TNMC API HUGHES H90 THREADING



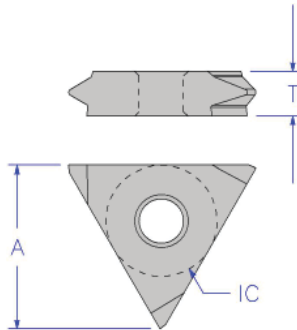
DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMC 55 H902 INT	74061	3.5	2	.625	.315	.925
TNMC 55 H902 EXT	74062	3.5	2	.625	.315	.925
TNMC 55 H903 INT	71151	3.5	3	.625	.315	.925
TNMC 55 H903 EXT	71152	3.5	3	.625	.315	.925
TNMC 55 H90S INT	62871	3	1 1/4	.625	.315	.925
TNMC 55 H90S EXT	62872	3	1 1/4	.625	.315	.925

TNMC holders and bars on pages 108-109.

On Edge



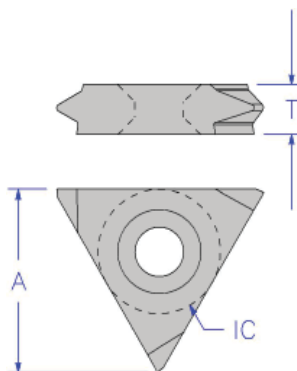
TNMA API THREADING



DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMA 54 530 INT	34001	5	3	.625	.252	.925
TNMA 54 530 EXT	34002	5	3	.625	.252	.925
TNMA 55 425 INT	34011	4	2	.625	.315	.925
TNMA 55 425 EXT	34012	4	2	.625	.315	.925
TNMA 55 428 INT	34021	4	2	.625	.315	.925
TNMA 55 428 EXT	34022	4	2	.625	.315	.925
TNMA 55 435 INT	34031	4	3	.625	.315	.925
TNMA 55 435 EXT	34032	4	3	.625	.315	.925
TNMA 55 438 INT	34041	4	3	.625	.315	.925
TNMA 55 438 EXT	34042	4	3	.625	.315	.925
TNMA 55 4PAC INT	34051	4	1.5	.625	.315	.925
TNMA 55 4PAC EXT	34052	4	1.5	.625	.315	.925

TNMA holders and bars on page 107 & 109.

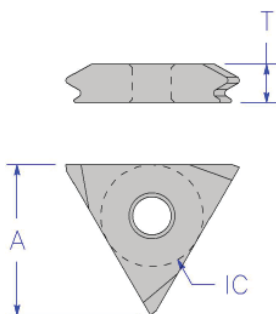
TNMC API THREADING



DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMC 54 530 INT	34061	5	3	.625	.252	.925
TNMC 54 530 EXT	34062	5	3	.625	.252	.925
TNMC 55 425 INT	34071	4	2	.625	.315	.925
TNMC 55 425 EXT	34072	4	2	.625	.315	.925
TNMC 55 428 INT	34081	4	2	.625	.315	.925
TNMC 55 428 EXT	34082	4	2	.625	.315	.925
TNMC 55 435 INT	34091	4	3	.625	.315	.925
TNMC 55 435 EXT	34092	4	3	.625	.315	.925
TNMC 55 438 INT	34101	4	3	.625	.315	.925
TNMC 55 438 EXT	34102	4	3	.625	.315	.925
TNMC 55 4PAC INT	34111	4	1.5	.625	.315	.925
TNMC 55 4PAC EXT	34112	4	1.5	.625	.315	.925

TNMC holders and bars on pages 108-109.

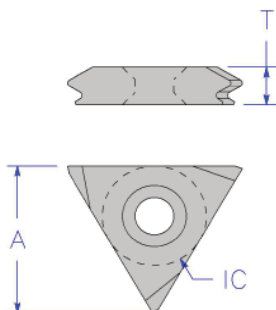
TNMA API ROUND THREADING



DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMA 43 8RD INT	41841	8	3/4	.500	.190	.737
TNMA 43 8RD EXT	41842	8	3/4	.500	.190	.737
TNMA 43 10RD INT	74101	10	3/4	.500	.190	.737
TNMA 43 10RD EXT	74102	10	3/4	.500	.190	.737
TNMA 54 8RD INT	58671	8	3/4	.625	.252	.925
TNMA 54 8RD EXT	58672	8	3/4	.625	.252	.925
TNMA 54 10RD INT	65781	10	3/4	.625	.252	.925
TNMA 54 10RD EXT	65782	10	3/4	.625	.252	.925

TNMA holders and bars on page 107 & 109.

TNMC API ROUND THREADING



DESCRIPTION	EDP	PITCH	TPF	IC	T	A
TNMC 43 8RD INT	62961	8	3/4	.500	.190	.737
TNMC 43 8RD EXT	62962	8	3/4	.500	.190	.737
TNMC 43 10RD INT	64461	10	3/4	.500	.190	.737
TNMC 43 10RD EXT	64462	10	3/4	.500	.190	.737
TNMC 54 8RD INT	66831	8	3/4	.625	.252	.925
TNMC 54 8RD EXT	66832	8	3/4	.625	.252	.925
TNMC 54 10RD INT	74121	10	3/4	.625	.252	.925
TNMC 54 10RD EXT	74122	10	3/4	.625	.252	.925

TNMC holders and bars on pages 108-109.

On Edge