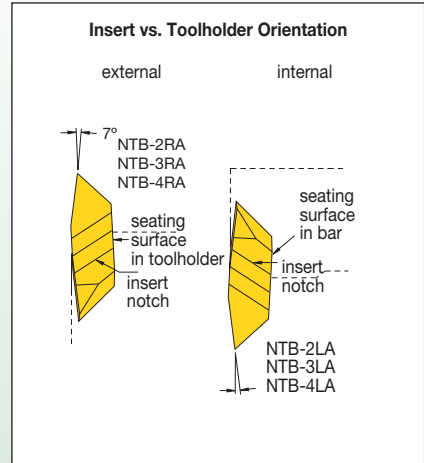
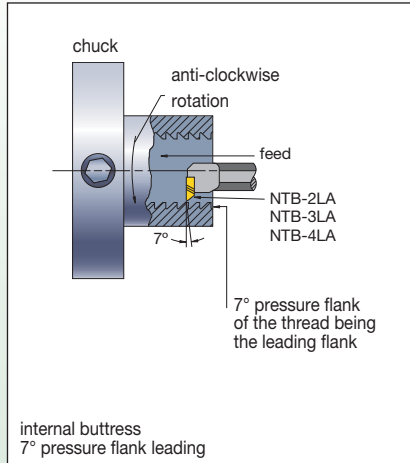
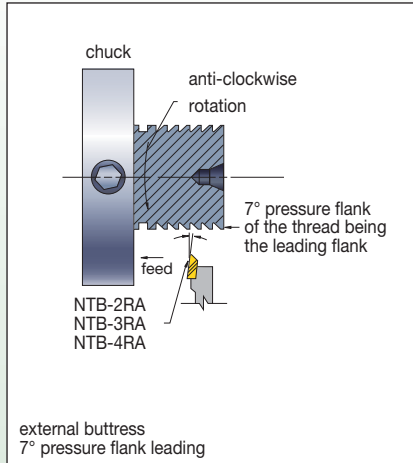
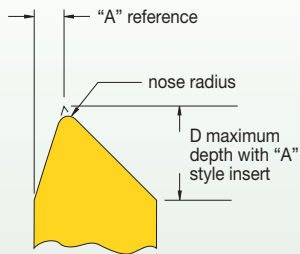


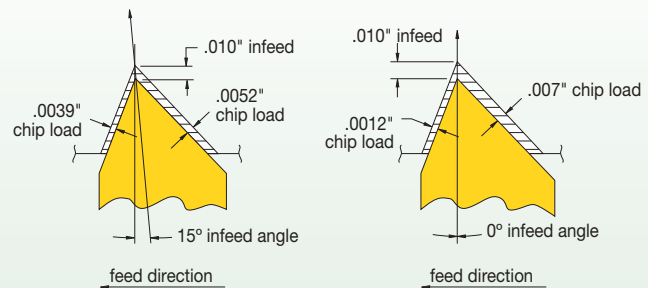
### American Buttress (7° Pressure Flank Leading) NTB-A Inserts • Push Type



#### Reference Dimensions



#### Infeed Angle vs. Chip Load: 7° Pressure Flank Leading



insert	D (inch)	"A" ref. (inch)	nose radius (inch)	pitch based on maximum radius
NTB-2A	.133	.024	.002-.004	16-20 TPI
NTB-3A	.171	.031	.005-.008	8-16 TPI
NTB-4A	.218	.049	.008-.012	4-6 TPI

NTB-A insert

NOTE: For balanced chip load, 15° infeed angle is suggested.

#### Internal Threading Limitations

##### internal threading limitations NTB-2A Buttress threading inserts

TPI	nominal thread size	minimum minor diameter (inch)
8	1-3/4	1.600
10	1-5/8	1.505
12	1-1/2	1.400
16	1-1/4	1.175
20	1-1/16	1.002

##### internal threading limitations NTB-3 and NTB-4A Buttress threading inserts

TPI	nominal thread size	minimum minor diameter (inch)
4*	2-1/2	2.200
5	2-1/4	2.010
6	2	1.800
8	1-3/4	1.600
10	1-5/8	1.505
12**	1-1/2	1.400

\*NTB-4A insert only.

\*\*Can cut 16 or 20 threads per inch provided minor diameter is 1.375" or larger.

#### Threads per Inch vs. Maximum Root Radius Chart (Inch)

TPI	20	16	12	10	8	6	5	4	3	2-1/2	2	1-1/2	1-1/4	1
maximum root radius	.0036	.0045	.0059	.0071	.0089	.0119	.0143	.0179	.0238	.0268	.0375	.0476	.0572	.0714

NOTE: Special Buttress forms are available upon request.