



# TOOL-FLO

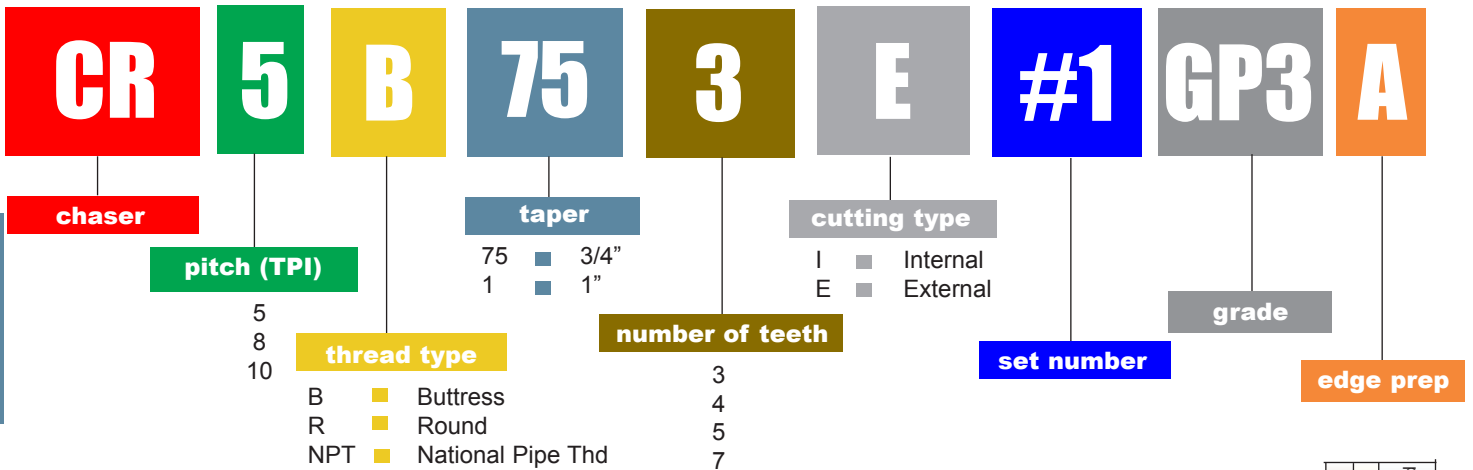


## CHASERS

Oil & Gas



## Chaser Insert Nomenclature Chart



## API BUTTRESS

### External

■ For holders see pg. 68

Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AC3	AC50
CR-5B75-3E #1	M16415188	5	3/4	.670	.573	.205	3	●	●	●	●
CR-5B75-3E #2	M16415189	5	3/4	.670	.582	.205	3	●	●	●	●
CR-5B75-3E #3	M16426149	5	3/4	.670	.590	.205	3	●	●	●	●
CR-5B75-4E	M16422675	5	3/4	.804	.625	.200	4	●	●	●	●
CR-5B1-4E	M1741130	5	1	.800	.640	.200	4	●	●	●	●
CR-8B75-4E	M2145353	8	3/4	.800	.605	.200	4	●	●	●	●

### Internal

■ For bars see pg. 69

Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AC3	AC50
CR-5B75-3I	M1681847	5	3/4	.630	.577	.204	3	●	●	●	●
CR-5B75-4I	M1681347	5	3/4	.800	.582	.205	4	●	●	●	●
CR-5B75-5I	M16815688	5	3/4	1.000	.590	.205	5	●	●	●	●
CR-5B1-3I	M1782052	5	1	.635	.635	.200	3	●	●	●	●
CR-5B1-4I	M1782051	5	1	.800	.640	.200	4	●	●	●	●
CR-8B75-4I	M2185353	8	3/4	.800	.590	.205	4	●	●	●	●

## API ROUND

### External

■ For holders see pg. 68

Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AC3	AC50
CR-8R-3E #1	M32416731	8	3/4	.630	.577	.204	3	●	●	●	●
CR-8R-3E #2	M32416732	8	3/4	.630	.586	.204	3	●	●	●	●
CR-8R-3E #3	M32416733	8	3/4	.630	.591	.204	3	●	●	●	●
CR-8R-3E	M32419310	8	3/4	.630	.592	.204	3	●	●	●	●
CR-8R-4E 6°	M3241136	8	3/4	.640	.625	.200	4	●	●	●	●
CR-8R-4E 12°	M3241163	8	3/4	.635	.625	.200	4	●	●	●	●
CR-10R-3E #1	M34416728	10	3/4	.628	.563	.204	3	●	●	●	●
CR-10R-3E #2	M34416729	10	3/4	.628	.572	.204	3	●	●	●	●
CR-10R-3E #3	M34416730	10	3/4	.628	.575	.204	3	●	●	●	●
CR-10R-3E	M3441291	10	3/4	.630	.625	.204	3	●	●	●	●

## API ROUND & BUTTRESS

### External

CNGA - Double Sided (2 cutting edges)

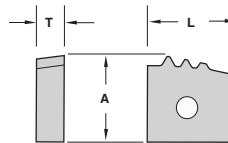
■ For holders see pg. 68

Description	EDP Code	TPI	TPF	No. of Teeth	GP50	AC3	AC50
CNGA-8R-3E	M32427407	8	3/4	3	●	●	●
CNGA-10R-3E	M34427408	10	3/4	3	●	●	●
CNGA-5B75-3E	M16427408	5	3/4	3	●	●	●



## API ROUND Internal

■ For bars see pg. 69

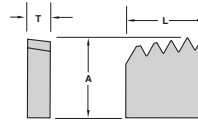


Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AC3	AC50
CR-8R-3I	M3287464	8	3/4	.630	.592	.204	3	●	●	●	●
CR-8R-4I	M3281136	8	3/4	.635	.625	.204	4	●	●	●	●
CR-8R-4I	M32825150	8	3/4	.640	.625	.204	4	●	●	●	●
CR-8R-7I	M32814828	8	3/4	1.000	.625	.204	7	●	●	●	●
CR-8R-7I	M32817968	8	3/4	1.000	.625	.204	7	●	●	●	●
CR-10R-3I	M3481291	10	3/4	.630	.625	.204	3	●	●	●	●

CVD Coated	TIN Coated	AlTiN Coated
G50	GP50	AC3
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●
●	●	●

## NPT/LPT External

■ For holders see pg. 68

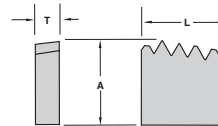


Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AC3	AC50
CR-8NPT-4E	M3648996	8	3/4	.630	.620	.204	4	●	●	●	●
CR-11.5NPT-4E	M3649668	11.5	3/4	.625	.620	.1875	4	●	●	●	●

G50	GP50	AC3	AC50
●	●	●	●
●	●	●	●
●	●	●	●
●	●	●	●

## Internal

■ For bars see pg. 69



Description	EDP Code	TPI	TPF	L	A	T	No. of Teeth	G50	GP50	AC3	AC50
CR-8NPT-4I	M3689804	8	3/4	.625	.620	.204	4	●	●	●	●
CR-11.5NPT-4I	M36823951	11.5	3/4	.625	.620	.1875	4	●	●	●	●
CR-8NPT-7I	M36817755	8	3/4	1.000	.615	.2000	7	●	●	●	●

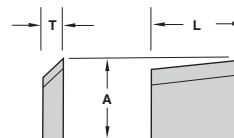
G50	GP50	AC3	AC50
●	●	●	●
●	●	●	●
●	●	●	●
●	●	●	●

In an effort to improve our stock standard grade offering, there are periodic changes. Please see current price list for up to date grade offering.

● High performance choice in optimal conditions.  
▲ Recommended grade under general conditions.

J-Series	K-Series	L-Series	N-Series	P-Series	Q-Series
▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	▲	▲

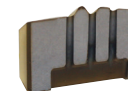
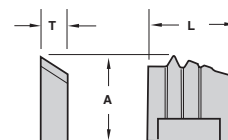
## CHIPBREAKERS External



Description	EDP Code	L	A	T	Coolant Grooves	Inserts
CR-5B75/5B1-4E-CB	TF2993	.800	.500	.125	✓	CR-5B75-4E/CR-5B1-4E
CR-8R/10R-3E/4E-CB	TF1353E	.625	.460	.120	✓	CR-8R-3E/CR-8R-4E/CR-10R-3E/CR-8NPT-4E
#3 CB without COOLANT GROOVES .170	TF26424	.618	.460	.170	✓	CR-8R-3E/CR-8R-4E/CR-10R-3E/CR-8NPT-4E

## External with coolant grooves

Also available at -.010, -.020 and -.030 off the A dimension.



Description	EDP Code	L	A	T	Coolant Grooves	Inserts
TD4601 5B75-1-CB	TF16660	.665	.530	.170	✓	CR-5B75-3E #1
TD4602 5B75-2-CB	TF16661	.668	.543	.170	✓	CR-5B75-3E #2
TD4603 5B75-3-CB	TF16662	.665	.553	.170	✓	CR-5B75-3E #3
TD3931 8R-1-CB	TF16657	.628	.518	.175	✓	CR-8R-3E #1
TD3932 8R-2-CB	TF16658	.635	.526	.175	✓	CR-8R-3E #2
TD3933 8R-3-CB	TF27129	.630	.540	.175	✓	CR-8R-3E #3
TA2237 10R-1-CB	TF16760	.628	.503	.175	✓	CR-10R-3E #1
TA2238 10R-2-CB	TF16761	.628	.512	.175	✓	CR-10R-3E #2
TA2239 10R-3-CB	TF16762	.628	.515	.175	✓	CR-10R-3E #3
#3 CB W/COOLANT GROOVES .170	TF26423	.618	.460	.170	✓	CR-8R-3E



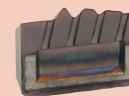
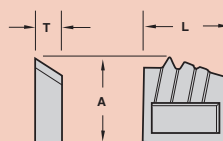


## CHIPBREAKER

### External

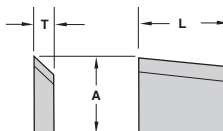
with coolant grooves and cavity

Also available at -.010, -.020 and -.030 off the A dimension.



Description	EDP Code	L	A	T	Coolant Grooves	Inserts
TD4601 5B75-1-CB W/CAVITY	TF30297	.665	.550	.170	✓	CR-5B75-3E #1
TD4602 5B75-2-CB W/CAVITY	TF30298	.668	.550	.170	✓	CR-5B75-3E #2
TD4603 5B75-3-CB W/CAVITY	TF30299	.665	.560	.170	✓	CR-5B75-3E #3
TD3931 8R-1-CB W/CAVITY	TF28130	.628	.518	.165	✓	CR-8R-3E #1
TD3932 8R-2-CB W/CAVITY	TF28131	.635	.526	.165	✓	CR-8R-3E #2
TD3933 8R-3-CB W/CAVITY	TF28132	.628	.520	.165	✓	CR-8R-3E #3

### Internal

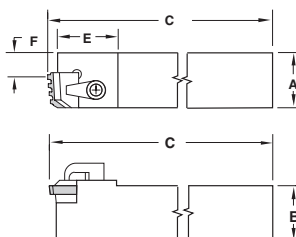


Description	EDP Code	L	A	T	Coolant Grooves	Inserts
CR-5B75/5B1-4I-CB	TF16104	.800	.500	.125		CR-5B75-4I/CR-5B1-4I
CR-8R/10R-3I/4I-CB	TF1353I	.630	.488	.125		CR-8R-3I/CR-8R-4I/CR-10R-3I/CR-8LPT-4I
CR-5B75-5I-CB	TF28765	1.000	.540	.125	✓	CR-5B75-5I
CR-8R-7I-CB	TF3435	1.000	.520	.125		CR-8R-7I
CR-8R-7I-CB	TF18096	1.010	.540	.125	✓	CR-8R-7I

## EXTERNAL HOLDER

### Threading CLVOR

Most holders available with coolant port  
(ie: Add CP to end of description)



RH SHOWN

Description	EDP Code	Insert	A	B	C	E	F	Seat	Seat Screw	Clamp	Clamp Screw	Chip Breaker
CLVOR-166	92601694	3 TOOTH*	1	1	8	1.25	.475	TF1207	SF80	TC311	STC-4	TF1353
CLVOR-206	92602060	3 TOOTH*	1-1/4	1-1/4	7	1.25	.725	TF1207	SF80	TC311	STC-4	TF1353
CLVOR-168	92601696	4 TOOTH**	1	1	6	1.25	.800	TF8132E	SF80	TC311	STC-4	TF2993
CLVOR-208	92602096	4 TOOTH**	1-1/4	1-1/4	7	1.25	.800	TF8132E	SF60	TC311	STC-4	TF2993
CLVOR-248	92602496	4 TOOTH**	1-1/2	1-1/2	7	1.25	.800	TF8132E	SF60	TC311	STC-4	TF2993

\*Accepts 3 & 4 Tooth RD, NPT, and 3 Tooth Buttress \*\*Accepts 4 Tooth Buttress Only

### METRIC

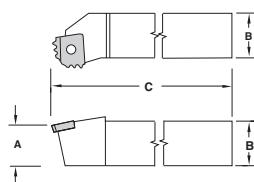
Description	EDP Code	Insert	A	B	C	E	F	Seat	Seat Screw	Clamp	Clamp Screw	Chip Breaker
CLVOR-25M6	9260M2560	3 TOOTH*	25	25	177,8	32	16,1	TF1207-S	SF80	TC311	STC-4	TF1353
CLVOR-32M6	9260M3260	3 TOOTH*	32	32	177,8	32	16,1	TF1207-S	SF85	TC311	STC-4	TF1353
CLVOR-40M6	9260M4094	4 TOOTH**	40	40	179,1	32	29,8	TF8132E	SF80	TC311	STC-4	TF2993
CLVOR-40M8	9260M4096	4 TOOTH**	40	40	179,1	32	29,8	TF8132E	SF60	TC311	STC-4	TF2993

\*Accepts 3 & 4 Tooth RD, NPT, and 3 Tooth Buttress \*\*Accepts 4 Tooth Buttress Only

### PCFNR

For double sided CNGA chaser style

Most holders available with coolant port  
(ie: Add CP to end of description)



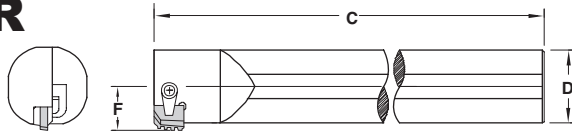
RH SHOWN

Description	EDP Code	Insert	A	B	C	Lock Pin	Clamp	Clamp Screw
PCFNR-165	96301664	CNGA 8R/10R/5B75-3E	1	1	6	NL-44	TC311	STC-11
PCFNR-205	96302064	CNGA 8R/10R/5B75-3E	1-1/4	1-1/4	6	NL-44	TC311	STC-11



## INTERNAL BAR

Threading  
SI-CLHOR



Most holders available with coolant port  
(ie: Add CP to end of description)

Description	EDP Code	Insert	D	F	C	Min. Bore	Seat	Seat Screw	Clamp	Clamp Screw
SI-CLHOR-206	97002094	CR-8R-3I	1-1/4	.750	14	1.500	-	-	TC311	STC-8
		CR-8R-4I	1-1/4	.750	14	1.500	-	-	TC311	STC-8
		CR-5B75-3I	1-1/4	.750	14	1.500	-	-	TC311	STC-8
SI-CLHOR-326	97003294	CR-8R-3IDC	2	1.125	14	2.250	TF1780I	SF60	TC311	STC-8
SI-CLHOR-328	97003296	CR-5B1-4I	2	1.125	14	2.250	TF8132I	SF60	TC311	STC-8
		CR-5B75-4I	2	1.125	14	2.250	TF8132I	SF60	TC311	STC-8
		CR-8B75-4I	2	1.125	14	2.250	TF8132I	SF60	TC311	STC-8
SI-CLHOR-408	97004096	CR-5B1-4I	2-1/2	1.375	14	2.750	TF8132I	SF60	TC311	STC-8
		CR-5B75-4I	2-1/2	1.375	14	2.750	TF8132I	SF60	TC311	STC-8
		CR-8B75-4I	2-1/2	1.375	14	2.750	TF8132I	SF60	TC311	STC-8
SI-CLHOR-329	97003298	CR-8R-7I	2	1.125	16	2.250	TF3218	SF48	TC311	STC-4
SI-CLHOR-409	97004098	CR-5B75-5I	2-1/2	1.375	16	2.750	TF3218	SF48	TC311	STC-4

Threading - **METRIC**  
SI-CLHOR

Description	EDP Code	Insert	D	F	C	Min. Bore	Seat	Seat Screw	Clamp	Clamp Screw
SI-CLHOR-40M6	970M4094	CR-8R-3I	40	23,16	400	50,8	-	-	TC311	STC-8
		CR-8R-4I	40	23,16	400	50,8	-	-	TC311	STC-8
		CR-5B75-3I	40	23,16	400	50,8	-	-	TC311	STC-8

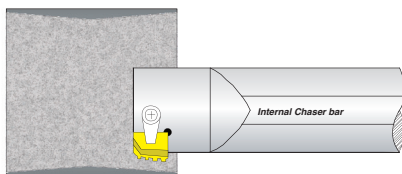
### Technical Information

API ROUND THREADING	8 & 10 PITCH
application	surface feet/minute (SFPM)
External	500 - 800
Internal	500 - 700

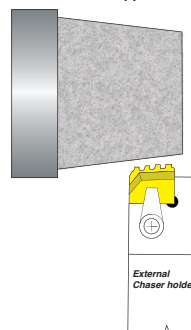
API BUTTRESS THREADING	5 PITCH
application	surface feet/minute (SFPM)
External	300 - 500
Internal	500 - 700

- Number of passes is dictated by the number of teeth on the insert.
- 3-4 tooth requires 3-5 passes
- 7 tooth requires 1-2 passes
- One or two additional passes may be required for heat treated materials.

internal chaser application



external chaser application





## Technical Information

### Recommended SFPM for Chasers

EXTERNAL 8 Round Sets	Material				
	1st Choice AITIN PVD Coated ZA3	2nd Choice AITIN PVD Coated AC3	AITIN PVD Coated AC50	CVD Coated G50	General purpose TIN PVD Coated GP50
H	500	500	500	500	800
J	500	500	500	500	800
K	500	500	500	500	800
L	500	500	500	500	600
N	500	500	500	500	600
P	500	500	500	500	600

ZA3 - All diameters  
AC3 - All diameters  
AC50 - All diameters  
G50 - 4-1/2" - 9-5/8" Casing  
GP50 - 2-3/8" - 3-1/2" Tubing

INTERNAL 8 Round Stand Alone TF19437 4 TOOTH	Material		
	1st Choice AITIN PVD Coated ZA3	AITIN PVD Coated AC3	AITIN PVD Coated AC50
H	700	700	700
J	700	700	700
K	700	700	700
L	700	700	700
N	700	700	700
P	700	700	700

ZA3 - All diameters  
AC3 - All diameters  
AC50 - All diameters  
4-5 PASSES

EXTERNAL 8 Round Stand Alone TF19310	Material			
	1st Choice AITIN PVD Coated ZA3	2nd Choice AITIN PVD Coated AC3	TIN PVD Coated AC50	TIN CVD Coated G50
H	500	500	500	500
J	500	500	500	500
K	500	500	500	500
L	500	500	500	500
N	500	500	500	500
P	500	500	500	500

AC50 - 3-1/2" - 7" diameters  
G50 - Only over 7" diameters  
4 PASSES

INTERNAL 8 Round Stand Alone TF17968 7 TOOTH	Material		
	1st Choice AITIN PVD Coated ZA3	2nd Choice AITIN PVD Coated AC3	TIN PVD Coated AC50
H	500	500	700
J	500	500	700
K	500	500	700
L	500	500	700
N	500	500	700
P	500	500	700

AC50 - All diameters  
1-2 PASSES

EXTERNAL Buttress Sets	Material	
	TIN CVD Coated G50	
H	500	G50 - All diameters
J	500	
K	500	
L	500	
N	500	
P	500	

EXTERNAL Buttress Stand Alone TF1130 1" TAPER	Material	
	TIN CVD Coated G50	
H	800	G50 - All diameters 5 PASSES
J	800	
K	800	
L	600	
N	600	
P	600	

EXTERNAL Buttress Stand Alone TF22675 3/4" TAPER	Material	
	TIN CVD Coated G50	
H	800	G50 - All diameters 5 PASSES
J	800	
K	800	
L	600	
N	600	
P	600	

INTERNAL Buttress Stand Alone TF22675 3/4" TAPER	Material	
	TIN CVD Coated G50	
H	800	G50 - All diameters 5 PASSES
J	800	
K	800	
L	600	
N	600	
P	600	