

FORMULES :

$$d = 1,5 D$$

$$X = E + (B + C)$$

$$Y = E + C$$

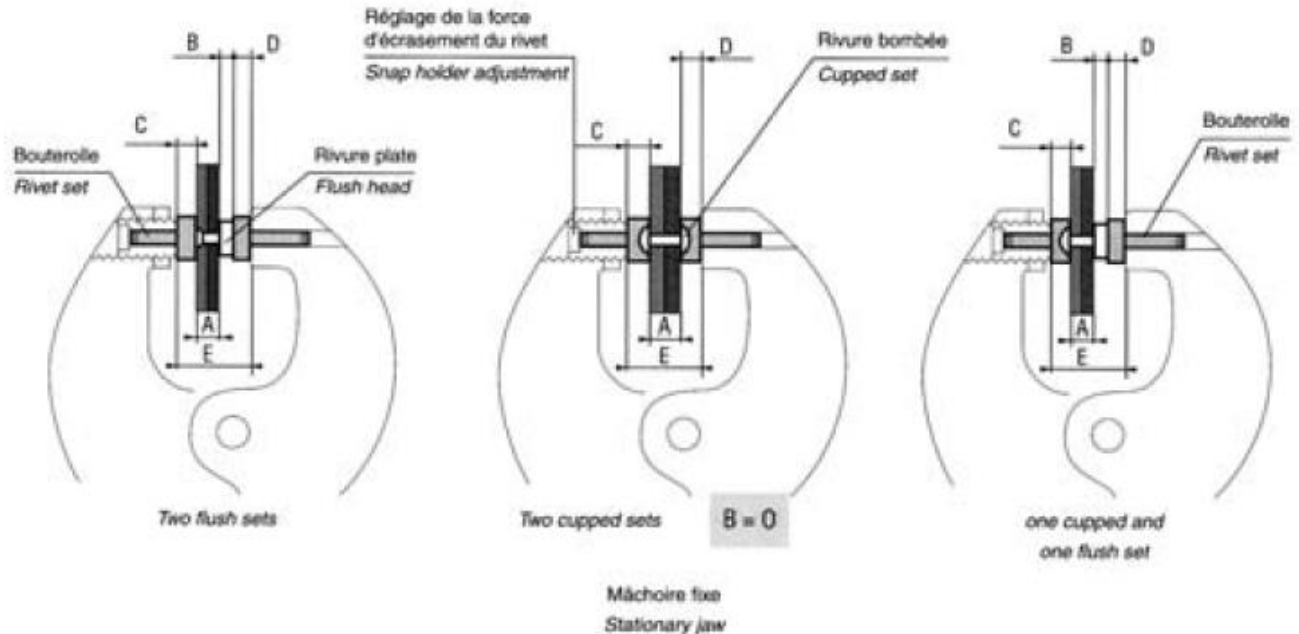
(D)	1,6	2,4	3,2	3,6	4	4,8	5,6	6,4
(A)	0,7	1,05	1,4	1,6	1,7	2,05	2,4	2,75
(R)	2,8 +/- 0,5	4,05 +/- 0,75	5,25 +/- 0,75	5,75 +/- 0,75	6,55 +/- 0,95	7,7 +/- 1	9 +/- 1	10 +/- 1
(C)	0,86 +/- 0,25	1,2 +/- 0,4	1,6 +/- 0,5	1,75 +/- 0,55	1,95 +/- 0,65	2,4 +/- 0,8	2,8 +/- 0,9	3,15 +/- 1,05
(B)	0,2	0,2	0,2		0,2	0,3	0,3	0,3
(B + C)	1,05 +/- 0,25	1,4 +/- 0,4	1,8 +/- 0,5		1,15 +/- 0,65	2,7 +/- 0,8	3,1 +/- 0,9	3,45 +/- 1,05
E mini	0,4	0,8	1	1,2	1,4	1,8	2,3	2,5
Effort (T)	0,4	0,8	1,4	1,8	2,2	3,1	4,2	5,5

• To develop maximum power the riveter must squeeze the rivet near to the end of the riveting stroke. Therefore, the combine length of the two rivets sets must be correct.

• The operator can adjust exactly the position of the rivet by adjusting the snap holder (stroke 5 mm). This allows the operator use the same rivet set for different thicknesses.

Determine the correct length of rivet sets as follows.

- A - épaisseur des éléments à assembler / *component thickness*
- B - épaisseur de la rivure plate / *height of finished rivet head (flush)*
- C - épaisseur de la bouterolle (fixe) / *rivet set height (fixed)*
- D - épaisseur de la bouterolle (mobile) / *rivet set height (mobile)*
- E - ouverture en fin de rivetage (réglage par le support bouterolle) / *closed height dimension of the jaws (adjust by moving the snap holder)*



RIVETING NEEDED FORCE OVERVIEW

		Ø RIVET	Ø mm	Ø 1,6	Ø 2,4	Ø 3,2	Ø 3,6	Ø 4	Ø 4,8	Ø 5,6	Ø 6,4	Ø 7	8
Rivet Extra- Length = 1,5 x Rivet Ø	ALU	"C" Hauteur rivure Squeezed Head Thickness	Nominal	0,86 mm	1,2 mm	1,6 mm	1,75 mm	1,95 mm	2,4 mm	2,8 mm	3,15 mm		
		Riveting Force	x1000daN	0,4 T	0,8 T	1,4 T	1,8 T	2,2 T	3,1 T	4,2 T	5,5 T	6,5 T	8,5 T

		Ø RIVET	mm		Ø 2,4	Ø 3,2	Ø 3,6	Ø 4	Ø 4,8	Ø 5,6
Rivet Extra- Length = 1,0 x Rivet Ø	Titane	"C" Hauteur rivure Squeezed Head Thickness	Nominal			>1,05 mm	>1,2 mm	>1,4 mm	>1,65 mm	>2,1 mm
		Riveting Force	x1000daN		1,4 T	2,5 T	3,2 T	3,9 T	5,6 T	8,3 T

		Ø RIVET	mm		Ø 2,4	Ø 3,2	Ø 3,6	Ø 4	Ø 4,8	Ø 5,6
Rivet Extra- Length = 0,8 x Rivet Ø	Steel	"C" Hauteur rivure Squeezed Head Thickness	Nominal		0,78 mm	1,05 mm	1,23 mm	1,4 mm	1,65 mm	1,9 mm
		Riveting Force	x1000daN		1,2 T	2,1 T	2,6 T	3,2 T	4,6 T	6,8 T

Note : All Rivet Force at Room
Temperature

Alligator	RB.40-60	2,6 T
Alligator	RB.40-85	1,8 T
Alligator	RB.43-60	1,4 T
Alligator	RB.44-60	3,0 T
Alligator	RB.44-100	2,8 T
Alligator	RB.44-130	2,2T
C-yoke	RB.41	2,2 T
C-yoke	RB.42	1,4 T
C-yoke	RB.49	3,5 T

C.Dugenne - 30 nov
2010

R1-1



PRECISION / PRECISION

- RB 400 → pour rivets tête fraisée / for countersink rivets
- RB 401 → pour rivets tête ronde aplatie / for universal head type rivets
- RB 402 → pour rivets tête ronde réduite aplatie / for special reduced universal head rivets

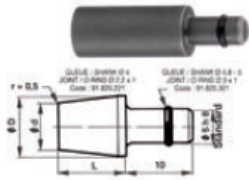
Sur demande, bouteilles avec queue Ø 4,8 / On request squeezer sets with 3/16" shank

RB 400 → Code / Code number 60702...

RB 401 → Code / Code number 60712...

RB 402 → Code / Code number 60722...

RB 400

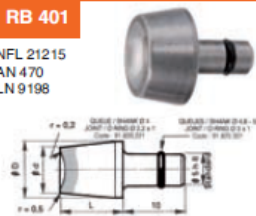


Ø Rivet Rivet Dia	1,6 & 2,4 1/16" & 3/32"	3,2 & 3,6 1/8" & 9/64"	4 5/32"	4,8 3/16"	5,6 & 6,4 7/32" & 1/4"
d	7	9	10	12	16
D	9	9	14	14	16
L	4 60703005	60703205	60703405	60703505	60703605
	7 60703020	60703220	60703420	60703520	60703620
	10 60703040	60703240	60703440	60703540	60703640
	12,5 60703055	60703255	60703455	60703555	60703655
	16 60703075	60703275	60703475	60703575	60703675
	20 60703095	60703295	60703495	60703595	60703695

L	4 60701005	60701205	RB 40-13-30 Queue Ø 4 Uniquement Shank 4 dia only (.1575")
7	60701020	60701220	

RB 401

NFL 21215
AN 470
LN 9198

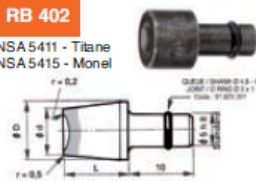


Ø Rivet Rivet Dia	2,4 3/32"	3,2 1/8"	4 5/32"	4,8 3/16"	5,6 7/32"	6,4 1/4"
d	7	9	10	12	14	16
D	9	9	14	14	14	16
L	4 60713105	60713205	60713405	60713505	60713605	60713705
	7 60713120	60713220	60713420	60713520	60713620	60713720
	10 60713140	60713240	60713440	60713540	60713640	60713740
	12,5 60713155	60713255	60713455	60713555	60713655	60713755
	16 60713175	60713275	60713475	60713575	60713675	60713775
	20 60713195	60713295	60713495	60713595	60713695	60713795

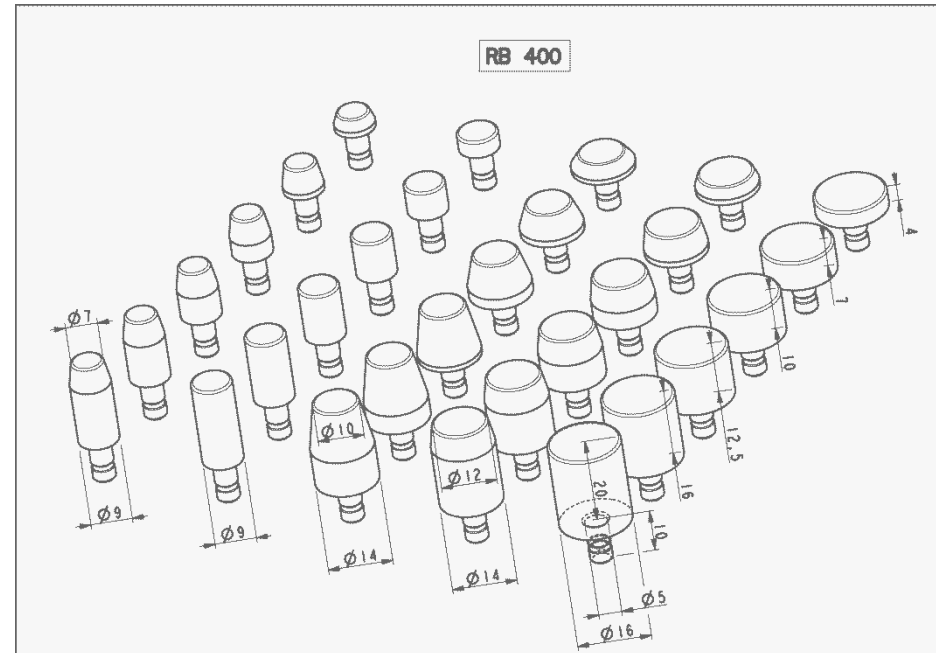
L	4 60711105	60711205	RB 40-13-30 Queue Ø 4 Uniquement Shank 4 dia only (.1575")
7	60711120	60711220	

RB 402

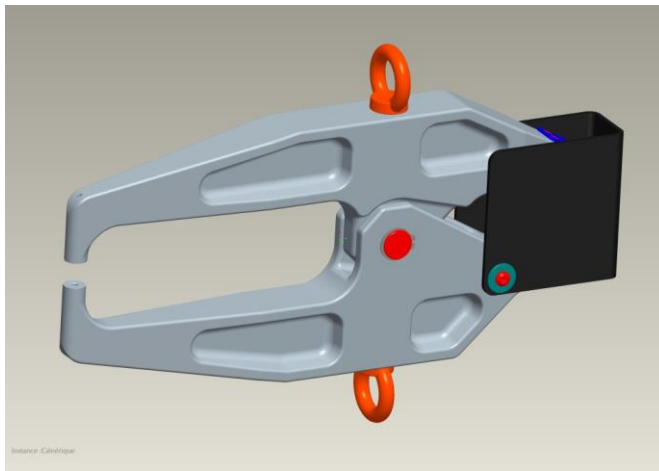
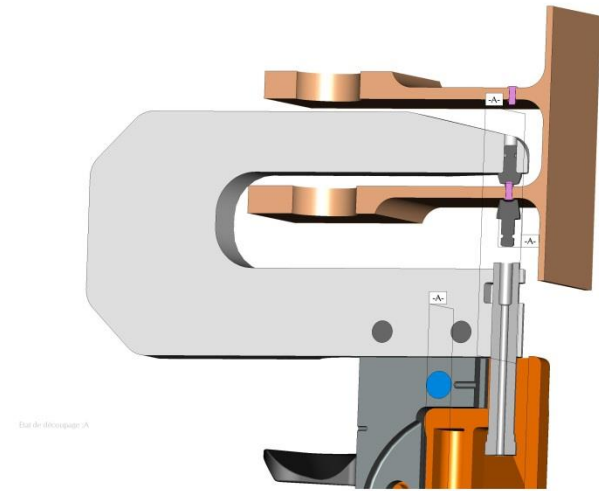
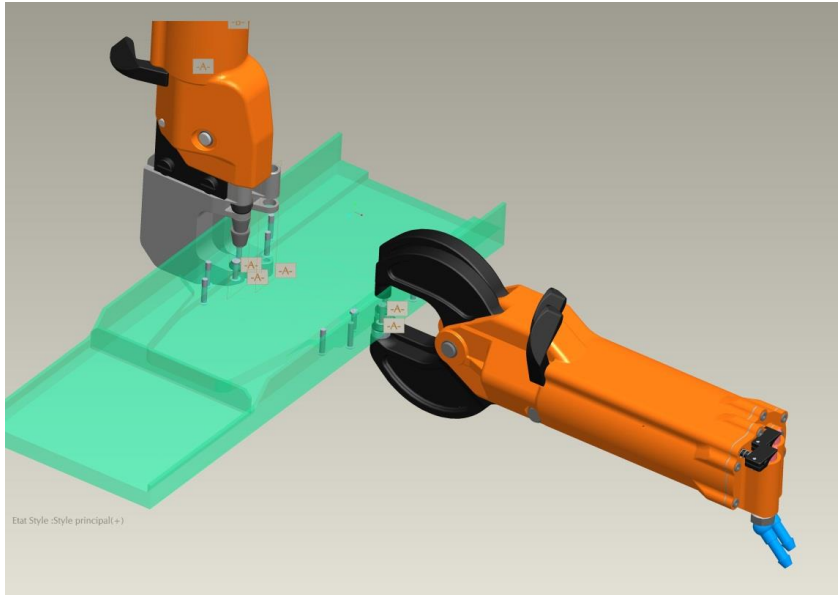
NSA 5411 - Titane
NSA 5415 - Monel



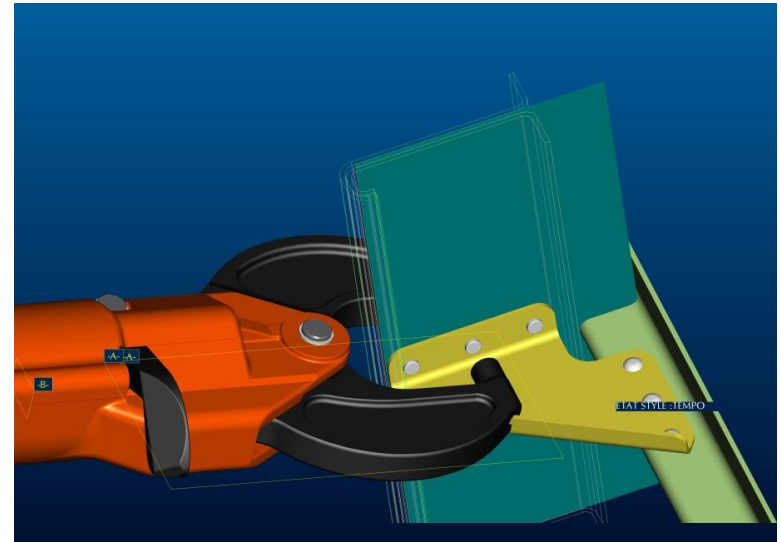
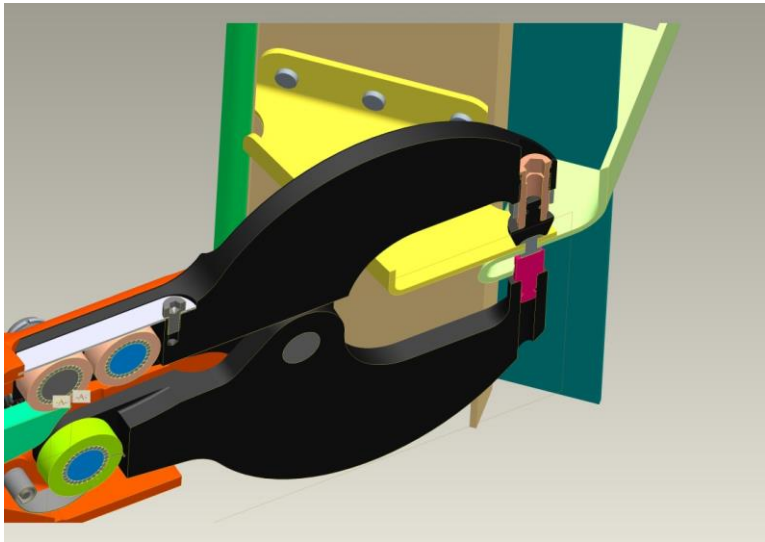
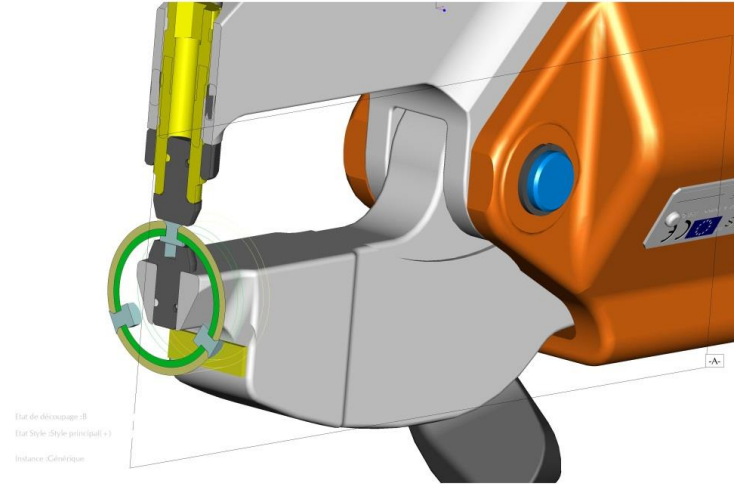
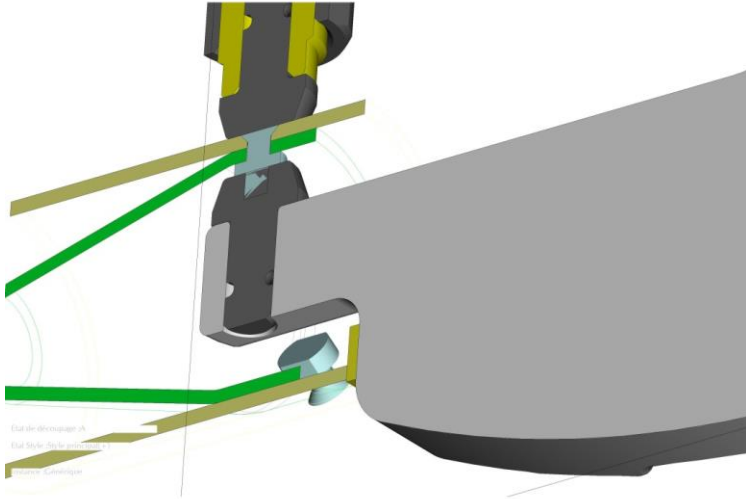
Ø Rivet Rivet Dia	2,4 3/32"	3,2 1/8"	3,6 9/64"	4 5/32"	4,8 3/16"	5,6 7/32"
d	7	9	9	10	12	14
D	9	9	9	14	14	14
L	4 60723105	60723205	60723305	60723405	60723505	60723605
	7 60723120	60723220	60723320	60723420	60723520	60723620
	10 60723140	60723240	60723340	60723440	60723540	60723640
	12,5 60723155	60723255	60723355	60723455	60723555	60723655
	16 60723175	60723275	60723375	60723475	60723575	60723675
	20 60723195	60723295	60723395	60723495	60723595	60723695



Examples of Riveting Projects



Examples of Riveting Projects

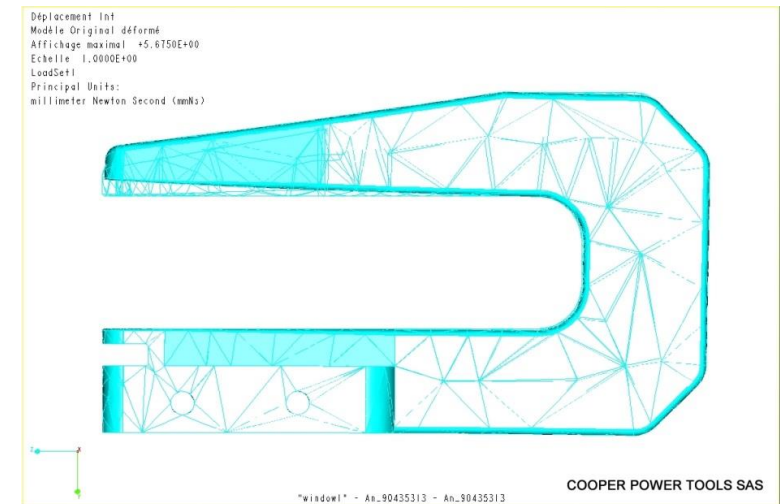
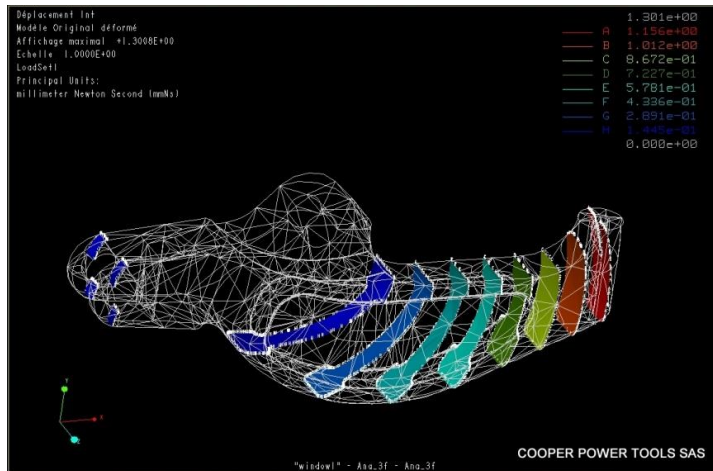
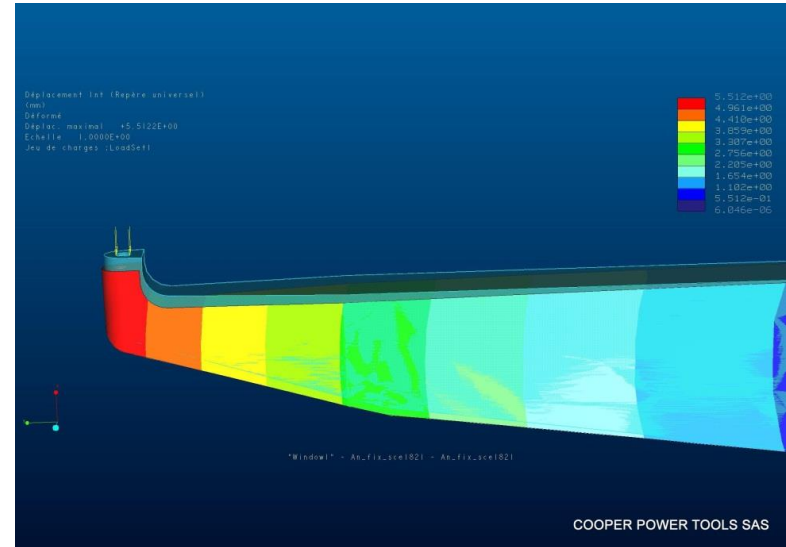
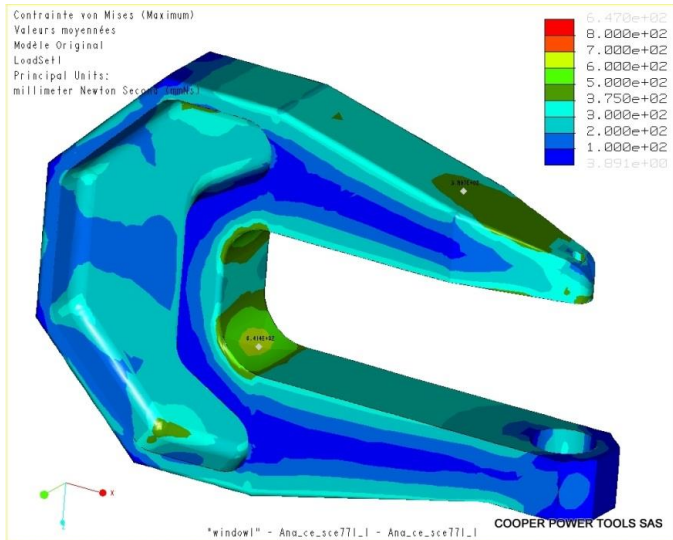


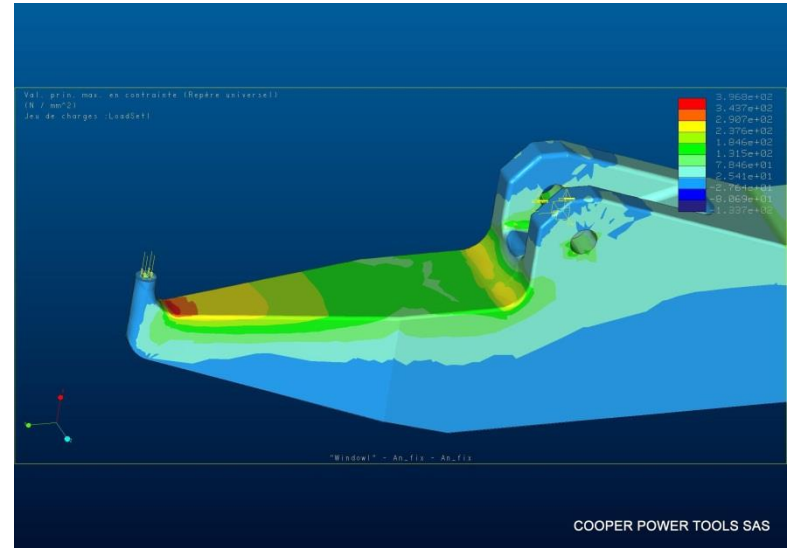
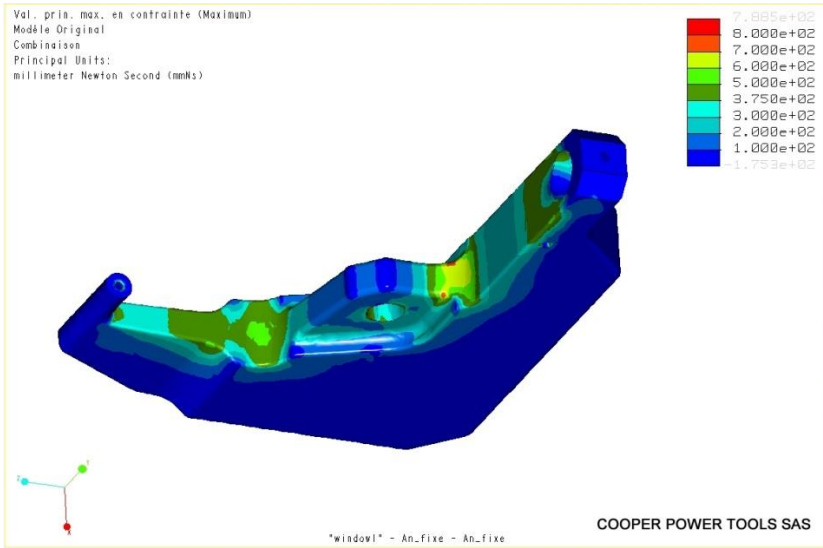
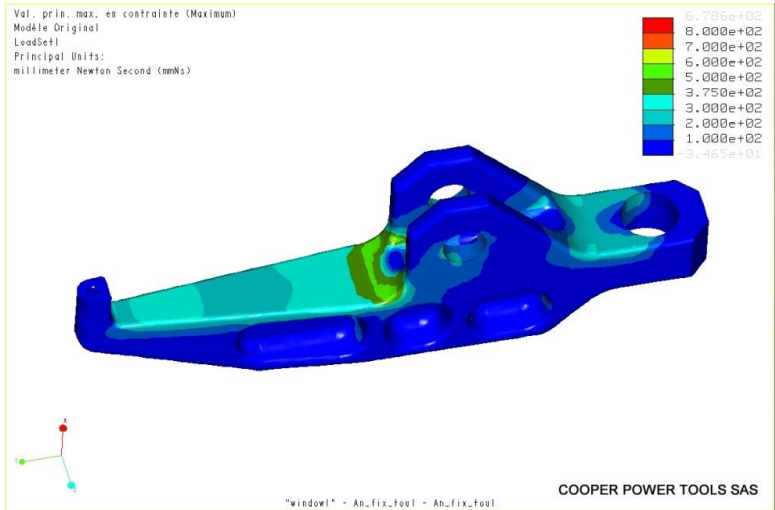
Examples of Riveting Projects



Examples of Riveting Projects







FEA analysis: promechanica

CATIA V5: Possible to convert or to provide files for CATIA V5

3D Printer for mockups and preliminary tests capability

