

D

C

B

A



Repérage des surfaces



Ensemble: Eolienne

Pièce: Socle

Responsable: Dehongher

4

4

3

3

2

2

1

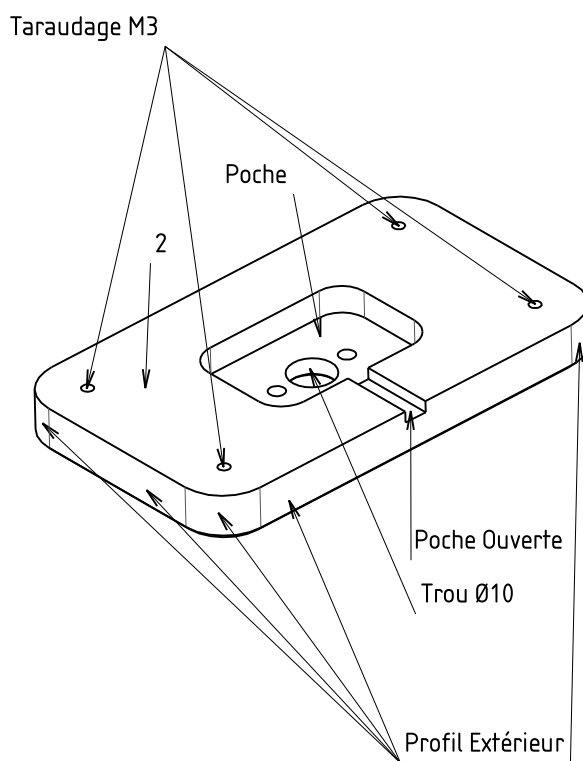
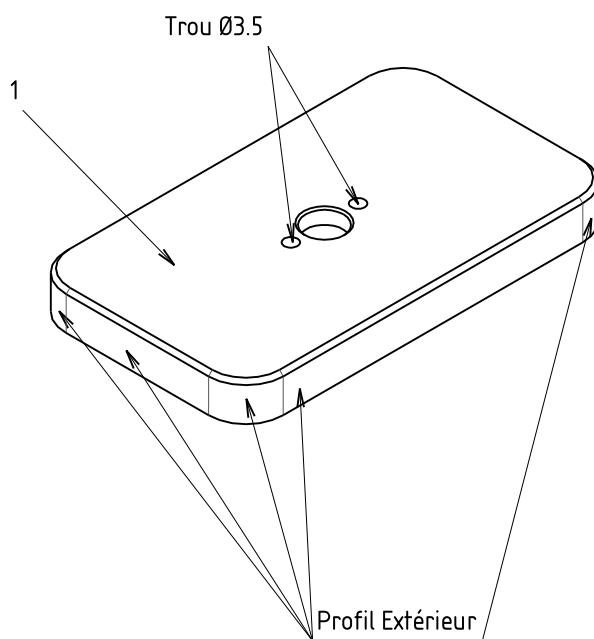
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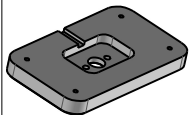
D

C

B

A





Fiche opérations -fraisage-



Ensemble: Eolienne

Pièce: Socle

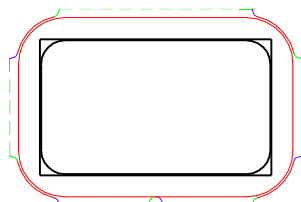
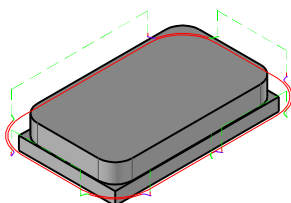
Phase: 10

Machine: HAAS - HAAS Mini Mill

Matière: EN-AW2017

Brut: 60 x 20 x 102 (scié)

[2: Contournage Ébauche Profil Extérieur]



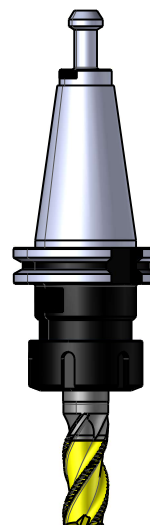
Temps Op= 0min 53s

Fraise 2T Ebauche ARS D20 (Coupe au centre)

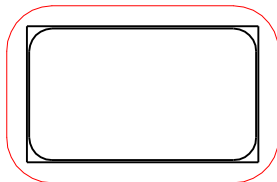
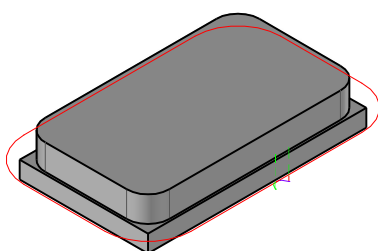
N= 1910tr/min

Vf= 611mm/min

N° Outil: Pot 2



[3: Contournage Finition Profil Extérieur (Cf1)]



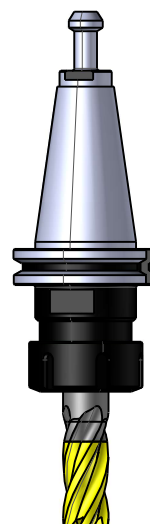
Temps Op= 1min 15s

Fraise 2T Finition ARS D20 (Coupe au Centre)

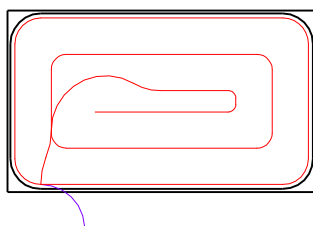
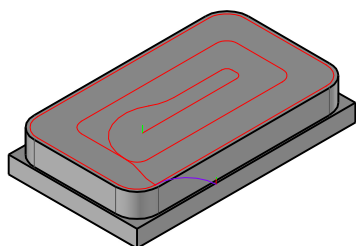
N= 1910tr/min

Vf= 306mm/min

N° Outil: Pot 3



[4: Surfaçage Finition 1 (Cf2)]



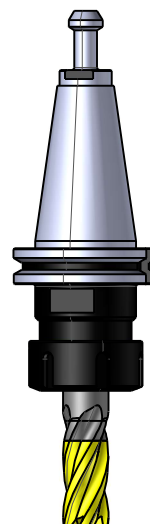
Temps Op= 1min 26s

Fraise 2T Finition ARS D20 (Coupe au Centre)

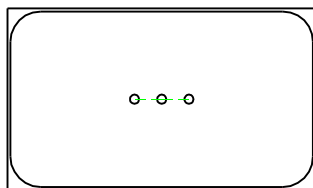
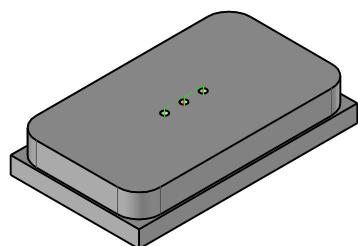
N= 1910tr/min

Vf= 458mm/min

N° Outil: Pot 3

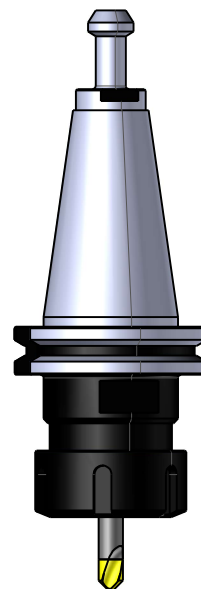


[5: Pointage Trous]



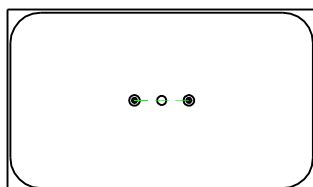
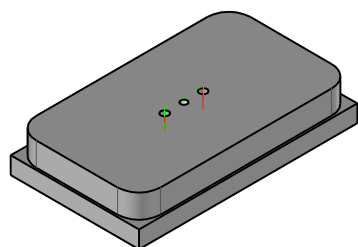
Temps Op= 0min 4s

Foret à Pointer Ø8
N= 2387tr/min
Vf= 382mm/min



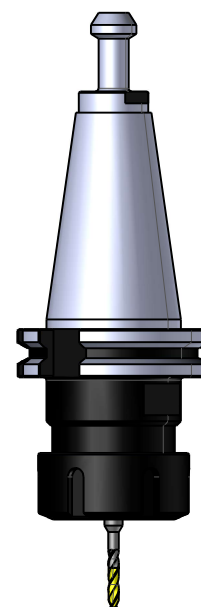
N° Outil: Pot 4

[6: Perçage Trou Ø3.5]



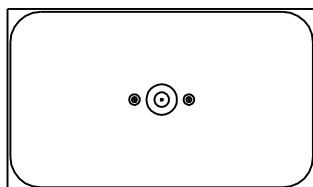
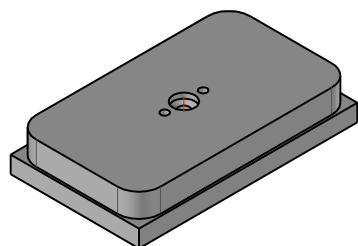
Temps Op= 0min 5s

Foret série courte Ø3.5
N= 5457tr/min
Vf= 327mm/min



N° Outil: Pot 5

[7: Perçage Trou Ø10]



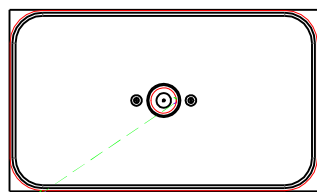
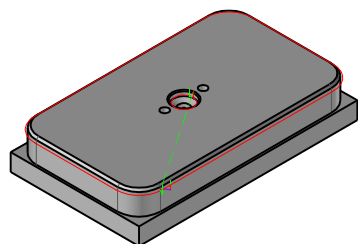
Temps Op= 0min 3s

Foret série normale Ø10
N= 1910tr/min
Vf= 382mm/min



N° Outil: Pot 6

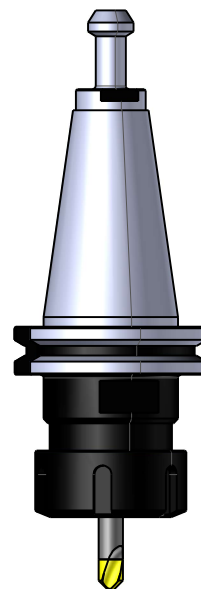
[8: Chanfreinage]

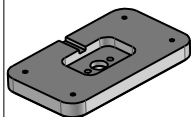


Temps Op= 0min 56s

Foret à Pointer Ø8
N= 3183tr/min
Vf= 382mm/min

N° Outil: Pot 4





Fiche opérations -fraisage-



Ensemble: Eolienne

Machine: HAAS - HAAS Mini Mill

Pièce: Socle

Matière: EN-AW2017

Phase: 20

Brut: Phase 10

[1: Surfaçage ébauche 2]

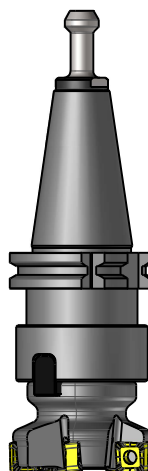
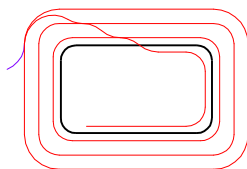
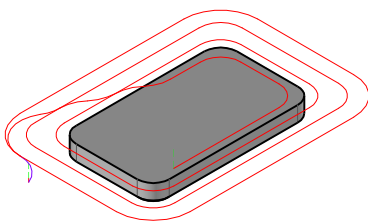
Vue simulation

Fraise à surfacer dresser D63

N° OutiPot 10

N= 1592tr/min

Vf= 764mm/min



Temps Op= 1min 59s

[2: Surfaçage finition 2 (Cf1)]

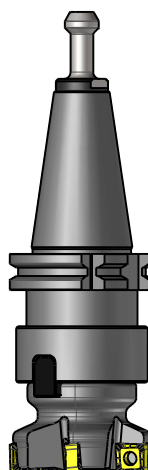
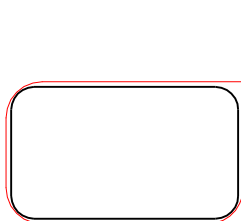
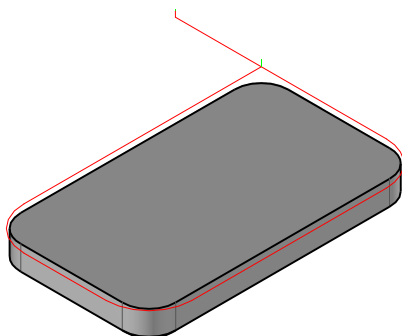
Vue simulation

Fraise à surfacer dresser D63

N° OutiPot 10

N= 1592tr/min

Vf= 509mm/min



Temps Op= 0min 41s

[3: Ebauche Poche]

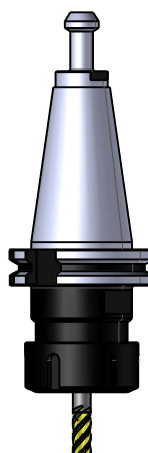
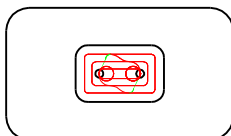
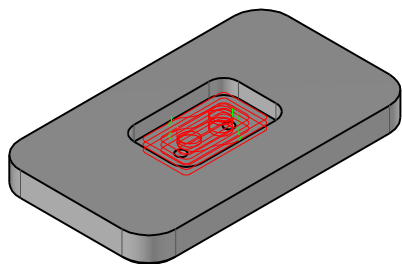
Vue simulation

Fraise 2T Ebauche ARS D8 (Coupe au centre)

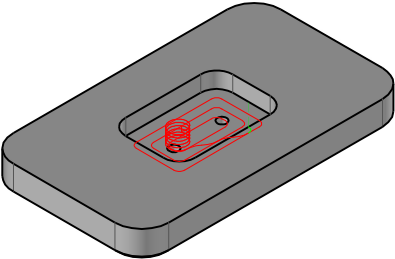
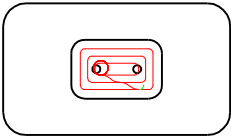
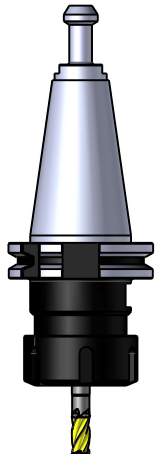
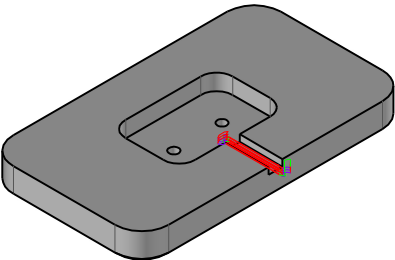
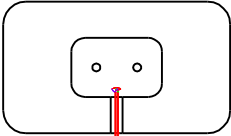
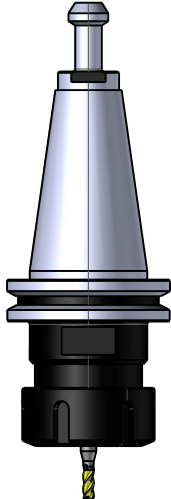
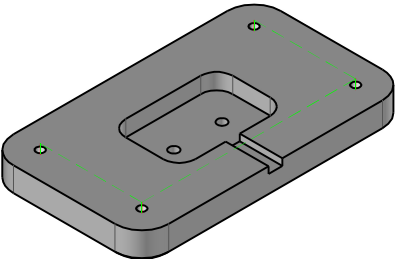
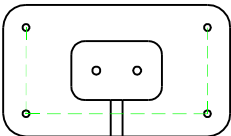
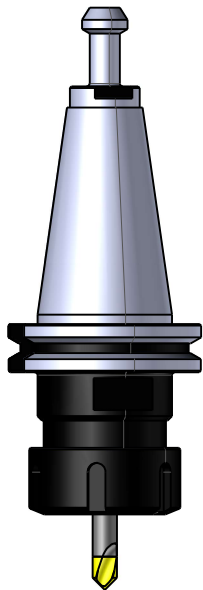
N° Outil: Pot 5

N= 1592tr/min

Vf= 509mm/min



Temps Op= 1min 36s

[4: Finition Poche (Cf2, Cf3)]  Vue simulation  Temps Op= 0min 23s	Fraise 2T Finition ARS D8 (Coupe au Centre) N= 3183tr/min Vf= 1019mm/min  N° Outil: Pot 6
[5: Poche ouverte (Cf4, Cf5)]  Vue simulation  Temps Op= 0min 19s	Fraise 2T Finition ARS Ø4 N= 4775tr/min Vf= 1146mm/min  N° Outil: Pot 3
[6: Pointage Taraudage M3]  Vue simulation  Temps Op= 0min 4s	Foret à Pointer Ø8 à 90° N= 2387tr/min Vf= 382mm/min  N° Outil: Pot 4

[7: Perçage Taraudage M3]

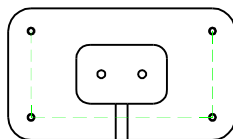
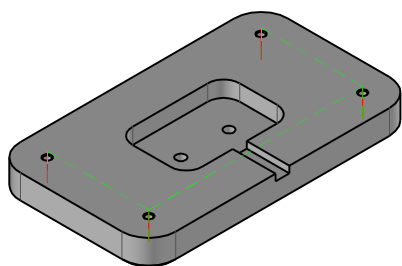
Vue simulation

Foret HSS Ø2.5

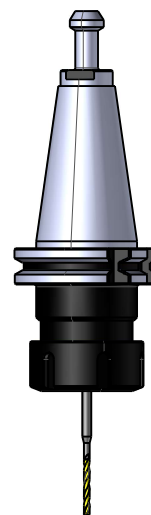
N= 5093tr/min

Vf= 204mm/min

N° Outil: Pot 8



Temps Op= 0min 14s



[8: Taraudage]

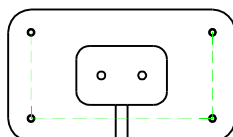
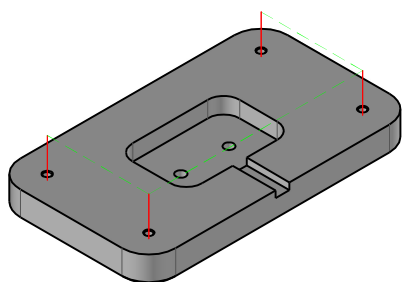
Vue simulation

Taraud M3

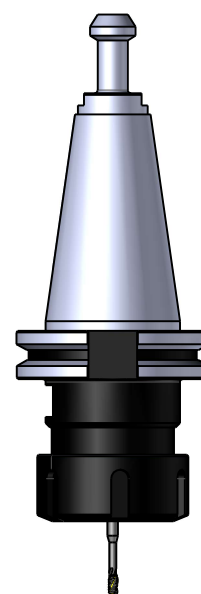
N= 1061tr/min

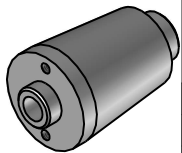
Vf= 531mm/min

N° Outil: Pot 1



Temps Op= 0min 15s





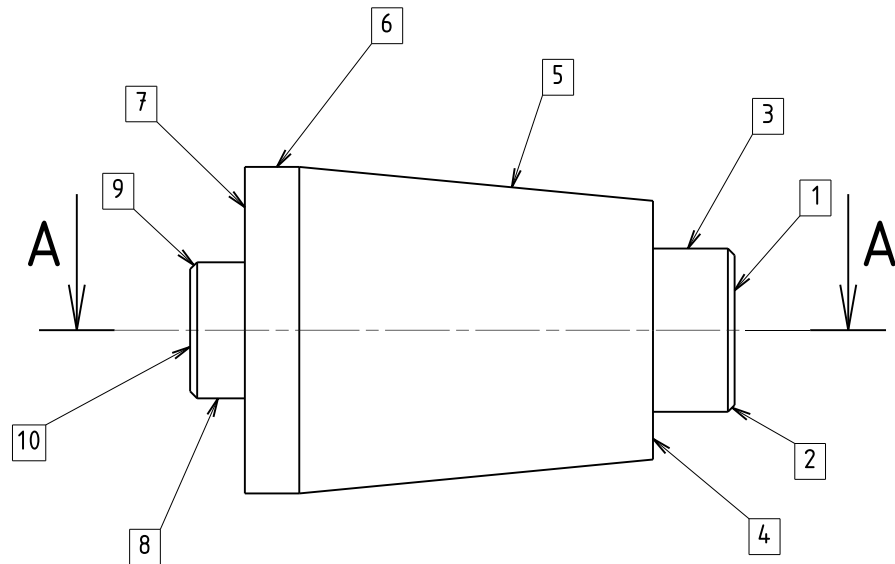
Repérage des surfaces



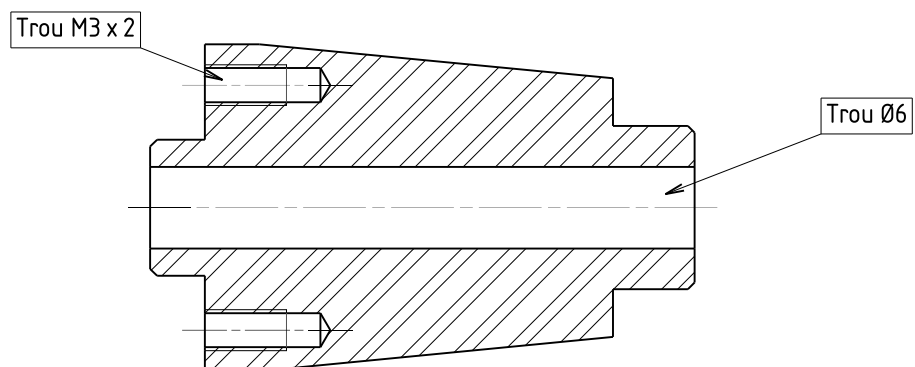
Ensemble: Eolienne

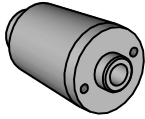
Pièce: Mat-1

Responsable: Dehongher



A - A





Fiche opérations -tournage-



Ensemble: Eolienne

Machine: ROSILIO - TBI 280

Pièce: Mat-1

Matière: EN-AW2017

Phase: 10

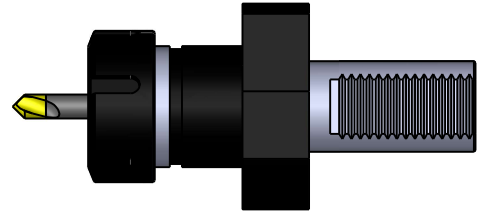
Brut: Barre Ø30

[1: Mise en Butée]

Vue simulation

Foret pointer 90° Ø8

N° Outil: T3.1



Temps Op= 0s

N= 0tr/min

Vc / Vcc= 0m/min

Vf= 0mm/min

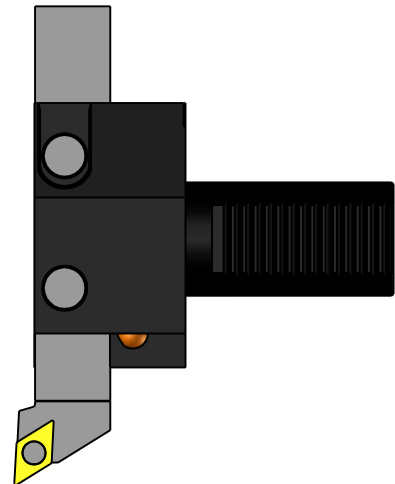
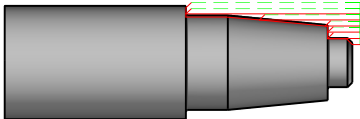
f= 0,000mm/tr

[2: Ébauche 2 à 6]

Vue simulation

Outil à Charioter-Dresser (Plaquette type D r0.4)

N° Outil: T2.2



Temps Op= 0min 20s

N= 51tr/min

Vc / Vcc= 250m/min

Vf= 6mm/min

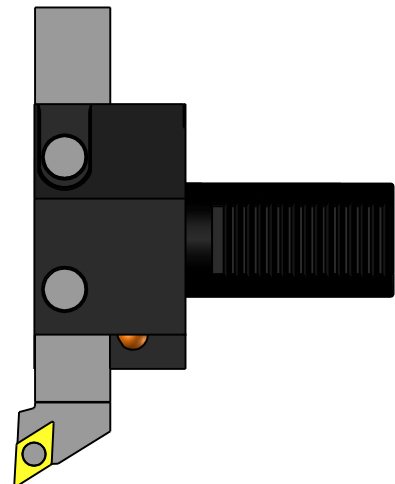
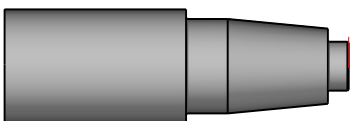
f= 0,120mm/tr

[3: Dresser 1]

Vue simulation

Outil à Charioter-Dresser (Plaquette type D r0.4)

N° Outil: T2.2



Temps Op= 0min 2s

N= 36tr/min

Vc / Vcc= 250m/min

Vf= 2mm/min

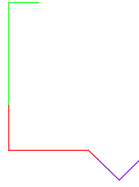
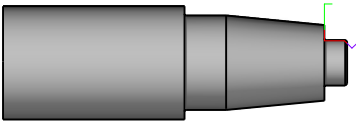
f= 0,060mm/tr

[4: Finition 2 à 4 (Cf1)]

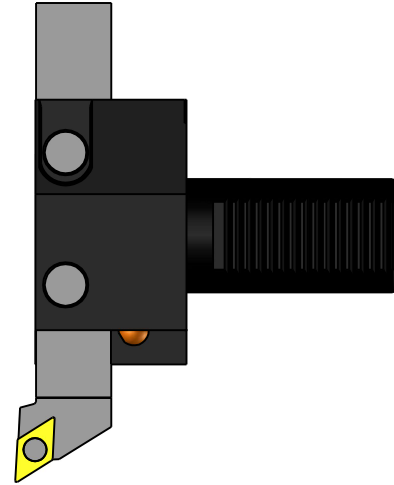
Vue simulation

Outil à Charioter-Dresser (Plaquette type D r0.4)

N° Outil: T2.2



Temps Op= 0min 7s



N= 21tr/min
Vf= 1mm/min

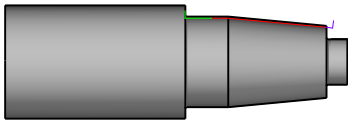
Vc / Vcc= 250m/min
f= 0,050mm/tr

[5: Finition 5, 6]

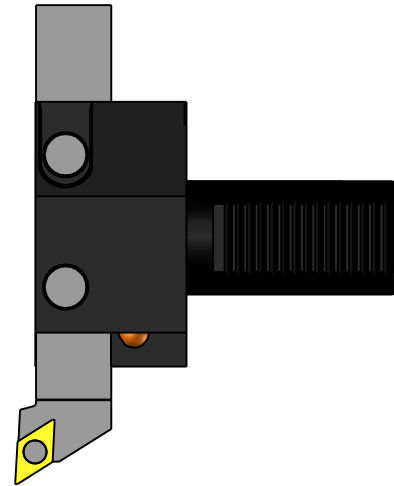
Vue simulation

Outil à Charioter-Dresser (Plaquette type D r0.4)

N° Outil: T2.2



Temps Op= 0min 12s



N= 21tr/min
Vf= 1mm/min

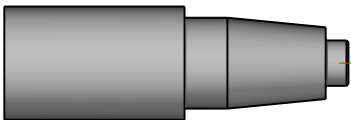
Vc / Vcc= 250m/min
f= 0,050mm/tr

[6: Pointage Trou Ø6]

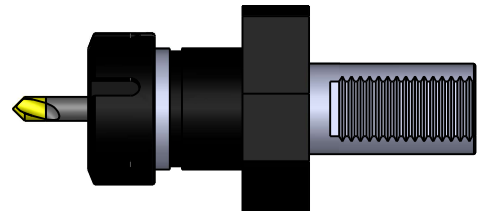
Vue simulation

Foret pointer 90° Ø8

N° Outil: T3.1

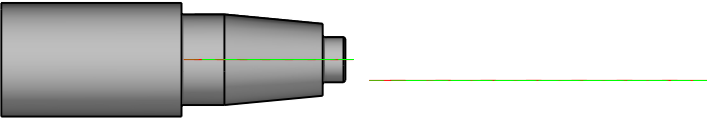
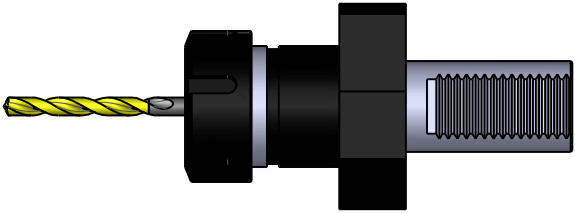
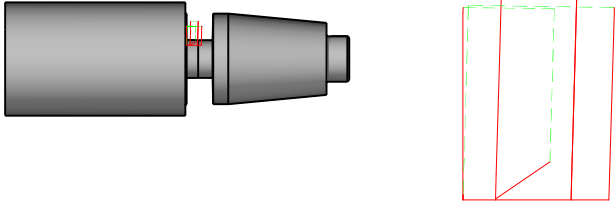
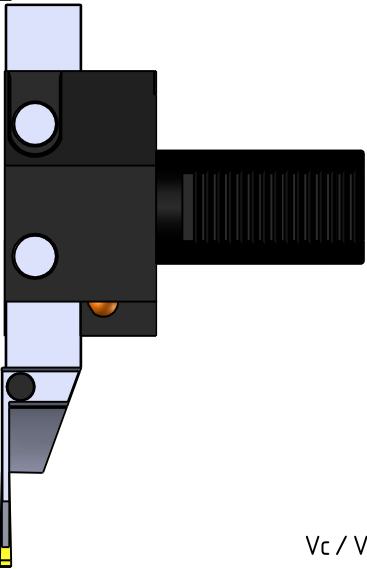
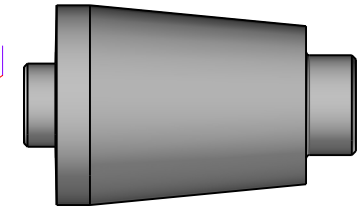
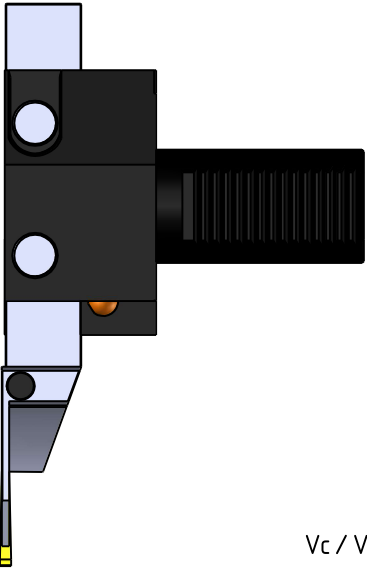


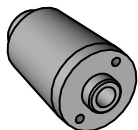
Temps Op= 0min 3s



N= 2387tr/min
Vf= 382mm/min

Vc / Vcc= 60m/min
f= 0,160mm/tr

[7: Perçage Trou Ø6] Vue simulation  Temps Op= 0min 12s	Foret HSS Ø6 N° Outil: T6.1  N= 3183tr/min Vf= 382mm/min Vc / Vcc= 60m/min f= 0,120mm/tr
[8: Usiner 7, 8 (Cf2,Cf3)] Vue simulation  Temps Op= 0min 24s	Outil à tronçonner L=3 N° Outil: T4.2  N= 36tr/min Vf= 2mm/min Vc / Vcc= 130m/min f= 0,050mm/tr
[9: Tronçonnage, chanfreinage 9, 10] Vue simulation  Temps Op= 0min 5s	Outil à tronçonner L=3 N° Outil: T4.2  N= 21tr/min Vf= 1mm/min Vc / Vcc= 130m/min f= 0,050mm/tr



Fiche opérations -fraisage-



Ensemble: Eolienne

Machine: HAAS - Mini Mill

Pièce: Mat-1

Matière: EN-AW2017

Phase: 20

Brut: Phase 10

[1: Pointage Trous M3]

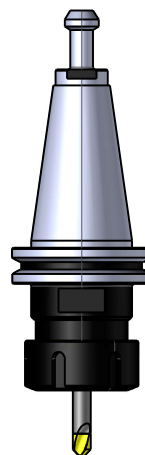
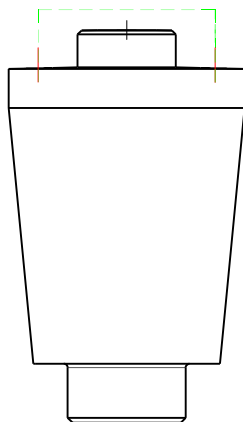
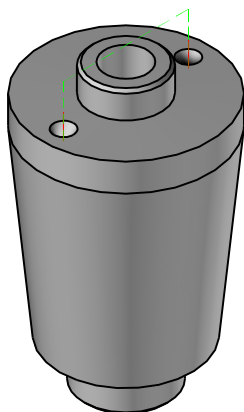
Vue simulation

Foret à Pointer Ø8 à 90°

N° Outil: 4

N= 2387tr/min

Vf= 191mm/min



Temps Op= 0min 7s

[2: Perçage Trous M3]

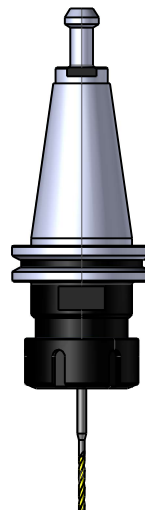
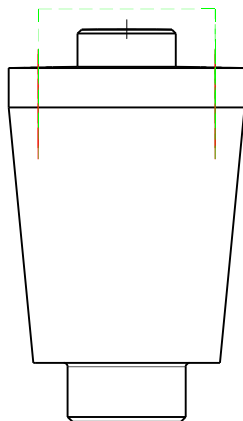
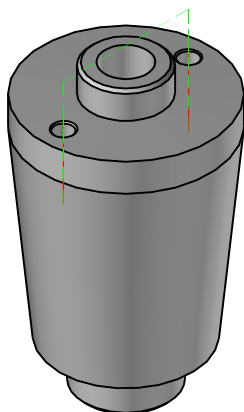
Vue simulation

Foret HSS Ø2.5

N° Outil: 8

N= 7639tr/min

Vf= 153mm/min



Temps Op= 0min 20s

[3: Taraudage M3]

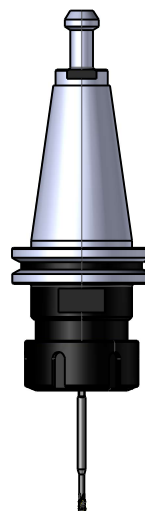
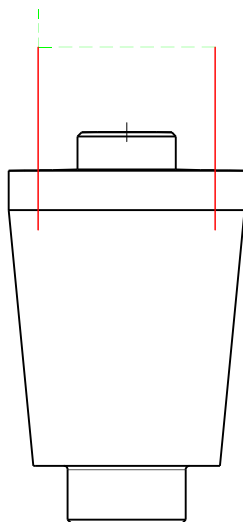
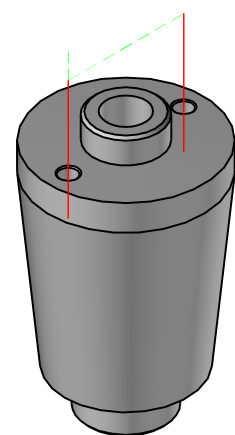
Vue simulation

Taraud M3

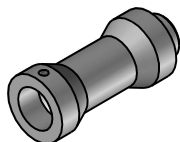
N° Outil: 7

N= 1061tr/min

Vf= 531mm/min



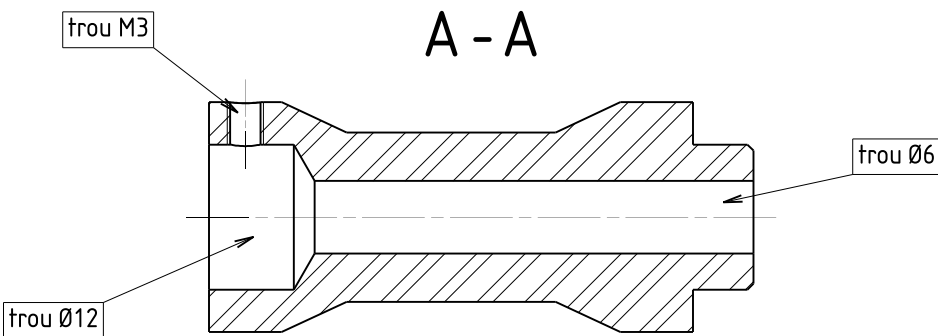
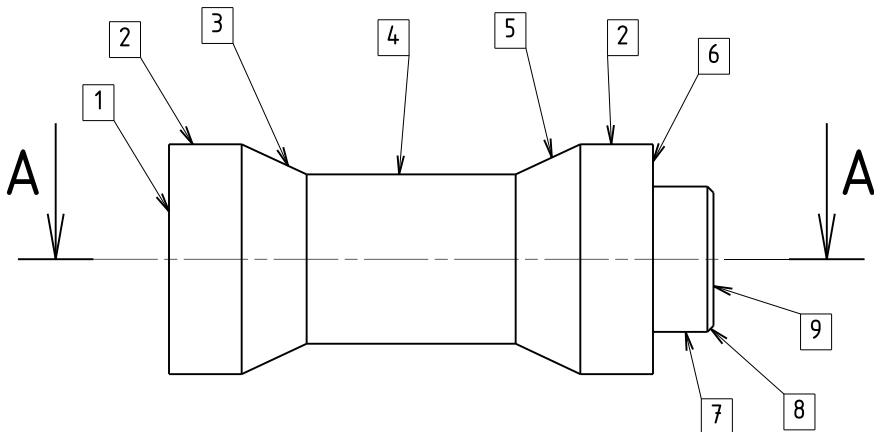
Temps Op= 0min 13s

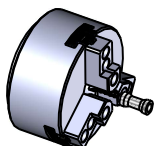


Repérage des surfaces



Ensemble: Eolienne
Pièce: Mat-2
Responsable: Dehongher





Fiche opérations -tournage-



Ensemble: Eolienne

Machine: ROSILIO - TBI 280

Pièce: Mat-2

Matière: EN-AW2017

Phase: 10

Brut: Barre Ø20

[1: Mise en butée]

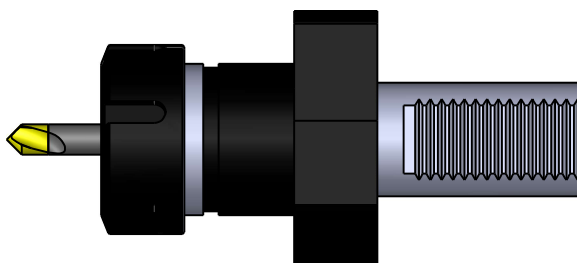
Vue simulation



Temps Op= 0min 3s

Foret pointer 90° Ø8

N° Outil: T3 Axial



N= 0tr/min

Vc / Vcc= 0m/min

Vf= 0mm/min

f= 0,000mm/tr

[2: Dressage Finition-1]

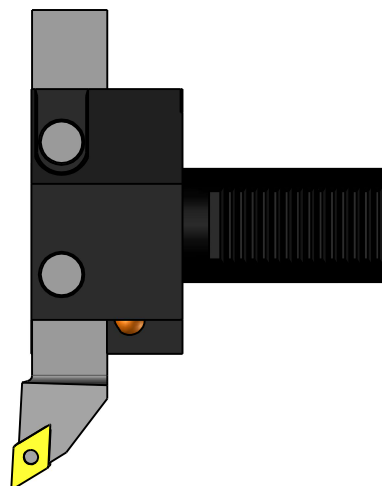
Vue simulation



Temps Op= 0min 5s

Outil à charioter/dresser de finition (Plaquette type D)

N° Outil: T2 Radial



N= 36tr/min

Vc / Vcc= 250m/min

Vf= 2mm/min

f= 0,060mm/tr

[3: Ébauche Profil 3 à 5]

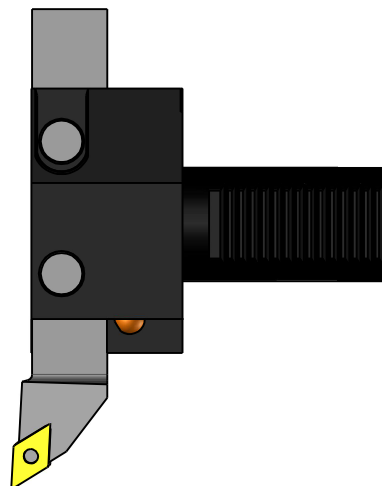
Vue simulation



Temps Op= 0min 4s

Outil à charioter/dresser de finition (Plaquette type D)

N° Outil: T2 Radial

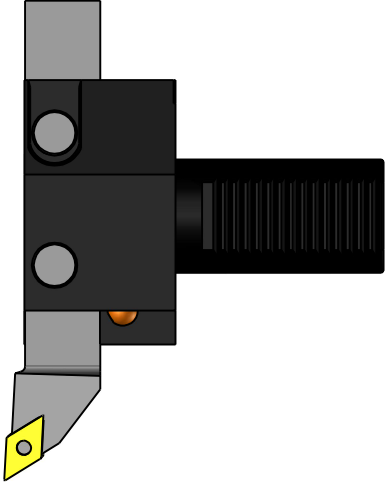
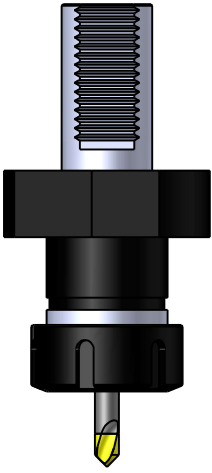
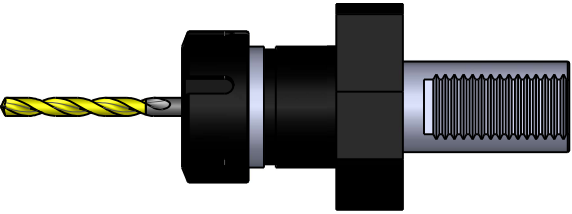


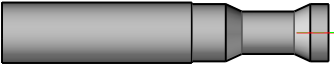
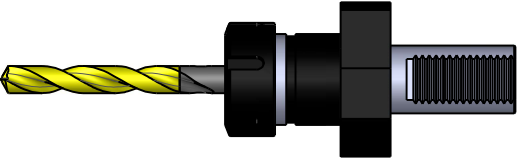
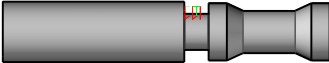
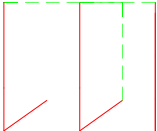
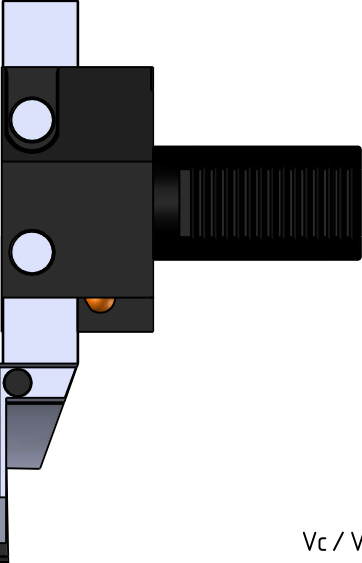
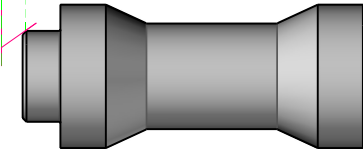
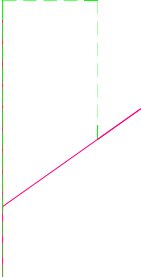
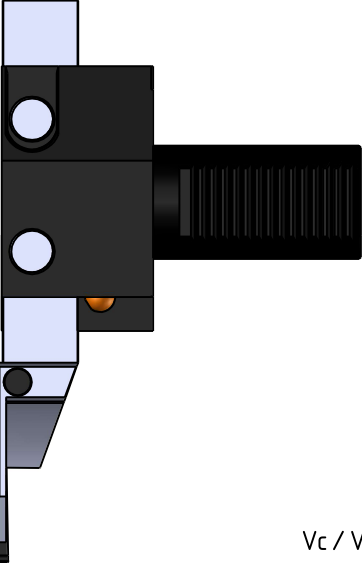
N= 36tr/min

Vc / Vcc= 250m/min

Vf= 9mm/min

f= 0,250mm/tr

[4: Finition Profil 2 à 5 (Cf1, Cf2)]  Temps Op= 0min 11s	Vue simulation 	Outil à charioter/dresser de finition (Plaquette type D) N° Outil: T2 Radial  N= 64tr/min Vf= 4mm/min Vc / Vcc= 250m/min f= 0,060mm/tr
[5: Pointage Trous]  Temps Op= 0min 6s	Vue simulation 	Foret pointer 90° Ø8 N° Outil: T3 Axial  N= 2387tr/min Vf= 382mm/min Vc / Vcc= 60m/min f= 0,160mm/tr
[6: Perçage Trou Ø6]  Temps Op= 0min 19s	Vue simulation 	Foret HSS Ø6 N° Outil: T5 Axial  N= 3183tr/min Vf= 382mm/min Vc / Vcc= 60m/min f= 0,120mm/tr

[7: Perçage Trou Ø12]  Vue simulation  Temps Op= 0min 7s	Foret HSS Ø12 N° Outil: T1 Axial  N= 1592tr/min Vf= 382mm/min Vc / Vcc= 60m/min f= 0,240mm/tr
[8: Usinage Gorge 6, 7 (Cf3, Cf4)]  Vue simulation  Temps Op= 0min 13s	Outil à tronçonner L=3 N° Outil: T4 Radial  N= 36tr/min Vf= 3mm/min Vc / Vcc= 120m/min f= 0,080mm/tr
[9: Tronçonnage + Chanfreinage 8,9]  Vue simulation  Temps Op= 0min 10s	Outil à tronçonner L=3 N° Outil: T4 Radial  N= 64tr/min Vf= 5mm/min Vc / Vcc= 120m/min f= 0,080mm/tr



Fiche opérations -fraisage-



Ensemble: Eolienne

Machine: HAAS - Mini Mill

Pièce: Mat-2

Matière: EN-AW2017

Phase: 20

Brut: Phase 10

[1: Pointage Trou M3]

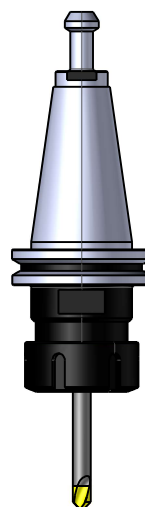
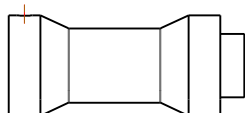
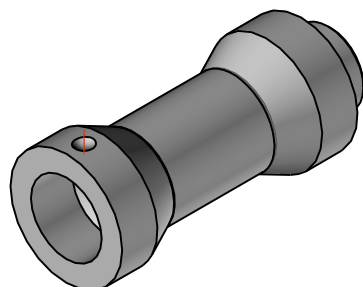
Vue simulation

Foret à Pointer Ø8 à 90°

N° Outil: 4

N= 2387tr/min

Vf= 191mm/min



Temps Op= 0min 5s

[2: Perçage Trou M3]

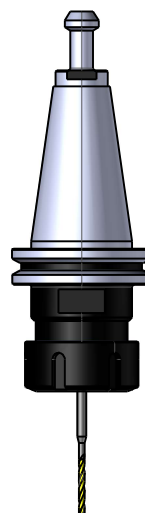
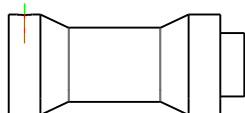
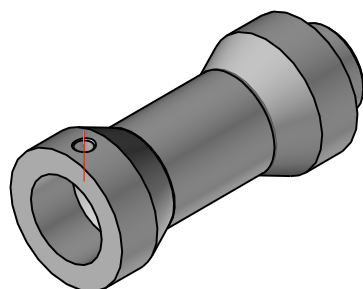
Vue simulation

Foret HSS Ø2.5

N° Outil: 8

N= 7639tr/min

Vf= 153mm/min



Temps Op= 0min 7s

[3: Taraudage Trou M3]

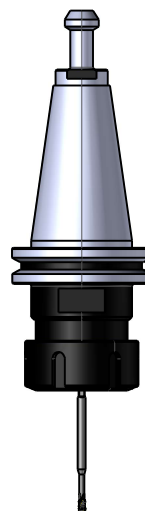
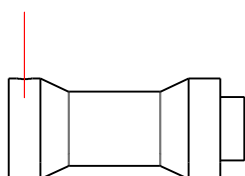
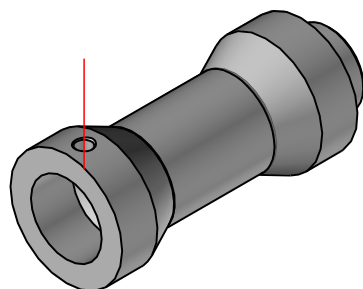
Vue simulation

Taraud M3

N° Outil: 7

N= 1061tr/min

Vf= 531mm/min



Temps Op= 0min 7s



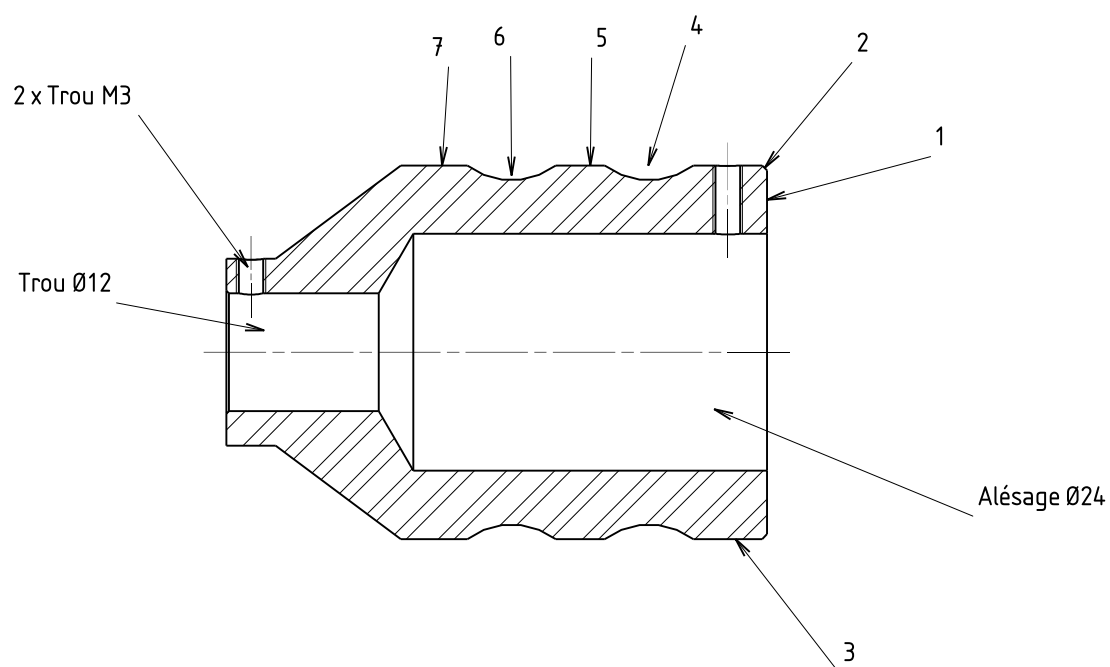
Repérage des surfaces



Ensemble: Eolienne

Pièce: Tête

Responsable: Dehongher





Fiche opérations -tournage-



Ensemble: Eolienne

Machine: ROSILIO - TBI 280

Pièce: Tête

Matière: EN-AW2017

Phase: 10

Brut: Barre Ø40

[1: Dresser Finition 1]

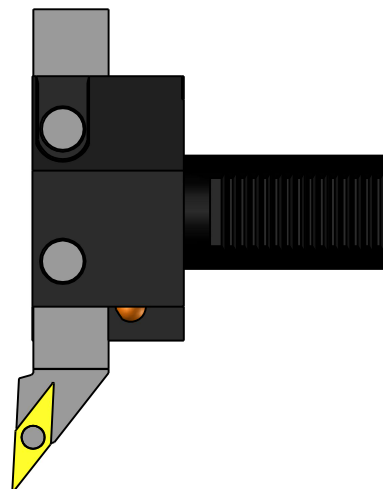
Vue simulation



Temps Op= 0min 6s

Outil à Charioter-Dresser (Plaquette type V r0.2)

N° Outil: T2.2



N= 36tr/min

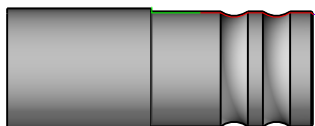
Vc / Vcc= 250m/min

Vf= 3mm/min

f= 0,080mm/tr

[2: Contournage finition 2 à 7]

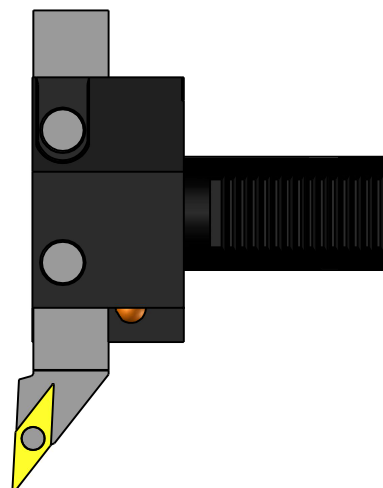
Vue simulation



Temps Op= 0min 44s

Outil à Charioter-Dresser (Plaquette type V r0.2)

N° Outil: T2.2



N= 21tr/min

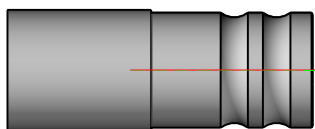
Vc / Vcc= 250m/min

Vf= 1mm/min

f= 0,040mm/tr

[3: Perçage Trou Ø12]

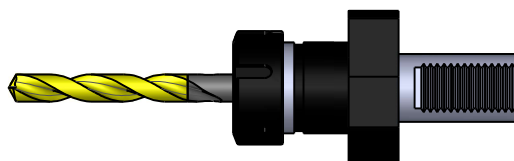
Vue simulation



Temps Op= 0min 14s

Foret HSS Ø12

N° Outil: T6.1

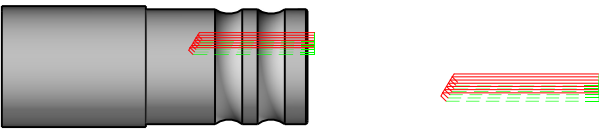
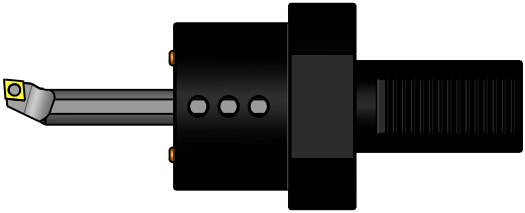
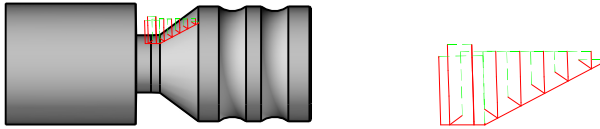
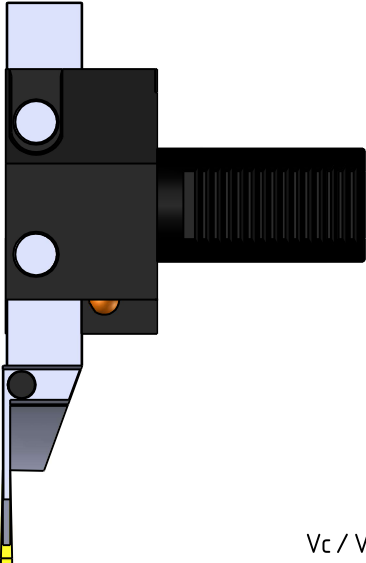
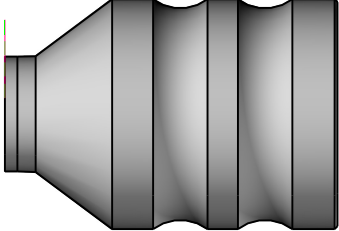
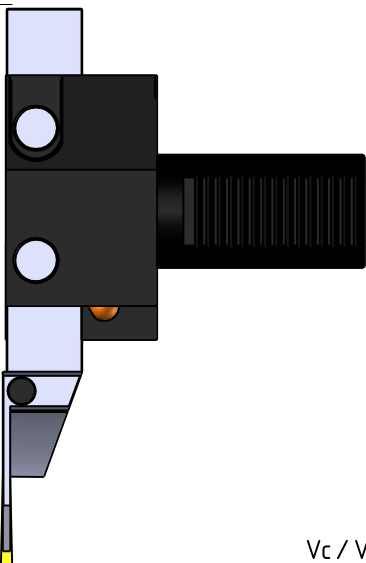


N= 1592tr/min

Vc / Vcc= 60m/min

Vf= 318mm/min

f= 0,200mm/tr

[4: Usinage Alésage Ø24]  Temps Op= 3min 32s	Vue simulation Barre d'alésage Ø12 (Plaquette type C) N° Outil: T8.1  N= 36tr/min Vf= 1mm/min Vc / Vcc= 120m/min f= 0,040mm/tr
[5: Usiner 8 et 9]  Temps Op= 7min 11s	Vue simulation Outil à tronçonner L=3 N° Outil: T4.2  N= 36tr/min Vf= 18mm/min Vc / Vcc= 226m/min f= 0,500mm/tr
[6: Tronçonnage 10]  Temps Op= 0min 11s	Vue simulation Outil à tronçonner L=3 N° Outil: T4.2  N= 64tr/min Vf= 3mm/min Vc / Vcc= 120m/min f= 0,040mm/tr



Fiche opérations -fraisage-



Ensemble: Eolienne

Machine: HAAS - Mini Mill

Pièce: Tête

Matière: EN-AW2017

Phase: 20

Brut: Phase 10

[1: Pointage Trou M3]

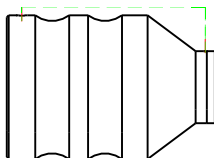
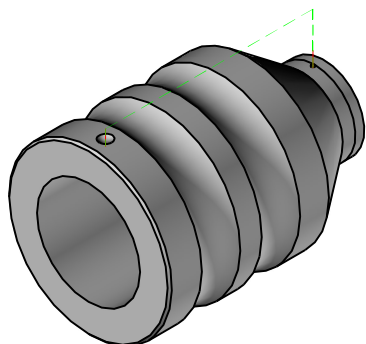
Vue simulation

Foret à Pointer Ø8 à 90°

N° Outil: 4

N= 2387tr/min

Vf= 191mm/min



Temps Op= 0min 6s

[2: Perçage Trou M3]

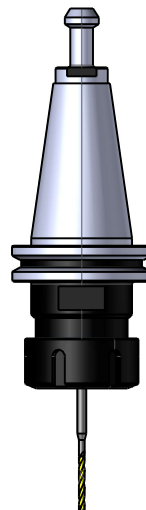
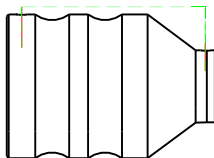
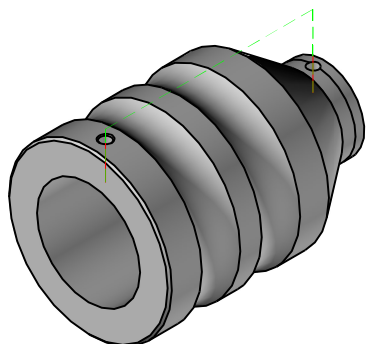
Vue simulation

Foret HSS Ø2.5

N° Outil: 8

N= 7639tr/min

Vf= 153mm/min



Temps Op= 0min 11s

[3: Taraudage Trou M3]

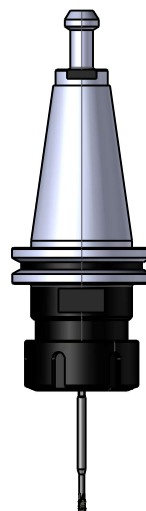
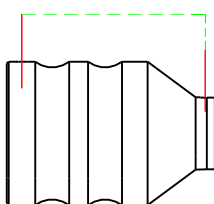
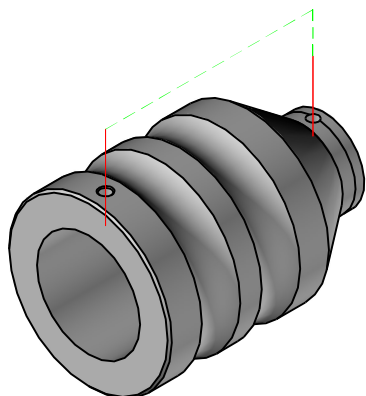
Vue simulation

Taraud M3

N° Outil: 7

N= 1061tr/min

Vf= 531mm/min



Temps Op= 0min 12s