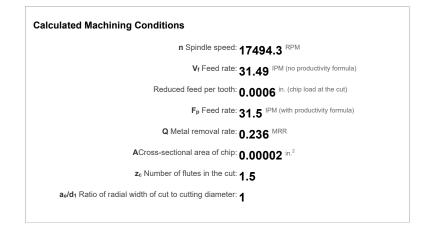
number(HB)	Skip this step if you a	Iready know the Brinell hardness
Hardness HRB OR HRC into Brinell Hardness (HB)	Rockwell HRC: V	
Characteristics of Workpie	ce Materials	
Brinell Hardness:	95	НВ
Ultimate strength:	45000	PSI
End Mill Nomenclature		
d1 Effective cutting diameter:	0.25] in.
z Number of inserts/cutter:	3]
Machining Conditions		
V _c Cutting speed:	1145	sfm
a _p Axial Depth of cut:	0.03	in. (DOC)
$\mathbf{a}_{\mathbf{e}}$ Radial width of cut:	0.25	in. (WOC)
$\mathbf{f}_{\mathbf{z}}$ Required feed per tooth:	0.0006	in. IPT (chip load)
C _m Machinability factor:	1	0
$\mathbf{C}_{\mathbf{w}}$ Tool wear factor:	1	0
E Machine efficiency factor:	85	0
	Calculate	



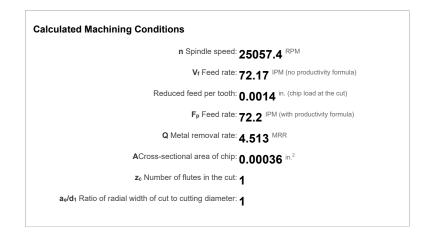
Ft Tangential cutting force: 1.35 1b

T Torque at the cutter: 0.17 in.-lb

 \textbf{P}_{s} at the cutter: $\textbf{0.05}^{\text{HPc}}$

 \textbf{P}_m at the motor: $\textbf{0.06}^{\text{hp}}$

	Skip this step if you a	Iready know the Brinell hardness
number(HB)		
Hardness HRB OR HRC into Brinell Hardness (HB)		
	Calculate Hardness	
Characteristics of Workpie	ce Materials	
Brinell Hardness:	95	НВ
Ultimate strength:	45000	PSI
End Mill Nomenclature		
d1 Effective cutting diameter:	0.25] in.
z Number of inserts/cutter:	2]
Machining Conditions		
V _c Cutting speed:	1640	sfm
$\mathbf{a}_{\mathbf{p}}$ Axial Depth of cut:	0.25	in. (DOC)
a e Radial width of cut:	0.25	in. (WOC)
$\mathbf{f}_{\mathbf{z}}$ Required feed per tooth:	0.00144	in. IPT (chip load)
$\mathbf{C}_{\mathbf{m}}$ Machinability factor:	1	0
$\mathbf{C}_{\mathbf{w}}$ Tool wear factor:	1	0
E Machine efficiency factor:	85	0
	Calculate	



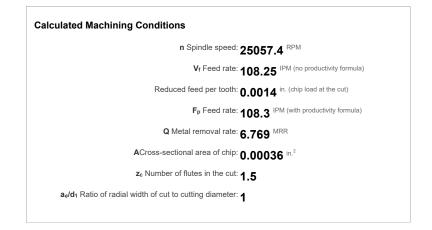
Ft Tangential cutting force: 16.2 b

T Torque at the cutter: 2.03 in.-lb

 $\textbf{P_s}$ at the cutter: $\textbf{0.81}^{\text{HPc}}$

 \textbf{P}_{m} at the motor: $\textbf{0.95}^{\text{hp}}$

number(HB)	Skip this step if you a	Iready know the Brinell hardness
Hardness HRB OR HRC into Brinell Hardness (HB)	Rockwell HRC: V	
Characteristics of Workpie	ce Materials	
Brinell Hardness:	95	НВ
Ultimate strength:	45000	PSI
End Mill Nomenclature		
d1 Effective cutting diameter:	0.25] in.
z Number of inserts/cutter:	3]
Machining Conditions		
V _c Cutting speed:	1640	sfm
a _p Axial Depth of cut:	0.25] in. (DOC)
a₀ Radial width of cut:	0.25	in. (WOC)
$\mathbf{f}_{\mathbf{z}}$ Required feed per tooth:	0.00144	in. IPT (chip load)
C _m Machinability factor:	1	0
C _w Tool wear factor:	1	0
E Machine efficiency factor:	85	0
	Calculate	



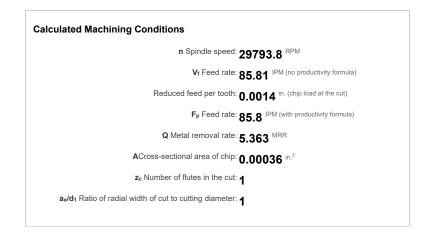
 \textbf{F}_{t} Tangential cutting force: **24.3** $^{\text{lb}}$

T Torque at the cutter: 3.04 in.-lb

 $\textbf{P_s}$ at the cutter: **1.21** $^{\text{HPc}}$

 \textbf{P}_{m} at the motor: **1.42** $^{\text{hp}}$

number(HB)	Skip this step if you a	Iready know the Brinell hardness
Hardness HRB OR HRC into Brinell Hardness (HB)	Rockwell HRC: V	
Characteristics of Workpie	ce Materials	
Brinell Hardness:	95	НВ
Ultimate strength:	45000	PSI
End Mill Nomenclature		
d1 Effective cutting diameter:	0.25] in.
z Number of inserts/cutter:	2]
Machining Conditions		
V _c Cutting speed:	1950	sfm
a _p Axial Depth of cut:	0.25	in. (DOC)
a _€ Radial width of cut:	0.25	in. (WOC)
$\mathbf{f}_{\mathbf{z}}$ Required feed per tooth:	0.00144	in. IPT (chip load)
C _m Machinability factor:	1	0
C _w Tool wear factor:	1	0
E Machine efficiency factor:	85	0
	Calculate	



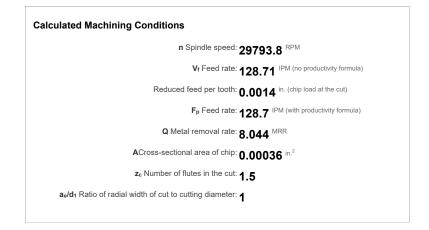
Ft Tangential cutting force: 16.2 b

T Torque at the cutter: 2.03 in.-lb

 \textbf{P}_{s} at the cutter: $\textbf{0.96}^{\text{HPc}}$

 \textbf{P}_{m} at the motor: **1.13** $^{\text{hp}}$

number(HB)	Skip this step if you a	Iready know the Brinell hardness
Hardness HRB OR HRC into Brinell Hardness (HB)	Rockwell HRC: V	
Characteristics of Workpie	ce Materials	
Brinell Hardness:	95	НВ
Ultimate strength:	45000	PSI
End Mill Nomenclature		
d1 Effective cutting diameter:	0.25] in.
z Number of inserts/cutter:	3]
Machining Conditions		
V _c Cutting speed:	1950	sfm
a _p Axial Depth of cut:	0.25	in. (DOC)
a e Radial width of cut:	0.25	in. (WOC)
$\mathbf{f}_{\mathbf{z}}$ Required feed per tooth:	0.00144	in. IPT (chip load)
C _m Machinability factor:	1	0
$\mathbf{C}_{\mathbf{w}}$ Tool wear factor:	1	0
E Machine efficiency factor:	85	0
	Calculate	



 \textbf{F}_{t} Tangential cutting force: **24.3** $^{\text{lb}}$

T Torque at the cutter: 3.04 in.-lb

 \textbf{P}_{s} at the cutter: $\textbf{1.44}^{\text{HPc}}$

 P_m at the motor: **1.69** $^{\rm hp}$