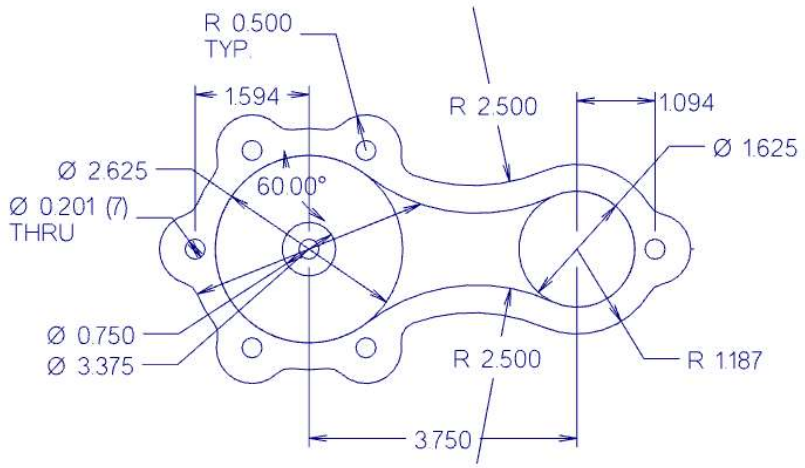
Mastercam Setup Sheet Report

# GENERIC HAAS 3 - AXIS VMC

**GENERAL INFORMATION**

| | | |
|---|---|---|
| PROJECT NAME: | | |
| CUSTOMER NAME: | | |
| PROGRAMMER: | | |
| DRAWING: | | REVISION: |
| DATE: | Wednesday, March 8, 2023 | |
| TIME: | 11:41 AM | |

**C:\USERS\WESTONSHAKESPEAR\DOWNLOADS\WSHAKESPEAR_MILL 8B.EMCAM**

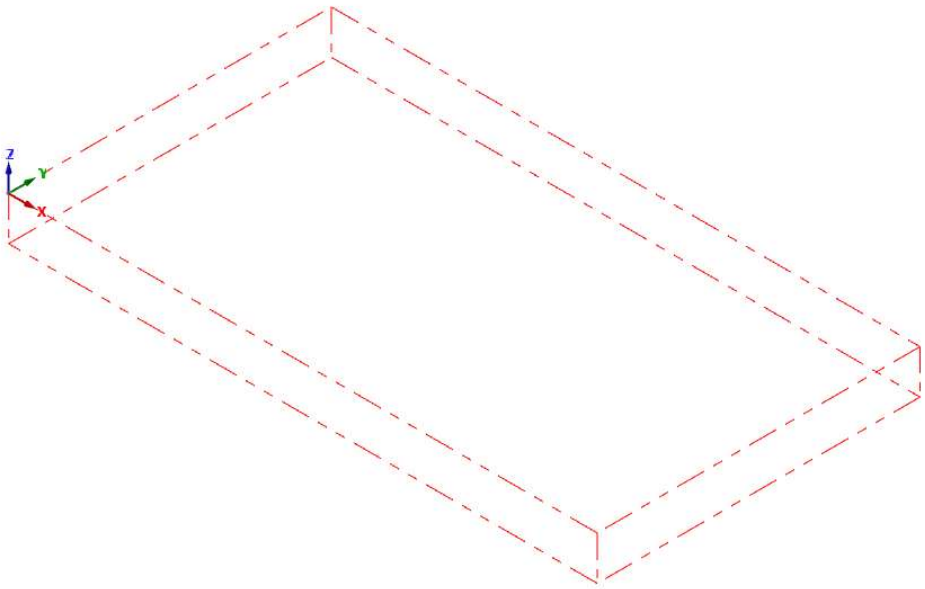




Top

1.5745 in
Inch

**COMMENTS**




| | |
|---|---|
| **STOCK:** | YES |
| SHAPE: | Box |
| SIZE: | 7.75, 4.25, 0.575 |
| RADIUS: | NA |
| LENGTH: | |
| AXIS: | NA |
| FILE: | |
| IDN: | NA |

## *C:\USERS\WESTONSHAKESPEAR\DOCUMENTS\MY*

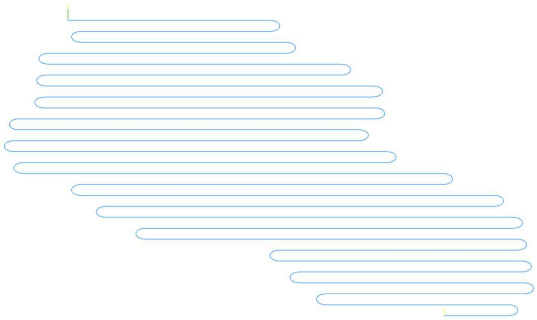
CYCLE TIME: 0 HOURS, 13 MINUTES, 35 SECONDS

## *OPERATION LIST*

*OPERATION INFO* ***1 - Facing***

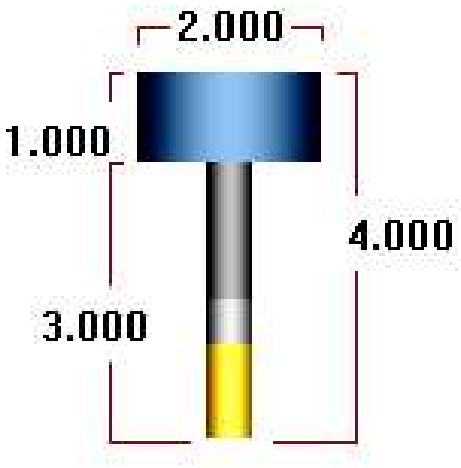
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 2 MINUTES, 5 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 55.0 inch/min |
| CLEARANCE PLANE: | 2.0 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.05 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 FLAT ENDMILL***

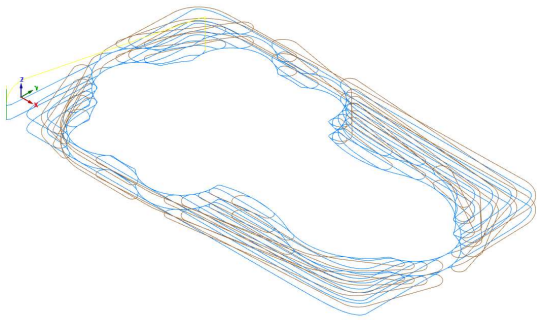
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:02:05 |



*OPERATION INFO* ***2 - 2D High Speed (2D Dynamic Rest Mill)***

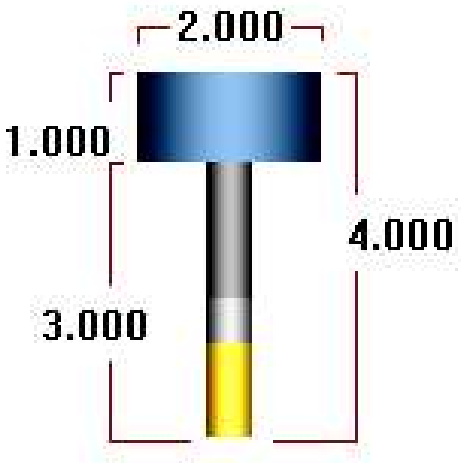
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 6 MINUTES, 3 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 49.0 inch/min |
| CLEARANCE PLANE: | 0.0 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.05 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 0.01 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 FLAT ENDMILL***

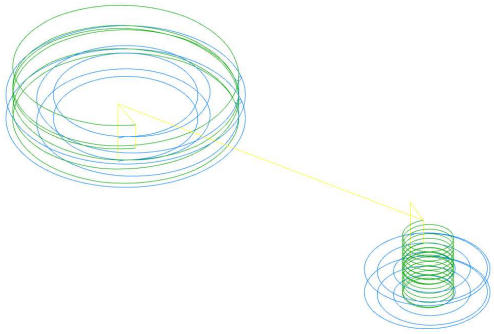
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:06:03 |



*OPERATION INFO* ***3 - 2D High Speed (2D Dynamic Rest Mill)***

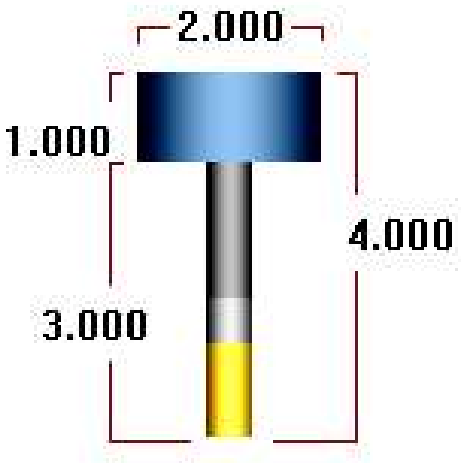
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 2 MINUTES, 17 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 49.0 inch/min |
| CLEARANCE PLANE: | 0.0 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.05 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 0.01 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 FLAT ENDMILL***

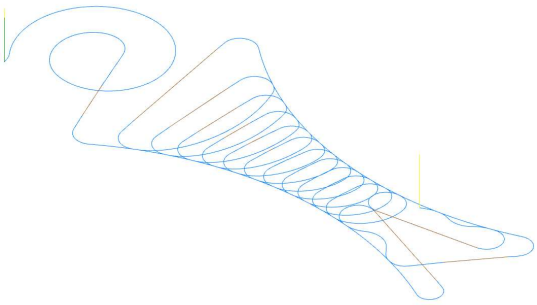
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:02:17 |



*OPERATION INFO* ***4 - 2D High Speed (2D Dynamic Rest Mill)***

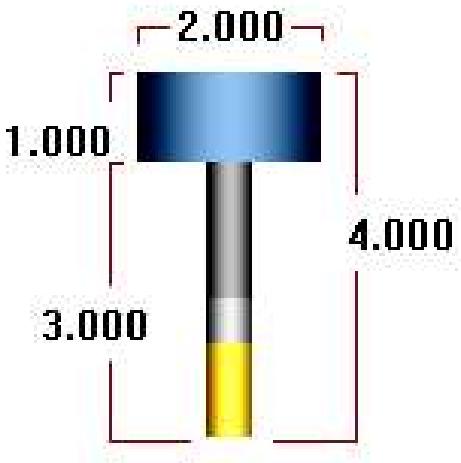
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 44 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 49.0 inch/min |
| CLEARANCE PLANE: | 0.0 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.05 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 0.01 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 FLAT ENDMILL***

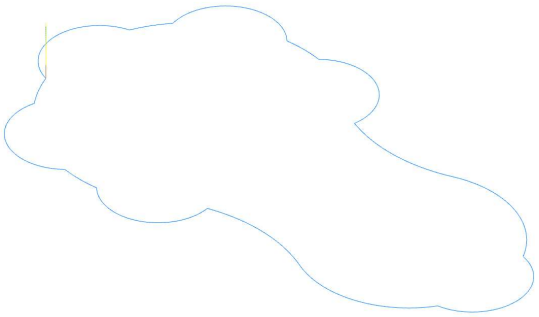
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:44 |



*OPERATION INFO* ***5 - Contour (2D)***

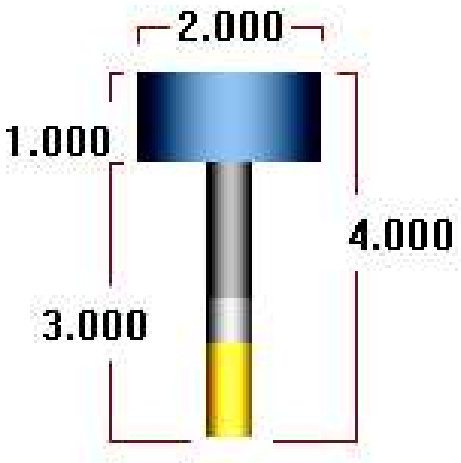
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 26 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 55.0 inch/min |
| CLEARANCE PLANE: | 2.0 |
| RETRACT PLANE: | 0.25 |
| FEED PLANE: | 0.2 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 FLAT ENDMILL***

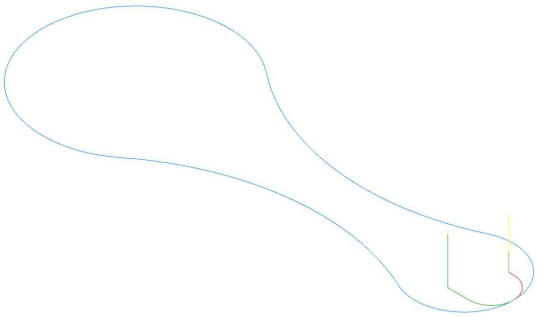
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:26 |



*OPERATION INFO* ***6 - Contour (2D)***

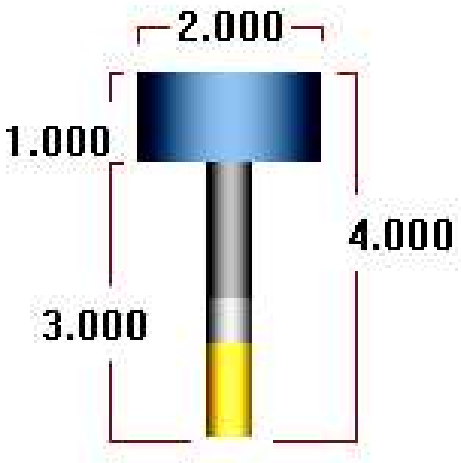
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 18 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 55.0 inch/min |
| CLEARANCE PLANE: | 2.0 |
| RETRACT PLANE: | 0.25 |
| FEED PLANE: | 0.2 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 FLAT ENDMILL***

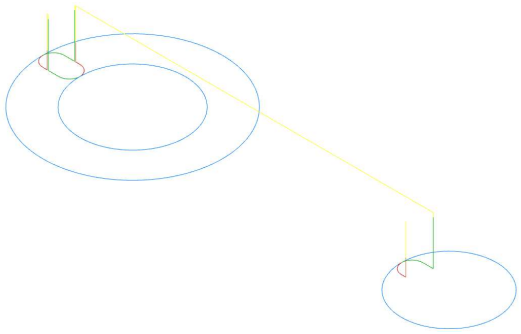
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:18 |



*OPERATION INFO* ***7 - Contour (2D)***

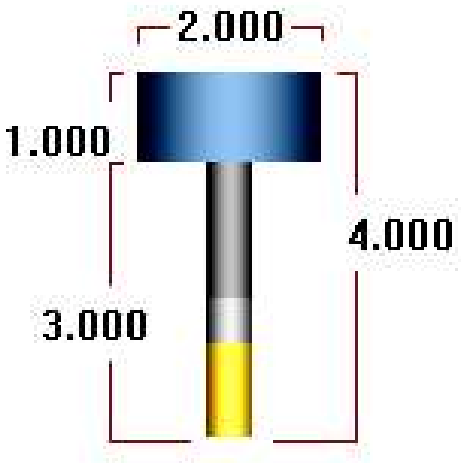
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 25 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 55.0 inch/min |
| CLEARANCE PLANE: | 2.0 |
| RETRACT PLANE: | 0.25 |
| FEED PLANE: | 0.2 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 FLAT ENDMILL***

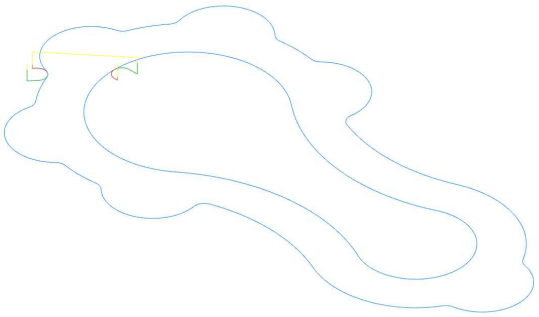
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:25 |



*OPERATION INFO* ***8 - Contour (2D chamfer)***

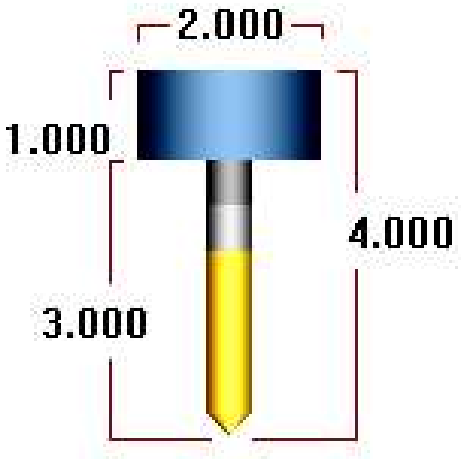
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 40 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 55.0 inch/min |
| CLEARANCE PLANE: | 2.0 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.05 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 SPOTDRILL***

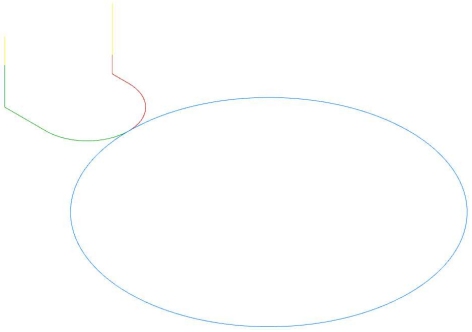
| | |
|---|---|
| TYPE: | Spot drill |
| NUMBER: | 2 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 2 |
| DIAMETER OFFSET: | 2 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.001 | SFM: 69.8953 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:40 |



*OPERATION INFO* ***9 - Contour (2D chamfer)***

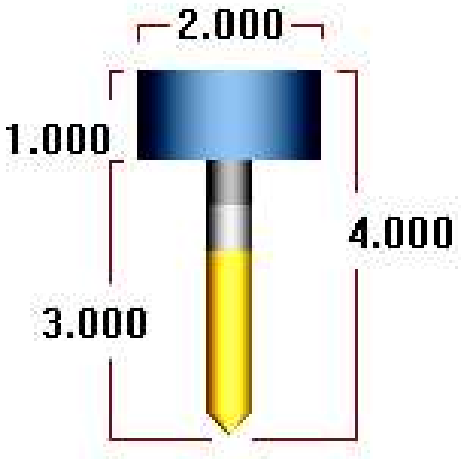
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 4 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 55.0 inch/min |
| CLEARANCE PLANE: | 2.0 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.05 |
| DEPTH: | 0.0 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 SPOTDRILL***

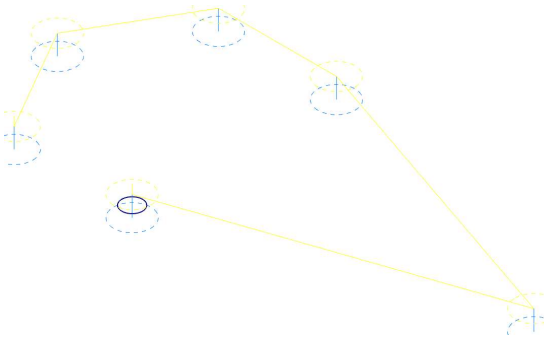
| | |
|---|---|
| TYPE: | Spot drill |
| NUMBER: | 2 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 2 |
| DIAMETER OFFSET: | 2 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.001 | SFM: 69.8953 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:04 |



*OPERATION INFO* ***10 - Drill/Counterbore***

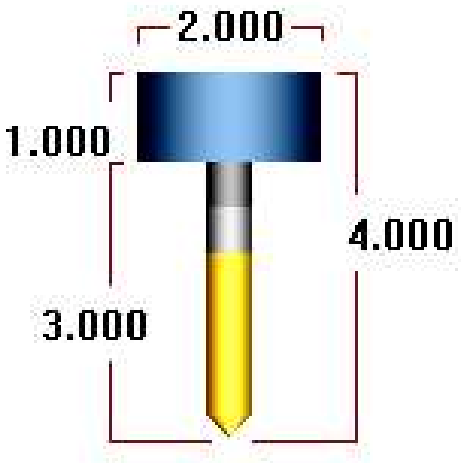
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 2 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 35.0 inch/min |
| CLEARANCE PLANE: | 0.25 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.125 |
| DEPTH: | -0.1455 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | NO |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 SPOTDRILL***

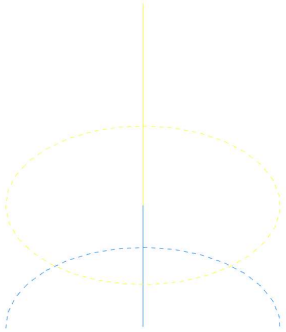
| | |
|---|---|
| TYPE: | Spot drill |
| NUMBER: | 2 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 2 |
| DIAMETER OFFSET: | 2 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.001 | SFM: 69.8953 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:02 |



*OPERATION INFO* ***11 - Drill/Counterbore***

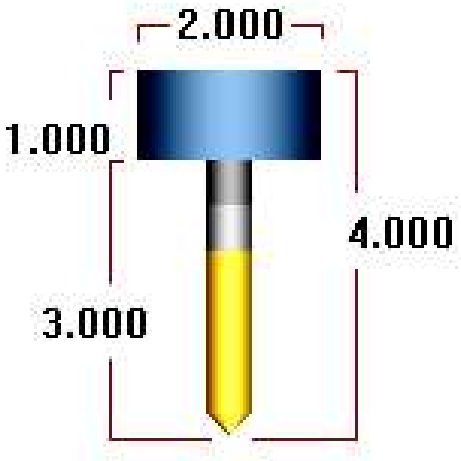
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 0 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 35.0 inch/min |
| CLEARANCE PLANE: | 0.25 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.125 |
| DEPTH: | -0.1455 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | NO |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/2 SPOTDRILL***

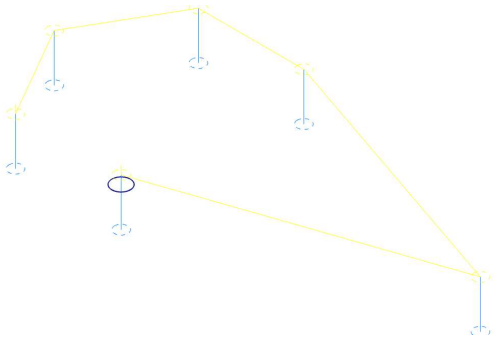
| | |
|---|---|
| TYPE: | Spot drill |
| NUMBER: | 2 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 2 |
| DIAMETER OFFSET: | 2 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.001 | SFM: 69.8953 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:00 |



*OPERATION INFO* ***12 - Peck Drill***

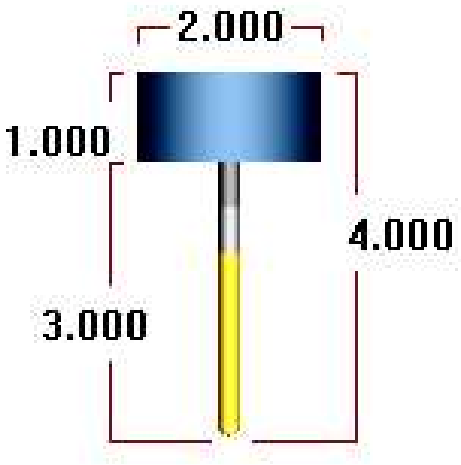
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 16 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 35.0 inch/min |
| CLEARANCE PLANE: | 0.25 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.125 |
| DEPTH: | -0.1405 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | NO |
| WORK OFFSET: | 0 |



*TOOL INFO* ***NO. 7 DRILL***

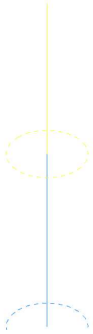
| | |
|---|---|
| TYPE: | Drill |
| NUMBER: | 3 |
| DIAMETER: | 0.201 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 3 |
| DIAMETER OFFSET: | 3 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.0048 | SFM: 399.9479 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:16 |



*OPERATION INFO* ***13 - Peck Drill***

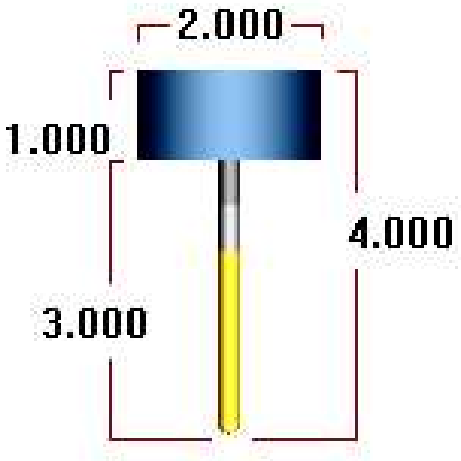
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 1 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 35.0 inch/min |
| CLEARANCE PLANE: | 0.25 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.125 |
| DEPTH: | -0.1405 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | NO |
| WORK OFFSET: | 0 |



*TOOL INFO* ***NO. 7 DRILL***

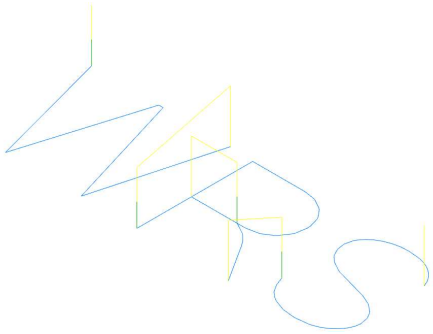
| | |
|---|---|
| TYPE: | Drill |
| NUMBER: | 3 |
| DIAMETER: | 0.201 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 3 |
| DIAMETER OFFSET: | 3 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.0048 | SFM: 399.9479 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:01 |



*OPERATION INFO* ***14 - Contour (2D)***

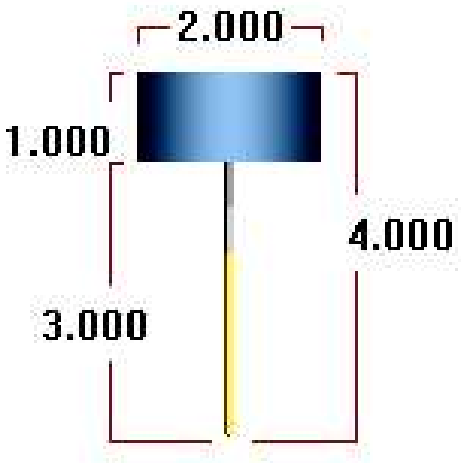
| | |
|---|---|
| CYCLE TIME: | 0 HOURS, 0 MINUTES, 6 SECONDS |
| COMMENT: | |

| | |
|---|---|
| PROGRAM NUMBER: | 0 |
| SPINDLE SPEED: | 4966 RPM |
| FEEDRATE: | 29.0 inch/min |
| CLEARANCE PLANE: | 2.0 |
| RETRACT PLANE: | 0.125 |
| FEED PLANE: | 0.05 |
| DEPTH: | -0.008 |
| STOCK TO LEAVE: | 0.0 |
| COMP TO TIP: | YES |
| WORK OFFSET: | 0 |



*TOOL INFO* ***1/8 SPOTDRILL***

| | |
|---|---|
| TYPE: | Spot drill |
| NUMBER: | 4 |
| DIAMETER: | 0.125 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 4 |
| DIAMETER OFFSET: | 4 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.0002 | SFM: 69.9935 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:06 |

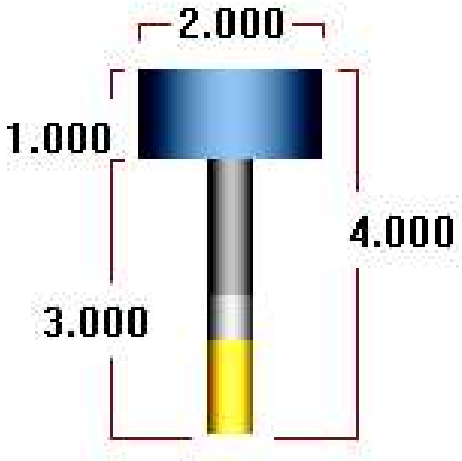


## *TOOL LIST*

Sorted: NO

*TOOL INFO* ***1/2 FLAT ENDMILL***

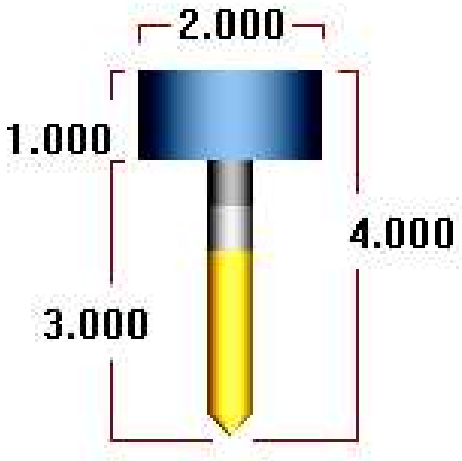
| | |
|---|---|
| TYPE: | Flat endmill |
| NUMBER: | 1 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 1 |
| DIAMETER OFFSET: | 1 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 4 |
| FPT: 0.0015 | SFM: 139.9215 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:12:21 |




| | | |
|---|---|---|
| USED BY OPERATION: | # 1 | 1 - Facing |
| USED BY OPERATION: | # 2 | 2 - 2D High Speed (2D Dynamic Rest Mill) |
| USED BY OPERATION: | # 3 | 3 - 2D High Speed (2D Dynamic Rest Mill) |
| USED BY OPERATION: | # 4 | 4 - 2D High Speed (2D Dynamic Rest Mill) |
| USED BY OPERATION: | # 5 | 5 - Contour (2D) |
| USED BY OPERATION: | # 6 | 6 - Contour (2D) |
| USED BY OPERATION: | # 7 | 7 - Contour (2D) |

*TOOL INFO* ***1/2 SPOTDRILL***

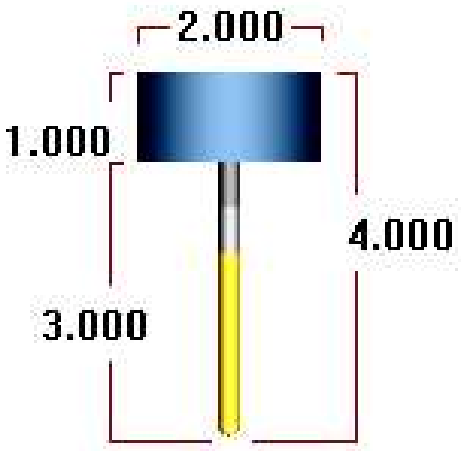
| | |
|---|---|
| TYPE: | Spot drill |
| NUMBER: | 2 |
| DIAMETER: | 0.5 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 2 |
| DIAMETER OFFSET: | 2 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.001 | SFM: 69.8953 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:48 |




| | | |
|---|---|---|
| USED BY OPERATION: | # 8 | 8 - Contour (2D chamfer) |
| USED BY OPERATION: | # 9 | 9 - Contour (2D chamfer) |
| USED BY OPERATION: | # 10 | 10 - Drill/Counterbore |
| USED BY OPERATION: | # 11 | 11 - Drill/Counterbore |

*TOOL INFO* ***NO. 7 DRILL***

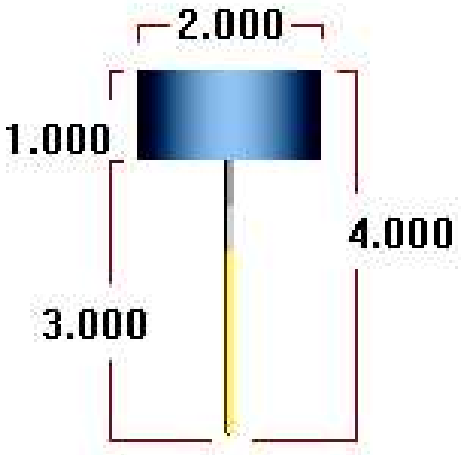
| | |
|---|---|
| TYPE: | Drill |
| NUMBER: | 3 |
| DIAMETER: | 0.201 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 3 |
| DIAMETER OFFSET: | 3 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.0048 | SFM: 399.9479 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:18 |




| | | |
|---|---|---|
| USED BY OPERATION: | # 12 | 12 - Peck Drill |
| USED BY OPERATION: | # 13 | 13 - Peck Drill |

*TOOL INFO* ***1/8 SPOTDRILL***

| | |
|---|---|
| TYPE: | Spot drill |
| NUMBER: | 4 |
| DIAMETER: | 0.125 |
| CORNER RADIUS: | 0.0 |
| LENGTH OFFSET: | 4 |
| DIAMETER OFFSET: | 4 |
| MATERIAL: | HSS |
| NUMBER OF FLUTES: | 2 |
| FPT: 0.0002 | SFM: 69.9935 |
| MFG CODE: | |
| ASSEMBLY: | |
| HOLDER: | Default Holder |
| TIME: | 00:00:06 |




| | | |
|---|---|---|
| USED BY OPERATION: | # 14 | 14 - Contour (2D) |

## *WORK OFFSETS*

*OFFSET INFO*

| NUMBER: 0 | PLANE: Top | ORIGIN: 0.0, 0.0, 0.0 |
|---|---|---|
| USED BY OPERATION: | # 1 | 1 - Facing |
| USED BY OPERATION: | # 2 | 2 - 2D High Speed (2D Dynamic Rest Mill) |
| USED BY OPERATION: | # 3 | 3 - 2D High Speed (2D Dynamic Rest Mill) |
| USED BY OPERATION: | # 4 | 4 - 2D High Speed (2D Dynamic Rest Mill) |
| USED BY OPERATION: | # 5 | 5 - Contour (2D) |
| USED BY OPERATION: | # 6 | 6 - Contour (2D) |
| USED BY OPERATION: | # 7 | 7 - Contour (2D) |
| USED BY OPERATION: | # 8 | 8 - Contour (2D chamfer) |
| USED BY OPERATION: | # 9 | 9 - Contour (2D chamfer) |
| USED BY OPERATION: | # 10 | 10 - Drill/Counterbore |
| USED BY OPERATION: | # 11 | 11 - Drill/Counterbore |
| USED BY OPERATION: | # 12 | 12 - Peck Drill |
| USED BY OPERATION: | # 13 | 13 - Peck Drill |
| USED BY OPERATION: | # 14 | 14 - Contour (2D) |