

Setup Sheet for Program 1001

JOB DESCRIPTION: AutoSetup 1

DOCUMENT PATH: X_TP02_FORI_EDIT_12100709 v1

Setup

WCS: #0

STOCK:

DX: 160mm

DY: 95mm

DZ: 35mm

PART:

DX: 150mm

DY: 84.87mm

DZ: 25mm

STOCK LOWER IN WCS #0:

X: -80mm

Y: -47.5mm

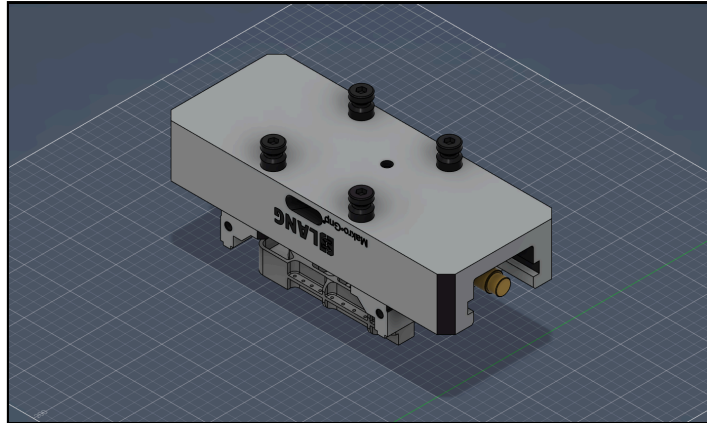
Z: -35mm

STOCK UPPER IN WCS #0:

X: 80mm

Y: 47.5mm

Z: 0mm



Total

NUMBER OF OPERATIONS: 14

NUMBER OF TOOLS: 11

TOOLS: T17000 T17006 T17013 T19000 T19006 T19007 T22003 T22011 T22012 T22013 T22014

MAXIMUM Z: 6.05mm

MINIMUM Z: -30.25mm

MAXIMUM FEEDRATE: 2470mm/min

MAXIMUM SPINDLE SPEED: 8000rpm

CUTTING DISTANCE: 28336.27mm

RAPID DISTANCE: 20302.77mm

ESTIMATED CYCLE TIME: 44m:20s

Tools

T17000 D17000 L17000

TYPE: flat end mill

DIAMETER: 40mm

LENGTH: 100mm

FLUTES: 4

DESCRIPTION: CoroMill490 Sgrossatura

VENDOR: Sandvik

PRODUCT: [490-040A32-14H](#)

MINIMUM Z: -30.25mm

MAXIMUM FEED: 2470mm/min

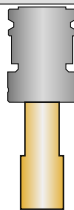
MAXIMUM SPINDLE SPEED: 1880rpm

CUTTING DISTANCE: 7196.44mm

RAPID DISTANCE: 6651.85mm

ESTIMATED CYCLE TIME: 4m:15s (9.6%)

HOLDER: BT40 - B4C4-1000



T17006 D17006 L17006

TYPE: drill

DIAMETER: 2.5mm

TIP ANGLE: 140°

LENGTH: 38mm

FLUTES: 2

DESCRIPTION: CoroDrill 862 Foripiccoli

VENDOR: Sandvik

PRODUCT: [862.1-2500-225A0-GM X2BL](#)

MINIMUM Z: -19.58mm

MAXIMUM FEED: 113mm/min

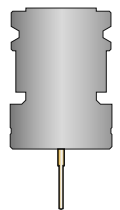
MAXIMUM SPINDLE SPEED: 4010rpm

CUTTING DISTANCE: 602.7mm

RAPID DISTANCE: 1138.43mm

ESTIMATED CYCLE TIME: 5m:34s (12.5%)

HOLDER: BT40 - B4C4-1000



T17013 D17013 L17013

TYPE: flat end mill

DIAMETER: 4mm

LENGTH: 30mm

FLUTES: 3

DESCRIPTION: CoroMill Plura FinituraTascheLateral

VENDOR: Sandvik

PRODUCT: [R216.23-04050CAK11P 1620](#)

MINIMUM Z: -16mm

MAXIMUM FEED: 2330mm/min

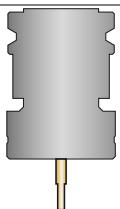
MAXIMUM SPINDLE SPEED: 8000rpm

CUTTING DISTANCE: 2433.55mm

RAPID DISTANCE: 998.24mm

ESTIMATED CYCLE TIME: 1m:45s (4%)

HOLDER: BT40 - B4C4-1000



T19000 D19000 L19000

TYPE: face mill

DIAMETER: 54.08mm

CORNER RADIUS: 0.8mm

LENGTH: 45mm

FLUTES: 4

DESCRIPTION: Fresa CoroMill 345 per spianatura

VENDOR: sandvik

PRODUCT: [345-040Q22-13M](#)

MINIMUM Z: -5mm

MAXIMUM FEED: 1600.002mm/min

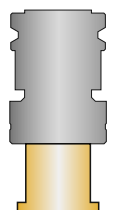
MAXIMUM SPINDLE SPEED: 1600rpm

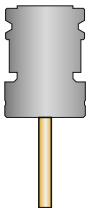
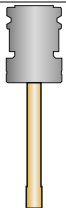

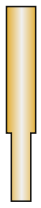



CUTTING DISTANCE: 4584.32mm

RAPID DISTANCE: 352.82mm

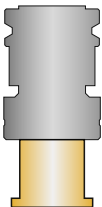
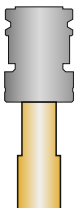
ESTIMATED CYCLE TIME: 2m:57s (6.7%)

HOLDER: BT40 - B4C4-1000



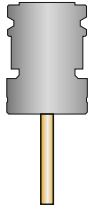
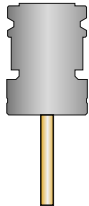


T19006 D19006 L19006 TYPE: flat end mill DIAMETER: 10mm LENGTH: 72mm FLUTES: 4 DESCRIPTION: Fresa a candela CoroMill Dura in metallo duro integrale VENDOR: sandvik PRODUCT: 1K335-1000-050-XD 1730		MINIMUM Z: -30.25mm MAXIMUM FEED: 451mm/min MAXIMUM SPINDLE SPEED: 2230rpm CUTTING DISTANCE: 1499.2mm RAPID DISTANCE: 2279.51mm ESTIMATED CYCLE TIME: 3m:50s (8.6%)	HOLDER: BT40 - B4C4-1000	
T19007 D19007 L19007 TYPE: flat end mill DIAMETER: 18mm LENGTH: 145mm FLUTES: 2 DESCRIPTION: Fresa CoroMill 390 per spallamenti VENDOR: sandvik PRODUCT: R390-018A16L-11L		MINIMUM Z: -30.25mm MAXIMUM FEED: 651mm/min MAXIMUM SPINDLE SPEED: 4070rpm CUTTING DISTANCE: 2266.24mm RAPID DISTANCE: 4150.67mm ESTIMATED CYCLE TIME: 5m:37s (12.7%)	HOLDER: BT40 - B4C4-1000	
T22003 D22003 L22003 TYPE: bullnose end mill DIAMETER: 8mm CORNER RADIUS: 0.2mm LENGTH: 45mm FLUTES: 5 DESCRIPTION: Sgrossatura tasche 1 PRODUCT: 1K325-0800-XB 1730		MINIMUM Z: -16mm MAXIMUM FEED: 2170mm/min MAXIMUM SPINDLE SPEED: 2170rpm CUTTING DISTANCE: 7219.48mm RAPID DISTANCE: 2494.03mm ESTIMATED CYCLE TIME: 12m:54s (29.1%)		
T22011 D22011 L22011 TYPE: flat end mill DIAMETER: 4mm LENGTH: 40mm FLUTES: 5 DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche PRODUCT: 1K334-0400-050-XC 1730		MINIMUM Z: -16mm MAXIMUM FEED: 2106.67mm/min MAXIMUM SPINDLE SPEED: 7190rpm CUTTING DISTANCE: 1204.52mm RAPID DISTANCE: 1429.99mm ESTIMATED CYCLE TIME: 2m:1s (4.5%)		
T22012 D22012 L22012 TYPE: flat end mill DIAMETER: 32mm LENGTH: 100mm FLUTES: 4 DESCRIPTION: fresa per elicoidale VENDOR: mitsubishi PRODUCT: AQXR324SA32S con inserto QOMT1651R-M2 con grado MP6130		MINIMUM Z: -30.1mm MAXIMUM FEED: 250mm/min MAXIMUM SPINDLE SPEED: 1393rpm CUTTING DISTANCE: 491.42mm RAPID DISTANCE: 34.12mm ESTIMATED CYCLE TIME: 1m:58s (4.4%)		
T22013 D22013 L22013 TYPE: bullnose end mill DIAMETER: 8mm CORNER RADIUS: 1mm LENGTH: 50mm FLUTES: 4 DESCRIPTION: 54_finitura_fondo_tondo VENDOR: mitsubishi PRODUCT: MPMHVRBD0800R100		MINIMUM Z: -16mm MAXIMUM FEED: 1999.2mm/min MAXIMUM SPINDLE SPEED: 6000rpm CUTTING DISTANCE: 459.45mm RAPID DISTANCE: 710.18mm ESTIMATED CYCLE TIME: 31s (1.2%)		
T22014 D22014 L22014 TYPE: ball end mill DIAMETER: 8mm CORNER RADIUS: 4mm LENGTH: 20mm FLUTES: 4 DESCRIPTION: nervatura tonda VENDOR: mitsubishi PRODUCT: fresa a punta tonda VQ4SVBR04000		MINIMUM Z: -16.29mm MAXIMUM FEED: 1900.001mm/min MAXIMUM SPINDLE SPEED: 8000rpm CUTTING DISTANCE: 378.96mm RAPID DISTANCE: 62.93mm ESTIMATED CYCLE TIME: 13s (0.5%)		

Operations

Operation 1/14 DESCRIPTION: 1 Face STRATEGY: Facing WCS: #0 TOLERANCE: 0.03mm MAXIMUM STEPDOWN: 1mm MAXIMUM STEPOVER: 36.74mm		T19000 D19000 L19000 TYPE: face mill DIAMETER: 54.08mm CORNER RADIUS: 0.8mm LENGTH: 45mm FLUTES: 4 DESCRIPTION: Fresa CoroMill 345 per spianatura VENDOR: sandvik PRODUCT: 345-040Q22-13M	
Operation 2/14 DESCRIPTION: 2 Adaptive Clearing STRATEGY: Adaptive WCS: #0 TOLERANCE: 0.05mm STOCK TO LEAVE: 0.25mm MAXIMUM STEPDOWN: 7.5mm OPTIMAL LOAD: 16mm LOAD DEVIATION: 1.6mm		T17000 D17000 L17000 TYPE: flat end mill DIAMETER: 40mm LENGTH: 100mm FLUTES: 4 DESCRIPTION: CoroMill490 Sgrossatura VENDOR: Sandvik PRODUCT: 490-040A32-14H	

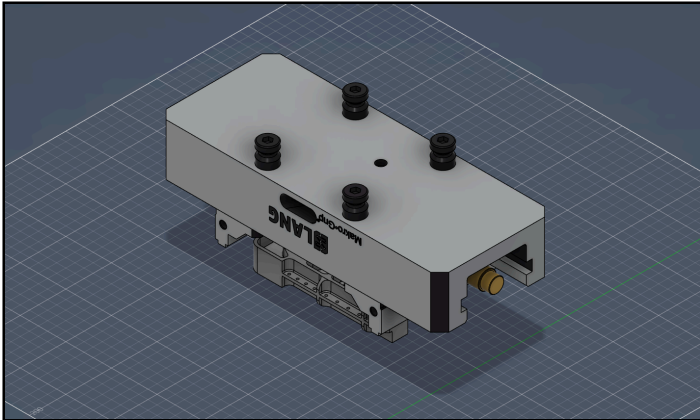
<p>Operation 3/14</p> <p>DESCRIPTION: 3 Adaptive Clearing</p> <p>STRATEGY: Adaptive</p> <p>WCS: #0</p> <p>TOLERANCE: 0.05mm</p> <p>STOCK TO LEAVE: 0.25mm</p> <p>MAXIMUM STEPDOWN: 10.8mm</p> <p>OPTIMAL LOAD: 2.4mm</p> <p>LOAD DEVIATION: 0.24mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -16mm</p> <p>MAXIMUM SPINDLE SPEED: 2170rpm</p> <p>MAXIMUM FEEDRATE: 2170mm/min</p> <p>CUTTING DISTANCE: 7219.48mm</p> <p>RAPID DISTANCE: 2494.03mm</p> <p>ESTIMATED CYCLE TIME: 12m:54s (29.1%)</p> <p>COOLANT: Flood</p>	<p>T22003 D22003 L22003</p> <p>TYPE: bullnose end mill</p> <p>DIAMETER: 8mm</p> <p>CORNER RADIUS: 0.2mm</p> <p>LENGTH: 45mm</p> <p>FLUTES: 5</p> <p>DESCRIPTION: Sgrossatura tasche 1</p> <p>PRODUCT: 1K325-0800-XB 1730</p>	
<p>Operation 4/14</p> <p>DESCRIPTION: 4 Adaptive Clearing</p> <p>STRATEGY: Adaptive</p> <p>WCS: #0</p> <p>TOLERANCE: 0.05mm</p> <p>STOCK TO LEAVE: 0.25mm</p> <p>MAXIMUM STEPDOWN: 7.5mm</p> <p>OPTIMAL LOAD: 7.2mm</p> <p>LOAD DEVIATION: 0.72mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -30.25mm</p> <p>MAXIMUM SPINDLE SPEED: 4070rpm</p> <p>MAXIMUM FEEDRATE: 651mm/min</p> <p>CUTTING DISTANCE: 2266.24mm</p> <p>RAPID DISTANCE: 4150.67mm</p> <p>ESTIMATED CYCLE TIME: 5m:37s (12.7%)</p> <p>COOLANT: Flood</p>	<p>T19007 D19007 L19007</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 18mm</p> <p>LENGTH: 145mm</p> <p>FLUTES: 2</p> <p>DESCRIPTION: Fresa CoroMill 390 per spallamenti</p> <p>VENDOR: sandvik</p> <p>PRODUCT: R390-018A16L-11L</p>	
<p>Operation 5/14</p> <p>DESCRIPTION: 5 Adaptive Clearing</p> <p>STRATEGY: Adaptive</p> <p>WCS: #0</p> <p>TOLERANCE: 0.05mm</p> <p>STOCK TO LEAVE: 0.25mm</p> <p>MAXIMUM STEPDOWN: 8.25mm</p> <p>OPTIMAL LOAD: 1.6mm</p> <p>LOAD DEVIATION: 0.16mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -16mm</p> <p>MAXIMUM SPINDLE SPEED: 7190rpm</p> <p>MAXIMUM FEEDRATE: 2106.67mm/min</p> <p>CUTTING DISTANCE: 1204.52mm</p> <p>RAPID DISTANCE: 1429.99mm</p> <p>ESTIMATED CYCLE TIME: 2m:1s (4.5%)</p> <p>COOLANT: Flood</p>	<p>T22011 D22011 L22011</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 4mm</p> <p>LENGTH: 40mm</p> <p>FLUTES: 5</p> <p>DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche</p> <p>PRODUCT: 1K334-0400-050-XC 1730</p>	
<p>Operation 6/14</p> <p>DESCRIPTION: 6 Drill</p> <p>STRATEGY: Drilling</p> <p>WCS: #0</p> <p>TOLERANCE: 0.01mm</p> <p>STOCK TO LEAVE: 0mm</p>	<p>MAXIMUM Z: 3.05mm</p> <p>MINIMUM Z: -19.58mm</p> <p>MAXIMUM SPINDLE SPEED: 4010rpm</p> <p>MAXIMUM FEEDRATE: 113mm/min</p> <p>CUTTING DISTANCE: 602.7mm</p> <p>RAPID DISTANCE: 1138.43mm</p> <p>ESTIMATED CYCLE TIME: 5m:34s (12.5%)</p> <p>COOLANT: Flood</p>	<p>T17006 D17006 L17006</p> <p>TYPE: drill</p> <p>DIAMETER: 2.5mm</p> <p>TIP ANGLE: 140°</p> <p>LENGTH: 38mm</p> <p>FLUTES: 2</p> <p>DESCRIPTION: CoroDrill 862 Foripiccoli</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: 862.1-2500-225A0-GM X2BL</p>	
<p>Operation 7/14</p> <p>DESCRIPTION: 7 Flat</p> <p>WCS: #0</p> <p>TOLERANCE: 0.03mm</p> <p>STOCK TO LEAVE: 0.13mm/0mm</p> <p>MAXIMUM STEPOVER: 2.8mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -16mm</p> <p>MAXIMUM SPINDLE SPEED: 8000rpm</p> <p>MAXIMUM FEEDRATE: 2330mm/min</p> <p>CUTTING DISTANCE: 1195.79mm</p> <p>RAPID DISTANCE: 448.7mm</p> <p>ESTIMATED CYCLE TIME: 37s (1.4%)</p> <p>COOLANT: Flood</p>	<p>T17013 D17013 L17013</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 4mm</p> <p>LENGTH: 30mm</p> <p>FLUTES: 3</p> <p>DESCRIPTION: CoroMill Plura FinituraTascheLateral</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: R216.23-04050CAK11P 1620</p>	
<p>Operation 8/14</p> <p>DESCRIPTION: 8 2D Contour</p> <p>STRATEGY: Contour 2D</p> <p>WCS: #0</p> <p>TOLERANCE: 0mm</p> <p>STOCK TO LEAVE: 0mm/0.03mm</p> <p>MAXIMUM STEPDOWN: 9.9mm</p> <p>MAXIMUM STEPOVER: 3.8mm</p>	<p>MAXIMUM Z: 3.05mm</p> <p>MINIMUM Z: -15.97mm</p> <p>MAXIMUM SPINDLE SPEED: 8000rpm</p> <p>MAXIMUM FEEDRATE: 2330mm/min</p> <p>CUTTING DISTANCE: 1237.76mm</p> <p>RAPID DISTANCE: 549.54mm</p> <p>ESTIMATED CYCLE TIME: 1m:8s (2.6%)</p> <p>COOLANT: Flood</p>	<p>T17013 D17013 L17013</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 4mm</p> <p>LENGTH: 30mm</p> <p>FLUTES: 3</p> <p>DESCRIPTION: CoroMill Plura FinituraTascheLateral</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: R216.23-04050CAK11P 1620</p>	
<p>Operation 9/14</p> <p>DESCRIPTION: 9 Flat</p> <p>WCS: #0</p> <p>TOLERANCE: 0.03mm</p> <p>STOCK TO LEAVE: 0.13mm/0mm</p> <p>MAXIMUM STEPOVER: 4.2mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -16mm</p> <p>MAXIMUM SPINDLE SPEED: 6000rpm</p> <p>MAXIMUM FEEDRATE: 1999.2mm/min</p> <p>CUTTING DISTANCE: 303.39mm</p> <p>RAPID DISTANCE: 525.4mm</p> <p>ESTIMATED CYCLE TIME: 17s (0.6%)</p> <p>COOLANT: Flood</p>	<p>T22013 D22013 L22013</p> <p>TYPE: bullnose end mill</p> <p>DIAMETER: 8mm</p> <p>CORNER RADIUS: 1mm</p> <p>LENGTH: 50mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: 54_finitura_fondo_tondo</p> <p>VENDOR: mitsubishi</p> <p>PRODUCT: MPMHVRBD0800R100</p>	
<p>Operation 10/14</p> <p>DESCRIPTION: 10 2D Contour</p> <p>STRATEGY: Contour 2D</p> <p>WCS: #0</p> <p>TOLERANCE: 0mm</p> <p>STOCK TO LEAVE: 0mm/0.03mm</p> <p>MAXIMUM STEPOVER: 5.7mm</p>	<p>MAXIMUM Z: 3.05mm</p> <p>MINIMUM Z: -15.97mm</p> <p>MAXIMUM SPINDLE SPEED: 6000rpm</p> <p>MAXIMUM FEEDRATE: 1999.2mm/min</p> <p>CUTTING DISTANCE: 156.05mm</p> <p>RAPID DISTANCE: 184.78mm</p> <p>ESTIMATED CYCLE TIME: 14s (0.5%)</p> <p>COOLANT: Flood</p>	<p>T22013 D22013 L22013</p> <p>TYPE: bullnose end mill</p> <p>DIAMETER: 8mm</p> <p>CORNER RADIUS: 1mm</p> <p>LENGTH: 50mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: 54_finitura_fondo_tondo</p> <p>VENDOR: mitsubishi</p> <p>PRODUCT: MPMHVRBD0800R100</p>	

<p>Operation 11/14</p> <p>DESCRIPTION: 11 Bore</p> <p>STRATEGY: Bore</p> <p>WCS: #0</p> <p>TOLERANCE: 0.01mm</p> <p>STOCK TO LEAVE: 0mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -30.1mm</p> <p>MAXIMUM SPINDLE SPEED: 1393rpm</p> <p>MAXIMUM FEEDRATE: 250mm/min</p> <p>CUTTING DISTANCE: 491.42mm</p> <p>RAPID DISTANCE: 34.12mm</p> <p>ESTIMATED CYCLE TIME: 1m:58s (4.4%)</p> <p>COOLANT: Flood</p>	<p>T22012 D22012 L22012</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 32mm</p> <p>LENGTH: 100mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: fresa per elicoidale</p> <p>VENDOR: mitsubishi</p> <p>PRODUCT: AQXR324SA32S con inserto QOMT1651R-M2 con grado MP6130</p>	
<p>Operation 12/14</p> <p>DESCRIPTION: 12 Scallop</p> <p>STRATEGY: Scallop</p> <p>WCS: #0</p> <p>TOLERANCE: 0.03mm</p> <p>STOCK TO LEAVE: 0mm</p> <p>MAXIMUM STEPOVER: 0.64mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -16.29mm</p> <p>MAXIMUM SPINDLE SPEED: 8000rpm</p> <p>MAXIMUM FEEDRATE: 1900.001mm/min</p> <p>CUTTING DISTANCE: 378.96mm</p> <p>RAPID DISTANCE: 62.93mm</p> <p>ESTIMATED CYCLE TIME: 13s (0.5%)</p> <p>COOLANT: Flood</p>	<p>T22014 D22014 L22014</p> <p>TYPE: ball end mill</p> <p>DIAMETER: 8mm</p> <p>CORNER RADIUS: 4mm</p> <p>LENGTH: 20mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: nervatura tonda</p> <p>VENDOR: mitsubishi</p> <p>PRODUCT: fresa a punta tonda VQ4SVBR04000</p>	
<p>Operation 13/14</p> <p>DESCRIPTION: 13 Adaptive Clearing</p> <p>STRATEGY: Adaptive</p> <p>WCS: #0</p> <p>TOLERANCE: 0.1mm</p> <p>STOCK TO LEAVE: 0.25mm/0mm</p> <p>MAXIMUM STEPDOWN: 16.5mm</p> <p>OPTIMAL LOAD: 4mm</p> <p>LOAD DEVIATION: 0.4mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -30.25mm</p> <p>MAXIMUM SPINDLE SPEED: 2230rpm</p> <p>MAXIMUM FEEDRATE: 451mm/min</p> <p>CUTTING DISTANCE: 523.83mm</p> <p>RAPID DISTANCE: 2210.2mm</p> <p>ESTIMATED CYCLE TIME: 1m:36s (3.6%)</p> <p>COOLANT: Flood</p>	<p>T19006 D19006 L19006</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 10mm</p> <p>LENGTH: 72mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: Fresa a candela CoroMill Dura in metallo duro integrale</p> <p>VENDOR: sandvik</p> <p>PRODUCT: 1K335-1000-050-XD 1730</p>	
<p>Operation 14/14</p> <p>DESCRIPTION: 14 2D Contour</p> <p>STRATEGY: Contour 2D</p> <p>WCS: #0</p> <p>TOLERANCE: 0.01mm</p> <p>STOCK TO LEAVE: 0mm</p> <p>MAXIMUM STEPDOWN: 22mm</p> <p>MAXIMUM STEPOVER: 9.5mm</p>	<p>MAXIMUM Z: 3.05mm</p> <p>MINIMUM Z: -30.13mm</p> <p>MAXIMUM SPINDLE SPEED: 2230rpm</p> <p>MAXIMUM FEEDRATE: 451mm/min</p> <p>CUTTING DISTANCE: 975.37mm</p> <p>RAPID DISTANCE: 69.3mm</p> <p>ESTIMATED CYCLE TIME: 2m:13s (5%)</p> <p>COOLANT: Flood</p>	<p>T19006 D19006 L19006</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 10mm</p> <p>LENGTH: 72mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: Fresa a candela CoroMill Dura in metallo duro integrale</p> <p>VENDOR: sandvik</p> <p>PRODUCT: 1K335-1000-050-XD 1730</p>	

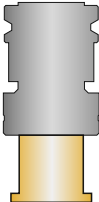



Setup Sheet for Program 1002

JOB DESCRIPTION: AutoSetup 2

DOCUMENT PATH: X_TP02_FORI_EDIT_12100709 v1

Setup	
<p>WCS: #0</p> <p>STOCK:</p> <p>DX: 160mm</p> <p>DY: 95mm</p> <p>DZ: 35mm</p> <p>PART:</p> <p>DX: 150mm</p> <p>DY: 84.87mm</p> <p>DZ: 25mm</p> <p>STOCK LOWER IN WCS #0:</p> <p>X: -80mm</p> <p>Y: -47.5mm</p> <p>Z: -35mm</p> <p>STOCK UPPER IN WCS #0:</p> <p>X: 80mm</p> <p>Y: 47.5mm</p> <p>Z: 0mm</p>	

Total
<p>NUMBER OF OPERATIONS: 8</p> <p>NUMBER OF TOOLS: 5</p> <p>TOOLS: T19000 T22003 T22011 T22013 T22014</p> <p>MAXIMUM Z: 6.05mm</p> <p>MINIMUM Z: -16.29mm</p> <p>MAXIMUM FEEDRATE: 2170mm/min</p> <p>MAXIMUM SPINDLE SPEED: 8000rpm</p> <p>CUTTING DISTANCE: 14481.83mm</p> <p>RAPID DISTANCE: 6229.9mm</p> <p>ESTIMATED CYCLE TIME: 20m:23s</p>

Tools		
<p>T19000 D19000 L19000</p> <p>TYPE: face mill</p> <p>DIAMETER: 54.08mm</p> <p>CORNER RADIUS: 0.8mm</p> <p>LENGTH: 45mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: Fresa CoroMill 345 per spianatura</p> <p>VENDOR: sandvik</p> <p>PRODUCT: 345-040Q22-13M</p>	<p>MINIMUM Z: -5mm</p> <p>MAXIMUM FEED: 1600.002mm/min</p> <p>MAXIMUM SPINDLE SPEED: 1600rpm</p> <p>CUTTING DISTANCE: 4584.32mm</p> <p>RAPID DISTANCE: 352.82mm</p> <p>ESTIMATED CYCLE TIME: 2m:57s (14.5%)</p>	<p>HOLDER: BT40 - B4C4-1000</p> 
<p>T22003 D22003 L22003</p> <p>TYPE: bullnose end mill</p> <p>DIAMETER: 8mm</p> <p>CORNER RADIUS: 0.2mm</p> <p>LENGTH: 45mm</p> <p>FLUTES: 5</p> <p>DESCRIPTION: Sgrossatura tasche 1</p> <p>PRODUCT: 1K325-0800-XB 1730</p>	<p>MINIMUM Z: -15.75mm</p> <p>MAXIMUM FEED: 2170mm/min</p> <p>MAXIMUM SPINDLE SPEED: 2170rpm</p> <p>CUTTING DISTANCE: 6050.69mm</p> <p>RAPID DISTANCE: 2935.78mm</p> <p>ESTIMATED CYCLE TIME: 11m:0s (54%)</p>	
<p>T22011 D22011 L22011</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 4mm</p> <p>LENGTH: 40mm</p> <p>FLUTES: 5</p> <p>DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche</p> <p>PRODUCT: 1K334-0400-050-XC 1730</p>	<p>MINIMUM Z: -16mm</p> <p>MAXIMUM FEED: 2106.67mm/min</p> <p>MAXIMUM SPINDLE SPEED: 7190rpm</p> <p>CUTTING DISTANCE: 3036.24mm</p> <p>RAPID DISTANCE: 2250.27mm</p> <p>ESTIMATED CYCLE TIME: 4m:29s (22%)</p>	
<p>T22013 D22013 L22013</p> <p>TYPE: bullnose end mill</p> <p>DIAMETER: 8mm</p> <p>CORNER RADIUS: 1mm</p> <p>LENGTH: 50mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: 54_finitura_fondo_tondo</p> <p>VENDOR: mitsubishi</p> <p>PRODUCT: MPMHVRBD0800R100</p>	<p>MINIMUM Z: -16mm</p> <p>MAXIMUM FEED: 1999.2mm/min</p> <p>MAXIMUM SPINDLE SPEED: 6000rpm</p> <p>CUTTING DISTANCE: 434.29mm</p> <p>RAPID DISTANCE: 628.51mm</p> <p>ESTIMATED CYCLE TIME: 29s (2.4%)</p>	

T22014 D22014 L22014

TYPE: ball end mill

DIAMETER: 8mm

CORNER RADIUS: 4mm

LENGTH: 20mm

FLUTES: 4

DESCRIPTION: nervatura tonda

VENDOR: mitsubishi

PRODUCT: [fresa a punta tonda VQ4SVBR04000](#)

MINIMUM Z: -16.29mm

MAXIMUM FEED: 1900.001mm/min

MAXIMUM SPINDLE SPEED: 8000rpm

CUTTING DISTANCE: 376.28mm

RAPID DISTANCE: 62.53mm

ESTIMATED CYCLE TIME: 13s (1.1%)

**Operations**

Operation 1/8

DESCRIPTION: 1 Face (2)

STRATEGY: Facing

WCS: #0

TOLERANCE: 0.03mm

MAXIMUM STEPDOWN: 1mm

MAXIMUM STEPOVER: 36.74mm

MAXIMUM Z: 6.05mm

MINIMUM Z: -5mm

MAXIMUM SPINDLE SPEED: 1600rpm

MAXIMUM FEEDRATE: 1600.002mm/min

CUTTING DISTANCE: 4584.32mm

RAPID DISTANCE: 352.82mm

ESTIMATED CYCLE TIME: 2m:57s (14.5%)

COOLANT: Flood

T19000 D19000 L19000

TYPE: face mill

DIAMETER: 54.08mm

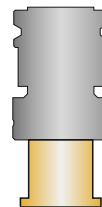
CORNER RADIUS: 0.8mm

LENGTH: 45mm

FLUTES: 4

DESCRIPTION: Fresa CoroMill 345 per spianatura

VENDOR: sandvik

PRODUCT: [345-040Q22-13M](#)

Operation 2/8

DESCRIPTION: 2 Adaptive Clearing (2)

STRATEGY: Adaptive

WCS: #0

TOLERANCE: 0.05mm

STOCK TO LEAVE: 0.25mm

MAXIMUM STEPDOWN: 10.8mm

OPTIMAL LOAD: 2.4mm

LOAD DEVIATION: 0.24mm

MAXIMUM Z: 0.51mm

MINIMUM Z: -15.75mm

MAXIMUM SPINDLE SPEED: 2170rpm

MAXIMUM FEEDRATE: 2170mm/min

CUTTING DISTANCE: 6050.69mm

RAPID DISTANCE: 2935.78mm

ESTIMATED CYCLE TIME: 11m:0s (54%)

COOLANT: Flood

T22003 D22003 L22003

TYPE: bullnose end mill

DIAMETER: 8mm

CORNER RADIUS: 0.2mm

LENGTH: 45mm

FLUTES: 5

DESCRIPTION: Sgrossatura tasche 1

PRODUCT: [1K325-0800-XB 1730](#)

Operation 3/8

DESCRIPTION: 3 Adaptive Clearing (2)

STRATEGY: Adaptive

WCS: #0

TOLERANCE: 0.05mm

STOCK TO LEAVE: 0.25mm

MAXIMUM STEPDOWN: 8.25mm

OPTIMAL LOAD: 1.6mm

LOAD DEVIATION: 0.16mm

MAXIMUM Z: 0.51mm

MINIMUM Z: -15.75mm

MAXIMUM SPINDLE SPEED: 7190rpm

MAXIMUM FEEDRATE: 2106.67mm/min

CUTTING DISTANCE: 1216.14mm

RAPID DISTANCE: 1368.04mm

ESTIMATED CYCLE TIME: 2m:1s (9.9%)

COOLANT: Flood

T22011 D22011 L22011

TYPE: flat end mill

DIAMETER: 4mm

LENGTH: 40mm

FLUTES: 5

DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche

PRODUCT: [1K334-0400-050-XC 1730](#)

Operation 4/8

DESCRIPTION: 4 Flat

WCS: #0

TOLERANCE: 0.03mm

STOCK TO LEAVE: 0.13mm/0mm

MAXIMUM STEPOVER: 2.8mm

MAXIMUM Z: 0.51mm

MINIMUM Z: -16mm

MAXIMUM SPINDLE SPEED: 7190rpm

MAXIMUM FEEDRATE: 2106.67mm/min

CUTTING DISTANCE: 1197.93mm

RAPID DISTANCE: 476.91mm

ESTIMATED CYCLE TIME: 41s (3.3%)

COOLANT: Flood

T22011 D22011 L22011

TYPE: flat end mill

DIAMETER: 4mm

LENGTH: 40mm

FLUTES: 5

DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche

PRODUCT: [1K334-0400-050-XC 1730](#)

Operation 5/8

DESCRIPTION: 5 2D Contour

STRATEGY: Contour 2D

WCS: #0

TOLERANCE: 0mm

STOCK TO LEAVE: 0mm/0.03mm

MAXIMUM STEPOVER: 3.8mm

MAXIMUM Z: 3.05mm

MINIMUM Z: -15.97mm

MAXIMUM SPINDLE SPEED: 4510rpm

MAXIMUM FEEDRATE: 369.82mm/min

CUTTING DISTANCE: 622.17mm

RAPID DISTANCE: 405.32mm

ESTIMATED CYCLE TIME: 1m:48s (8.8%)

COOLANT: Flood

T22011 D22011 L22011

TYPE: flat end mill

DIAMETER: 4mm

LENGTH: 40mm

FLUTES: 5

DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche

PRODUCT: [1K334-0400-050-XC 1730](#)

Operation 6/8

DESCRIPTION: 6 Flat

WCS: #0

TOLERANCE: 0.03mm

STOCK TO LEAVE: 0.13mm/0mm

MAXIMUM STEPOVER: 4.2mm

MAXIMUM Z: 0.51mm

MINIMUM Z: -16mm

MAXIMUM SPINDLE SPEED: 6000rpm

MAXIMUM FEEDRATE: 1999.2mm/min

CUTTING DISTANCE: 278.24mm

RAPID DISTANCE: 416.01mm

ESTIMATED CYCLE TIME: 14s (1.2%)

COOLANT: Flood

T22013 D22013 L22013

TYPE: bullnose end mill

DIAMETER: 8mm

CORNER RADIUS: 1mm

LENGTH: 50mm

FLUTES: 4

DESCRIPTION: 54_finitura_fondo_tondo

VENDOR: mitsubishi

PRODUCT: [MPMHVRBD0800R100](#)

Operation 7/8

DESCRIPTION: 7 2D Contour

STRATEGY: Contour 2D

WCS: #0

TOLERANCE: 0mm

STOCK TO LEAVE: 0mm/0.03mm

MAXIMUM STEPOVER: 5.7mm

MAXIMUM Z: 3.05mm

MINIMUM Z: -15.97mm

MAXIMUM SPINDLE SPEED: 6000rpm

MAXIMUM FEEDRATE: 1999.2mm/min

CUTTING DISTANCE: 156.05mm

RAPID DISTANCE: 212.5mm

ESTIMATED CYCLE TIME: 15s (1.2%)

COOLANT: Flood

T22013 D22013 L22013

TYPE: bullnose end mill

DIAMETER: 8mm

CORNER RADIUS: 1mm


LENGTH: 50mm

FLUTES: 4

DESCRIPTION: 54_finitura_fondo_tondo

VENDOR: mitsubishi

PRODUCT: [MPMHVRBD0800R100](#)

Operation 8/8		T22014 D22014 L22014	
DESCRIPTION: 8 Scallop	MAXIMUM Z: 0.51mm	TYPE: ball end mill	
STRATEGY: Scallop	MINIMUM Z: -16.29mm	DIAMETER: 8mm	
WCS: #0	MAXIMUM SPINDLE SPEED: 8000rpm	CORNER RADIUS: 4mm	
TOLERANCE: 0.03mm	MAXIMUM FEEDRATE: 1900.001mm/min	LENGTH: 20mm	
STOCK TO LEAVE: 0mm	CUTTING DISTANCE: 376.28mm	FLUTES: 4	
MAXIMUM STEPOVER: 0.64mm	RAPID DISTANCE: 62.53mm	DESCRIPTION: nervatura tonda	
	ESTIMATED CYCLE TIME: 13s (1.1%)	VENDOR: mitsubishi	
	COOLANT: Flood	PRODUCT: fresa a punta tonda VQ4SVBR04000	