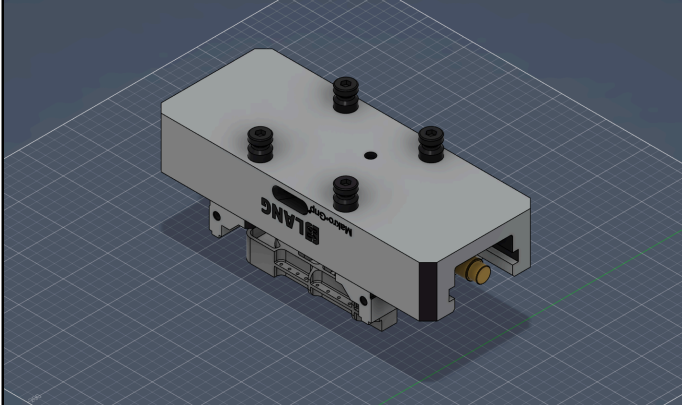


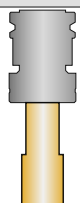
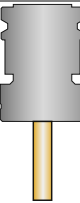

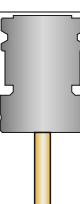

# Setup Sheet for Program 1001

JOB DESCRIPTION: AutoSetup 1

DOCUMENT PATH: X\_TP01\_FORI\_EDIT\_121007 v1

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

Total
<b>NUMBER OF OPERATIONS:</b> 14
<b>NUMBER OF TOOLS:</b> 12
<b>TOOLS:</b> T17000 T17001 T17006 T17009 T17013 T22003 T22005 T22008 T22011 T22012 T22013 T22014
<b>MAXIMUM Z:</b> 6.05mm
<b>MINIMUM Z:</b> -30.25mm
<b>MAXIMUM FEEDRATE:</b> 2470mm/min
<b>MAXIMUM SPINDLE SPEED:</b> 8000rpm
<b>CUTTING DISTANCE:</b> 27196.61mm
<b>RAPID DISTANCE:</b> 16102.92mm
<b>ESTIMATED CYCLE TIME:</b> 45m:17s




Tools			
<b>T17000</b> D17000 L17000 TYPE: flat end mill DIAMETER: 40mm LENGTH: 100mm FLUTES: 4 DESCRIPTION: CoroMill490 Sgrossatura VENDOR: Sandvik PRODUCT: <a href="#">490-040A32-14H</a>	<b>MINIMUM Z:</b> -30.25mm <b>MAXIMUM FEED:</b> 2470mm/min <b>MAXIMUM SPINDLE SPEED:</b> 1880rpm <b>CUTTING DISTANCE:</b> 7196.44mm <b>RAPID DISTANCE:</b> 6651.85mm <b>ESTIMATED CYCLE TIME:</b> 4m:15s (9.4%)	<b>HOLDER:</b> BT40 - B4C4-1000	
<b>T17001</b> D17001 L17001 TYPE: flat end mill DIAMETER: 14mm LENGTH: 60mm FLUTES: 5 DESCRIPTION: CoroMill Plura Contornatura VENDOR: Sandvik PRODUCT: <a href="#">2N342-1400-PC 1730</a>	<b>MINIMUM Z:</b> -30.25mm <b>MAXIMUM FEED:</b> 695mm/min <b>MAXIMUM SPINDLE SPEED:</b> 1620rpm <b>CUTTING DISTANCE:</b> 2520.67mm <b>RAPID DISTANCE:</b> 2487.58mm <b>ESTIMATED CYCLE TIME:</b> 5m:36s (12.4%)	<b>HOLDER:</b> BT40 - B4C4-1000	
<b>T17006</b> D17006 L17006 TYPE: drill DIAMETER: 2.5mm TIP ANGLE: 140° LENGTH: 38mm FLUTES: 2 DESCRIPTION: CoroDrill 862 Foripiccoli VENDOR: Sandvik PRODUCT: <a href="#">862.1-2500-225A0-GM X2BL</a>	<b>MINIMUM Z:</b> -19.58mm <b>MAXIMUM FEED:</b> 113mm/min <b>MAXIMUM SPINDLE SPEED:</b> 4010rpm <b>CUTTING DISTANCE:</b> 602.7mm <b>RAPID DISTANCE:</b> 1151.8mm <b>ESTIMATED CYCLE TIME:</b> 5m:34s (12.3%)	<b>HOLDER:</b> BT40 - B4C4-1000	
<b>T17009</b> D17009 L17009 TYPE: flat end mill DIAMETER: 12mm LENGTH: 60mm FLUTES: 4 DESCRIPTION: CoroMill Dura Finituracontornatura VENDOR: Sandvik PRODUCT: <a href="#">1K334-1200-XB 1730</a>	<b>MINIMUM Z:</b> -30.13mm <b>MAXIMUM FEED:</b> 2100mm/min <b>MAXIMUM SPINDLE SPEED:</b> 3710rpm <b>CUTTING DISTANCE:</b> 496.04mm <b>RAPID DISTANCE:</b> 35.72mm <b>ESTIMATED CYCLE TIME:</b> 19s (0.7%)	<b>HOLDER:</b> BT40 - B4C4-1000	
<b>T17013</b> D17013 L17013 TYPE: flat end mill DIAMETER: 4mm LENGTH: 30mm FLUTES: 3 DESCRIPTION: CoroMill Plura FinituraTascheLateral VENDOR: Sandvik PRODUCT: <a href="#">R216.23-04050CAK11P 1620</a>	<b>MINIMUM Z:</b> -16mm <b>MAXIMUM FEED:</b> 2330mm/min <b>MAXIMUM SPINDLE SPEED:</b> 8000rpm <b>CUTTING DISTANCE:</b> 2433.55mm <b>RAPID DISTANCE:</b> 998.24mm <b>ESTIMATED CYCLE TIME:</b> 1m:45s (3.9%)	<b>HOLDER:</b> BT40 - B4C4-1000	

<b>T22003 D22003 L22003</b> TYPE: bullnose end mill DIAMETER: 8mm CORNER RADIUS: 0.2mm LENGTH: 45mm FLUTES: 5 DESCRIPTION: Sgrossatura tasche 1 PRODUCT: <a href="#">1K325-0800-XB 1730</a>	MINIMUM Z: -16mm MAXIMUM FEED: 2170mm/min MAXIMUM SPINDLE SPEED: 2170rpm CUTTING DISTANCE: 7219.48mm RAPID DISTANCE: 2494.03mm ESTIMATED CYCLE TIME: 12m:54s (28.5%)	
<b>T22005 D22005 L22005</b> TYPE: face mill DIAMETER: 25mm CORNER RADIUS: 1.6mm LENGTH: 50mm FLUTES: 2 DESCRIPTION: Fresa per creazione foro centrale PRODUCT: <a href="#">R390-025A25-17L</a>	MINIMUM Z: -4.5mm MAXIMUM FEED: 1687.3mm/min MAXIMUM SPINDLE SPEED: 3590rpm CUTTING DISTANCE: 2559.95mm RAPID DISTANCE: 10.59mm ESTIMATED CYCLE TIME: 1m:31s (3.4%)	
<b>T22008 D22008 L22008</b> TYPE: face mill DIAMETER: 50mm CORNER RADIUS: 0.8mm LENGTH: 20mm FLUTES: 3 DESCRIPTION: facciatura_finitura VENDOR: mitsubishi PRODUCT: <a href="#">ASX400-050A03R con inserto SOET12T308PEER-JL con grado VP30RT</a>	MINIMUM Z: -5mm MAXIMUM FEED: 333.333mm/min MAXIMUM SPINDLE SPEED: 955rpm CUTTING DISTANCE: 1616.94mm RAPID DISTANCE: 5.59mm ESTIMATED CYCLE TIME: 5m:39s (12.5%)	
<b>T22011 D22011 L22011</b> TYPE: flat end mill DIAMETER: 4mm LENGTH: 40mm FLUTES: 5 DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche PRODUCT: <a href="#">1K334-0400-050-XC 1730</a>	MINIMUM Z: -16mm MAXIMUM FEED: 2106.67mm/min MAXIMUM SPINDLE SPEED: 7190rpm CUTTING DISTANCE: 1221.03mm RAPID DISTANCE: 1460.3mm ESTIMATED CYCLE TIME: 2m:2s (4.5%)	
<b>T22012 D22012 L22012</b> TYPE: flat end mill DIAMETER: 32mm LENGTH: 100mm FLUTES: 4 DESCRIPTION: fresa per elicoidale VENDOR: mitsubishi PRODUCT: <a href="#">AQXR324SA32S con inserto QOMT1651R-M2 con grado MP6130</a>	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%)	
<b>T22013 D22013 L22013</b> TYPE: bullnose end mill DIAMETER: 8mm CORNER RADIUS: 1mm LENGTH: 50mm FLUTES: 4 DESCRIPTION: 54_finitura_fondo_tondo VENDOR: mitsubishi PRODUCT: <a href="#">MPMHVRBD0800R100</a>	MINIMUM Z: -16mm MAXIMUM FEED: 1999.2mm/min MAXIMUM SPINDLE SPEED: 6000rpm CUTTING DISTANCE: 459.45mm RAPID DISTANCE: 710.18mm ESTIMATED CYCLE TIME: 31s (1.1%)	
<b>T22014 D22014 L22014</b> TYPE: ball end mill DIAMETER: 8mm CORNER RADIUS: 4mm LENGTH: 20mm FLUTES: 4 DESCRIPTION: nervatura tonda VENDOR: mitsubishi PRODUCT: <a href="#">fresa a punta tonda VQ4SVBR04000</a>	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: 14.13mm MAXIMUM STEPOVER: 7.5mm	MAXIMUM Z: 6.05mm MINIMUM Z: -4.5mm MAXIMUM SPINDLE SPEED: 3590rpm MAXIMUM FEEDRATE: 1687.3mm/min CUTTING DISTANCE: 2559.95mm RAPID DISTANCE: 10.59mm ESTIMATED CYCLE TIME: 1m:31s (3.4%) COOLANT: Flood	<b>T22005 D22005 L22005</b> TYPE: face mill DIAMETER: 25mm CORNER RADIUS: 1.6mm LENGTH: 50mm FLUTES: 2 DESCRIPTION: Fresa per creazione foro centrale PRODUCT: <a href="#">R390-025A25-17L</a>	
Operation 2/14 DESCRIPTION: 2 Face STRATEGY: Facing WCS: #0 TOLERANCE: 0.03mm MAXIMUM STEPOVER: 15mm	MAXIMUM Z: 3.05mm MINIMUM Z: -5mm MAXIMUM SPINDLE SPEED: 955rpm MAXIMUM FEEDRATE: 333.333mm/min CUTTING DISTANCE: 1616.94mm RAPID DISTANCE: 5.59mm ESTIMATED CYCLE TIME: 5m:39s (12.5%) COOLANT: Flood	<b>T22008 D22008 L22008</b> TYPE: face mill DIAMETER: 50mm CORNER RADIUS: 0.8mm LENGTH: 20mm FLUTES: 3 DESCRIPTION: facciatura_finitura VENDOR: mitsubishi PRODUCT: <a href="#">ASX400-050A03R con inserto SOET12T308PEER-JL con grado VP30RT</a>	

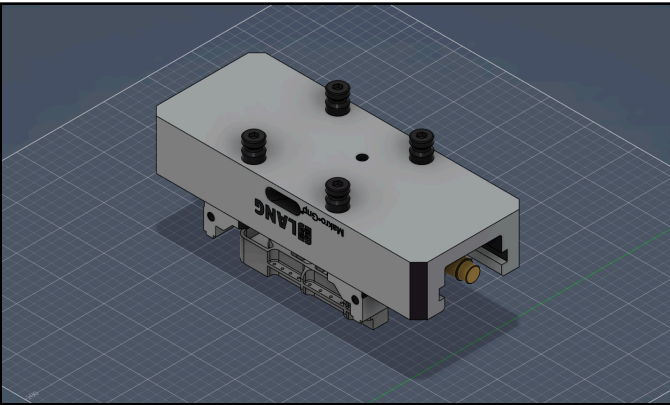
<p>Operation 3/14</p> <p>DESCRIPTION: 3 Adaptive Clearing</p> <p>STRATEGY: Adaptive</p> <p>WCS: #0</p> <p>TOLERANCE: 0.05mm</p> <p>STOCK TO LEAVE: 0.25mm</p> <p>MAXIMUM STEPDOWN: 7.5mm</p> <p>OPTIMAL LOAD: 16mm</p> <p>LOAD DEVIATION: 1.6mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -30.25mm</p> <p>MAXIMUM SPINDLE SPEED: 1880rpm</p> <p>MAXIMUM FEEDRATE: 2470mm/min</p> <p>CUTTING DISTANCE: 7196.44mm</p> <p>RAPID DISTANCE: 6651.85mm</p> <p>ESTIMATED CYCLE TIME: 4m:15s (9.4%)</p> <p>COOLANT: Air</p>	<p><b>T17000</b> D17000 L17000</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 40mm</p> <p>LENGTH: 100mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: CoroMill490 Sgrossatura</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: <a href="#">490-040A32-14H</a></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: 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 (28.5%)</p> <p>COOLANT: Flood</p>	<p><b>T22003</b> 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: <a href="#">1K325-0800-XB 1730</a></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: 22.5mm</p> <p>OPTIMAL LOAD: 5.6mm</p> <p>LOAD DEVIATION: 0.56mm</p>	<p>MAXIMUM Z: 0.51mm</p> <p>MINIMUM Z: -30.25mm</p> <p>MAXIMUM SPINDLE SPEED: 1620rpm</p> <p>MAXIMUM FEEDRATE: 695mm/min</p> <p>CUTTING DISTANCE: 2520.67mm</p> <p>RAPID DISTANCE: 2487.58mm</p> <p>ESTIMATED CYCLE TIME: 5m:36s (12.4%)</p> <p>COOLANT: Flood</p>	<p><b>T17001</b> D17001 L17001</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 14mm</p> <p>LENGTH: 60mm</p> <p>FLUTES: 5</p> <p>DESCRIPTION: CoroMill Plura Contornatura</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: <a href="#">2N342-1400-PC 1730</a></p>	
<p>Operation 6/14</p> <p>DESCRIPTION: 6 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: 1221.03mm</p> <p>RAPID DISTANCE: 1460.3mm</p> <p>ESTIMATED CYCLE TIME: 2m:2s (4.5%)</p> <p>COOLANT: Flood</p>	<p><b>T22011</b> 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: <a href="#">1K334-0400-050-XC 1730</a></p>	
<p>Operation 7/14</p> <p>DESCRIPTION: 7 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 STEPOVER: 11.4mm</p>	<p>MAXIMUM Z: 3.05mm</p> <p>MINIMUM Z: -30.13mm</p> <p>MAXIMUM SPINDLE SPEED: 3710rpm</p> <p>MAXIMUM FEEDRATE: 2100mm/min</p> <p>CUTTING DISTANCE: 496.04mm</p> <p>RAPID DISTANCE: 35.72mm</p> <p>ESTIMATED CYCLE TIME: 19s (0.7%)</p> <p>COOLANT: Flood</p>	<p><b>T17009</b> D17009 L17009</p> <p>TYPE: flat end mill</p> <p>DIAMETER: 12mm</p> <p>LENGTH: 60mm</p> <p>FLUTES: 4</p> <p>DESCRIPTION: CoroMill Dura Finituracontornatura</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: <a href="#">1K334-1200-XB 1730</a></p>	
<p>Operation 8/14</p> <p>DESCRIPTION: 8 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: 1151.8mm</p> <p>ESTIMATED CYCLE TIME: 5m:34s (12.3%)</p> <p>COOLANT: Flood</p>	<p><b>T17006</b> 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: <a href="#">862.1-2500-225A0-GM X2BL</a></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: 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><b>T17013</b> 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 FinituraTascheLaterali</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: <a href="#">R216.23-04050CAK11P 1620</a></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 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 (2.5%)</p> <p>COOLANT: Flood</p>	<p><b>T17013</b> 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 FinituraTascheLaterali</p> <p>VENDOR: Sandvik</p> <p>PRODUCT: <a href="#">R216.23-04050CAK11P 1620</a></p>	
<p>Operation 11/14</p> <p>DESCRIPTION: 11 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><b>T22013</b> 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: <a href="#">MPMHVRBD0800R100</a></p>	

<b>Operation 12/14</b> <b>DESCRIPTION:</b> 12 2D Contour <b>STRATEGY:</b> Contour 2D <b>WCS:</b> #0 <b>TOLERANCE:</b> 0mm <b>STOCK TO LEAVE:</b> 0mm/0.03mm <b>MAXIMUM STEPOVER:</b> 5.7mm	<b>MAXIMUM Z:</b> 3.05mm <b>MINIMUM Z:</b> -15.97mm <b>MAXIMUM SPINDLE SPEED:</b> 6000rpm <b>MAXIMUM FEEDRATE:</b> 1999.2mm/min <b>CUTTING DISTANCE:</b> 156.05mm <b>RAPID DISTANCE:</b> 184.78mm <b>ESTIMATED CYCLE TIME:</b> 14s (0.5%) <b>COOLANT:</b> Flood	<b>T22013 D22013 L22013</b> <b>TYPE:</b> bullnose end mill <b>DIAMETER:</b> 8mm <b>CORNER RADIUS:</b> 1mm <b>LENGTH:</b> 50mm <b>FLUTES:</b> 4 <b>DESCRIPTION:</b> 54_finitura_fondo_tondo <b>VENDOR:</b> mitsubishi <b>PRODUCT:</b> <a href="#">MPMHVRBD0800R100</a>	
<b>Operation 13/14</b> <b>DESCRIPTION:</b> 13 Bore <b>STRATEGY:</b> Bore <b>WCS:</b> #0 <b>TOLERANCE:</b> 0.01mm <b>STOCK TO LEAVE:</b> 0mm	<b>MAXIMUM Z:</b> 0.51mm <b>MINIMUM Z:</b> -30.1mm <b>MAXIMUM SPINDLE SPEED:</b> 1393rpm <b>MAXIMUM FEEDRATE:</b> 250mm/min <b>CUTTING DISTANCE:</b> 491.42mm <b>RAPID DISTANCE:</b> 34.12mm <b>ESTIMATED CYCLE TIME:</b> 1m:58s (4.4%) <b>COOLANT:</b> Flood	<b>T22012 D22012 L22012</b> <b>TYPE:</b> flat end mill <b>DIAMETER:</b> 32mm <b>LENGTH:</b> 100mm <b>FLUTES:</b> 4 <b>DESCRIPTION:</b> fresa per elicoidale <b>VENDOR:</b> mitsubishi <b>PRODUCT:</b> <a href="#">AQXR324SA32S con inserto QOMT1651R-M2 con grado MP6130</a>	
<b>Operation 14/14</b> <b>DESCRIPTION:</b> 14 Scallop <b>STRATEGY:</b> Scallop <b>WCS:</b> #0 <b>TOLERANCE:</b> 0.03mm <b>STOCK TO LEAVE:</b> 0mm <b>MAXIMUM STEPOVER:</b> 0.64mm	<b>MAXIMUM Z:</b> 0.51mm <b>MINIMUM Z:</b> -16.29mm <b>MAXIMUM SPINDLE SPEED:</b> 8000rpm <b>MAXIMUM FEEDRATE:</b> 1900.001mm/min <b>CUTTING DISTANCE:</b> 378.96mm <b>RAPID DISTANCE:</b> 62.93mm <b>ESTIMATED CYCLE TIME:</b> 13s (0.5%) <b>COOLANT:</b> Flood	<b>T22014 D22014 L22014</b> <b>TYPE:</b> ball end mill <b>DIAMETER:</b> 8mm <b>CORNER RADIUS:</b> 4mm <b>LENGTH:</b> 20mm <b>FLUTES:</b> 4 <b>DESCRIPTION:</b> nervatura tonda <b>VENDOR:</b> mitsubishi <b>PRODUCT:</b> <a href="#">fresa a punta tonda VQ4SVBR04000</a>	


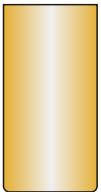


## Setup Sheet for Program 1002

JOB DESCRIPTION: AutoSetup 2

DOCUMENT PATH: X\_TP01\_FORI\_EDIT\_121007 v1

Setup	
<b>WCS: #0</b>	
<b>Stock:</b> DX: 160mm DY: 95mm DZ: 35mm	
<b>PART:</b> DX: 150mm DY: 84.87mm DZ: 25mm	
<b>Stock Lower in WCS #0:</b> X: -80mm Y: -47.5mm Z: -35mm	
<b>Stock Upper in WCS #0:</b> X: 80mm Y: 47.5mm Z: 0mm	

Total
NUMBER OF OPERATIONS: 9
NUMBER OF TOOLS: 6
TOOLS: T22003 T22005 T22008 T22011 T22013 T22014
MAXIMUM Z: 6.05mm
MINIMUM Z: -16.29mm
MAXIMUM FEEDRATE: 2170mm/min
MAXIMUM SPINDLE SPEED: 8000rpm
CUTTING DISTANCE: 14046.77mm
RAPID DISTANCE: 5674.07mm
ESTIMATED CYCLE TIME: 24m:46s

Tools		
<b>T22003</b> D22003 L22003 TYPE: bullnose end mill DIAMETER: 8mm CORNER RADIUS: 0.2mm LENGTH: 45mm FLUTES: 5 DESCRIPTION: Sgrossatura tasche 1 PRODUCT: <a href="#">1K325-0800-XB 1730</a>	MINIMUM Z: -15.75mm MAXIMUM FEED: 2170mm/min MAXIMUM SPINDLE SPEED: 2170rpm CUTTING DISTANCE: 6025.82mm RAPID DISTANCE: 2716.63mm ESTIMATED CYCLE TIME: 10m:56s (44.1%)	
<b>T22005</b> D22005 L22005 TYPE: face mill DIAMETER: 25mm CORNER RADIUS: 1.6mm LENGTH: 50mm FLUTES: 2 DESCRIPTION: Fresa per creazione foro centrale PRODUCT: <a href="#">R390-025A25-17L</a>	MINIMUM Z: -4.5mm MAXIMUM FEED: 1687.3mm/min MAXIMUM SPINDLE SPEED: 3590rpm CUTTING DISTANCE: 2559.95mm RAPID DISTANCE: 10.59mm ESTIMATED CYCLE TIME: 1m:31s (6.1%)	
<b>T22008</b> D22008 L22008 TYPE: face mill DIAMETER: 50mm CORNER RADIUS: 0.8mm LENGTH: 20mm FLUTES: 3 DESCRIPTION: facciatura_finitura VENDOR: mitsubishi PRODUCT: <a href="#">ASX400-050A03R con inserto SOET12T308PEER-JL con grado VP30RT</a>	MINIMUM Z: -5mm MAXIMUM FEED: 333.333mm/min MAXIMUM SPINDLE SPEED: 955rpm CUTTING DISTANCE: 1614.22mm RAPID DISTANCE: 5.59mm ESTIMATED CYCLE TIME: 5m:38s (22.7%)	
<b>T22011</b> D22011 L22011 TYPE: flat end mill DIAMETER: 4mm LENGTH: 40mm FLUTES: 5 DESCRIPTION: Fresa per sgrossatura (tasca piccola) e per finitura totale tasche PRODUCT: <a href="#">1K334-0400-050-XC 1730</a>	MINIMUM Z: -16mm MAXIMUM FEED: 2106.67mm/min MAXIMUM SPINDLE SPEED: 7190rpm CUTTING DISTANCE: 3036.21mm RAPID DISTANCE: 2250.22mm ESTIMATED CYCLE TIME: 4m:29s (18.1%)	
<b>T22013</b> D22013 L22013 TYPE: bullnose end mill DIAMETER: 8mm CORNER RADIUS: 1mm LENGTH: 50mm FLUTES: 4 DESCRIPTION: 54_finitura_fondo_tondo VENDOR: mitsubishi PRODUCT: <a href="#">MPMHVRBD0800R100</a>	MINIMUM Z: -16mm MAXIMUM FEED: 1999.2mm/min MAXIMUM SPINDLE SPEED: 6000rpm CUTTING DISTANCE: 434.29mm RAPID DISTANCE: 628.51mm ESTIMATED CYCLE TIME: 29s (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: 376.28mm

RAPID DISTANCE: 62.53mm

ESTIMATED CYCLE TIME: 13s (0.9%)

**Operations**

## Operation 1/9

DESCRIPTION: 1 Face (2)

STRATEGY: Facing

WCS: #0

TOLERANCE: 0.03mm

MAXIMUM STEPDOWN: 14.13mm

MAXIMUM STEPOVER: 7.5mm

MAXIMUM Z: 6.05mm

MINIMUM Z: -4.5mm

MAXIMUM SPINDLE SPEED: 3590rpm

MAXIMUM FEEDRATE: 1687.3mm/min

CUTTING DISTANCE: 2559.95mm

RAPID DISTANCE: 10.59mm

ESTIMATED CYCLE TIME: 1m:31s (6.1%)

COOLANT: Flood

**T22005 D22005 L22005**

TYPE: face mill

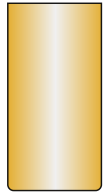
DIAMETER: 25mm

CORNER RADIUS: 1.6mm

LENGTH: 50mm

FLUTES: 2

DESCRIPTION: Fresa per creazione foro centrale

PRODUCT: [R390-025A25-17L](#)

## Operation 2/9

DESCRIPTION: 2 Face (2)

STRATEGY: Facing

WCS: #0

TOLERANCE: 0.03mm

MAXIMUM STEPOVER: 15mm

MAXIMUM Z: 3.05mm

MINIMUM Z: -5mm

MAXIMUM SPINDLE SPEED: 955rpm

MAXIMUM FEEDRATE: 333.333mm/min

CUTTING DISTANCE: 1614.22mm

RAPID DISTANCE: 5.59mm

ESTIMATED CYCLE TIME: 5m:38s (22.7%)

COOLANT: Flood

**T22008 D22008 L22008**

TYPE: face mill

DIAMETER: 50mm

CORNER RADIUS: 0.8mm

LENGTH: 20mm

FLUTES: 3

DESCRIPTION: facciatura\_finitura

VENDOR: mitsubishi

PRODUCT: [ASX400-050A03R con inserto SOET12T308PEER-JL con grado VP30RT](#)

## Operation 3/9

DESCRIPTION: 3 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: 6025.82mm

RAPID DISTANCE: 2716.63mm

ESTIMATED CYCLE TIME: 10m:56s (44.1%)

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 4/9

DESCRIPTION: 4 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: 1216.11mm

RAPID DISTANCE: 1367.99mm

ESTIMATED CYCLE TIME: 2m:1s (8.1%)

COOLANT: Flood

**T22011 D22011 L22011**

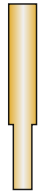
TYPE: flat end mill

DIAMETER: 4mm

LENGTH: 40mm

FLUTES: 5

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

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

## Operation 5/9

DESCRIPTION: 5 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 (2.8%)

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 6/9

DESCRIPTION: 6 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 (7.2%)

COOLANT: Flood

**T22011 D22011 L22011**

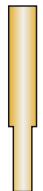
TYPE: flat end mill

DIAMETER: 4mm

LENGTH: 40mm

FLUTES: 5

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

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

## Operation 7/9

DESCRIPTION: 7 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%)

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 8/9

DESCRIPTION: 8 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%)

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 9/9  
DESCRIPTION: 9 Scallop  
STRATEGY: Scallop  
WCS: #0  
TOLERANCE: 0.03mm  
STOCK TO LEAVE: 0mm  
MAXIMUM STEPOVER: 0.64mm

MAXIMUM Z: 0.51mm  
MINIMUM Z: -16.29mm  
MAXIMUM SPINDLE SPEED: 8000rpm  
MAXIMUM FEEDRATE: 1900.001mm/min  
CUTTING DISTANCE: 376.28mm  
RAPID DISTANCE: 62.53mm  
ESTIMATED CYCLE TIME: 13s (0.9%)  
COOLANT: Flood

**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](#)

