



— Updates Included —

- Six (6) axis control (No Hydraulics!)
- Controller: Siemens 840D Processor
- 75 H.P. spindle drive
- New Spindle Assembly: C & B's 21CSS Spindle Head Assembly, 60% less moving parts and wear items supplying longer life, higher accuracy and reliability.
- Table index: updated with a servo axis and high precision gear box for quick, accurate index positioning.
- Rotary Fixtures: updated with servo axes and high precision gear boxes. This allows each fixture to have its own unique parameter programming such as RPM (two or three speeds per cycle) and excell/decell.
- Wheel Dressing: "Automatic" wheel dressing is performed with a multi-point diamond dressing tool mounted directly on the Index Table.
- In-Process Gauging: Grinding Wheel positioning is controlled by direct feedback from the in-process gauge reading the location of the face of the grinding wheel while also tracking and calculating remaining wheel life.
- Coolant: Delivered through multiple precision directed lines including through the spindle for consistent coverage.



Tooled to grind two different parts,  
Aluminum Valve Bodies and Transfer Plates

**Production Rate:**

2 parts in 33 seconds / 214 parts an hour  
Material: Cast Aluminum  
Stock Removal: .015"  
Part size: 10" x 15"

**Transfer Plate**

Overall Flatness: .380 Micron / .015" 9.72 PpK  
Elemental Flatness: .0150 Micron (25 x 25) /  
.0006" (1" x 1") 2.0 PpK  
Profile: .380 Micron / .015" 2.15 Pp  
Surface Finish: Ra 1.3 Rz 4.5

**Valve Body**

Overall Flatness: .100 Micron / .004" 14.85 PpK  
Elemental Flatness: .015 Micron (25 x 25) /  
.0006" (1" x 1") 37.35 PpK  
Profile area "W": .120 Micron / .0047" 3.29 Pp  
Surface Finish: Ra 1.3 Rz 4.5

