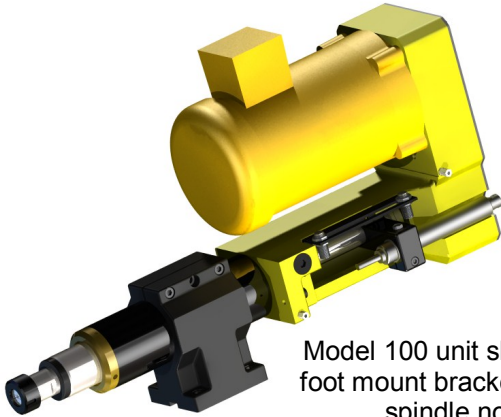


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**Model 100 air / oil  
Quill Feed Units**



Model 100 unit shown with foot mount bracket & ER25 spindle nose



Model 100 unit shown with universal column & ER25 spindle nose

**Zagar model 100 units:**

Air-operated, electric motor driven, production drilling unit manufactured and assembled at Zagar Inc., Cleveland, Ohio. Designed for automatic, precision hole making operations that include drilling, counter sinking, counter boring, spot-facing, reaming, deep hole peck drilling. Standard cycle includes both rapid and controlled feed. Length of rapid and feed segments are adjustable. Feed rate is adjusted and controlled using a self-contained, constant velocity, hydraulic feed cylinder. Feed cylinder is dual shaft mounted with a linear support ball bearing to eliminate quill deflection under load. Quill feed is air actuated by a double-acting piston for 4" (100mm) of travel. Spindle is involute spline driven with dual angular contact precision bearings at the spindle nose. It also includes a mid-unit ball bearing for extended radial load capacity and reduced spline wear. T.I.R. of spindle rotation is within .0005" (.013mm) Full depth is controlled by a positive stop assembly on the center line of the quill to prevent deflection. Positive stop features a worm shaft and gear for micrometer adjustment of end depth position. Spindle rotation is electric motor driven by US, NEMA, T.E.F.C., 3PH, 208/230/460 VAC, motors available as 1/2, 3/4, and 1HP standards. Extensive range of configurable output speeds are available using timing belts, pulleys, and an adjustable belt tensioner. Unit is sealed for operation in any orientation with standard foot mount bracket or universal, column assembly.

Spindle noses are configurable with single angle standards, JT tapers, ASA bores, over-spindle quick-change adapters, ABS or HSK standards, and flange mounts for multiple spindle drill heads. Spindle travel limits are set using quick-disconnect proximity switches. Unit is lubricated with long lasting synthetic grease for minimum maintenance. Protective plexi-glass shield provided over feed cylinder and positive stop.

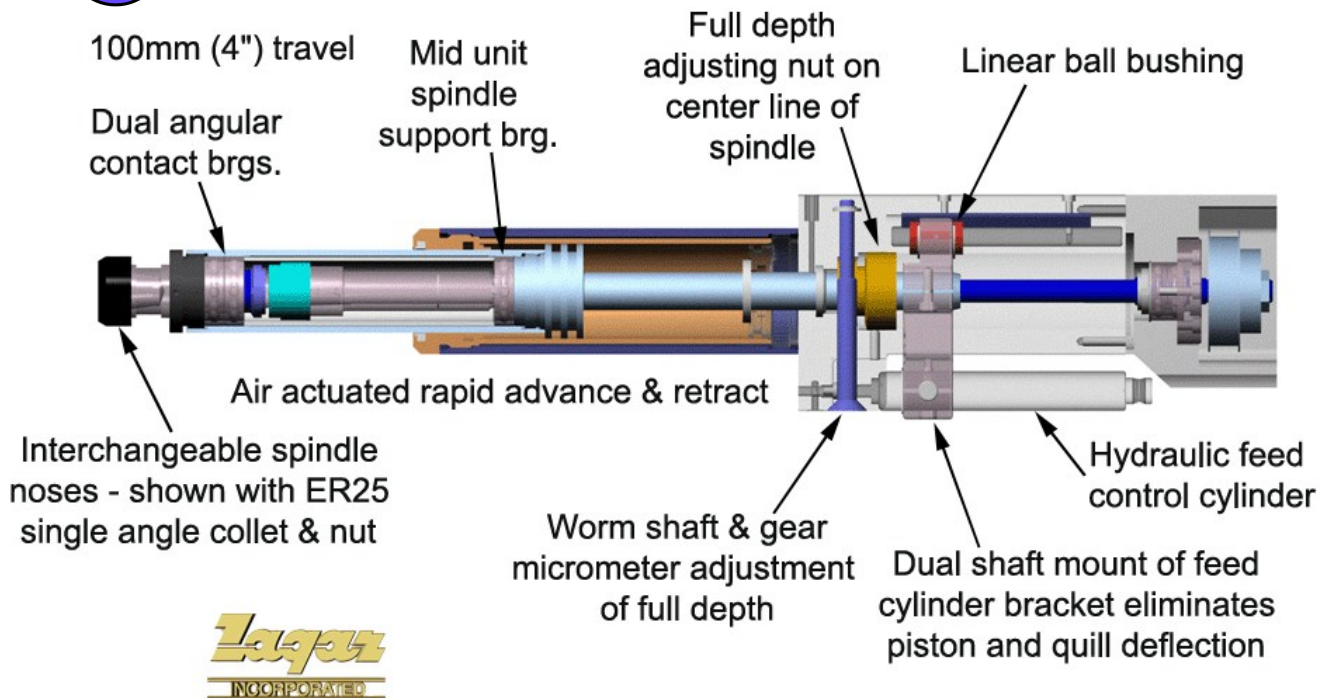
**Model 100 Specifications**

Stroke	4" (100mm)
Thrust Capacity	337 lbs. @ 100 PSI air pressure
Quill Diameter	1.968" (49.99mm)
Rapid Traverse Rate	300 I.P.M. (7.6 M.P.M.)
Feed rates	.50—20 (in./min.) (13 to 500 (mm / min.)
Depth control	Adjustable positive stop
Spindle noses	Integral collets—ER16 thru ER40 ASA Standard—.750", .875", 1.062", .16mm, 20mm, 28mm I.D. bore ABS 40 HSK 32
Spindle speed	570 to 6,900 RPM max.
HP	1/2, 3/4, & 1 HP

Click on image to start animation



# Operating mechanics - Model 100 Air / Oil Quill Feed, Drilling Unit



Timing belt & pulley drive with adjustable belt tensioning idler assembly. Click for Model 100 speed chart.



## Output Speed RPM Chart

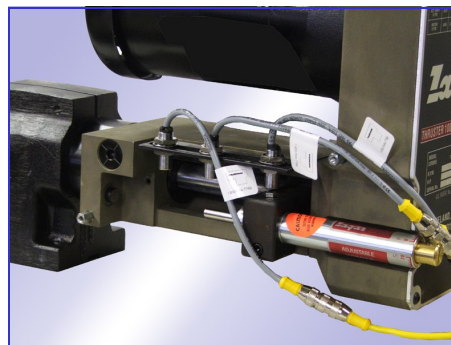
One handed tool change demo. Click to run video



Shown with quick-change over-spindle adapter and single angle collet holder

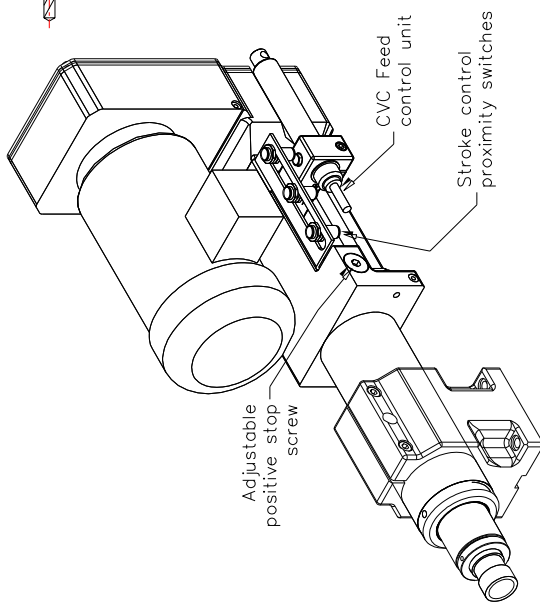
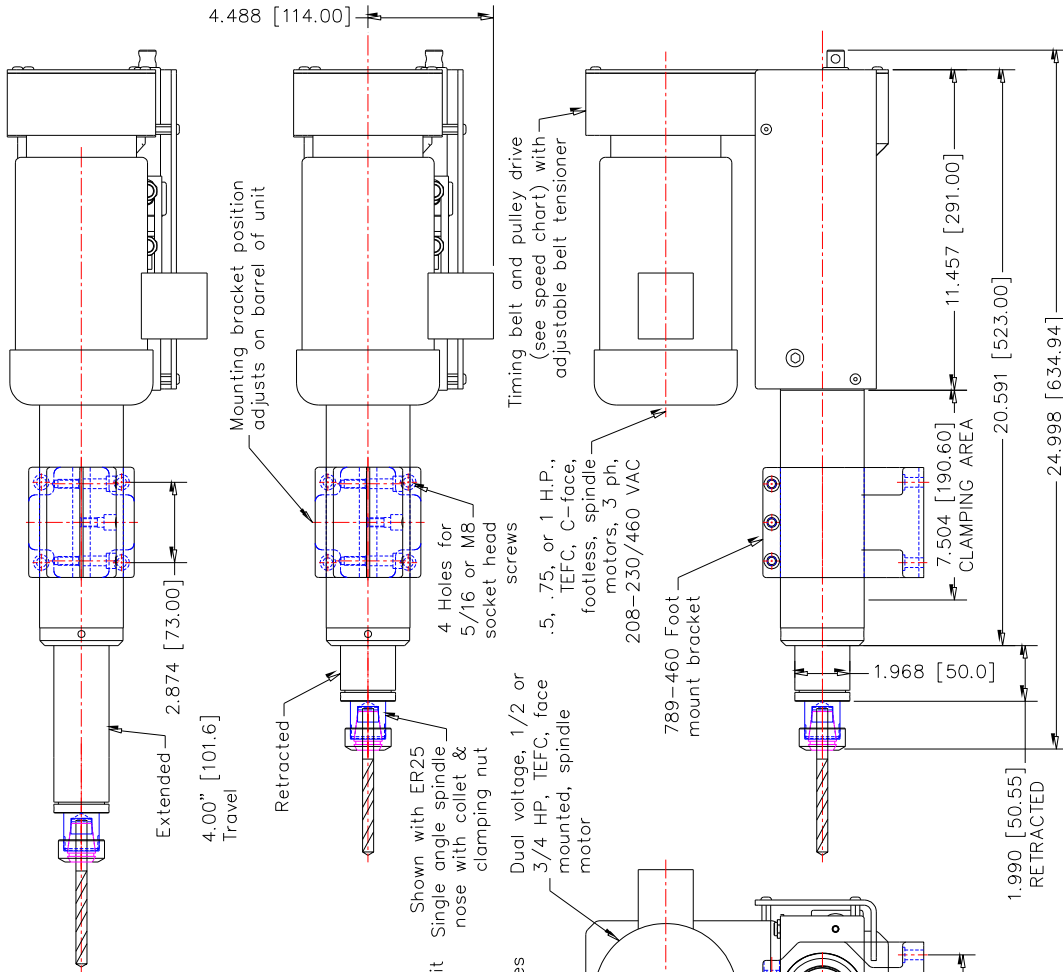
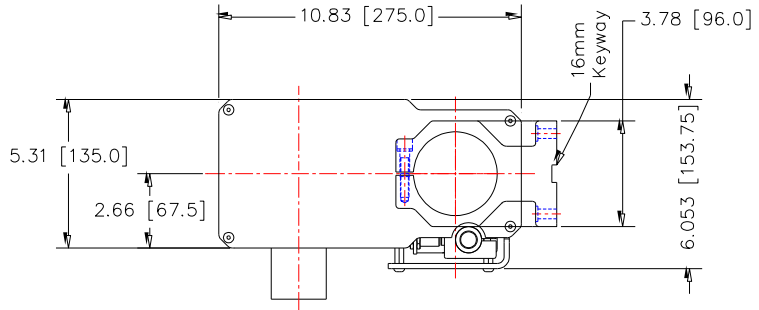


Constant velocity, hydraulic feed control cylinder & quick disconnect, stroke control proximity switches

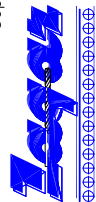




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2D [CAD](#) template



Unit views and mounting bracket are separate blocks



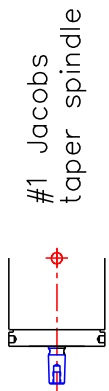
### Model 100 Quill Feed Unit

# Optional spindles Model 100 Unit

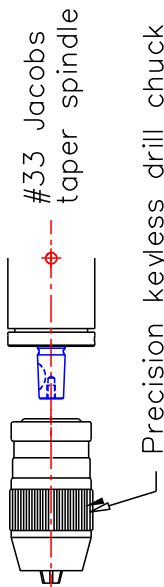
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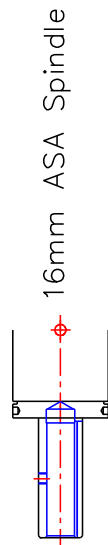
**Zagar**  
INCORPORATED



ER16 Spindle



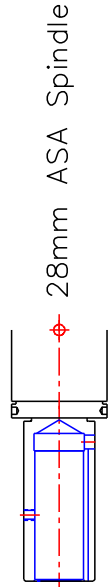
ER25 Spindle



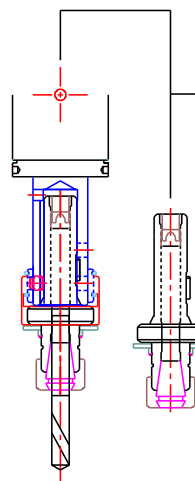
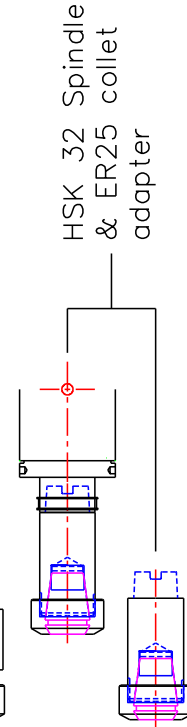
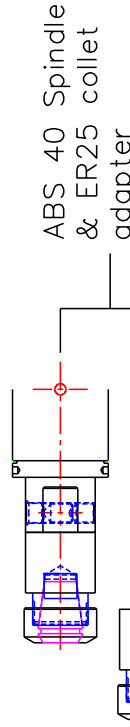
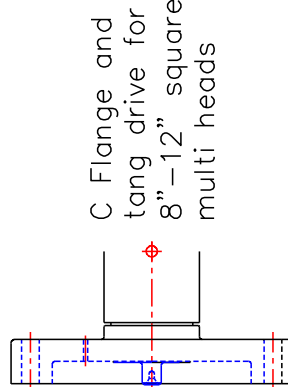
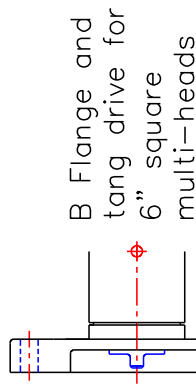
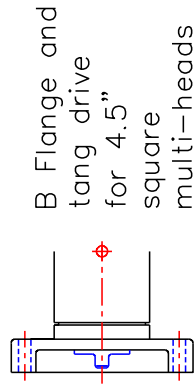
.750" ASA Spindle



.875" ASA Spindle

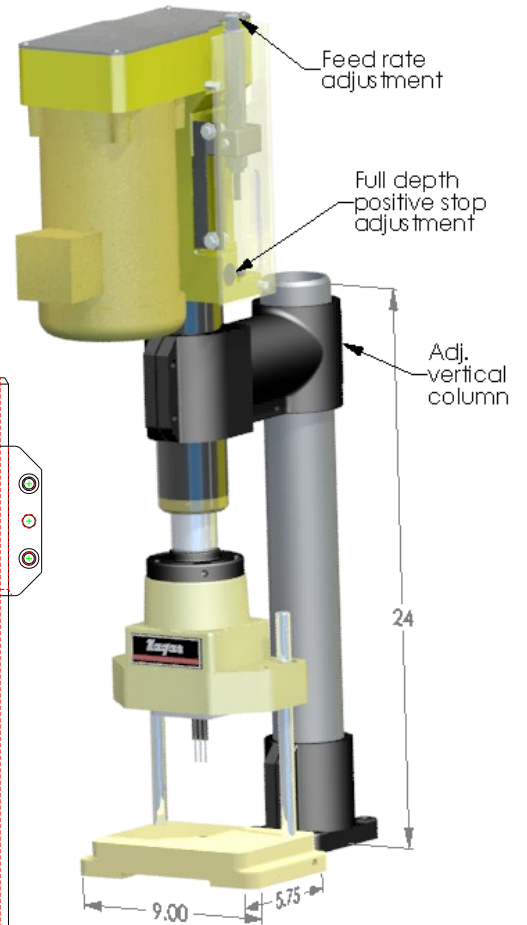
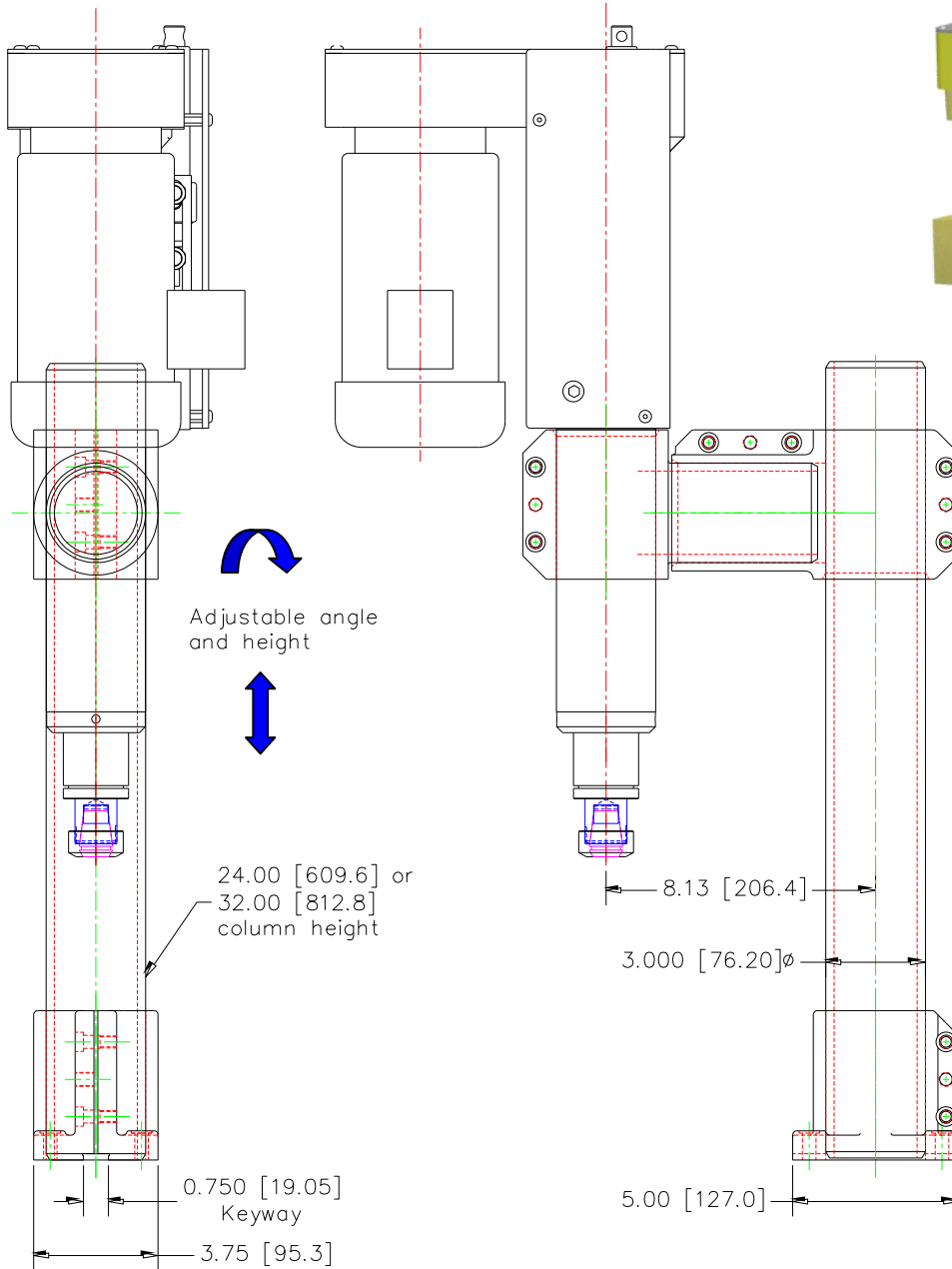
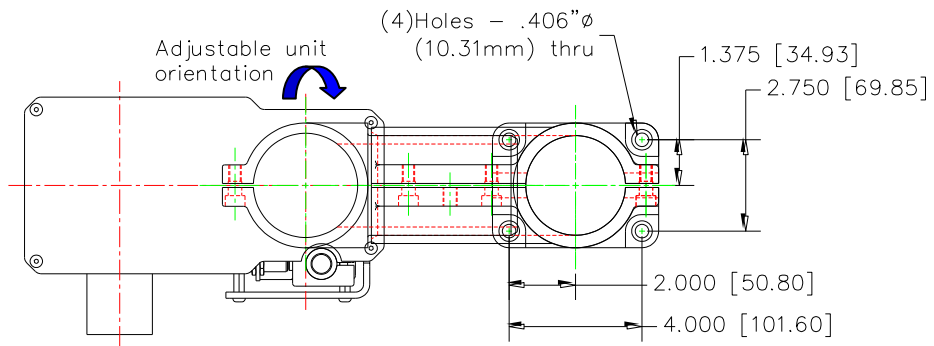


1.062" ASA Spindle





# Model 100 vertical drill station



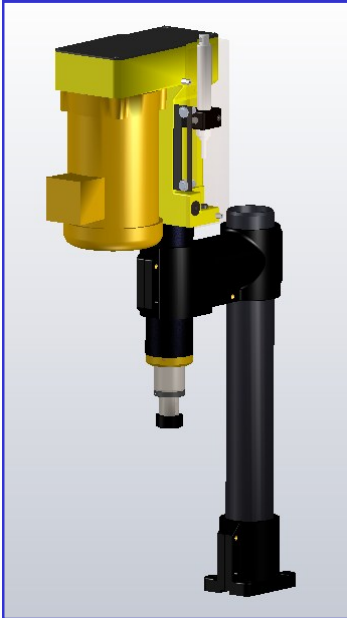
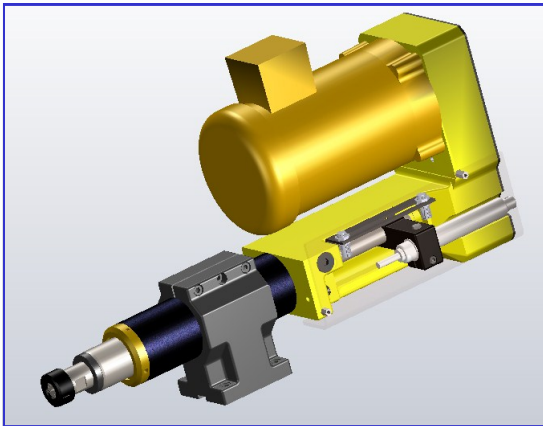
Multiple spindle, Model 100 vertical drill station

Click to download 2D [CAD](#) template





### Model 100 air / oil Quill Feed Units

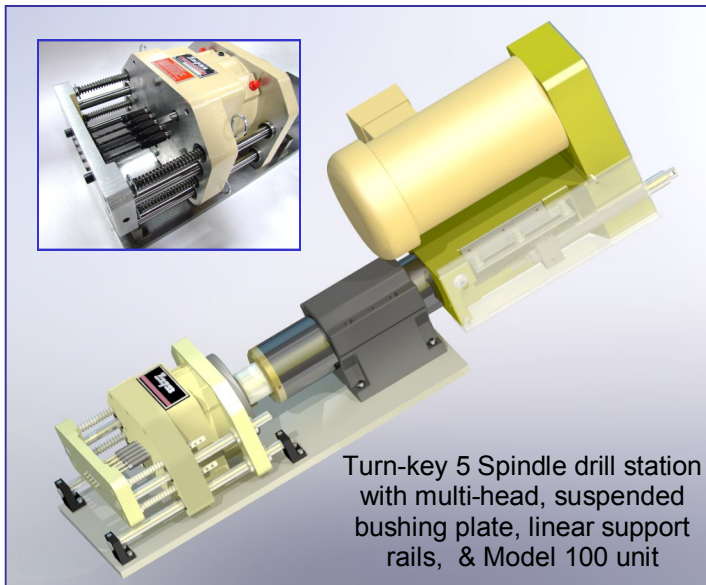


Click on either 3-D graphic for e-view (measure enabled) If you do not have the eDrawings Viewer installed, download it free from: <<http://www.eDrawingsViewer.com/download>>.

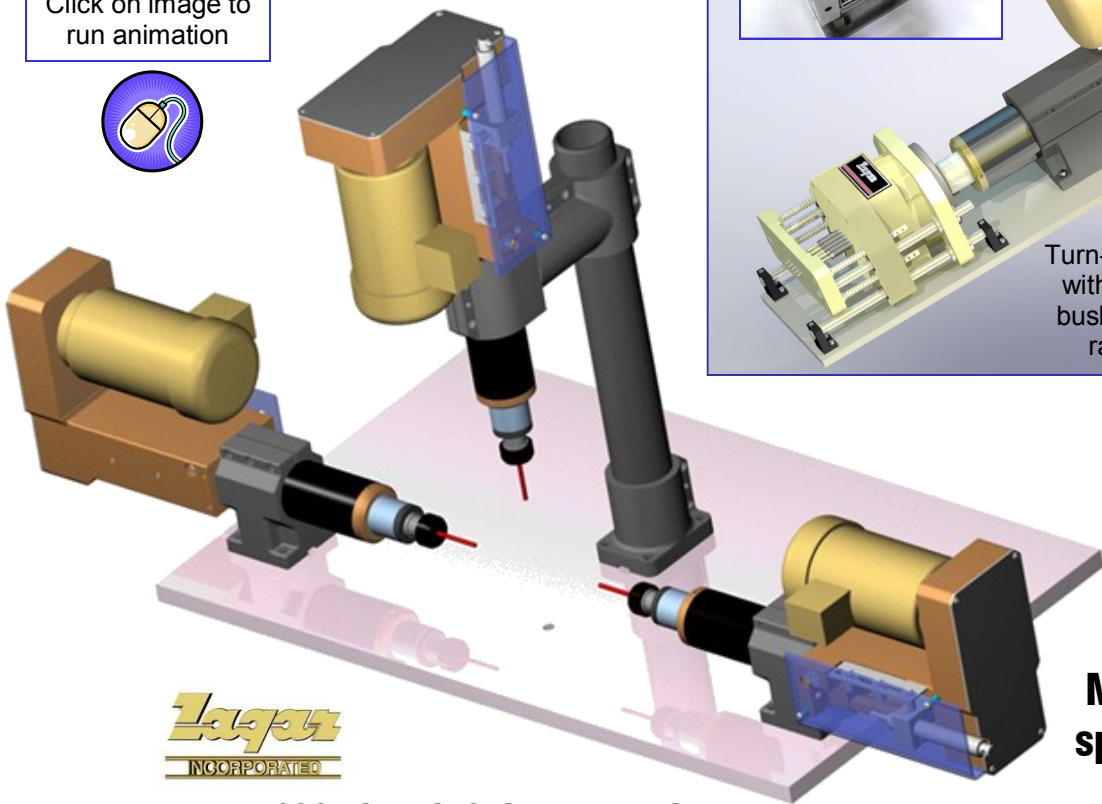


### Pricing spread sheet (.xls)

Click on image to run animation



Turn-key 5 Spindle drill station with multi-head, suspended bushing plate, linear support rails, & Model 100 unit



### Model 100 air / oil Quill Feed Units

### Multi-unit or multi-spindle drill stations