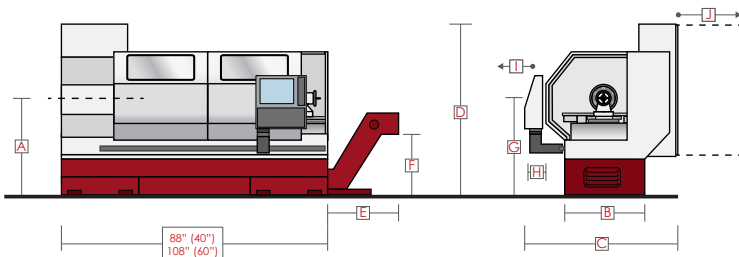


| ET-TR SERIES SPECIFICATIONS        |                               | ET-16                        | ET-18                                      | ET-21                        | ET-25                        |
|------------------------------------|-------------------------------|------------------------------|--|------------------------------|------------------------------|
| MACHINE CAPACITY                   | Swing Over Bed                | 16"                          | 18"  | 21"                          | 25"                          |
|                                    | Swing Over Cross Slide        | 8.125"                       | 9.125"                                     | 12"                          | 16"                          |
|                                    | Center Height                 | 8.125"                       | 9.125"                                     | 10.5"                        | 12.6"                        |
|                                    | Swing in Gap                  | N/A                          | N/A  | N/A                          | N/A                          |
|                                    | Distance Between Centers      | 40" (60")                    | 40" (60")                                  | 60" (80", 120")              | 60" (80", 120")              |
|                                    | Width of Bed                  | 14"                          | 14"  | 14"                          | 14"                          |
|                                    | Width of Cross Slide          | 8.5"                         | 8.5"                                       | 8.5"                         | 8.5"                         |
|                                    | Cross Slide Travel (X)        | 10"                          | 10"  | 12"                          | 12.5"                        |
|                                    | Longitudinal Travel (Z)       | 37"                          | 37"  | 57"                          | 57"                          |
|                                    | Optional Travel (Z)           | 57"                          | 57"  | 80"                          | 80"                          |
|                                    | Ball Screw Size               | 1.625" Z - 1.00" X           | 1.625" Z - 1.00" X                         | 1.625" Z - 1.00" X           | 1.625" Z - 1.00" X           |
|                                    | Max Part Weight - Unsupported | 500 lbs                      | 500 lbs                                    | 800 lbs                      | 800 lbs                      |
| Max Part Weight - Supported w/ S/R | 1,500 lbs                     | 2,500 lbs                    | 3,000 lbs                                  | 3,000 lbs                    |                              |
| SPINDLE                            | Spindle Nose                  | Camlock D1-6                 | Camlock D1-6 (D1-8)                        | Camlock D1-8 (A2-11)         | Camlock D1-8 (A2-11)         |
|                                    | Spindle Bore                  | 2.05"                        | 2.05" (3.4")                               | 3.40" (4.01")                | 3.40" (4.01")                |
|                                    | Spindle Nose Taper            | MT - 6                       | MT - 6                                     | Straight                     | Straight                     |
|                                    | Spindle Motor HP (Peak)       | 10 HP                        | 10 HP                                      | 15 HP                        | 15 HP                        |
|                                    | Spindle Speed (RPM)           | 100 - 3,000                  | 50 - 2,500                                 | 50 - 2,000                   | 50 - 2,000                   |
|                                    | Speed Ranges                  |                              | Low 50 - 350                               | Low 50 - 300                 | Low 50 - 300                 |
|                                    |                               | High 100 - 3,000             | High 350 - 2,500                           | High 300 - 2,000             | High 300 - 2,000             |
| Speed Selection                    | Single Gear Range             | Auto Shift                   | Auto Shift                                 | Auto Shift                   |                              |
| TAILSTOCK                          | Quill Travel                  | 5.0"                         | 5.0"                                       | 5.5"                         | 5.5"                         |
|                                    | Quill Diameter                |                              |  | 2.5"                         |                              |
|                                    | Quill Taper Hole              |                              |  | MT-5                         |                              |
| PERFORMANCE                        | Positioning Accuracy          |                              | +/- 0.0002"                                |                              |                              |
|                                    | Positioning Repeatability     |                              | +/- 0.0001"                                |                              |                              |
|                                    | Rapid Traverse (X,Z)          |                              | 400 IPM                                    |                              |                              |
|                                    | Servo Type                    |                              | AC Digital Brushless                       |                              |                              |
|                                    | Axis Thrust (Peak)            |                              | 3,058 lbs. X 3,504 lbs. Z                  |                              |                              |
| GENERAL INFO                       | Air Requirements              |                              | 90 PSI - 5 CFM                             |                              |                              |
|                                    | Coolant Capacity              |                              | 10 Gallons                                 |                              |                              |
|                                    | Coolant Flow                  |                              | 2 GPM                                      |                              |                              |
|                                    | Power Requirements            |                              | 40 AMP                                     |                              |                              |
|                                    | Voltage Requirements          |                              | 208-240 VAC 3 PHASE (380-500 VAC Optional) |                              |                              |
|                                    | Shipping Dimensions* (WxDxH)  | 86"x72"x68"                  | 86"x72"x68"                                | 106"x76"x68"                 | 106"x76"x68"                 |
|                                    | Operating Dimensions (WxDxH)  | 86"x74"x68"                  | 86"x74"x68"                                | 106"x78"x68"                 | 106"x78"x68"                 |
|                                    | Machine Weight                | 5,000 lbs.<br>60" 6,000 lbs. | 6,500 lbs.<br>60" 7,000 lbs.               | 7,500 lbs.<br>40" 7,000 lbs. | 8,500 lbs.<br>40" 8,000 lbs. |



|                                     | ET-16 | ET-18 | ET-21 | ET-25 |
|-------------------------------------|-------|-------|-------|-------|
| Floor to Spindle Center (A)         | 44"   | 44"   | 45.5" | 47.5" |
| Floor Depth (B)                     | 27"   | 27"   | 27"   | 27"   |
| Overall Depth (C)                   | 74"   | 74"   | 78"   | 78"   |
| Maximum Height (D)                  | 68"   | 68"   | 68"   | 68"   |
| Conveyor Protusion (E)              | 30"   | 30"   | 30"   | 30"   |
| Conveyor Height (F)                 | 28"   | 28"   | 28"   | 28"   |
| Floor to Console Height (G)         | 42.5" | 42.5" | 42.5" | 42.5" |
| Console Depth (H)                   | 9.5"  | 9.5"  | 9.5"  | 9.5"  |
| Console Swing Radius (I)            | 16"   | 16"   | 16"   | 16"   |
| Electrical Cabinet Swing Radius (J) | 27"   | 27"   | 27"   | 27"   |