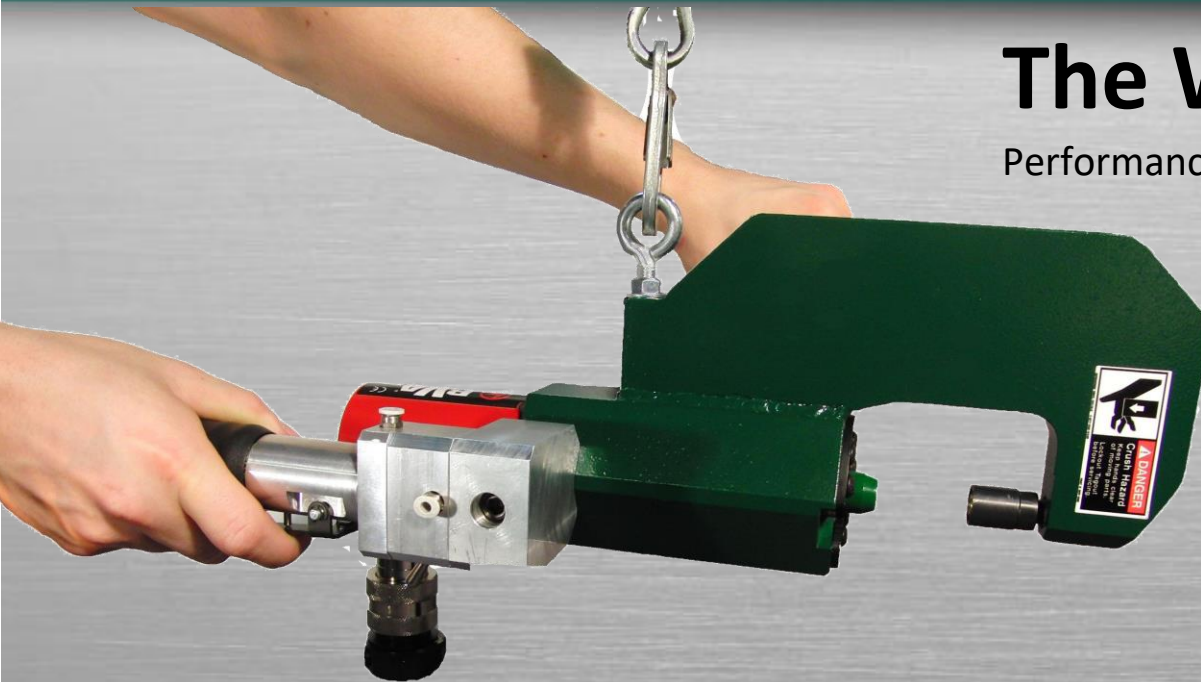


## The WATSON

Performance in a small package



The Watson offers all the benefits of clinching in a lightweight version that gives you the portability you need.

- Simple tool adjustments
- Close tooling access
- Air powered
- Easy maintenance
- Fully customizable
- Fasten up to two ply 14ga mild steel, 18 ga stainless steel (with optional tooling)

**INNOVATIONS IN ENGINEERING**

# Medium Duty Watson

**Capacity:** Medium Duty (0.18" diameter punch)  
 MAX: Two ply .075"[1.9mm] mild steel\*  
 MIN: Two ply .010"[0.25mm] mild steel



**Stroke:** 1.7" [43mm]  
**Throat:** 1-1/2" [38mm]  
**Weight:** 21 lbs [9.5kg] -hand tool only-  
 47 lbs [21kg] -power unit-

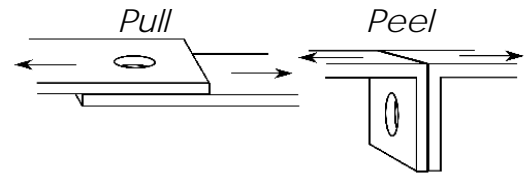
## Clinch Joint Strength in Mild Steel

Material Thickness	Pull (lbs/N)	Peel (lbs/N)	Die Type
.075"/1.90mm	550/2400	225/1000	#50
.060"/1.50mm	475/2100	175/775	#50
.050"/1.25mm	430/1900	150/665	#50
.040"/1.00mm	400/1780	120/530	#40
.030"/0.75mm	325/1450	85/380	#40
.020"/0.50mm	285/1250	70/310	#30
.010"/0.25mm	210/935	35/155	#30

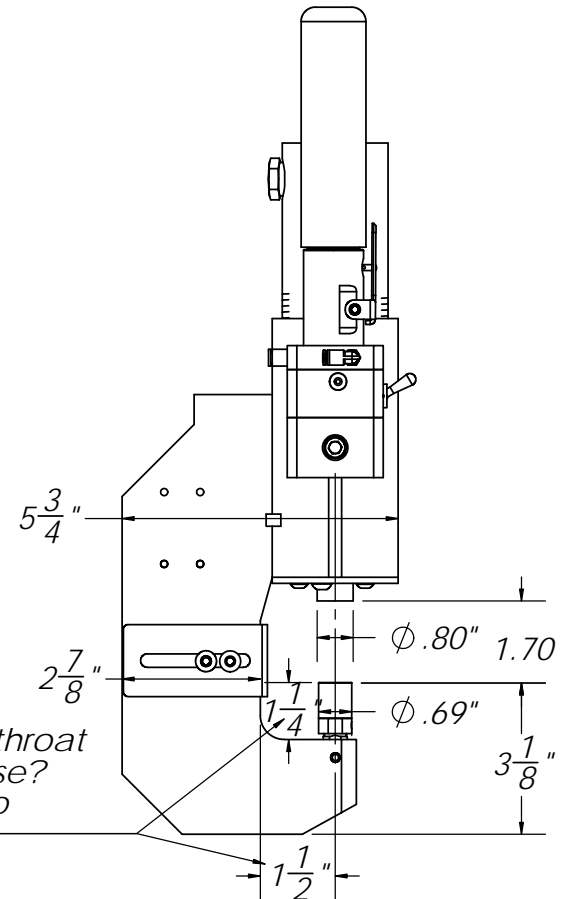
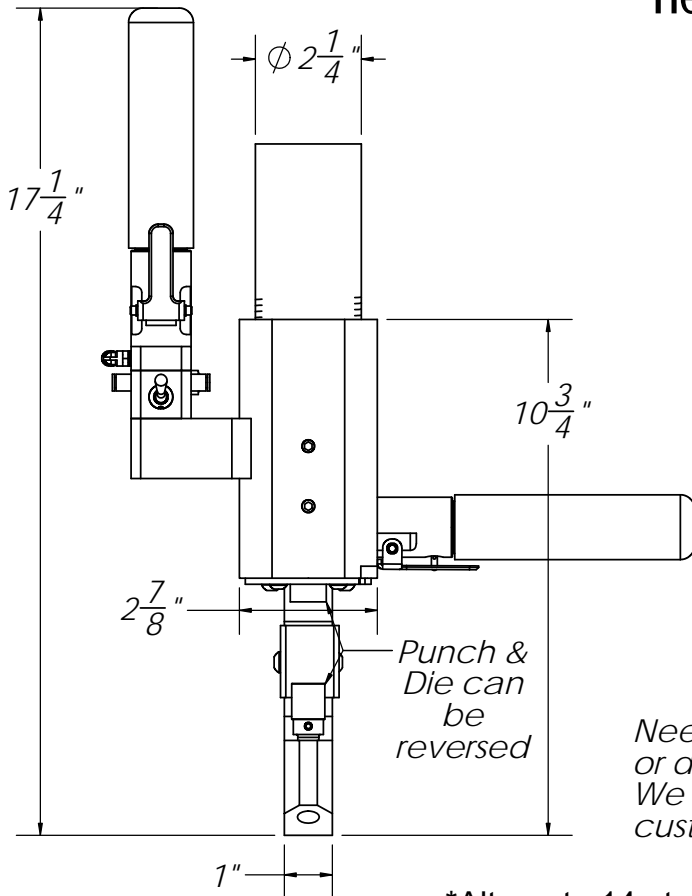
**Cycle Speed:** 25 CPM (standard speed)  
 30-40 CPM (modified stroke)

**Air Requirements:** 70-90psi [5-6 bar]  
 Approx 0.8 cu ft free air per cycle  
 5HP @ 40 clinches per minute

- Options:**
- Hanging Gymbal**  
Rotate in the X, Y, or both for machine manipulation
  - Spring Balancer**  
Provides weightless machine motion
  - Mobile Hanging Cart**  
For machine mobility around the shop



Norlok has an extensive selection of Watson designs for getting over large flanges, into narrow openings, and reaching deep into parts.  
 If not already designed, we will design a machine to meet your clinching needs!



\*Alternate 14g tooling may be required