



## Heavy Duty Stud Welding Gun

*Proven design specifically for welding large diameter studs  
The industry standard for 50 years*

The Nelson NS-20 HD, a rugged, heavy duty stud welding gun designed specifically to weld studs 5/8" diameter and larger. It can be used to weld smaller diameter studs, if required. The NS-20 HD gun operates with D.C. power sources such as the Nelweld, transformer-rectifiers, or Nelson inverters. The gun is a pistol shaped tool with a compensating lift mechanism. The gun body is molded of high impact plastic in one piece. To minimize weld splatter, a TRANQUIL-ARC<sup>®</sup> assembly is standard on this gun.

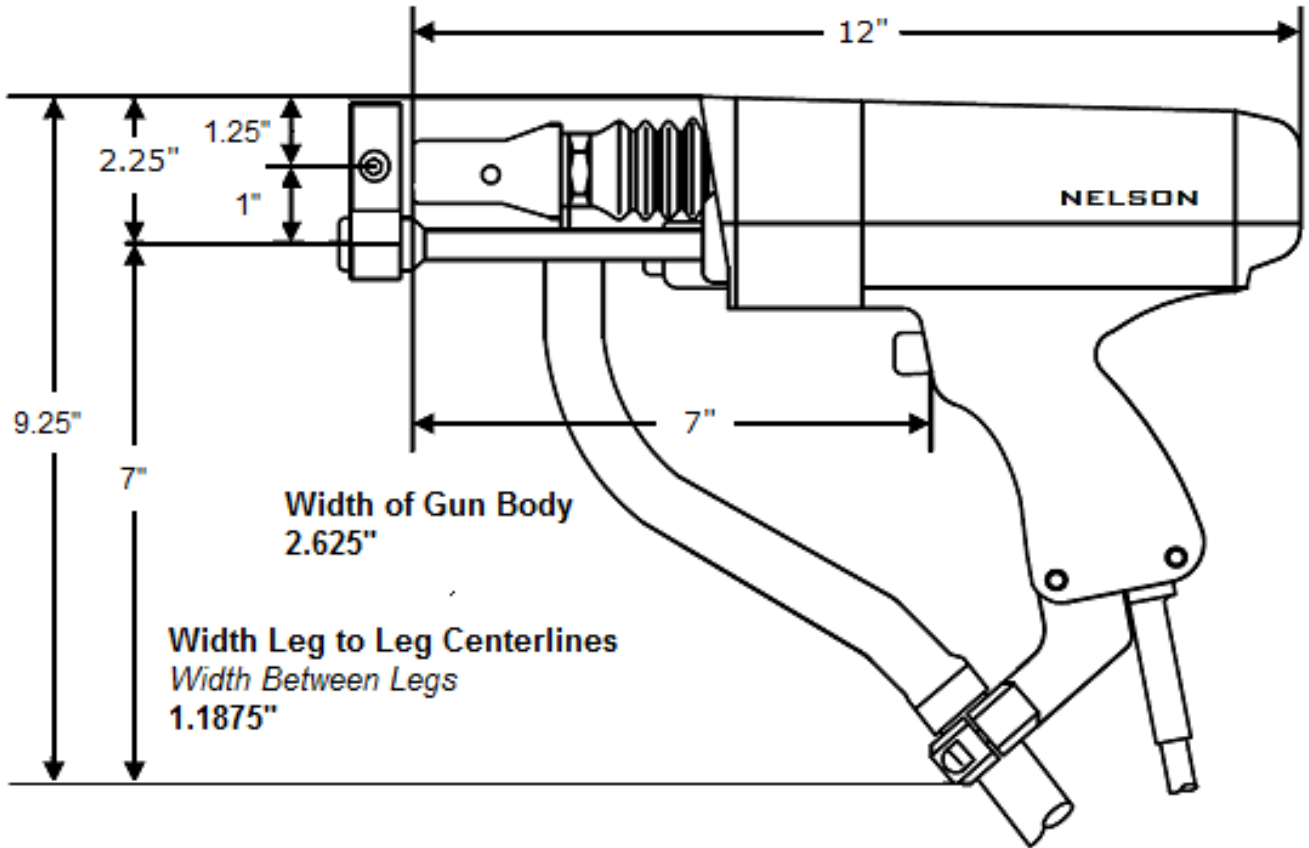
- **Durable Gun Body.** Constructed from thermo-plastic resin for maximum strength and longevity.
- **Lift Adjustment.** Infinite adjustability for precise control of lift height and arc voltage.
- **Lift Mechanism.** Assures reliable control of lift height for highly repeatable weld arc length over millions of welds.
- **Ease of Service.** Lifting mechanism is assembled and housed in a cartridge held in place by the main spring.
- **Leg Design.** Stainless steel legs with milled flats resists galling from leg screws and allows free movement of leg assembly during plunge adjustment.
- **Large Leg Diameter.** 3/8" diameter legs resist flexing with longer length studs.
- **Ergonomic Shape.** Shape and balance reduces operator fatigue.
- **Two Wire Control Cable.** Multiplexing reduces control cable failures, simplifies field repairs and speeds up service to reduce downtime.
- **Hydraulic Plunge Dampener.** TRANQUIL-ARC<sup>®</sup> prevents loss of weld metal and improves weld flash appearance.
- **Adjustable Free Travel.** Allows for controlled dampening with the increased stud length reduction when welding through metal decking.
- **Large Weld Cable.** Reduces cable heating for large stud diameters and high weld rates.
- **Two Wire Control Cable.** Multiplexing simplifies and speeds field repairs.
- **Multiple Connector Configurations.** Camlock, Dinse, Hubbell, R&S and others are available.

### Applications

- *Welding of large diameter studs for construction, shipbuilding and industrial applications.*
- *Welding of shear connector stud through galvanized metal decking.*
- *Welding of long studs is permitted by use of rigid extension accessories.*

NS-20 HD

**Technical Data**



NS-20 HD

NS-20 HD WELDING GUN	
Length: (less accessories)	12" (30.5 cm)
Weight: Basic Weight of Tool includes standard legs and foot plus cable loop to cable spud	6 lbs. 13 oz. (3.1 kg)
Typical Working Weight of Tool includes standard legs and foot plus 4' (1.2 m) of cable from tool handle (NOTE: 4' (1.2 m) of cable is normally supported by operator when in working position)	9 lbs. 9 oz. (4.3 kg)
Shipping Weight of Tool includes standard legs and foot plus 7'3" (2.2 m) to 7'5" (2.3 m) of cable with connectors normally supplied with tool	11 lbs. 2 oz. (5.0 kg)
Lift Height Range Total Stroke (Lift & Plunge)	7/8" (22 mm)

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