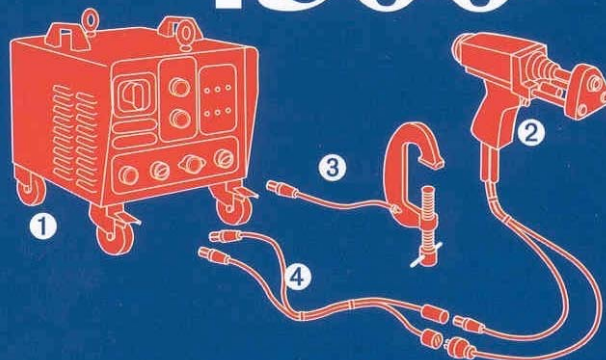


Nelson® Model 101 Series 4500



System Configuration

| Item | Description | Part Number |
|------|--------------------------------------|-------------|
| 1 | Power/control unit, 230/460/575v | 77-04-05 |
| 1B | Power/control unit, 220/380/415/440v | 77-04-07 |
| 2 | NS 40 Welding Gun | 751-585-500 |
| 3 | Ground Cable and Clamp | 720-070-002 |
| 4 | 25 ft. Combination Cable | 722-000-058 |

Options

| | |
|-------------------------------------|-------------|
| NS 40 Short Cycle Welding Gun | 751-585-570 |
| Steel Tranquil-Arc (NS 40 only) | 512-241-000 |
| Aluminum Tranquil-Arc® (NS 40 only) | 512-241-100 |

Features & Benefits

- Operates from 3 phase power for a smoother, more stable arc.
- Fully regulated current output adjusts for cable heating or primary power fluctuations, insuring optimum weld quality & consistency.
- Integral chuck saver circuitry prevents accidental damage to gun parts.
- Designed with cooling fan and thermo-overload circuitry to protect system in extreme operating environments.
- LED's assist in trouble-shooting and informs user of proper operation.
- Infinitely adjustable weld and time controls for precise adjustment of weld parameters.
- Short Cycle feature expands applications for thin gauge materials.

Specifications

Power Control Unit

| | |
|--------------------|---|
| Transformer Rating | 850 amps |
| Stud Range | 1/8"–1/2" (3mm–13mm) |
| Input voltage | 230/460/575v, 60hz. 220/380/415/440v, 50/60hz. |
| Fusing | 30 amp @ 460v 60 amp @ 230v |
| Timing Control | .01 – 1.0 seconds, stepless |
| Regulated Output | 200 – 850 amps, stepless, regulated output |
| Case Dim. | 12-1/2" H x 14-1/2" W x 21-1/2" D (318mm x 368mm x 546mm) Excluding wheels and handles/eyes |
| Weight | 149 lbs. (68kg) |

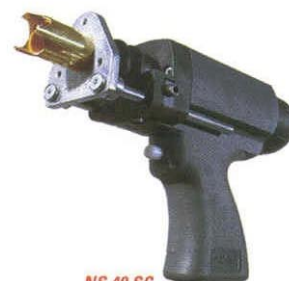
Recommended Settings—Drawn Arc

| Stud Dia. | Weld Base Dia. | Time/Sec. | Current/Amps |
|-------------|----------------|-----------|--------------|
| 3/16" (5mm) | 0.187 | 0.15 | 300 |
| 1/4" (6mm) | 0.250 | 0.17 | 425 |
| 5/16" (8mm) | 0.312 | 0.25 | 500 |
| 3/8" (10mm) | 0.375 | 0.33 | 550 |
| 1/2" (13mm) | 0.448 | 0.55 | 800 |

Duty Cycle—Drawn Arc

Rated at continuous operation

| | |
|-------------|---------------|
| 1/2" (13mm) | 3 per minute |
| 3/8" (10mm) | 7 per minute |
| 5/16" (8mm) | 10 per minute |
| 1/4" (6mm) | 12 per minute |



NS 40 SC
Short Cycle Gun



NS 40
Standard Duty Gun

Guns

Standard Duty Drawn Arc—

NS 40, two wire, 751-585-500

Short Cycle—

NS 40 SC, two wire, 751-585-570

| | NS 40 | NS 40 SC |
|-----------------------------------|----------------------|---------------------|
| Gun Capacity | 5/8" (16mm) | 3/8" (10mm) |
| Length | 7-1/2" (190mm) | 7-1/2" (190mm) |
| Weight w/o cables | 3 lbs. 1 oz.(1.4kg) | 3 lbs. 8 oz.(1.6kg) |
| Weight w/working weight of cables | 4 lbs. 10 oz.(2.1kg) | 5 lbs. 4 oz.(2.4kg) |