

N3

innovative thinking on the part of Nelson

The 3rd generation of Nelson stud welding systems boasts the following features:

- **Switched mode power supply** delivers constant current every time
- **DSP** technology for precision parameter control
- **Independent** of the number of weld outputs, system controller works by the principle of distributed intelligence
- **CAN** bus systems handle internal flow of information
- **Ethernet** capability integrated
- **Automated interfaces** include DeviceNet, EtherNet IP, Interbus-S, RS-495 and basic parallel
- **Service-friendly** design incorporates scores of descriptive error and warning messages
- **Energy efficient** low idle power loss helps operator conserve energy
- **Compact construction** with casters



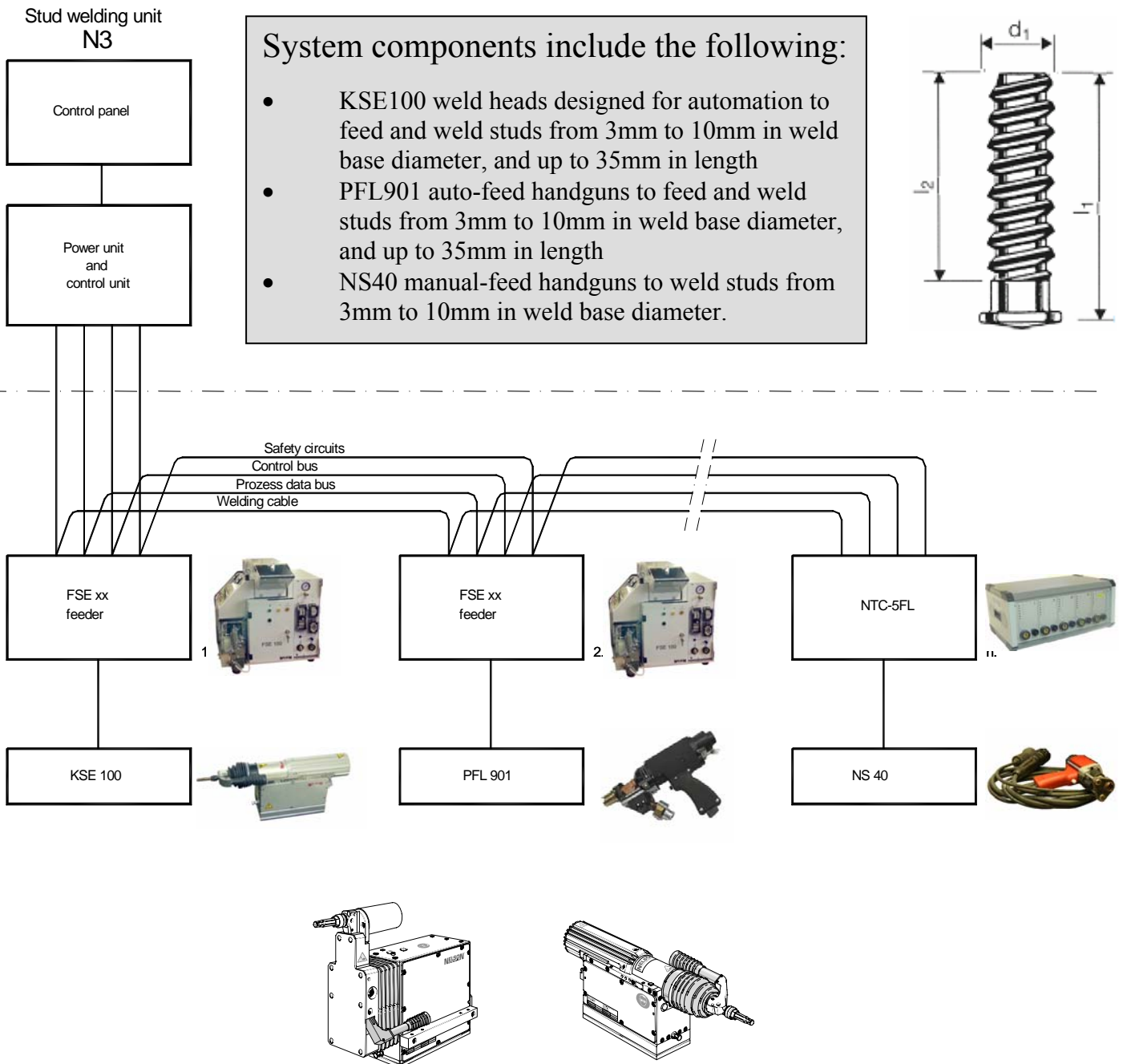
All settings for the N3 and system components are made at the control panel, the control panel has the following features:

- **LCD** display
- **Resolution** of 320 x 240 pixel (1/4 VGA)
- **Graphics**-capable
- **Microprocessor** controlled

Whether you use handguns or robotic servo electric guns, the state of the art N3 provides an unbeatable value

Cost Effective Configuration, only pay for the outlets you want, and will use!

The N3 stud welding inverter has only one weld output to which various system components can be connected in linear configuration. The number of weld outputs is determined **solely** by the **system components needed**. The first set of system components is connected to the N3 stud welding unit, the second set to the first set, etc. This cascading enables the number of weld outputs to be extended or reduced simply by installing or uninstalling system components.



Technical data	Standard Duty	Heavy Duty
Unit name:	Stud welding unit N3	
Unit design:	Standard Duty	Heavy Duty (w/ Cooling Unit)
Input voltage:	3 ~ 400V/440V/480V ($\pm 10\%$)	3 ~ 400V/440V/480V ($\pm 10\%$)
Standard frequency:	50Hz / 60Hz	
Supply fuse rate:	per phase 35A slow-blow (400V)	per phase 35A slow-blow (400V)
Connected load:	122kVA	122kVA
Output:	max. 75kW	max. 75kW
No-load voltage:	$\leq 105V$ DC	$\leq 105V$ DC
Welding sequence:	$\leq 100/\text{min.}^*$	same
Duty cycle:	1,5% (on max. output)	3,5% (on max. output)
Welding current range:	250A – 1800A	250A – 2000A
Step size, adjustable:	10A	10A
Pilot current range:	20A - 100A	20A - 100A
Step size, adjustable:	10A	10A
Weld time range:	5ms - 100ms	5ms - 100ms
Step size, adjustable:	1ms	1ms
Pilot arc range:	40ms – 100ms	40ms – 100ms
Step size, adjustable:	1ms	1ms
Ambient temperature ranges:		
- Storage temperature:	-25° C to +55° C	
- Operating temperature:	0° C to +40° C	
Cooling method:	Self-cooling (AN)	
Relative air humidity:	0% - 50% at 40°C	
	0% - 90% at 20°C	
Dimensions:	675mm x 560mm x 915mm (SD)	
	675mm x 675mm x 915mm (HD)	
Weight:	ca. 120kg (includes keypad and cable)	

Protective measures

Degrees of protection provided

by enclosures: IP-Code 21

Class of protection: 1 (one)

* depending on stud type and number of outlets in use

