

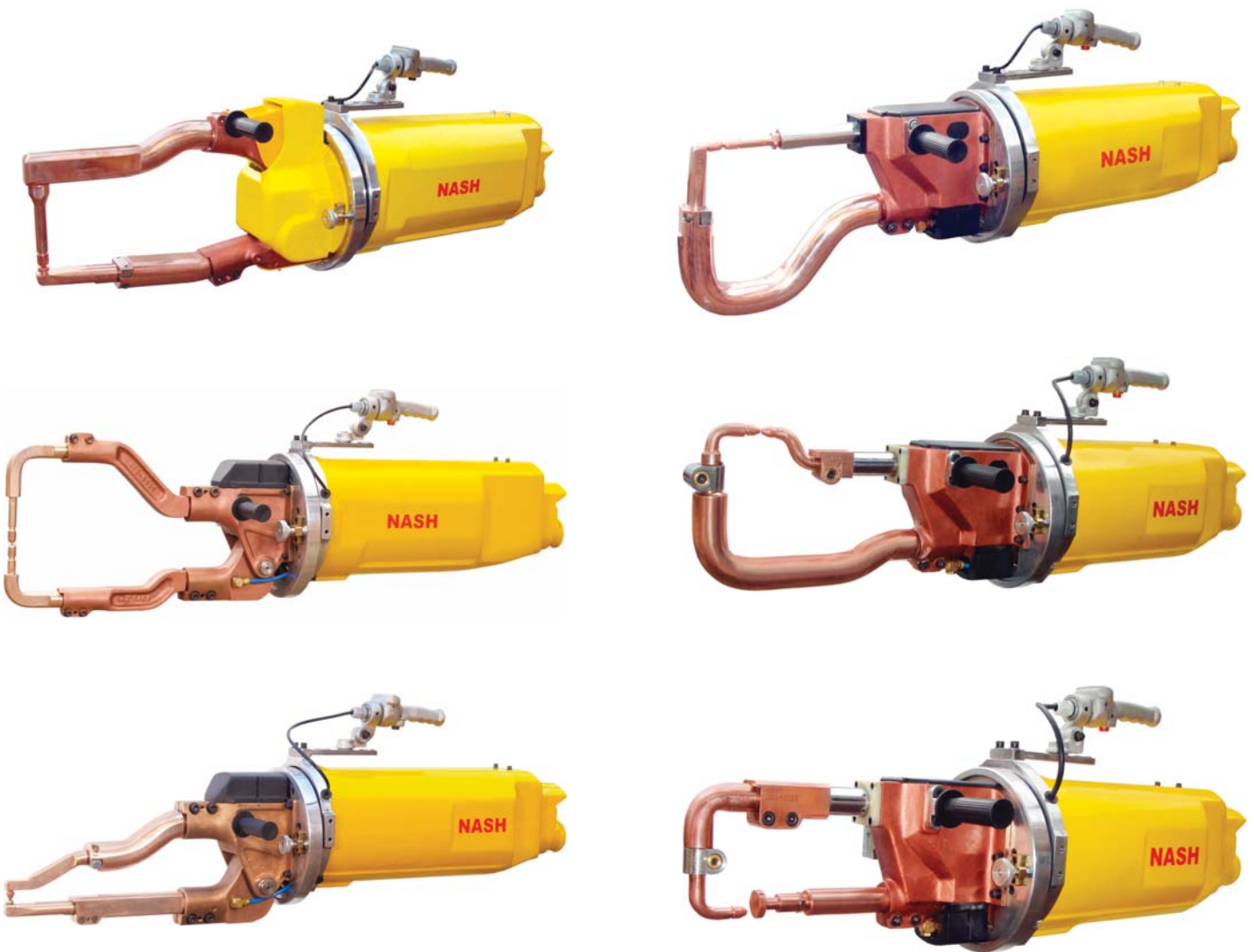


INTEGRAL TRANSFORMER GUNS

Slimline Series

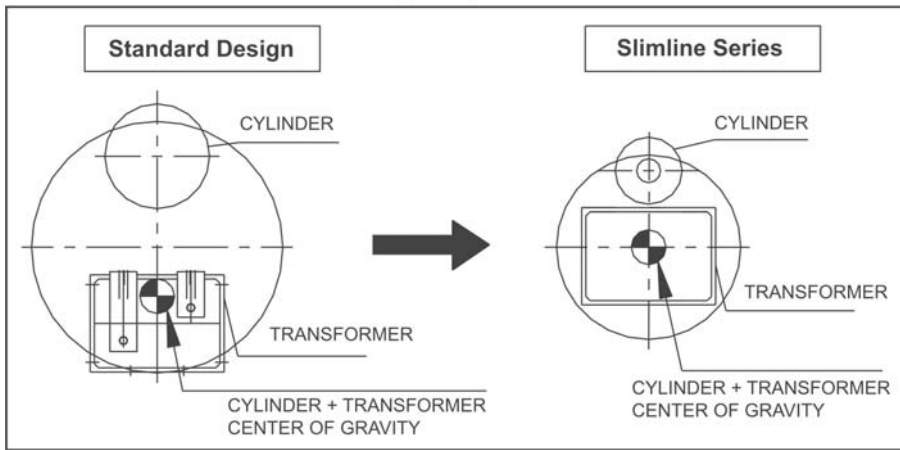
A/C / MFDC / SERVO

- Compact Design
- High Conductivity Copper Alloy Brackets for Higher Electrode Force
- Modular Multistage Cylinder



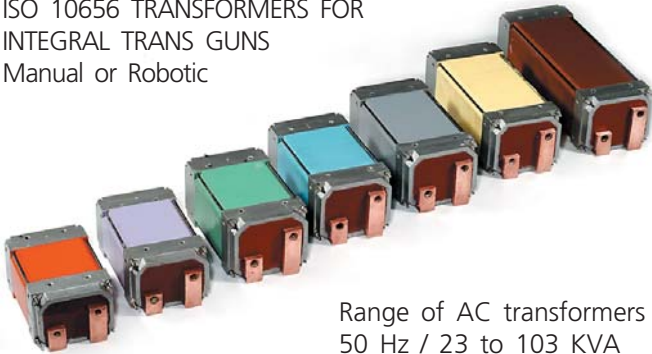
- ISO Transformers 23 KVA - 103 KVA.
- Medium frequency transformers 56 KVA - 600 KVA.
- **Medium Frequency guns 56 KVA - 250 KVA.**
- Weld forces upto 850 kgs.
- Hi-Lift facility on all guns.
- Gun locking facility in rotary and vertical plane.
- Easy maintenance as all guns are of modular construction.
- Constant current through primary and secondary.
- Thermostats on primary and secondary for total thermal protection.
- Emergency switch provided on gun (Optional).
- Selection switches on handle - 2 weld programs, weld on/off, Hi-lift and initiation.
- Special automotive standard safety to give 30ms/30mA tripping.

Handling Improvement

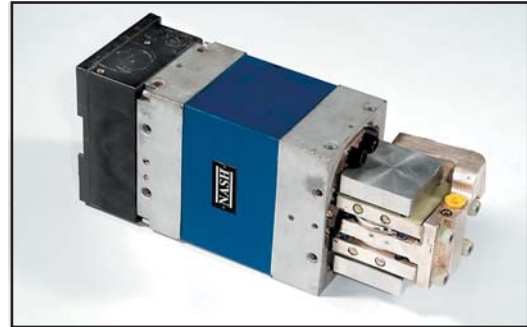


- Simplification of parts and module
- Slim line range covers a wide range of forces and currents while preserving optimum ergonomics.
- Multi stage cylinder.
- Multi position handle.
- Centre of gravity at centre of welding gun location.
- Easy maintainability
- Complete range can be equipped with AC or MFDC Transformers.

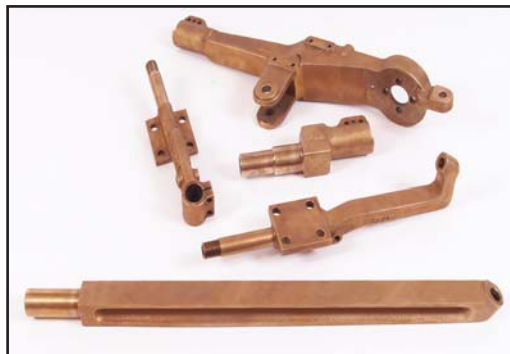
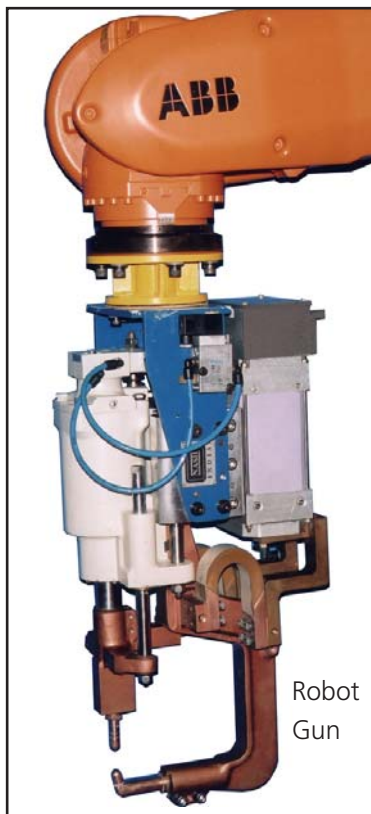
ISO 10656 TRANSFORMERS FOR INTEGRAL TRANS GUNS
Manual or Robotic



Range of AC transformers -
50 Hz / 23 to 103 KVA



Medium Frequency Transformer
1000 Hz / 56 to 600 KVA

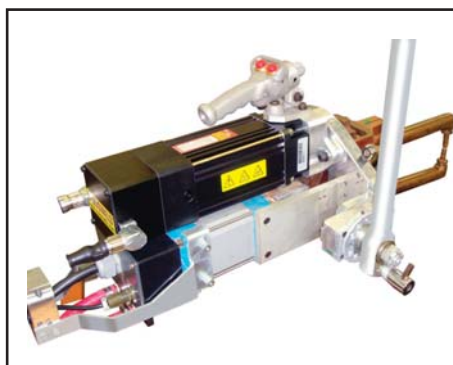


Cast Gun Arms Class 3 Alloy, Be Cu

SEAM - NASH has its own most modern non-ferrous foundry where each and every Gun arm is processed under strict quality checks. Every SEAM - NASH Guns casting is internally cooled with water tubes which extend through the entire length of current path. These water tubes are cast in place and are accessible from both sides of Gun.



Round Gun Arms
Class 3 Alloy, Be Cu



Servo Gun

- Integrated Actuator / Motor / Feedback
- Anti-Rotation
- Ball Screw or Roller Screw
- Zero Maintenance
- No forced cooling required
- Low cogging torque for better repeatability, independent of position. This results in higher quality welds.
- Upto 12 Million Cycle Life
- Short Body Length
- High Force
- High Speed
- Manual Override

MICROPROCESSOR WELD TIMERS

Wide range of models are available for detailed features please refer separate catalogue.



Timer with Built-in Programmer



Timer with MCCB, Detachable Programmer and Reset Box



Mechanical Reset Box



Digital Weld Monitor (Reset Box) with optional job counter for easy monitoring and programming of spot count and job count from weld monitor itself.

MEDIUM FREQUENCY CONTROLLER



Medium Frequency Advantages :

- Three Phase load distribution.
- Very high secondary current capability due to reactance component being zero.
- Lower Peak Currents.
- Reduced splashing due to lower peak current.
- Much higher electrode life - 10 times more.
- Reduced energy costs - 25 to 30% less.
- Light weight transformers.
- High power efficiency.
- Can reduce robot costs.
- Higher rate of heat input.
- Shorter weld times.

Capsule Models LCD / LED Display, Vertical / Horizontal



- Constant current facility primary or secondary
- Option of Single Gun / Dual Gun
- Alphanumeric LCD backlit display
- Upto 128 weld programs
- Online programming
- Option of detachable programmer or built-in programmer
- Direct programming in KA
- Impulses
- Slopes
- Stepper
- Clock display
- Tip dress count
- Weld count
- Chain sequencing and batch count
- Error messages are displayed in description form
- Computer networking and serial communication facility
- **Online Graphical Spot Monitoring**
- **Live SPC graphs facility**
- Vehicle Spot history
- Choice of electronic weld monitor or mechanical pendant
- ELR, MCCB optional
- **Kickless Cable Deterioration Monitoring**
- Proportional pressure regulator output
- Selection of CT through programmer

WELD CHECKER (AC & DC) Features:



- A hand held, battery powered weld analyser is, a sophisticated instrument to fulfill the demands of measurement, accuracy and weld quality analysis of today's welding technology.
- Easy operation setup, highly presentable data, and analysis of the weld, to full depth, makes it the most suitable unit to fulfill these demands.
- Battery powered with Auto-Off.
- Weld analysis up to every half (10 ms.) cycle.
- Measures weld current, weld time (cycle/ms), conduction angle, No. of pulses in the weld.
- Measurement data of last 1000 welds, is saved on the main part of a measuring instrument.

Specifications - 50 Hz AC

"SCISSORS" TYPE		X - 23	X - 32	X - 36	X - 48	X - 54	X - 61	X - 75	X - 103
"C" TYPE		C - 23	C - 32	C - 36	C - 48	C - 54	C - 61	C - 75	C - 103
Power at 50% DC	KVA	23	32	36	48	54	61	75	103
Power at 100% DC	KVA	16	23	26	34	38	43	54	73
Secondary Volts V		4.5	5.6	6.3	6.3	7.1	8	10	13.5
Short Circuit Current (MIN.TD.) KA		14	16	18	18	20	24	26	30
Primary cable cross section	mm ²	10	10	10	10	10	16	25	35
Max Welding Capacity	MS Sheet Round	1.5 + 1.5 8 + 8	2 + 2 10 + 10	2.5 + 2.5 12 + 12	2.5 + 2.5 12 + 12	3 + 3 14 + 14	4 + 4 16 + 16	4 + 4 16 + 16	5 + 5 20 + 20
Throat Gap "X" type	i	100	100	100	150	150	150	150	150
	ii	150	150	150	200	250	250	250	250
	iii	200	200	200	250	300	300	300	300
Throat Gap "C" type	i	110	110	110	110	110	110	-	-
	ii	200	200	200	200	200	200	-	-
	iii	300	300	300	300	300	300	-	-
Throat Depth "X" type	min	190	190	190	255	255	255	255	255
	max	800	800	1030	1030	1030	1030	1030	1030
Weld Force (6 bar)	'x'	350	350	350	500	680	680	850	850
Max on 250 mm Arms	'c'	450	450	450	450	450	450	450	450
Water Flow @ 2 bar	lpm	10-12	10-12	10-12	10-12	10-12	10-12	10-12	10-12
Weight without arms	Kgs	50	53	55	75	78	82	90	102

Specifications - MFDC 1000 Hz

X Type		X - 56	X - 75	X - 100	
C Type		C - 56	C - 75	C - 100	
Power at 50%		KVA	56	75	100
Secondary Volts		V	6.3	8	9.0-10.0
Short Circuit Current (Min. TD)		KA	18	25	30
Max. Welding Current		KA	14.4	20	24
Supply Power		KVA	68	120	162
Max. Welding Capacity (MS Sheets)		mm	2.5 + 2.5	3.0 + 3.0	4.0 + 4.0
Distance between Arms X' Type	I		100	150	150
	II	mm	150	200	200
	III		200	250	300
Distance between Arms C' Type	I		100	100	100
	II	mm	200	200	200
	III		300	200	300
Throat Depth	min	mm	190	190	250
	max	mm	500	800	1200
Weld Force at 6 bar	X-Gun	Kgf.	350	500	850
Max. on 250 mm Arms	C-Gun	Kgf.	450	450	450
Weight without Electrode Arms			50	59	90

Gun with higher throat depths can be supplied. • Gun with higher electrode forces can be supplied.

NASH reserves the right to change specifications and appearance without prior notice.

NASH Robotics and Automation Pvt. Ltd.

ISO 9001 Company

93/9, MIDC, Satpur, Nashik 422 007, India
 Phones : +91 - 253 - 2353382, 2352180, 2350680
 Fax : +91 - 253 - 2351780
 Email : co@nashrobotics.com
 Web : www.nashrobotics.com

