



Induction Systems & Accessories

Induction Units, Accessories & Repair kits

Induction Systems

Through years of research and development, Mannings USA has made Induction Heating an integral part of an outage. Mannings Induction Equipment has proven itself reliable dependability and safety. This system is highly portable simple to operate and robust in construction - everything needed to provide excellent results.

Design Features:

- Complete Solid State System - Reliable, high power factor, fully tested and 100% duty cycle rated.
- Automatic Frequency Matching - The inverter frequency will automatically match to the load resonant frequency.
- Electronic circuit protection - Automatic fast action transistor shutdown for system protection. (No special fuses required)
- Soft Start Front End - No excessive power surge when the primary power is applied.
- Electronic Control - A single electronic circuit board, common to all power levels and frequencies, controls the inverter functions.
- Regulated Power Output - Constant power regulation within +/- 5% at a 10% input line voltage.
- Conservative Power Rating - Component specifications exceed power requirements. Full power rating output at 100% duty cycle.
- Automatic Limiting - Out of range tuning limits automatically hold the system within safe power ranges.
- Operator Control - System controls include on/off switch, emergency stop, and power level control.
- Remote Control - Optically isolated full function interface circuit board provided.
- Operator Interface - Front Panel LED indicators for limit, fault, and heat on LCD screen message display for operating condition. Analog meters display power level and load resonant frequency.
- Access Safety Switches - Safety switches on all access doors to prevent or cease operation if doors are not closed.
- Isolated Short / Ground Detector - For additional safety.
- Optional Features - Temperature Profilers and Brazing Attachments.

Mannings Induction Units are the most reliable, user friendly and technically advanced product on the Market!!!!

System Benefits:

- Water Cooled System - no open flames or exposed heating elements.
- Fast & Efficient
- Highly Portable - can be used virtually everywhere.
- Easily Adaptable for a variety of applications.
- Equipment & Technology are proven and reliable.

M5 - 100kW 8-25kHz Induction Brazing Unit



Dimensions: 46 1/2"H x 35"L x 19"W

Input Power: 60 Amp 480 VAC 3 Phase 50/60 HZ

Stock No. **77150**

Built into a self contained cabinet with the following standard features:

- All control functions on a single board
- Built in water pump to cool output coil
- 4 swivel casters (shock absorbing wheels) for easy mobility
- Remote work heat station with 35' lead to enable operation at work area
- Leak proof fittings on main water supply and drain
- Ground fault protection circuit
- Analog meters on front panel for both power level and frequency
- LCD display to show status of power supply
- 0-100% adjustable power level
- Self tuning 8-25kHz
- 12 GPM @ 30 PSI

M5 - 50kW 8-25kHz Induction Unit



Dimensions: 34"H x 35"L x 19"W

Input Power: 60 Amp 480 VAC 3

Stock No. **77000**

Built into a self contained cabinet with the following standard features:

- All control functions on a single board
- Built in water pump to cool output coil
- 4 swivel casters (shock absorbing wheels) for easy mobility
- Remote pendant with 35' lead to enable operation at work area
- Leak proof fittings on main water supply and drain
- Ground fault protection circuit
- Analog meters on front panel for both power level and frequency
- LCD display to show status of power supply
- 0-100% adjustable power level
- Self tuning 8-25kHz

M5 - 100kW 8-25kHz Induction Unit



Dimensions: 46 1/2"H x 35"L x 19"W

Input Power: 120 Amp 480 VAC
3 Phase 50/60 HZ

Stock No. 77100

Built into a self contained cabinet with the following standard features:

- All control functions on a single board
- Built in water pump to cool output coil
- 4 swivel casters (shock absorbing wheels) for easy mobility
- Remote pendant with 35' lead to enable operation at work area
- Leak proof fittings on main water supply and drain
- Ground fault protection circuit
- Analog meters on front panel for both power level and frequency
- LCD display to show status of power supply
- Self tuning 8-25kHz
- Built in output coaxial cable
- 8 GPM @ 30 PSI

M5 - 100kW 3-10kHz Induction Unit



Dimensions: 54 1/4"H x 52"L x 27"W

Input Power: 150 Amp 480 VAC
3 Phase 50/60 HZ

Stock No. 75100

Built into a self contained cabinet with the following standard features:

- All control functions on a single board
- Built in water pump to cool output coil
- 6 swivel casters (shock absorbing wheels) for easy mobility
- Remote pendant with 35' lead to enable operation at work area
- Leak proof fittings on main water supply and drain
- Ground fault protection circuit
- Built in timer that can be utilized for repetitive operations
- Analog meters on front panel for both power level and frequency
- LCD display to show status of power supply
- 0-100% adjustable power level
- Self tuning 3-10kHz
- Built in output coaxial cable
- 8 GPM @ 30 PSI

200kW Induction System with Remote Heat Station



Dimensions: 54 1/4"H x 52"L x 27"W
Input Power: 300 Amp 480 VAC
 3 Phase 50/60 HZ

Stock No. **75050**

Built into a self contained cabinet with the following standard features:

- All control functions on a single board
- 6 swivel casters (shock absorbing wheels) for easy mobility
- Separate - Remote heat station with 35' secondary and interlock cables to enable operation at work area
- Leak proof fittings on main water supply and drain
- Ground fault protection circuit - with digital meter
- Analog meters on front panel for both power level and frequency
- LCD display to show status of power supply
- Dual water cooled secondary power buss connection blocks
- 2 - 50ft flexible water cooled coils
- 8 - 50ft quick disconnect water hoses
- 1 - Stealth Cap
- 0-100% adjustable power level
- Self tuning 3-10KHZ
- 15 GPM @ 30 PSI

10 Ton Standard Chiller for 200kW Induction Unit



Stock No. **75000**

Built into a LD3 container for easy transportation by AIR or GROUND:

- Air to water system
- High volume pump
- Digital water temperature meter on reservoir tank
- Fluid level sight glass
- Self protected motor starter on primary and secondary loops
- Hermetically sealed compressor
- Quick disconnect fittings
- All brass valves on discharge & return ports
- Secondary heat exchanger for additional cooling capacity
- Variable temperature control system
- Engineered for longevity and performance

1/2 Chiller (Add-On)



Designed to the Standard Chiller for increased capacity -Features Include:

- Air to water system
- High volume pump
- Self protected motor starter on primary and secondary loops
- Hermetically sealed compressor
- Quick disconnect fittings
- All brass valves on discharge & return ports
- Variable temperature control system
- Engineered for longevity and performance

Stock No. **75001**

15 Ton Shop Chiller System



- Designed for use in shop environments where transporting the unit is not essential
- The latest evolution in Mannings chiller development
- The 7.5 x 2 chiller system is two 7.5 ton chiller systems in one frame and staged for efficiency and reliability
- A pre set temperature control system and one 3 position switch for off, pump only and chilling
- A secondary heat exchanger is included for added capacity, but it is independently controlled via a temperature differential controller that sense the need for extra cooling and automatically turns on the heat exchanger fan accordingly

Dimensions: 74"H x 31"W x 98"L

Input Power: 60Amps 480VAC 3 Phase

Stock No. **75002**

Features Include:

- 3 HP secondary pump
- Stainless Steel Tanks
- Water Level switch indicator light
- Secondary heat exchanger w/ auto control
- Brazed plate heat exchangers
- Thermostatic expansion valve
- Liquid line filter dryer
- Heavy duty Steel frame

Induction Heating - Components & Accessories

Stock No.	Description
75051	(200kW) - inverter power supply
75052	(200kW) - Matching heat station
75059	(100kW and 200kW) - Ground fault protection with digital meter
75060	(200kW) - Accessory Tool Box
75065	(100kW and 200kW) - Water flow digital readout (G.P.M.)
75080	(100kW and 200kW) - A.C. Analog Current Meter Package
75085	(100kW and 200kW) - SCR Failure Indicator Package
75101	(100kw) - Bolt Heating System "Complete"
75105	(100kw and 200kw) - Tool box with complete set of hand tools and fittings to support the unit
75106	(100kW and 200kW) - Input power volt meter (3) 1 per phase
75110	(100kW and 200kW) - Tappable transformer to enable a unit to perform other functions such as thermal expansion
75220	(200kW) - 35 foot load station to inverter secondary cables
75311	(100kW and 200kW) - 50 foot single flexible water cooled coil 5/16
75312	(200kW) - 50 foot dual flexible water cooled coils 5/16
75313	(100kW and 200kW) - 50 foot single flexible water cooled coil 3/8
75314	(200kW) - 50 foot dual flexible water cooled coil 3/8
75320	(200kw) - Dual water cooled secondary power buss connection blocks
75330	(200kW) - Dual water cooled coil splitter
75339	(100kW and 200kW) - 50' long 3/4" water hoses with leak proof fittings
75340	(100kW and 200kW) - 50' foot water hoses wit quick disconnect
75341	(200kW) - LD3 Container (Complete)
75401	Swivel Kit
75404	(200kW) - 35 foot load station to inverter interlock cables
76212	(100kw and 200kw) - D.C. Buss Volt Meter
76413	(200kW) - Stealth Cap
76502	Installation Kit for Pressure Switch
76608	(100kw and 200kW) - Primary power plug for client's primary power cable to unit
76629	(100kw) - 25' long co-ax cable from machine to inductor
81800	(100kW and 200kW) - Temperature programmer (Thermocouple Type "K") input
Next Page	(100kW) - Custom made inductors (wands) to fit your requirement

Bolt Heating Inductors

Inductor Type	To Fit Bore	Stock No.
X-SMALL	.475"-.600"	77205-1
	12mm-15mm	77205-2
		77205-3
		77210-1
SMALL	.610"-.720"	77210-2
	16mm-18.5mm	77210-3
		77210-4
		77215-1
EURO 18	.720"-.820"	77215-2
	18.5mm-21mm	77215-3
		77215-4
		77220-1
MEDIUM	.760"-.840"	77220-2
	19.5mm-22mm	77220-3
		77220-4
		77225-1
21mm	.840"-.955"	77225-2
	21.5mm-23.5mm	77225-3
		77225-4
		77227-1
INCH	.955"-1.065"	77227-2
	24.5mm-27.5mm	77227-3
		77227-4
		77230-1
LARGE	1.065"	77230-2
	27.5mm-31.5mm	77230-3
		77230-4
		77235-2
31mm	1.230"-1.330"	77235-3
	31.5mm-34.5mm	77235-4
		77236-2
34mm	1.350"-1.450"	77236-3
	34.5mm-37mm	77236-4
		77240-2
X-LARGE	1.450"-1.550"	77240-3
	37mm-40.5mm	77240-4
		77245-2
61mm	2.410"-2.510"	77245-3
	61mm-64.5mm	77245-4



Stock No. **77210-1**

Induction Systems

Induction Repair Kits

Spare Parts Kit (Evolution 2-200kW)

Comes with: A set of manuals and prints and is enclosed in a blue foam-lined carrying case.

Stock No. **76621**

Stock No.	(Repair Kit Parts Include)	Quantity
76010	Breaker Board	1
76020	Analog Board	1
76030	Digital Board	1
76040	System Input / Output Board	1
76050	Driver Board	1
76060	Line Filter Board	1
76110	R270 Power SCR	4
76111	398 Main SCR	1
76112	158 Commutator SCR	1
76113	Power Diode + PHR	3
76114	Power Diode - PHN	3
76115	SM 18 Feed Back Diode	4
N.P.N.	IN4007 Commutator Charge Rectifiers	2
N.P.N.	10 Watt ONE OHM Resistor	1



Spare Parts Kit (Evolution 4-100kW)

Comes with: A set of manuals and prints and is enclosed in a black with silver trim foam-lined carrying case.

Stock No. **76622**

Stock No.	(Repair Kit Parts Include)	Quantity
76615	Main Control Board Assembly*	1
76615A	Control Board Base	1
76615B	Remote Board	1
76615C	Driver Board	1
76615D	Application Board	1
76601	Main Transistor	1
76617	Rectifier Module	3
76115	Stack (Feedback) Diodes	4
76110	Stack (Power) SCR's	4
76602	Diode # D7	1

*Main Control Board Assembly Includes 76615A, 76615B, 76615C, 76615D

Spare Parts Kit (Evolution 4-200kW)

Comes with: A set of manuals and prints and is enclosed in a white foam-lined carrying case.

Stock No. **76623**

Stock No.	(Repair Kit Parts Include)	Quantity
76615	Main Control Board Assembly*	1
76615A	Control Board Base	1
76615B	Remote Board	1
76615C	Driver Board	1
76615D	Application Board	1
76601	Main Transistor	1
76617	Rectifier Module	3
76115	Stack (Feedback) Diodes	4
76110	Stack (Power) SCR's	4
76602	Diode # D7	1

*Main Control Board Assembly Includes 76615A, 76615B, 76615C, 76615D

Spare Parts Kit (Evolution 5-50kW)

Comes with: A set of manuals and prints and is enclosed in a

Stock No. **76624**

Stock No.	(Repair Kit Parts Include)	Quantity
77114	Control Board Base	1
77115	High Voltage Board	1
77116	Driver Board	1
77117	Personality Board	1
77002	Transistor Package	1
77011	Rectifier Module	1

Spare Parts Kit (Evolution 5-100kW)

Comes with: A set of manuals and prints and is enclosed in a black foam-lined carrying case.

Stock No. **76625**

Stock No.	(Repair Kit Parts Include)	Quantity
77114	Control Board Base	1
77115	High Voltage Board	1
77116	Driver Board	1
77118	Personality Board	1
77002	Transistor Package	1
77111	Rectifier Module	3