MARITIME STRESS IS COMMITTED TO PROVIDING HIGH QUALITY PRODUCTS AT COMPETITIVE PRICES.
Since the establishment of our business in 1980, Maritime Stress became the preferred supplier for Pre-heat and Post Weld Heat Treatment products, rentals and services to the Offshore/Onshore Oil and Gas Industries, Generating Stations, Refineries, Fabrication and Welding Shops, Shipyards, Pulp & Paper Mills…

Index

HEAT TREATMENT CONSOLES
- P2003-6-NC Automatic Heat Treatment Console, Page 3
- P2003-6 Automatic Heat Treatment Console, Page 4
- P2003-6, P2003-6-NC & PB2003-6 Specifications, Page 5
- PB2003-6 Automatic Heat Treatment Console, Page 6
- B2002-6 Basic Heat Treatment Console, Page 7

SPARE PARTS FOR HEAT TREATMENT CONSOLES, Page 8

6 CHANNEL P256 AUTO PROGRAMMER - CONTROLLER, Page 9

TWO-ZONE CONSOLE, Page 10
TWO-ZONE CONTROLLER, Page 11

DIGITAL TEMPERATURE RECORDERS, Page 12

THERMOCOUPLE WELDING UNITS
- Manual Thermocouple Welding Unit, Page 13
- Automatic Thermocouple Welding Unit, Page 13

SECONDARY CABLES AND SPLITTERS, Page 14

TEMPERATURE MEASUREMENT, Page 14
- Thermocouple Wire, Page 14
- Shielded Thermocouple Extension Wire, Page 14

CERAMIC PAD HEATERS, Page 15
- 80 Volt Ceramic Pad Heaters Chart, Page 15
- 60 Volt Ceramic Pad Heaters Chart, Page 15
- Round/Square Magnet Assembly, Page 15

CABLE AND HEATER CONNECTORS, Page 16

ACCESSORIES, Page 17 & Page 18
- Ceramic Replacement Beads, Page 17
- Heating Element Repair Kits, Page 17
- Heater Core Wire, Page 17
- Nickel 212 Cold Tail Wire, Page 17
- Male/Female 300 amp Panel Mounts, Page 18
- Energy Regulators, Page 18
- 200 amp Contactor, Page 18
- Male/Female Thermocouple Plugs, Page 18
- Fiber Tape/Tie Wire, Page 18

3 PHASE ISOLATION TRANSFORMER, Page 19
THE P2003-6-NC WITH AUTOMATIC PROGRAMMER AND TEMPERATURE RECORDER TO ACCOMMODATE YOUR ON-SITE HEAT TREATMENT APPLICATIONS.

P2003-6-NC Automatic Heat Treatment Console:

Standard Features are:

- 75 KVA (3 phase) isolated copper wound power transformer: Primary Voltage: 380/415/440/480/575, 50/60 Hz Secondary Voltage 65/85 with thermal trips per phase to prevent overload.
- Internal 12 Channel Chino Digital Recorder (Simultaneous Display/12 Channels/°C or °F) 180mm/7” Chart (model AH3725-N00)
- Automatic programmer FGHP256 (°C or °F) controls temperature rate of rise, length of hold time and rate of cool. User friendly and simple operation
- Digital amp meter (0-200 amps) with six-channel selector switch and six current transformers which is the utmost importance for checking the current to the ceramic pad heater to make sure they are all operating.
- Painted steel cabinet with swivel wheels (900 lb capacity each with brake) and two lifting lugs. **SS mounting brackets available upon request.**
- One 340 CFM cooling fan which keeps all instrumentation and transformer cool.
- One 110 volt auxiliary plug.
- 100 amp - 3 phase circuit breaker with 120 volt uv release.
- Six 200 amp contactors (100% duty cycle).
- Six 110 volt neons and six two way on off switches.
- Instrument wiring tinned copper to prevent corrosion and down time.

Dimensions: 31"L x 27"W x 45"H
Weight: 950 lbs (approx.)
P2003-6 Automatic Heat Treatment Console:

Standard Features are:

- 75 KVA (3 phase) isolated copper wound power transformer: Primary Voltage: 380/415/440/480/575, 50/60 Hz Secondary Voltage 65/85 with thermal trips per phase to prevent overload.
- Internal 12 Channel Chino Digital Recorder (Simultaneous Display/12 Channels/°C or °F) 180 mm/7” Chart (model AH3725-N00)
- Automatic programmer FGHP256 (°C or °F) controls temperature rate of rise, length of hold time and rate of cool. User friendly and simple operation
- Six digital temperature controllers (°C or °F) with ramp rate in degrees/hr to set point and capable of performing up to six different processes at a time (1/8 DIN)
- Digital amp meter (0-200 amps) with six-channel selector switch and six current transformers which is the utmost importance for checking the current to the ceramic pad heater to make sure they are all operating.
- Painted steel cabinet with swivel wheels (900 lb capacity each with brake) and two lifting lugs. **Wheels or SS mounting brackets available upon request.
- One 340 CFM cooling fan which keeps all instrumentation and transformer cool.
- One 110 volt auxiliary plug.
- 100 amp - 3 phase circuit breaker with 120 volt uv release.
- Six 200 amp contactors (100% duty cycle).
- Six 110 volt neons and six two way on off on switches.
- Instrument wiring tinned copper to prevent corrosion and down time.
The P2003-6, P2003-6-NC & PB2003-6 automatic heat treatment consoles are designed to control various heat treatment processes by closely monitoring and adjusting the temperature rate of rise and fall, the soak temperature, set point and duration, on up to 6 zones. Each zone can be used either in the fully automatic or manual mode. It incorporates the latest microprocessor based technology and is simple to set up and operate. Control setting is by means of push switches and an LCD screen provides visual indication of program position and output status at any time.

The P2003-6 & P2003-6-NC are equipped with a 12 channel strip chart recorder to provide permanent records of the heating operation in either digital or analog trend mode, or a combination of both. The P2003-6, P2003-6-NC & PB2003-6 are equipped with a digital amp meter and a 6 position selector switch, which is the utmost importance for checking the current to the ceramic pad heaters to make sure they are all operating.

**Inputs:**

- **Voltage:** 380-415-440-480-575, 3 Phase
- **Current:** 100 amp or optional 125 amps for 380/415 VAC
- **Power:** 75 KVA Isolated Copper Wound
- **Frequency:** 60 Hz / 50 Hz

**Output Per Zone:**

- **Zones:** 6
- **Voltage:** 65 or 85 VAC, single phase
- **Current:** 192 amps @ 65 V or 156 amps 85V
- **Power:** 12.5 KVA
- **Activation:** 200 amp contactor
- **Control per zone:** Digital temperature control via 6 Channel Programmer/Controller

**Control Circuit:**

- **Voltage:** 110 VAC, single phase
- **Current:** 5 amp circuit breaker
- **Power:** 1.2 KVA winding on power transformer
- **Auxiliary:** 110 VAC supply, single phase

**6 Channel Temperature Programmer/Controller:**

- **Temperature Range:** 0-2000°F or 0-1200°C
- **Thermocouple:** Type “K”
- **Resolution:** Measurement 0.1 degrees / Display 1.0 degree

**Digital Recorder (P2003-6 & P2003-6-NC Models Only):**

- **Accuracy:** Type “K” +/- 0.2% +/- 1 digit
- **Chart:** Fan-fold type, 180mm

**Digital Amp Meter:**

- **Primary Amperage:** Up to 200 amps
- **Secondary Amperage:** 5 amps

**Protection:**

- **120-VAC Control Circuit:** 5 amp circuit breaker
- **Heater Power:** Isolation contactor for each zone
- **Console Power:** 100 amp main circuit breaker
- **Power Transformer:** 392°F (200°C) over temperature thermostat per phase
- **Cooling fan:** 340 CFM - Thermally protected
PB2003-6 Automatic Heat Treatment Console:

Standard Features are:

- 75 KVA (3 phase) **isolated** copper wound power transformer: Primary Voltage: 380/415/440/480/575, 50/60 Hz Secondary Voltage 65/85 with thermal trips per phase to prevent overload.
- Automatic programmer FGHP256 (°C or °F) controls temperature rate of rise, length of hold time and rate of cool. **User friendly and simple operation**
- Digital amp meter (0-200 amps) with six-channel selector switch and six current transformers.
- Painted steel cabinet with swivel wheels (900 lb capacity each with brake) and two lifting eye lugs.
- One 340 CFM cooling fan.
- One 110 volt auxiliary plug.
- 100 amp - 3 phase circuit breaker with 120 volt uv release.
- Six 200 amp albright contactors (100% duty cycle).
- Six 110 volt neons and six two way on off on switches.
- Instrument wiring tinned copper to prevent corrosion and down time.
BASIC HEAT TREATMENT CONSOLE

Top Inside View

“Instrument wiring tinned copper to prevent corrosion and down time”

8600 Temperature Controllers with ramp soak capabilities (1/8 DIN)

Dimensions: 31"L x 27"W x 45"H
Weight: 900 lbs (approx.)

STATE OF THE ART TECHNOLOGY
SIMPLE OPERATION
SIX ZONES OF CONTROL
COMPACT AND PORTABLE

B2002-6 Basic Heat Treatment Console:

Standard Features are:

- 75 KVA (3 phase) isolated copper wound power transformer: Primary Voltage: 380/415/440/480/575, 50/60 Hz Secondary Voltage 65/85 with thermal trips per phase to prevent overload.
- Six digital temperature controllers (°C or °F) with ramp rate in degrees/hr to set point and capable of performing up to six different processes at a time. (1/8 DIN)
- Digital amp meter (0-200 amps) with six-channel selector switch and six current transformers.
- Painted steel cabinet with swivel wheels (900 lb capacity each with brake) and two lifting lugs.
- One 340 CFM cooling fan.
- One 110 volt auxiliary plug.
- 100 amp - 3 phase circuit breaker with 120 volt uv release.
- Six 200 amp contactors (100% duty cycle).
- Six energy regulators with aluminum knobs and scales.
- Six 110 volt neons and six two way on off on switches.
- Instrument wiring tinned copper to prevent corrosion and down time.
**SPARE PARTS FOR HEAT TREATMENT CONSOLES**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description Of Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB BLUE #2</td>
<td>Painted Steel Cabinet</td>
</tr>
<tr>
<td>900Wheel</td>
<td>Wheels Swivel Caster (900 lb Capacity with brake)</td>
</tr>
<tr>
<td>Bracket</td>
<td>Stainless Steel Mounting Bracket</td>
</tr>
<tr>
<td>AH3725-N00</td>
<td>12 Channel Chino Digital Temperature Recorder (°C or °F)</td>
</tr>
<tr>
<td>8600</td>
<td>Digital Temperature Controller (1/8 DIN)</td>
</tr>
<tr>
<td>(P256)</td>
<td>Six channel digital automatic FGH Programmer (°C or °F)</td>
</tr>
<tr>
<td>75KVA #7</td>
<td>75 KVA - 3 Phase <em>Isolated</em> copper wound power transformer: Primary 380/415/440/480/575, 50/60 Hz Secondary 0/65/85 (Thermal trips per phase to prevent overload)</td>
</tr>
<tr>
<td>Amp Meter</td>
<td>Digital Amp Meter 0-200 amps</td>
</tr>
<tr>
<td>Selector Switch</td>
<td>Six Channel Selector Switch with Plate &amp; Knob</td>
</tr>
<tr>
<td>CT</td>
<td>Current Transformer 0-200 amps</td>
</tr>
<tr>
<td>A10</td>
<td>300 amp Female Panel Mount Socket Complete</td>
</tr>
<tr>
<td>PP-20-KX</td>
<td>Thermocouple Extension Cable</td>
</tr>
<tr>
<td>A37</td>
<td>200 amp contactor (100% Duty Cycle)</td>
</tr>
<tr>
<td>A38</td>
<td>110 Volt Neon</td>
</tr>
<tr>
<td>52F7431</td>
<td>ON/OFF/ON Rocker Switch</td>
</tr>
<tr>
<td>Merlin 100 amp</td>
<td>100 amp - 3 phase Circuit Breaker with 120 volt uv Release</td>
</tr>
<tr>
<td>Merlin 125 amp</td>
<td>Optional for 380/415: 125 amp - 3 phase Circuit Breaker with 120 volt uv Release</td>
</tr>
<tr>
<td>56F874</td>
<td>5 amp Circuit Breaker</td>
</tr>
<tr>
<td>56F876</td>
<td>10 amp Circuit Breaker</td>
</tr>
<tr>
<td>F-A18</td>
<td>Female Thermocouple Panel Mount (Type “K”)</td>
</tr>
<tr>
<td>Fan</td>
<td>340 CFM Cooling Fan</td>
</tr>
<tr>
<td>120 V</td>
<td>120 V Receptacle</td>
</tr>
<tr>
<td>96F4496</td>
<td>3 Pole Terminal Block</td>
</tr>
<tr>
<td>#1 Tinned</td>
<td>#1 Tinned Cable with lugs (please specify length)</td>
</tr>
<tr>
<td>#4 Tinned</td>
<td>#4 Tinned Cable with lugs (please specify length)</td>
</tr>
<tr>
<td>90F7177</td>
<td>Lug 1/0 - 3/8 Hole</td>
</tr>
<tr>
<td>AL1/4</td>
<td>Aluminium Lugs 1/4” Hole</td>
</tr>
<tr>
<td>120 V</td>
<td>120 V Receptacle</td>
</tr>
<tr>
<td>90F7177</td>
<td>Lug 1/0 - 3/8 Hole</td>
</tr>
<tr>
<td>AL1/4</td>
<td>Aluminium Lugs 1/4” Hole</td>
</tr>
</tbody>
</table>
6 Channel P256 Auto Programmer - Controller

Technical Description:

This unit can be used to control various heat treatment processes by closely monitoring and adjusting the temperature rate of rise and fall, the soak temperature, set point and duration, on up to 6 zones. Each zone can be used either in the fully automatic or manual mode. It incorporates the latest microprocessor based technology and is simple to set up and operate. Control setting is by means of push switches and an LCD screen provides visual indication of program position and output status at any time.

The equipment is housed in a robust steel case, with protecting crash bars on either side. It is supplied with a 2m x 3 core trailing lead for 110 V supply and 2m x 12 core lead c/w multi pin socket for contactor control. The six neon indicators in the box indicate when a contactor is energised.

Ordering Information:

MSREF#: P256-A  Six channel digital automatic FGH Programmer (°C or °F)
**TW0-ZONE CONSOLE (TZC2003-2)**

**TZC2003-2 TWO-ZONE CONSOLE:**

- 12.5 KVA/10 KW (1 phase) *isolated* copper wound power transformer: Primary Voltage: 460/575, 60 Hz Secondary Voltage 65 with thermal trip to prevent overload.
- Two digital temperature controllers (0-1200°C or 0-2200°F, Type “K”) with ramp rate in degrees/hr to set point and capable of performing up to two different processes at a time. (1/8 DIN)
- Digital amp meter (0-200 amps) with two-channel switch and two current transformers.
- Painted steel cabinet with feet and two lifting bars.
- Two x 50 CFM cooling fans.
- One 110 volt auxiliary plug.
- 30 amp - 1 phase circuit breaker with 120 volt uv release.
- Two 200 amp contactors (100% duty cycle).
- Two energy regulators with aluminum knobs and scales.
- Two 110 volt neons and 2 x two way on off on switches.
- Instrument wiring tinned copper to prevent corrosion and down time.

**Note:** One two-zone console is capable of heating an area up to 2.5 sq. ft. approximately using a total of 4 x 60 volt ceramic pad heaters.
The portable two-zone controller is designed for post weld heat treatment and preheating applications.

TZ2003-2 takes the output from a transformer or welding machine (AC/DC). Also requires 110 volt power supply.

- Painted blue steel cabinet.
- Two temperature controllers with ramp soak capabilities (1/8 DIN Digital Controllers).
- Two 200 amp contactors (100% duty cycle).
- Two 110 volt neon's.
- 2 x two way on off switches.
- 1 x 5 amp circuit breaker.
- Maximum output per circuit 3 x 60/80 volt ceramic pad heaters = 135 amps
- TZ2003-2 requires 16 kilowatts power source to operate 6 x 60 volt ceramic pad heaters.
- TZ2003-2 requires 22 kilowatts power source to operate 6 x 80 volt ceramic pad heaters.

Note 1: One two-zone controller is capable of heating an area up to 3.75 sq. ft. approximately using 6 x 60 volt heaters.

Note 2: One two-zone controller is capable of heating an area up to 5 sq. ft. approximately using 6 x 80 volt heaters.
6, 12 & 24 CHANNEL 
AH3000 SERIES

DIGITAL TEMPERATURE RECORDER

AH3725-N00-A

FEATURES:
Brilliant color printing
Easy to read digital display
Simple operation
Multi-Point type hybrid recorder °C or °F
Abundant of functions

Weight: 36 lbs
Dimensions: 16” L x 13” W x 14” H

Ordering Information:

MSREF#: AH3765-N00-A: Six channel 180 mm Chino digital recorder assembled in steel enclosure.
MSREF#: AH3725-N00-A: Twelve channel 180 mm Chino digital recorder assembled in steel enclosure.
MSREF#: AH3745-N00-A: 24 channel 180 mm Chino digital recorder assembled in steel enclosure.
**Note: The above come with calibration certificate.

SPARE PARTS:

MSREF#: AH3765-N00: Six channel 180 mm Chino digital recorder only.
MSREF#: AH3725-N00: Twelve channel 180 mm Chino digital recorder only.
MSREF#: AH3745-N00: 24 channel 180 mm Chino digital recorder only.
MSREF#: REC-E-12: Twelve channel steel (blue) recorder enclosure.
MSREF#: REC-E-24: 24 channel steel (blue) recorder enclosure.
MSREF#: EH51089: 180 MM Chino Chart Paper (0-2000°F)
MSREF#: ET201: 180 MM Chino Chart Paper (0-1200°C)
MSREF#: 22026-01330: Chino Ribbon for AH3000 series recorder.
MSREF#: A63: 6 way male to male loom (6’ long)
MSREF#: F-A18: Thermocouple female panel mount (Type “K”)
MSREF#: AH3000-R: Spare recorder door.
THERMOCOUPLE WELDING UNITS

These easy to use compact light weight thermocouple welding units are the optimum devices for attaching thermocouples directly to the work piece by the capacitor discharge method. In which precise temperature measurement is essential.

**TW113**

**FEATURES:**
- Variable Output
- Manual/Automatic Operation
- Portable Design
- Rapid operation
- Site proven reliability
- Built in rechargeable power supply

Dimensions: 7 3/4“ L x 4“ W x 10.5“ H  
Weight: 4.5 KGS

Ordering Information:

**MSREF#: TW113**  Manual/Automatic unit battery operating/mains recharge with auto weld.

**TW9**

**FEATURES:**
- Portable Design
- Rapid operation
- Site proven reliability
- Built in rechargeable power supply

Dimensions: 7.5“ L x 3.5“ W x 9“ H  
Weight: 3.5 KGS

Ordering Information:

**MSREF#: TW9**  Manual unit battery operating/mains recharge.

**MSREF#: TW9V**  Manual unit battery operating/mains recharge with variable output.

**TW9V**
### SECONDARY CABLES AND SPLITTERS:

#### SECONDARY CABLE:

**Features:**
- Provides power for heating applications for the heat treatment consoles, two-zone consoles and two-zone controllers.
- Provides temperature sensing from the work piece thermocouples.
- Comes with two 300 amp male twistlocks, two 300 amp female twistlocks, T/C shielded extension wire, one female T/C socket and one male T/C plug.

<table>
<thead>
<tr>
<th>MSREF#:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA100-#2-S</td>
<td>180 amp - 100 ft. triple cable (#2 welding cable, type “K” shielded extension wire)</td>
</tr>
<tr>
<td>CA50-#2-S</td>
<td>180 amp - 50 ft. triple cable (#2 welding cable, type “K” shielded extension wire)</td>
</tr>
<tr>
<td>CA100-#4-S</td>
<td>135 amp - 100 ft. triple cable (#4 welding cable, type “K” shielded extension wire)</td>
</tr>
<tr>
<td>CA50-#4-S</td>
<td>135 amp - 50 ft. triple cable (#4 welding cable, type “K” shielded extension wire)</td>
</tr>
</tbody>
</table>

#### SPLITTER:

**Features:**
- Provides availability to connect multiple heating elements in series to one secondary cable.
- Two splitters are required for each secondary cable.

<table>
<thead>
<tr>
<th>MSREF#:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 way</td>
<td>2 way splitter (3’ long) (includes one 300 amp male twistlock and two 60 amp female twistlocks).</td>
</tr>
<tr>
<td>3 way</td>
<td>3 way splitter (3’ long) (includes one 300 amp male twistlock and three 60 amp female twistlocks).</td>
</tr>
<tr>
<td>4 way</td>
<td>4 way splitter (4’ long) (includes one 300 amp male twistlock and four 60 amp female twistlocks).</td>
</tr>
</tbody>
</table>

### TEMPERATURE MEASUREMENT:

#### Thermocouple Wire (MSREF#: HT-24-K):
- Type "K"
- 24 gauge wire
- Rating: 0 - 800°C (1472°F)
- High temperature
- Comes in 100 meter rolls (328')

#### Thermocouple Wire (MSREF#: QQ-20-K):
- Type "K"
- 20 gauge wire
- Rating: 1300°F continuous & 1600°F intermittent
- Comes in 500' rolls

#### Thermocouple Extension Wire (Shielded) (MSREF#: UP/ALPTW-20-KX):
- Type "K"
- 20 gauge wire
- Rated 105°C (221°F) 300 Volt
- UL Listed Subject 13 PLTC
- Flame Retardant
- Sunlight Resistant
- Comes in 500', 1000' rolls
**Specifications:** All flexible ceramic pad heaters are constructed of 80/20 Nickel/Chrome multi-strand wire, insulated with interlocking sintered alumina pink ceramic beads, nickel 212 cold tails (tigged) and two male 60 amp twistlocks complete with insulated covers.

Available in numerous sizes and ratings, they can be used up to 2150°F/1176°C in various heat treating applications.

<table>
<thead>
<tr>
<th>MS REFERENCE</th>
<th>DESCRIPTION</th>
<th>RATING</th>
<th>SIZE (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP3-60V</td>
<td>Preheater</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>3&quot; x 29&quot;</td>
</tr>
<tr>
<td>CP4-60V</td>
<td>Preheater</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>4&quot; x 21&quot;</td>
</tr>
<tr>
<td>CP6-60V</td>
<td>Thick Wall Pad</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>6&quot; x 15&quot;</td>
</tr>
<tr>
<td>CP8-60V</td>
<td>Pad Element</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>8&quot; x 11&quot;</td>
</tr>
<tr>
<td>CP10-60V</td>
<td>Pad Element</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>10&quot; x 9&quot;</td>
</tr>
<tr>
<td>CP12-60V</td>
<td>3&quot; Diameter Pipe</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>12&quot; x 7&quot;</td>
</tr>
<tr>
<td>CP15-60V</td>
<td>4&quot; Diameter Pipe</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>15&quot; x 6&quot;</td>
</tr>
<tr>
<td>CP18-60V</td>
<td>Strip</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>18&quot; x 5&quot;</td>
</tr>
<tr>
<td>CP21-60V</td>
<td>6&quot; Diameter Pipe</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>21&quot; x 4&quot;</td>
</tr>
<tr>
<td>CP24-60V</td>
<td>Strip</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>24&quot; x 5&quot;</td>
</tr>
<tr>
<td>CP29-60V</td>
<td>Strip</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>29&quot; x 4&quot;</td>
</tr>
<tr>
<td>CP36-60V</td>
<td>Long Strip</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>36&quot; x 3.5&quot;</td>
</tr>
<tr>
<td>CP70-60V</td>
<td>Snake</td>
<td>60 volt, 45 amp, 2.7 kW</td>
<td>70&quot; x 2&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MS REFERENCE</th>
<th>DESCRIPTION</th>
<th>RATING</th>
<th>SIZE (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP3-80V</td>
<td>Preheater</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>3&quot; x 39&quot;</td>
</tr>
<tr>
<td>CP4-80V</td>
<td>Preheater</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>4&quot; x 29&quot;</td>
</tr>
<tr>
<td>CP6-80V</td>
<td>Thick Wall Pad</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>6&quot; x 20&quot;</td>
</tr>
<tr>
<td>CP8-80V</td>
<td>Pad Element</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>8&quot; x 15&quot;</td>
</tr>
<tr>
<td>CP10-80V</td>
<td>Pad Element</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>10&quot; x 12&quot;</td>
</tr>
<tr>
<td>CP12-80V</td>
<td>3&quot; Diameter Pipe</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>12&quot; x 10&quot;</td>
</tr>
<tr>
<td>CP15-80V</td>
<td>4&quot; Diameter Pipe</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>15&quot; x 8&quot;</td>
</tr>
<tr>
<td>CP18-80V</td>
<td>Strip</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>18&quot; x 7&quot;</td>
</tr>
<tr>
<td>CP21-80V</td>
<td>6&quot; Diameter Pipe</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>21&quot; x 6&quot;</td>
</tr>
<tr>
<td>CP24-80V</td>
<td>Strip</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>24&quot; x 5&quot;</td>
</tr>
<tr>
<td>CP29-80V</td>
<td>Strip</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>29&quot; x 4&quot;</td>
</tr>
<tr>
<td>CP36-80V</td>
<td>Long Strip</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>36&quot; x 3.5&quot;</td>
</tr>
<tr>
<td>CP70-80V</td>
<td>Snake</td>
<td>80 volt, 45 amp, 3.6 kW</td>
<td>70&quot; x 2&quot;</td>
</tr>
</tbody>
</table>

**Round Magnet Assembly:**
MSREF#: RD-2

**Square Magnet Assembly:**
MSREF#: SQ-2
Cable and Heater Connectors:

Male Connector (for secondary cable and one end of the splitter):
Specifications: 300 amp

- Male twistlock complete (C, B & D)  MSREF#: M300-COM-FP
- Brass connector only (C)  MSREF#: A8
- Brown sleeve only (B)  MSREF#: A7
- Heavy duty white sleeve only (A)  MSREF#: A7-HT
- Retaining pin only (D)  MSREF#: 300-A28-HT

Female Connector (for secondary cable):
Specifications: 300 amp

- Female twistlock complete (G, F & D)  MSREF#: F300-COM-FP
- Brass connector only (G)  MSREF#: A6
- Brown sleeve only (F)  MSREF#: A5
- Heavy duty white sleeve only (E)  MSREF#: A5-HT
- Retaining pin only (D)  MSREF#: 300-A28-HT

Male Connector (for ceramic pad heaters):
Specifications: 60 amp

- Male twistlock complete (J, I & K)  MSREF#: M60-COM-FP
- Brass connector only (J)  MSREF#: A4
- Brown sleeve only (I)  MSREF#: A2
- Heavy duty white sleeve only (H)  MSREF#: A2-HT
- Retaining pin only (K)  MSREF#: 60-A28-HT

Female Connector (for splitter):
Specifications: 60 amp

- Female twistlock complete (N, M & K)  MSREF#: F60-COM-FP
- Brass connector only (N)  MSREF#: A3
- Brown sleeve only (M)  MSREF#: A1
- Heavy duty white sleeve only (L)  MSREF#: A1-HT
- Retaining pin only (K)  MSREF#: 60-A28-HT
These special sintered alumina ceramic beads can be used for pre and post-heaters of welding applications because of its excellent heat resistance.

<table>
<thead>
<tr>
<th>MS PART NUMBER</th>
<th>DESCRIPTION</th>
<th>COLOR</th>
<th>QUANTITY PER BOX</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMBB</td>
<td>Main Body Bead (A)</td>
<td>Pink</td>
<td>2000</td>
</tr>
<tr>
<td>PMEB</td>
<td>Male End Bead (B)</td>
<td>Pink</td>
<td>2000</td>
</tr>
<tr>
<td>PFEB</td>
<td>Female End Bead (C)</td>
<td>Pink</td>
<td>2000</td>
</tr>
<tr>
<td>PSTB</td>
<td>Small Tail Bead (D)</td>
<td>Pink</td>
<td>5000</td>
</tr>
<tr>
<td>PBBH</td>
<td>Body Bead with Hole (E)</td>
<td>Pink</td>
<td>2000</td>
</tr>
<tr>
<td>4396</td>
<td>Small Tail Bead (F)</td>
<td>White</td>
<td>100</td>
</tr>
<tr>
<td>4397</td>
<td>Tube Bead (over welding ferrules) (G)</td>
<td>White</td>
<td>100</td>
</tr>
</tbody>
</table>

CERAMIC REPLACEMENT BEADS:

Welding Ferrules:
MSREF#: A33

1/2” Copper Shim (1 KG)
3/4” Copper Shim (1 KG)

CERAMIC PAD HEATER ACCESSORIES:

A heating element repair kit comes with 80/20 (19 multi-strand) Nickel/Chrome wire, nickel 212 cold tail wire (tigged) and two male 60 amp twistlocks complete

Heater Core Wire: Consists of 80/20 nickel chrome alloy (19 multi-strand) on 500m/1640’ roll.

Ordering Information:
MSREF#: A15-19 strand

Nickel 212 Wire: Low resistance cold tail wire available in 19 multi-strand on 100m/328’ roll.

Ordering Information:
MSREF#: A17

OTHER TYPES OF WIRE AVAILABLE UPON REQUEST
Energy Regulator (110 Volt), Aluminum Knob and Scale

**FEATURES:**
- Type “K”
- Simple and stable connection

Thermocouple In outlet 6 way panel mount
(type “K”)
MSREF#: 6way

Thermocouple In outlet 12 way panel mount
(type “K”)
MSREF#: 12way

Female Thermocouple Socket Separately:
MSREF#: F-A18

Fiber Tape:
- ½” x 180’ (55m) rolls
- ¾” x 180’ (55m) rolls
- 1” x 180’ (55m) rolls

16 gauge Tie Wire: MSREF#: Tie-A40

Male Thermocouple Plug:
MSREF#: A19-K

Female Thermocouple Plug:
MSREF#: A20-K

200 amp contactor:
MSREF#: A37-EL
100% Duty Cycle

300 amp female panel mount twistlock complete
MSREF#: A10

300 amp male panel mount twistlock complete
MSREF#: A11

To order call toll free 1-877-468-1781 US/CAN
www.maritimestress.com
3 Phase Isolation Transformer

Transformer (Core and Coil Only):
- **Weight**: 660 lbs (approx.)
- **Dimensions**: 24” L x 17” W x 21” H

**FEATURES:**
- 75 KVA/60 KW
- Primary 380/415/440/480/575, 3 Phase
- Secondary 0/65/85, Single Phase
- (1 P.H.) 110 volt @ 1200 VA, Single Phase
- Isolation
- Copper wound
- Over temperature thermostat per phase
- Class 220 insulation.
- 150 degrees C. temperature rise. C
- CSA certified/UL listed.
- Manufactured to ISO9001 quality certification.

<table>
<thead>
<tr>
<th>PRIMARY VOLTAGE</th>
<th>CURRENT</th>
<th>CONNECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>575 VAC</td>
<td>76 amps</td>
<td>1-1-1</td>
</tr>
<tr>
<td>480 VAC</td>
<td>91 amps</td>
<td>2-2-2</td>
</tr>
<tr>
<td>440 VAC</td>
<td>99 amps</td>
<td>3-3-3</td>
</tr>
<tr>
<td>415 VAC</td>
<td>105 amps</td>
<td>4-4-4</td>
</tr>
<tr>
<td>380 VAC</td>
<td>114 amps</td>
<td>5-5-5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECONDARY VOLTAGE</th>
<th>CURRENT</th>
<th>CONNECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 volts</td>
<td>384 amps per phase</td>
<td>65-65-65</td>
</tr>
<tr>
<td>85 volts</td>
<td>312 amps per phase</td>
<td>85-85-85</td>
</tr>
</tbody>
</table>

**Ordering Information:**
- **MSPART#: 75KVA #7**: 75 KVA - 3 Phase *Isolated* copper wound power transformer: Primary 380/415/440/480/575, 50/60 Hz Secondary 0/65/85

**NOTE:** Optional 125 amp circuit breaker (MSREF#: Merlin125amp) required for 380VAC/415 Primary Voltage
Maritime Stress is committed to providing high quality products that meet our customer’s requirements and expectations, as well as, ensuring on time delivery.

PLEASE CALL, EMAIL OR FAX FOR A PRODUCT THAT IS NOT LISTED IN CATALOG

SAME OR NEXT DAY DELIVERY ON ALL IN STOCK PRODUCTS.

MARITIME STRESS

Mailing: P.O. Box 2898, Dartmouth, NS, B2W 4Y2, Canada
Physical: 30 Estates Road (Woodside Industrial Park), Dartmouth, NS, B2Y 4K7

TOLL FREE 1-877-468-1781
Phone 1: 1-902-468-1781 24 HR
Phone 2: 1-902-468-7873
Fax: 1-902-468-2304

General E-mail: info@maritimestress.com
Sales: sales@maritimestress.com
Technical: sfisher@maritimestress.com
Quality Assurance: dburke@maritimestress.com
President: president@maritimestress.com
www.maritimestress.com

Maritime Stress reserves the right to change the design of equipment without prior notice.