

THERMOCOUPLES & COMPONENTS

Target Tubes Elements Sheaths

Quality heat treatment depends on accurate furnace temperature. The thermocouple is the most vulnerable part of the temperature measuring system, and therefore thermocouples must be properly designed, fabricated of the best materials, and, of course, accurate.

Recommended As Good Practice

Thermocouples used in molten salt should be checked on a regular periodic basis (daily, by shift, etc.) for accuracy and for loose connections, sheath corrosion or other damage. You should always have at least two complete thermocouple assemblies on hand for each furnace. That is simply insurance against furnace down time.

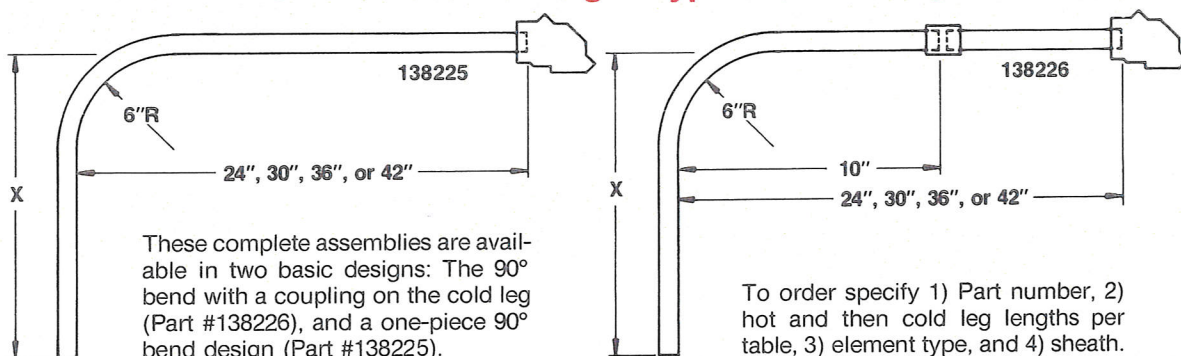
An Ajax Thermocouple Is Special

Ajax has developed over the years special thermocouples that best meet the rigorous condition of a salt bath furnace. Protecting sheaths are inspected for soundness of welds and thoroughly cleaned before assembly. Each couple is then tagged with its complete part number, calibration and serial number of the furnace for which it is intended.

Note:

Ajax can also supply thermocouples for other makes of salt bath furnaces if you will supply the critical dimensions of the couple, type of salt involved and operating temperature.

Standard AJAX Angle-Type Thermocouples



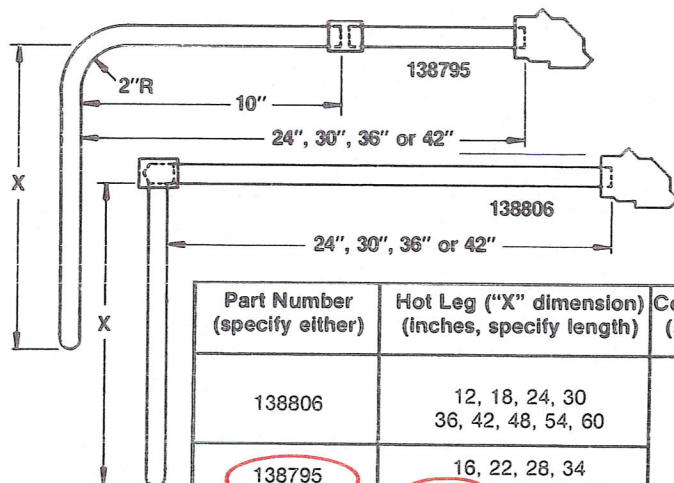
| Part Number (specify either) | Hot Leg ("X" dimension) (inches, specify length) | | | Cold Leg (inches) (specify length) | Element (specify either) | Sheath (specify code) |
|---------------------------------|---|----|----|---------------------------------------|--|---|
| 138225 | 12 | 33 | 54 | 24 | J is Iron-Constantan calibration | Steel = #10 Chrome- Stainless = #30 |
| (or) | 15 | 36 | 57 | 30 | | |
| | 18 | 39 | 60 | | | |
| | 21 | 42 | 63 | | | |
| | 24 | 45 | 66 | 36 | K is Chromel-Alumel calibration | High Ni - Chrome = #94 |
| 138226 | 27 | 48 | 69 | | | |
| | 30 | 51 | 72 | 42 | | High Ni = #100 |

Example: 138226 - 45 - 36 - K - 94

This is a 138226 couple, 45" hot leg, 36" cold leg, Chromel-Alumel with high Nickel-Chrome sheath.

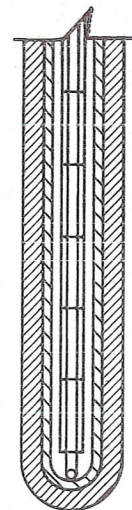
NOTE: Custom sizes are available on special order.

See other side for specifications and ordering information.



Angle Type With Ceramic Inner Sheath

This new Ajax design provides optimum operating life by protecting the element from the corrosive attacks of fumes and oxidation. A high temperature ceramic sheath is mounted inside of an outer alloy metal sheath.



| Part Number (specify either) | Hot Leg ("X" dimension) (Inches, specify length) | Cold Leg (Inches) (specify length) | Element (specify either) | Sheath (specify code) |
|---------------------------------|---|---------------------------------------|---|--|
| 138806 | 12, 18, 24, 30 36, 42, 48, 54, 60 | 24 30 36 36 | J is Iron-Constantan calibration K is Chromel-Alumel calibration | Chrome - Stainless = #30 High Ni. - Chrome = #94 High Ni. = #100 |
| 138795 | 16, 22, 28, 34 40, 46, 52, 58, 64 | 42 | | |

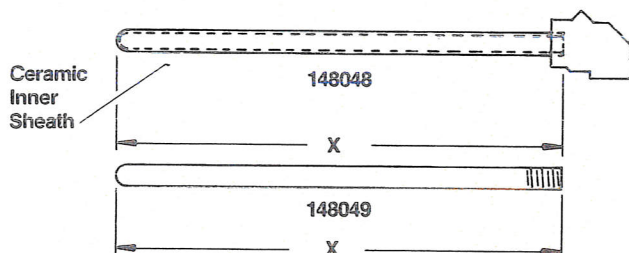
Example: 138795 — 40 — 42 — K — 100

This is a 138795 ceramic-lined couple with a 40" hot leg, 42" cold leg, with a high nickel outer sheath.

NOTE: A straight version of this couple having the ceramic inner sheath is also available. Specify part number 148045 and use the same ordering code. Hot leg lengths from 12" to 60" in 6" increments.

Standard Noble Metal Platinum Thermocouples

Thermocouples employing Platinum-Platinum/Rhodium elements are usually used only at salt bath temperatures exceeding 1800°F. Ajax can supply either straight or angle-type assemblies. Angle-type noble metal couples are available on special order. Similarly, custom sizes available on request. Ajax supplies one basic design (Part No. 148048) of Noble metal thermocouple, as illustrated, from a 12 in. length in 6 in. increments. Protecting Sheaths (Part No. 148049) may be ordered separately. To order, simply advise: a) Calibration (R or S), b) length desired.



Elements

Ajax supplies elements for either base or noble metal thermocouples, either bare, or with ceramic insulators. To order, simply specify: a) Calibration, b) overall length in inches, and c) with or without insulators.

Target Tubes For Radiation Pyrometer

Ajax supplies spare target tubes for either the Honeywell Radiamatic™ or Leeds & Northrup Ray-O-Tube™ pyrometers. Both types use only one standard length for salt baths (18 inches). To order, simply specify: which type of instrument is being used.



(Clip, complete and mail to AJAX ELECTRIC COMPANY)

☐ Proceed with repairs or replacement parts, use our P.O. # _____

(or)

☐ Please advise costs and delivery.

(For quick replay call **Ajax Spare Parts Dept. (215) 947-8500**)

Quantity _____

Complete Assembly (Base Metal) No. _____

Complete Assembly (Noble Metal) No. _____

Complete Assembly (Ceramic Inner Sheath) No. _____

Elements: ☐ Bare

☐ With Insulators

{ Calibration

{ Length

Target Tubes for

Radiation Pyrometer _____

(#19455 for L&N, #19456 for Honeywell)

COMPANY _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

Name of Authorized Person _____

PHONE NO. _____

AJAX
ELECTRIC COMPANY



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