



AH-MA Series Air Heat Burners Worksheet

Ordering Information

In designing your system, the following must be completed:

- **Use page 2 to sketch your system:**

Follow the instructions on page 2 for designing a burner system. Be certain to use the appropriate symbol for each burner and plate section in laying out your application. Also, include the corresponding number for each symbol; numbering each symbol will help in determining the quantity you must order for each respective burner and end plate section. If necessary, refer to the burner sketch example on page 4.

Use page 3 to determine quantities:

After sketching out your system and numbering the symbols, add the number of each respective symbol used and enter that sum in the "Selection" column of the corresponding Table on page 3 (if necessary, please refer to the example on page 4).

How pricing is determined:

See the 160 AH-MA Config price list for current price information.

Graph for Designing Burner System

Flame direction is into the page (as if viewing the back of burner).


















Use the appropriate section symbols and numbers as shown.

Determine the sum of each numbered section and add that number in the corresponding Table number on page 3.

If necessary, refer to the burner sketch layout example on page 4.

Drawing must be based on the 4/1/105 Revision of AH-MA Worksheet 160

Section Symbols & Numbers for Designing The Burner System

| | | | | | | | | |
|---|---|--|--|--|---|---|---|---|
| 4  150mm (6") Straight | 5  300mm (12") Straight | 6  300mm (12") Straight with Back Inlet | 7  300mm x 150mm (12" x 6") Tee | 8  300mm x 300mm (12" x 12") Cross | 9  Plain End Plate | 10  Pilot End Plate No Feed | 11  Pilot End Plate 1" Gas Feed | |
| 12  Pilot End Plate 1.5" Gas Feed | 13  Pilot End Plate 2" Gas Feed | 14  Pilot Angled Mon. End Plate No Feed | 15*  Flame Monitoring End Plate | 16  Angled Flame Mon. End Plate | 17*  Burner Feed End Plate with Flame Monitoring | 18  Burner Feed End Plate | 24  Divider Plate for Staged Burners | 25  Hanger Rod Mounting Bracket |

* Direct spark ignition up to 18" long (450 mm) uses the flame monitoring end plate or burner feed with flame monitoring end plate #15 or #17 with ignition plug #19 and/or flame rod #20.

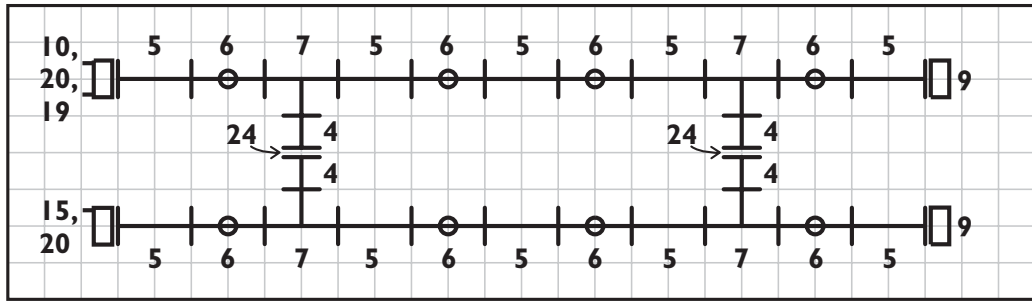
Ordering List

- Determine the sum of each numbered section on page 2 and add that number in the corresponding Table number below.
- Tables 1 through 15 apply to the overall burner system layout and the necessary figures to achieve it.
- Tables 16 through 22 determine the costs of the overall burner system.
- If necessary, refer to the ordering list example on page 4

| Table No. | Description | Selection | Lineal Ft. Multiplier | Lineal Ft. Subtotal |
|--|--|-----------------|-----------------------|---------------------|
| 1 | Gas Manifold | Pressure | Gas Ports | Option |
| | Aluminum | Standard | Ø2.0mm | A |
| | Corrosion Resistant CI | Standard | Ø2.0mm | C |
| | Cast Iron | Low | Ø2.4mm | L |
| | Aluminum | Low | Ø2.4mm | P |
| | Cast Iron | Standard | Ø2.0mm | S |
| 2 | Assembled system (enter A) or Individual sections (enter I) | _____ | | |
| 3 | B.S.P. (enter B) or N.P.T. (enter N) pipe threads | _____ | | |
| 4 | Number of 150mm straight sections | _____ | X 0.5 = | _____ |
| 5 | Number of 300mm straight sections | _____ | X 1.0 = | _____ |
| 6 | Number of 300mm straight section with back inlet | _____ | X 1.0 = | _____ |
| 7 | Number of 150mm by 300mm tee sections | _____ | X 1.5 = | _____ |
| 8 | Number of 300mm by 300mm cross sections | _____ | X 2.0 = | _____ |
| 9 | Number of plain end plates | _____ | | |
| 10 | Number of pilot end plates with no feed | _____ | | |
| 11 | Number of pilot end plates with 1" Gas Feed | _____ | | |
| 12 | Number of pilot end plates with 1.5" Gas Feed | _____ | | |
| 13 | Number of pilot end plates with 2" Gas Feed | _____ | | |
| 14 | Number of pilot angled flame monitoring end plates | _____ | | |
| 15 | Number of flame monitoring end plates | _____ | | |
| 16 | Number of angled flame monitoring end plates | _____ | | |
| 17 | Number of burner feed end plates with flame monitoring | _____ | | |
| 18 | Number of burner feed end plates | _____ | | |
| Total lineal feet of burner system (add Tables 4 through 10 subtotals for total lineal feet) | | | | |
| | cost per lineal foot for aluminum burner bodies (A, P) | | x _____ = | \$ _____ |
| | cost per lineal foot for cast iron burner bodies (L, S) | | x _____ = | \$ _____ |
| | cost per lineal foot for optional corrosion resistant burner bodies (C) | | x _____ = | \$ _____ |
| 19 | Number of ignition plugs (must use with items 10 - 14) | _____ x | /each = | \$ _____ |
| 20 | Number of flame rods | _____ x | /each = | \$ _____ |
| 21 | Number of U.V. scanner adapters, 1/2" N.P.T. | _____ x | /each = | \$ _____ |
| 22 | Number of U.V. scanner adapters, 3/4" N.P.T. (use w/ #15 or #17 only) | _____ x | /each = | \$ _____ |
| 23 | Number of U.V. scanner adapters, 1" N.P.T. (use w/ #15 or #17 only) | _____ x | /each = | \$ _____ |
| 24 | Number of divider plates for staging | _____ x | /each = | \$ _____ |
| 25 | Number of hanger rod mounting brackets | _____ x | /each = | \$ _____ |
| 26 | Certified drawing charge | | = | \$ _____ |
| TOTAL LIST PRICE | | | | \$ _____ |
| SCHEDULE I DISCOUNT MULTIPLIER | | | | x _____ |
| TOTAL NET PRICE | | | | \$ _____ |

Burner Sketch & Ordering List Example

In this example, the sketch depicts a two stage burner with flame rod flame detection on both stages. The ordering list summarizes the component quantities of the system drawn in the sketch.



| Table No. | Description | Selection | Lineal Ft. Multiplier | Lineal Ft. Subtotal |
|-----------|--|-------------------|-----------------------|---------------------|
| 1 | Gas Manifold | | | |
| | Aluminum | Standard Ø2.0mm A | _____ | |
| | Corrosion Resistant CI | Standard Ø2.0mm C | <u>CF</u> | |
| | Cast Iron | Low Ø2.4mm L | _____ | |
| | Aluminum | Low Ø2.4mm P | _____ | |
| | Cast Iron | Standard Ø2.0mm S | <u>S</u> | |
| 2 | Assembled system (enter A) or Individual sections (enter I) | <u>A</u> | | |
| 3 | B.S.P. (enter B) or N.P.T. (enter N) pipe threads | <u>N</u> | | |
| 4 | Number of 150mm straight sections | <u>4</u> | X 0.5 = | <u>2</u> |
| 5 | Number of 300mm straight sections | <u>10</u> | X 1.0 = | <u>10</u> |
| 6 | Number of 300mm straight section with back inlet | <u>8</u> | X 1.0 = | <u>8</u> |
| 7 | Number of 150mm by 300mm tee sections | <u>4</u> | X 1.5 = | <u>6</u> |
| 8 | Number of 300mm by 300mm cross sections | <u>0</u> | X 2.0 = | <u>0</u> |
| 9 | Number of plain end plates | <u>2</u> | | |
| 10 | Number of pilot end plates with no feed | <u>1</u> | | |
| 11 | Number of pilot end plates with 1" Gas Feed | <u>0</u> | | |
| 12 | Number of pilot end plates with 1.5" Gas Feed | <u>0</u> | | |
| 13 | Number of pilot end plates with 2" Gas Feed | <u>0</u> | | |
| 14 | Number of pilot angled flame monitoring end plates | <u>0</u> | | |
| 15 | Number of flame monitoring end plates | <u>1</u> | | |
| 16 | Number of angled flame monitoring end plates | <u>0</u> | | |
| 17 | Number of burner feed end plates with flame monitoring | <u>0</u> | | |
| 18 | Number of burner feed end plates | <u>0</u> | | |
| | Total lineal feet of burner system (add Tables 4 through 10 subtotals for total lineal feet) | | | |
| | cost per lineal foot for aluminum burner bodies (A, P) | | x <u>0</u> = | \$ <u>0</u> |
| | cost per lineal foot for cast iron burner bodies (L, S) | | x <u>26</u> = | \$ _____ |
| | cost per lineal foot for optional corrosion resistant burner bodies (C) | | x <u>0</u> = | \$ <u>0</u> |
| 19 | Number of ignition plugs (must use with items 10 - 14) | <u>1</u> x | /each = | \$ _____ |
| 20 | Number of flame rods | <u>2</u> x | /each = | \$ _____ |
| 21 | Number of U.V. scanner adapters, 1/2" N.P.T. | <u>0</u> x | /each = | \$ <u>0</u> |
| 22 | Number of U.V. scanner adapters, 3/4" N.P.T. (use w/ #15 or #17 only) | <u>0</u> x | /each = | \$ <u>0</u> |
| 23 | Number of U.V. scanner adapters, 1" N.P.T. (use w/ #15 or #17 only) | <u>0</u> x | /each = | \$ <u>0</u> |
| 24 | Number of divider plates for staging | <u>2</u> x | /each = | \$ _____ |
| 25 | Number of hanger rod mounting brackets | _____ x | /each = | \$ _____ |
| 26 | Certified drawing charge | | = | \$ _____ |
| | TOTAL LIST PRICE | | = | \$ _____ |

* Contact Factory



Offered By:

Power Equipment Company
2011 Williamsburg Road
Richmond, Virginia 23231
Phone (804) 236-3800
Fax (804) 236-3882

www.peconet.com