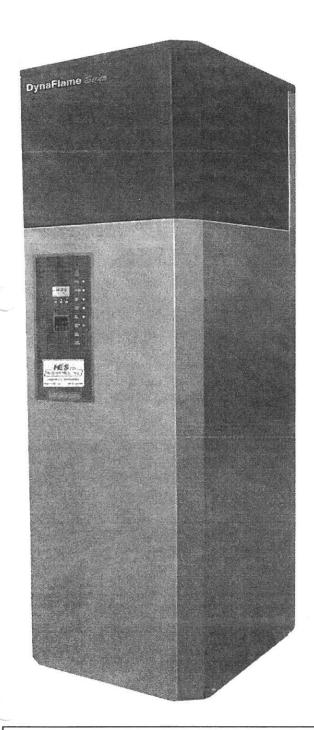


DOMESTIC WATER HEATERS SERIES DFW

500,000 THROUGH 3,000,000 BTUH INPUT



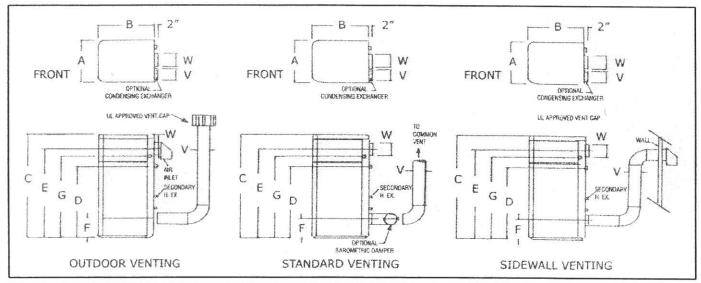
VENTS UP TO 100 FEET HORIZONTALLY. UP TO 100 FEET OF AIR INTAKE DUCT.

STANDARD EQUIPMENT

- 85% Thermal Efficiency
- Range of burner modulation of 35-100% (non-condensing)
- · Suitable for Category 1 installation
- All Bronze and Copper water surfaces
- Single point input adjustment for controlling air and gas
- 1 to 1 gas/air ratio for perfect modulation throughout
- Extremely low NOx emissions exceeding air quality standards (less than 10 PPM)
- · Flow switch
- Pressure Relief Valve
- · Very small footprint
- · Extremely low noise level of operation
- · Metal fibre knit burner
- Stainless Steel Outer Jacket & Combustion Chamber
- · Advanced Digital Control System with pin point accuracy
- Proven hot surface ignition w/ soft start for rumble-free operation
- Designed for easy access to components for maximum serviceability
- Gasketless heat exchanger design
- Inspected and tested to ASME requirements
- Maximum allowable working pressure of 160 PSI
- Maximum operating water temperature of 250 deg. F.
- 24 volt circuit breaker
- Protective air filter
- Very low gas pressure operation (down to 2" pressure inlet)
- Main burner test firing valve
- Temperature and Pressure Gauge

OPTIONAL EQUIPMENT

- Secondary Exchanger for condensing operation at 95% efficiency
- Range of burner modulation 20-100% (condensing)
- High Gas Pressure Switch
- Low Gas Pressure Switch
- Normally open Vent Valve
- · Low Water Cut-Off
- Flame Failure Alarm
- · Pump Delay
- Outdoor Installation
- Cupro Nickel Heat Exchanger
- IRI Gas train
- Hi 2000-S Gas/Carbon Monoxide Alarm
- PKG—Packaged on skid with storage tank



| DIMENSIONAL SPECIFICATIONS | | | | | | | | | | | | | |
|----------------------------|---------|-------|--------|------------------|---------|---------|---------|---------|----------------|-----|--------|------------|------------|
| MODEL | A' | B' | C | D' | E. | F | G' | | V' DIAMETER | | W DIA. | WATER | GAS |
| INPUT | WIDTH | DEPTH | HEIGHT | WATER | AIR | FLUE | GAS | | SIDEWALL OR | | AIR | CONN. | CONN. |
| X 1000 | | | | CONN. | INLET | | | OUTDOOR | ALL CONDENSING | STD | INLET | | l. |
| 500 | 23" | 27" | 45" | 25 3/4" | 35 1/4" | 11" | 32 1/4" | 6" | 6" | 8" | 6" | 2" NPT | 1" NPT |
| 750 | 23" | 27" | 54" | 34 7/8" | 44 3/8" | 12 3/4" | 41 3/8" | 8" | 8" | 10" | 8" | 2" NPT | 1" NPT |
| 1100 | 23" | 27" | 68" | 48 1/2" | 58" | 19 1/2" | 55" | 8" | 8" | 10" | 8" | 2" NPT | 1" NPT |
| 1200 | 23" | 27" | 68" | 48 1/2" | 58" | 19 1/2" | 55" | 8" | 8" | 10" | 8" | 2" NPT | 1" NPT |
| 1500 | 29 1/2" | 34" | 57" | 36 1 <i>/</i> 2" | 46 7/8" | 12 1/2" | 43 7/8" | 10" | 10" | 12" | 10" | 2 1/2" NPT | 1 1/4" NPT |
| 1750 | 29 1/2" | 34" | 61" | 41" | 51 3/8" | 17" | 48 3/8" | 10" | 10" | 12" | 10" | 2 1/2" NPT | 1 1/4" NPT |
| 2000 | 29 1/2" | 34" | 66" | 45 1/2" | 55 7/8" | 16 1/4" | 52 7/8" | 12" | 12" | 14" | 12" | 2 1/2" NPT | 1 1/4" NPT |
| 2500 | 29 1/2" | 34" | 72" | 51" | 61 3/8" | 21 1/2" | 57 3/8" | 12" | 12" | 14" | 12" | 3" NPT | 1 1/2" NPT |
| 3000 | 29 1/2" | 34" | 78" | 59 1/2" | 69 7/8" | 28" | 66 7/8" | 12" | 12" | 14" | 12" | 3" NPT | 1 1/2" NPT |

| HEAT EXCHANGER HEAD LOSS & TEMP RISE | | | | | | | | |
|--------------------------------------|----------|----------|-------------|-----------------------|----------|-------|--|--|
| MODEL | П | EMPERATU | RE RISE ACI | ACROSS HEAT EXCHANGER | | | | |
| INPUT | 20 DEG F | | 30 D | EG F | 35 DEG F | | | |
| X 1000 | GPM | ΔP-FT | GPM | ΔP-FT | GPM | ΔP-FT | | |
| 500 | 42.0 | 1.4 | 28.0 | 0.7 | 24.0 | 0.5 | | |
| 750 | 62.9 | 2.8 | 42.0 | 1.4 | 36 | 1.0 | | |
| 1100 | * 90.0 | 5.5 | 61.6 | 2.7 | 52.8 | 2.1 | | |
| 1200 | * 90.0 | 6.0 | 68.0 | 2.9 | 58.3 | 2.1 | | |
| 1500 | * 90.0 | 5.0 | 83.9 | 2.4 | 71.9 | 1.8 | | |
| 1750 | * 90.0 | 6.7 | 97.9 | 3.2 | 83.9 | 2.5 | | |
| 2000 | 170.0 | 8.5 | 111.9 | 4.1 | 95.9 | 3.1 | | |
| 2500 | * 180.0 | 12.6 | 139.9 | 6.1 | 119.9 | 4.6 | | |
| 3000 | * 180.0 | 17.6 | 167.9 | 8.4 | 143.9 | 7.0 | | |

^{*} Maximum flows recommended. Temp. rise will be higher than shown. Contact HESco for recommendations.

| SHIPPING WTS. | | | | | | |
|----------------|------------|------------|--|--|--|--|
| INCLUDING SKID | | | | | | |
| MODEL | | | | | | |
| INPUT | NON | | | | | |
| X 1000 | CONDENSING | CONDENSING | | | | |
| 500 | 375 LBS | 425 LBS | | | | |
| 750 | 400 LBS | 450 LBS | | | | |
| 1100 | 480 LBS | 530 LBS | | | | |
| 1200 | 485 LBS | 535 LBS | | | | |
| 1500 | 578 LBS | 628 LBS | | | | |
| 1750 | 695 LBS | 745 LBS | | | | |
| 2000 | 775 LBS | 825 LBS | | | | |
| 2500 | 875 LBS | 925 LBS | | | | |
| 3000 | 920 LBS | 970 LBS | | | | |

| RECOVERY CAPACITY | | | | | | |
|-------------------|-----------|----------|----------------|----------|--|--|
| | 85% EFFI | CIENCY | 95% EFFICIENCY | | | |
| MODEL | 100 DEG F | 80 DEG F | 100 DEG F | 80 DEG F | | |
| INPUT | RISE | RISE | RISE | RISE | | |
| X 1000 | /GPH | /GPH | /GPH | /GPH | | |
| 500 | 503 | 629 | 570 | 712 | | |
| 750 | 755 | 944 | 855 | 1069 | | |
| 1100 | 1107 | 1384 | 1254 | 1568 | | |
| 1200 | 1208 | 1510 | 1368 | 1710 | | |
| 1500 | 1510 | 1887 | 1710 | 2138 | | |
| 1750 | 1762 | 2202 | 1995 | 2494 | | |
| 2000 | 2013 | 2516 | 2280 | 2851 | | |
| 2500 | 2516 | 3146 | 2851 | 3563 | | |
| 3000 | 3020 | 3775 | 3421 | 4276 | | |

| INPUT & OUTPUT | | | | | |
|----------------|------------|-----------|--|--|--|
| MBTU | MBTU OI | JTPUT | | | |
| INPUT | CONDENSING | NON.COND. | | | |
| 500 | 475.00 | 425.00 | | | |
| 750 | 712.50 | 637.00 | | | |
| 1100 | 1045.00 | 935.00 | | | |
| 1200 | 1140.00 | 1020.00 | | | |
| 1500 | 1425.00 | 1275.00 | | | |
| 1750 | 1662.50 | 1487.50 | | | |
| 2000 | 1900.00 | 1700.00 | | | |
| 2500 | 2375.00 | 2125.00 | | | |
| 3000 | 2850.00 | 2550.00 | | | |