

PORTABLE SILVER SERIES HOT OIL

FOR OPERATING TEMPERATURES UP TO 600°F



Budzar Industries has over 30 years of experience engineering and building hot oil systems. Budzar engineers are experts at ensuring hot oil systems are accurate, leak-free and safe.

The Silver Series with its maximum operating temperature of 600°F shares the same engineering principles as Budzar's high temperature oil systems. With simple and easy to understand controls and a premium on operator safety, the Silver Series will stand the test of time.

 **BUDZAR**
INDUSTRIES, INC.

engineering Bulletin #15
PRECISION

COMPARE THESE FEATURES

- Welded pipe construction to eliminate leaks.
- Compact, space saving design .
- Carbon steel powder coated sheet metal cabinet with lift off panel for maintenance access—no sheet metal screws to remove.
- Ultra low heater watt density prevents “coking” and extends useful life of oil.
- Y-strainer on pump suction line.
- Internal by-pass valve maintains proper flow across the heater regardless of the pressure drop through your process.
- Automatic air and water vapor purging system simplifies start-up and prevents pump cavitation.
- Heater case design eliminates air pockets that can damage the heater element.
- Heater center core baffles increase oil velocity and prevent damage to the oil.
- Positive displacement pump with TEFC motor.
- Integral 5 ft.² Stainless steel cooling bundle provides smooth cooling profiles without flashing at high operating temperatures.
- High temperature mechanical pump seal prevents leaks.
- Reversible pump/evacuation.
- Low pressure safety switch for protection against running without proper fill.
- Non-proprietary PID microprocessor controller operator's digital display.
- Electrically actuated automatic cooling control ball valve provides accurate cooling control without system temperature spikes or cooling water flashing.
- Motor starter with solid state overload protection.
- Non-fused lockable rotary disconnect.
- UL listed panel.
- Separate process and set point temperature displays.
- Full lighted status display provides complete diagnostics for the system.
- High level alarm.
- Audible alarm.



process
TEMPERATURE
control

PORTABLE SILVER SERIES HOT OIL UNITS

| MODEL # | 1SSOT | 1220-NC-030 | 1220-NC-050 | 1220-NC-100 | 1230-NC-030 | 1230-NC-050 | 1230-NC-100 | 1250-NC-030 | 1250-NC-050 | 1250-NC-100 |
|--------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| HEATER | kW | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| FLOW | GPM | 20 | 20 | 20 | 30 | 30 | 30 | 50 | 50 | 50 |
| TDH | Psi | 30 | 50 | 100 | 30 | 50 | 100 | 30 | 50 | 100 |
| MOTOR | HP | 1 | 1.5 | 2 | 1.5 | 2 | 3 | 2 | 3 | 5 |
| FLA@460/3/60 | Amps | 17.4 | 18.3 | 18.7 | 18.3 | 18.7 | 20.1 | 18.7 | 20.1 | 22.9 |
| FLA@230/3/60 | Amps | 34.8 | 36.6 | 37.4 | 36.6 | 37.4 | 40.2 | 37.4 | 40.2 | 45.8 |
| DIMENSIONS | Height | 49" | 49" | 49" | 49" | 49" | 49" | 49" | 49" | 49" |
| | Width | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" |
| | Length | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" |

| MODEL # | 1SSOT | 2420-NC-030 | 2420-NC-050 | 2420-NC-100 | 2430-NC-030 | 2430-NC-050 | 2430-NC-100 | 2450-NC-030 | 2450-NC-050 | 2450-NC-100 |
|--------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| HEATER | kW | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| FLOW | GPM | 20 | 20 | 20 | 30 | 30 | 30 | 50 | 50 | 50 |
| TDH | Psi | 30 | 50 | 100 | 30 | 50 | 100 | 30 | 50 | 100 |
| MOTOR | HP | 1 | 1.5 | 2 | 1.5 | 2 | 3 | 2 | 3 | 5 |
| FLA@460/3/60 | Amps | 32.4 | 33.3 | 33.7 | 33.3 | 33.7 | 35.1 | 33.7 | 35.1 | 37.9 |
| FLA@230/3/60 | Amps | 64.9 | 66.7 | 67.5 | 66.7 | 67.5 | 70.3 | 67.5 | 70.3 | 75.9 |
| DIMENSIONS | Height | 49" | 49" | 49" | 49" | 49" | 49" | 49" | 49" | 49" |
| | Width | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" |
| | Length | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" |

| MODEL # | 1SSOT | 3620-NC-030 | 3620-NC-050 | 3620-NC-100 | 3630-NC-030 | 3630-NC-050 | 3630-NC-100 | 3650-NC-030 | 3650-NC-050 | 3650-NC-100 |
|--------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| HEATER | kW | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| FLOW | GPM | 20 | 20 | 20 | 30 | 30 | 30 | 50 | 50 | 50 |
| TDH | Psi | 30 | 50 | 100 | 30 | 50 | 100 | 30 | 50 | 100 |
| MOTOR | HP | 1 | 1.5 | 2 | 1.5 | 2 | 3 | 2 | 3 | 5 |
| FLA@460/3/60 | Amps | 47.7 | 48.6 | 49 | 48.6 | 49 | 50.4 | 49 | 50.4 | 53.2 |
| FLA@230/3/60 | Amps | 95.4 | 97.2 | 98 | 97.2 | 98 | 100.8 | 98 | 100.8 | 106.4 |
| DIMENSIONS | Height | 73" | 73" | 73" | 73" | 73" | 73" | 73" | 73" | 73" |
| | Width | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" |
| | Length | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" |

| MODEL # | 1SSOT | 4820-NC-030 | 4820-NC-050 | 4820-NC-100 | 4830-NC-030 | 4830-NC-050 | 4830-NC-100 | 4850-NC-030 | 4850-NC-050 | 4850-NC-100 |
|--------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| HEATER | kW | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |
| FLOW | GPM | 20 | 20 | 20 | 30 | 30 | 30 | 50 | 50 | 50 |
| TDH | Psi | 30 | 50 | 100 | 30 | 50 | 100 | 30 | 50 | 100 |
| MOTOR | HP | 1 | 1.5 | 2 | 1.5 | 2 | 3 | 2 | 3 | 5 |
| FLA@460/3/60 | Amps | 62.8 | 63.7 | 64.1 | 63.7 | 64.1 | 65.5 | 64.1 | 65.5 | 68.3 |
| FLA@230/3/60 | Amps | 125.6 | 127.4 | 128.2 | 127.4 | 128.2 | 131.0 | 128.2 | 131.0 | 136.6 |
| DIMENSIONS | Height | 73" | 73" | 73" | 73" | 73" | 73" | 73" | 73" | 73" |
| | Width | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" | 28" |
| | Length | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" | 48" |

Standard Options

- Side Stream Cooling, Water Cooling 5 sq. ft
- Main Stream Cooling, Water Cooling 5 sq. ft
- Solid State Relays
- Isolation Valves
- RS-485 Digital Communications
- Upgrade to 600°F Maximum Temperature
- Dual Zone Units
- Hose Kit
- Retransmission/Remote Set Point
- Hoffman NEMA 12 enclosure



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