



ELECTRIC THERMAL FLUID HEATING SYSTEMS

Sigma Hot Oil Transfer Systems (SHOTS) are electrically powered thermal fluid heating systems. SHOTS incorporate an electric circulation heater with a low watt density immersion bundle and fluid circulation pump to create a simple, robust, and reliable system. This system uses electricity to heat your thermal fluid instead of natural gas, fuel oil, or biomass fuel sources.



SHOTS with Heat Exchanger



SHOTS with Pre-Piped Expansion Tank

PRE-ENGINEERED DESIGNS

Capacities: 30 - 800 kW

- » Low voltage (up to 600V)
- » Liquid phase service up to 600°F
- » NFPA 87 safety adherence
- » Compliance: General Area and Class 1 Div. 2, Class 1 Div. 1
- » Design ready for procurement and fabrication
- » Skid mounted, assembled, wired, and tested

EQUIPMENT

- » Circulation heater
- » Primary circulation pump
- » Expansion tank*
- » Isolation valves
- » Integrated control system with safety interlocks and modulating controls
- » Heater pressure safety valve

OPTIONS

- » Control valves
- » Expansion tank mounting and pre-piping
- » Drain pump
- » Drain tank
- » Heat exchanger(s)
- » Advanced automation
- » Vapor phase thermal oil and molten salts
- » ATEX and CSA compliance
- » Custom configurations available from 800kW to 4MW or higher (medium voltage available)

*shipped loose or mounted with tank tower

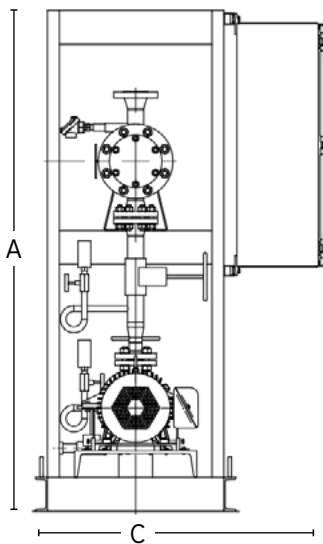
SHOTS TECHNICAL SPECIFICATIONS

MODELS	Heat Output (kW)	Current Draw (AMPS)	Heater Volume (GAL)	Flow Rate (GPM)	Pump Motor (HP)
SHOTS-30	30	36.1	7.34	40	10
SHOTS-60	60	72.2	12.19	70	10
SHOTS-75	75	90.2	10.88	70	10
SHOTS-90	90	108.3	12.19	70	10
SHOTS-120	120	144.3	25.16	100	15
SHOTS-160	160	192.5	23.80	100	15
SHOTS-200	200	240.6	25.16	150	20
SHOTS-240	240	288.7	25.50	150	20
SHOTS-280	280	336.8	48.47	250	20
SHOTS-320	320	384.9	48.47	250	20
SHOTS-360	360	433.0	67.97	250	20
SHOTS-400	400	481.1	65.97	250	20
SHOTS-440	440	529.3	86.17	250	25
SHOTS-480	480	577.4	86.17	250	25
SHOTS-520	520	625.5	86.17	250	25
SHOTS-560	560	673.6	86.17	250	25
SHOTS-600	600	721.7	109.06	250	25
SHOTS-640	640	769.8	109.06	250	25
SHOTS-680	680	817.9	134.64	250	25
SHOTS-720	720	866.1	193.88	250	25
SHOTS-760	760	914.2	193.88	250	25
SHOTS-800	800	962.3	191.92	250	25

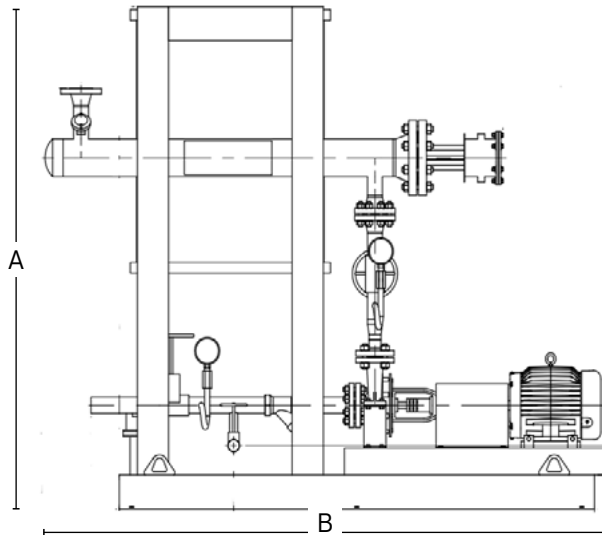


STANDARD DIMENSIONS

Models	Heater Diameter	(A) Overall Height	(B) Overall Length	(C) Overall Width	Weight (lbs)
SHOTS-30	6"	6'-2"	7'-6"	4'-7"	2200
SHOTS-60	8"	6'-2"	7'-6"	4'-7"	2200
SHOTS-75	8"	6'-2"	8'-8"	4'-7"	2200
SHOTS-90	8"	8'-1"	12'-11"	6'-4"	3100
SHOTS-120	10"	8'-1"	9'-6"	5'-10"	3200
SHOTS-160	10"	8'-1"	12'-11"	6'-4"	3100
SHOTS-200	10"	8'-8"	13'-8"	6'-9"	3900
SHOTS-240	10"	8'-9"	13'-8"	6'-5"	4025
SHOTS-280	12"	9'-0"	14'-3"	7'-1"	4800
SHOTS-320	12"	9'-1"	14'-3"	7'-1"	4800
SHOTS-360	14"	9'-2"	14'-7"	7'-1"	5200
SHOTS-400	14"	9'-2"	14'-7"	7'-3"	5200
SHOTS-440	16"	9'-2"	14'-7"	7'-3"	5300
SHOTS-480	16"	9'-3"	15'-1"	7'-3"	5400
SHOTS-520	16"	9'-6"	14'-8"	7'-3"	8300
SHOTS-560	16"	9'-6"	14'-8"	7'-3"	8300
SHOTS-600	18"	9'-6"	14'-8"	7'-3"	8300
SHOTS-640	18"	9'-6"	14'-8"	7'-3"	8300
SHOTS-680	20"	9'-6"	14'-8"	7'-3"	8300
SHOTS-720	24"	9'-6"	14'-8"	7'-3"	8300
SHOTS-760	24"	9'-6"	14'-8"	7'-3"	8300
SHOTS-800	24"	9'-6"	14'-8"	7'-3"	8200



SHOTS Elevation View - Side



SHOTS Elevation View - Front



SHOTS with Pre-Piped Expansion Tank, Drain Tank, and Fill/Drain Pump options

Note: Pre-Engineered SHOTS can be used in a modular fashion to build custom assemblies that accommodate a wide variety of project and process needs.

