

**QUOTATION REQUEST FOR ACME
ELECTRIC STEAM SUPERHEATER**

Company Name:

Address:

Phone: Fax: E-mail:

Project Manager: Technical:

Commercial:

Industry:

Process: Final Product:

Project Status: a) Budget b) Preliminary study

 c) Definite project d) Paid study

Location: a) Indoor b) Outdoor c) Roofed

Design Pressure in PSIG: Working Pressure in PSIG:

Maximum pressure drop that can be tolerated:

Design Flow in Lbs steam/Hr:

Maximum Flow expected: Minimum Flow expected:

Moisture content of steam entering at Inlet (Steam Quality):

If steam flow is not steady, what is the flow cycle?

Desired Temperature at outlet:

What is the allowable temperature variation at outlet?

Available power source (Voltage, Phase, Cycles):

Any space limitations?

Special requests:

In the U.S.A.
ACME ENGINEERING PROD. INC.
2330 State Route 11 PMB 10
Moers, N.Y. 12958
Tel.: (518) 236-5659
Fax: (518) 236-6941

In Canada
ACME ENGINEERING PROD. LTD.
5706 Royalmount Ave.
Montreal, Qc. H4P 1K5
Tel.: (514) 342-5656
Fax: (514) 342-3131



TYPICAL SPECIFICATIONS FOR ACME ES SERIES ELECTRIC STEAM SUPERHEATER

General

Supply and install where shown on drawings, ES series package type Electric Steam Superheaters as manufactured by Acme Engineering Products. Units shall be skid mounted factory assembled, pre-wired, including automatic controls and factory tests.

The ACME Superheater shall heat _____ lbs steam/hr entering at _____ PSIG saturated with _____% steam quality at _____ ° F to a leaving temperature of _____ ° F and have an electrical capacity of _____ KW at _____ V _____ PH _____ HZ including a 10% allowance for losses and safety considerations.

In and Out connections shall be _____ in. flanges.

Provide pressure and temperature gauges on outlet and a safety relief valve.

Pressure Vessel

Pressure Vessel design shall be minimum 50 PSI and 100° F above operating conditions in order to allow for suitable settings of protection devices. Design to ASME Boiler and Pressure Vessel Code Section VIII Div. 1 and provide "U" stamp, National Board or CRN Registration.

Inlet & Outlet connections and flanged heating elements shall be class 300# flanges or higher if applicable.

Provide a suitable drain connection.

6 in. of high temperature insulation shall enclose the vessel behind a 2 in. angle frame supporting external panels in aluminum.

Heating Elements

The Heating Elements shall have ANSI class 300# flanges or higher if applicable with cooling extension to weather-proof terminal boxes. Heating blades shall be incoloy sheathed with a maximum watt dissipation of 25 w/in².

Additional cost **option** for units up to 150 PSI and 500° F: Flanged heating elements shall have individually field replaceable blades with standard tools secured in the flange with stainless steel fittings. Flanges shall be insulated on the exposed side.



TYPICAL SPECIFICATIONS FOR ACME ES SERIES ELECTRIC STEAM SUPERHEATER

Power and Control Panel:

NEMA 12 Enclosure shall include the following:

- Magnetic Breaker or Disconnect Switch, door interlocked;
- Buss Bars or Splitter Block;
- Fuses;
- Control Transformer fused primary;
- On-Off breaker for 120V control circuit;
- Dual Digital Display Electronic Controller, 1/4" DIN size for ease of operation;
- SCR Power Controller to modulate total heating capacity from 0 to 100%, according to steam flow variations;
- Semiconductor fuses to protect the SCRs;
- Thermocouple in outlet to detect leaving steam temperature. A minimum flow is required;
- Two levels of high steam temperature protection, one with automatic reset and the second one with manual reset in separate protection circuits for maximum security;
- Audible and visual alarm circuit with associated display lights, silencing button and horn.
- SPDT dry contacts for remote alarm supervision;
- **OPTIONAL:** Two SCR Power Controllers, each modulating half the total capacity, with slightly different time bases in order to reduce pulsations in the electrical distribution.