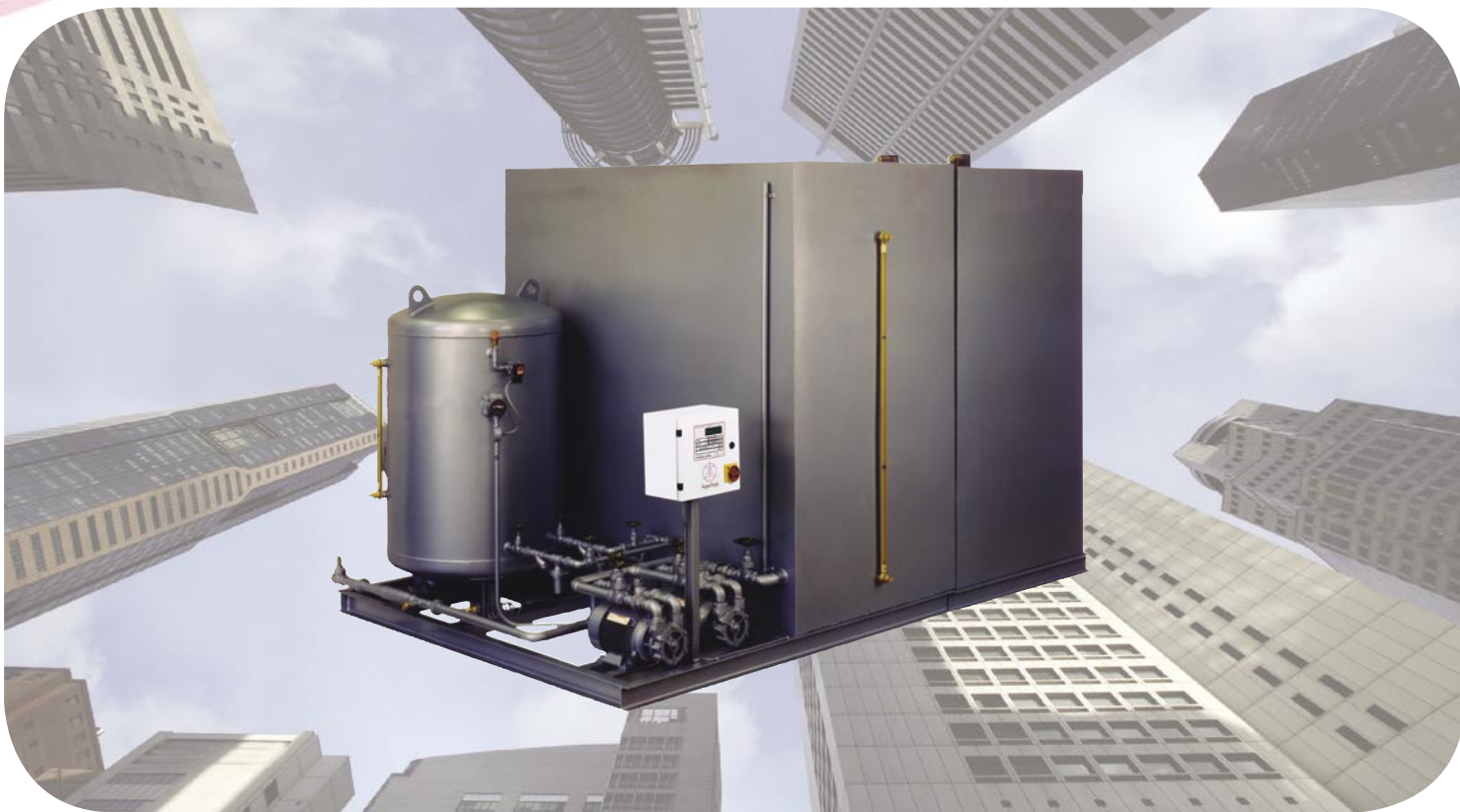


# AquaTech Pressmain

HEATING & CHILLED SYSTEM PRESSURISATION UNITS



## NITROPACK 'AS2ET-N' SERIES

## GENERAL

The set consists of Twin Pumps, Nitrogen Pressure Vessel and Spill Tank, with Control Panel, all interconnecting piping and wiring. Constructed to comply with D.O.E. Specification M & E 3, and H.S.E. Directive P.M.5 category B.

## OPERATION

Designed to maintain operating pressure as defined by H.S.E. Directive P.M.5 category B below the maximum working pressure of the system. As the system water expands due to temperature rise the level in the nitrogen pressure vessel rises resulting in a rise in pressure. An electro-mechanical spill valve relieves the rising pressure, and surplus water is ejected from the system into the spill tank via an integral spurge pipe. This intermittent spilling system continues until the heating system operating temperature is reached.

The nitrogen pressure vessel compensates for any variation of system temperature between thermostat settings.

As the system cools one or both pressurisation pumps put water back into the system from the spill tank to automatically compensate for the rate of system contraction.

## SPECIFICATION PUMPS

Horizontal shaft close coupled regenerative turbine pumps, 304 stainless steel with bronze impellers and cast iron casings, having TEFC motors to BS 4999 part 2 with class F insulation protected to IP44.

## MANIFOLDS, STRAINERS AND VALVES

Steel welded pipework to tubular specification BS 1387 and welded fittings to BS 1965. Valves non-rising stem wedge disc type. Strainer with malleable iron body and brass perforated screen. Isolating and non-return valves on each pump discharge and isolating on each suction.

## SPILL TANK

Adequately sized fabricated mild steel construction, with connections for pump suctions, spurge pipe, overflow, automatic water make-up via special float valve with type 'A' air gap.

Normal external finishes one undercoat and one heavy-duty durable finish. Normal internal finishes bituminous paint.

Brackets provided for mounting Nitrogen bottles.

Hot dipped galvanised spill tanks available as an optional extra.

Surface ball blanket available as an optional extra.

## NITROGEN PRESSURE VESSEL

Vertically mounted steel fabrication to BS 5500 and provided with side entry level switch to automatically control nitrogen charging, pressure relief valve, isolating and drain valves with optional sight gauge with automatic shut-off pockets (at extra cost).

## CONTROL PANEL

Automatic control by 2020+ Microprocessor, pressure measurement by pressure transducer, illuminated digital display for pressure, operational parameters and fault conditions.

Automatic alternation of duty pump and timed intermittent pulse for 'non-sticktion'.

Motor contactors with overload and single phasing prevention.

Hand/Off/Auto controls for each pump.

Interlocked door isolator.

Alarm buzzer to side of panel.

AquaTech Pressmain design and development programmes are continuous; we reserve the right to make any changes to this specification without prior notice.



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