DME BREWHOUSE FEATURES AND BENEFITS

- **Mash mixer and lauter tun** sized for all grain brewing high gravity beers from 12 to 17.5 Plato.

- **DME Tier II controls system** powered by Siemens Braumat Compact.

- **Large glass manways c/w safety switch and vessel lights** for improved process view. Hidden conduit keeps wires off the top of the tanks for better cleanability and aesthetic appeal.

- **Stainless lautering desk** with integral sink and wort cooling tower provides a convenient location for taking in-line samples and checking wort clarity. Wort cooling tower incorporates a new mess-free design.

- **Diverter panel CIP piping** brings all CIP supply and return lines to a common location. Cleaning manifold includes connection points for portable CIP pump, hot and cold water, and stationary CIP system. Swing-bends ensure safe routing of CIP fluids for individual vessel cleaning with wort in the brewhouse.

- **High efficiency wort cooler** with integrated flow meter, wort aeration, and CIP back-flush. Automated wort cooling and aeration controls.

- **Low speed wort pumps** utilize 4-pole motors and oversized pump heads for low shear product transfers and prevention of cavitation. DME works directly with quality North American pump and motor manufacturers to produce a tailor made solution.

- **DME Grist Hydrator** provides thorough mixing of the water and grain for homogeneous mashes without dough-balls. This design has been time-tested and has become the industry standard in craft brewing, with many manufacturers attempting to replicate the DME design. Performance upgrades include a J-tube for minimized splashing and oxygen uptake upon entry, and an RTD for rapid and precision temperature readings.

HIGH GRAVITY MASH MIXER

- **Mash Mixer** is specially designed to handle the larger grist loads required for high gravity brewing.

- **Large diameter stainless mixer** imparts low shear while gently mixing the mash. Vessel height to diameter is optimized for efficient mixing.

- **Laser welded steam jackets** efficiently heat the mash achieving a minimum 1C/minute temperature rise using low pressure (10psi) steam.

- **Level transmitter** provides feedback to control system enabling automated transfers and engaging jackets based on liquid level. This ensures maximum heating of the mash while minimizing burn-on from uncovered jackets.

HIGH GRAVITY LAUTER TUN

- **Lauter Tun** is specially designed to handle the larger grist loads required for high gravity brewing.

- **Rakes** are designed to cut and gently lift the bed to maximize extract efficiency and minimize lautering time. Extract efficiencies of up to 95% are typical for 12Plato wort and properly prepared grist.

- **Raising** and lowering rakes enable brewer to operate rakes throughout lautering process.

HIGH GRAVITY LAUTER TUN

- **Lautering sensors** provided for bed differential pressure, run-off flow rate and total volume, specific gravity measurement, and turbidity. Sensors are tied into the control system and values are continuously logged to batch record. Brewer can choose to make manual adjustments to the lautering process based on instrument feedback, or lautering process can be automated with easily customizable Braumat recipe control.

- **Wedge wire false bottom** achieves a large percent open space and robust design for heavy loading. Each false bottom section is custom fit and stamped with installation sequence to ensure there are no spaces where husk material can bi-pass.

- **New grains-out sweeper design** minimizes time required for grains out. Tier II controls package incorporates a home-position function that will automatically stop the boom in the full raised position under the manway for easy raising or lowering of the sweeper.

- **Multiple wort collection ports** are orientated across the bottom of the vessel for uniform bed pressure and maximum extract collection.

- **Full pattern sparge nozzles** are designed for continuous, uniform sparging of the spent grains.

STEAM KETTLE

- **Kettle** incorporates high efficiency laser welded jackets, a large freeboard, and optimized height:diameter ratio to achieve a vigorous 6%/hr evaporation using low pressure (10psi) steam.

- **Stack condensate ring** prevents high DMS condensate from running back into kettle, improving product quality and reducing energy requirements.

- **Boil-over probe** will automatically cut steam supply until foam has receded, improving operator safety, product losses, and additional cleaning of the kettle stack.

- **Level transmitter** provides feedback to control system enabling automated transfers and engaging jackets based on liquid level. This ensures kettle pre-heat is achieved in the minimum amount of time.

WHIRLPOOL

- **Whirlpool Heigh:Diameter ratio** is optimized for trub separation and large hop loads typical of the craft brewing industry. Tangential inlet is carefully sized for required mass flow and centrifugal force for trub separation without imparting unnecessary shear forces on the wort.

- **Flat sloping bottom** achieves maximum wort recovery and leaves a tight trub pile in the center of the whirlpool. A trub dam helps prevent the trub pile from sliding over the bottom drain.

- **Tangential inlet** is also utilized as a high draw-off so wort cooling can start as soon as possible, minimizing DMS formation.

- **Level transmitter** provides feedback to the control system allowing for adjustment of transfer speed to minimize wort cooling time without disturbing the trub pile.

- **Trub removal nozzle** produces a strong jet of water and spins to break-up the trub pile, saving the brewer time and quickly getting the whirlpool back into a ready state for the next batch.

DME
BREWING SOLUTIONS