SURFACE FINISHING SYSTEMS

Experience, practical engineering, quality workmanship, and dedication to customer satisfaction have earned Jessup Systems a reputation for building the most environmentally sound and competitive finishing systems on the market.

INDUSTRY EXPERIENCE

• Single or multiple hoists to 15,000 lbs. capacity
• Poly, fiberglass, steel, and stainless steel process tanks
• Automated barrel loading and unloading systems
• Weigh-in or weigh-out vibratory feeders and scales
• Noise abatement enclosures
• Full machine ventilation enclosures
• Automatic positioning load systems
• Automatic barrel cover handling
• Powered wet or dry transfer shuttles
• Programmable in-tank and up-barrel rotation
• Tank rim air knives and in-line blow down cells
• Full tank and halo spray systems
• Air, pumped, and mechanical agitation
• Centrifugal, in-line, and off-line dryers
• Engineered in-line barrel and rack dryers
• Fully integrated in-line bake ovens
• Fully automated rack/barrel storage and retrieval
• Light beam, light curtain, and interlocking gate operator safety devices
• Intuitive, self-diagnostic, web accessible touch screen controls
• Automatic bar code, electronic file, or manual keypad input capable
• Programmable immersion times and plate cell rectification settings
• Touch screen machine control with up to 10,000 recipe capacity
• Non-contract linear encoder, laser, and cam plate hoist positioning
• Wireless remote operation for manual mode improves operator safety
• Cable carriers provide quiet operation, improved durability, and machine aesthetics

BARREL SYSTEMS

Jessup Systems built a reputation for delivering extremely rugged, reliable, and cost effective barrel finishing machines. Major components including hoists, track, frame, load/unload equipment, barrels, dryers, and controls are built in-house by skilled craftsmen.

Polypropylene Barrel Technology

• High capacity one-piece cylindrical shell design
• Tongue and groove welded construction
• Integrated fusion welded tumbling ribs
• CNC drilled or slotted perforation patterns
• Knob or inside-out style load locker covers
• Single point drive and high pressure cathode contact

RACK SYSTEMS

Our systems include numerous ferrous, non-ferrous, and plating-on-plastic rack plating and coating systems. Full length non-contact linear encoders coupled with variable frequency drives enable smooth, virtually sway-free operation and precise positioning for even the largest rack systems. In-line automatic rack storage and retrieval is an increasingly popular option for large rack systems.
COATING SYSTEMS

Our technology extends phosphate and e-coating machines, where oscillating or rotating baskets may be used. Dip-spin and mechanical plating are among the long list of fully integrated system options.

BASKET SYSTEMS

Our technology includes single and twin basket oscillating chromate coating and centrifuge drying systems. Top and bottom grip stainless steel baskets allow fully inverted unload capability. Material handling equipment is lined to minimize part damage.

Work is processed through reversible automatic centrifuge dryers designed to deliver high production volume with minimal part damage.

Basket coating and drying features are often integrated into fully automated plate, bake, and chromate systems with load-by-load part traceability.

Features Include

- In-tank basket oscillation
- Lined transfers for gentle handling
- Rotate-stop-reverse control available
- Steam, gas, or electric heat options
- Fully inverted unload rollover

SPECIALTY SYSTEMS

With over 700 systems and countless conversions installed, the Jessup Systems team has accumulated tremendous experience integrating a sophisticated array of mechanical, hydraulic, pneumatic, electric, and electronic components. We believe in long term customer focus, exacting quality, and on time start-up. These results are achieved through efficient in-house mechanical, electrical, and controls engineering, coupled with timely installation and field services.

CONTROLS

An intuitive touch screen HMI/PLC is the heart of every Jessup machine. It displays system overviews, recipe options, hoist programming, load/unload monitoring, process functions, load tracking, fault diagnostics, and pre-programmed maintenance schedules. The support section may also include storage of drawings, schematics, and operations manuals.

Performance monitoring includes shift reports for total time and cycles, automatic vs. manual operation, load/unload delay, and fault data. To speed correction of unexpected stoppages, the control system provides system diagnostics. Detailed screens display fault location and actions needed to quickly restore production. Internet based remote monitoring expedites troubleshooting and repairs.

Self diagnostic feature directs problem solving

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