



DIRECTIONAL REGULATED SYSTEMS, INC.
Industrial Automation Equipment

Since 1991

Automatic Part Feeders

Inspection Systems

Custom Machines

Machine Tending Systems

Handling Systems

Robotic Systems

BALL STUD FEED/ LOADER SYSTEM

25-2

PROJECT SCOPE:

(4) Different Ball Studs batch run.

Bulk Feed, Inspect, Sort with purge reject prior to accept loading to Induction Heat Treat Machine
Fixtures 3 at a time.

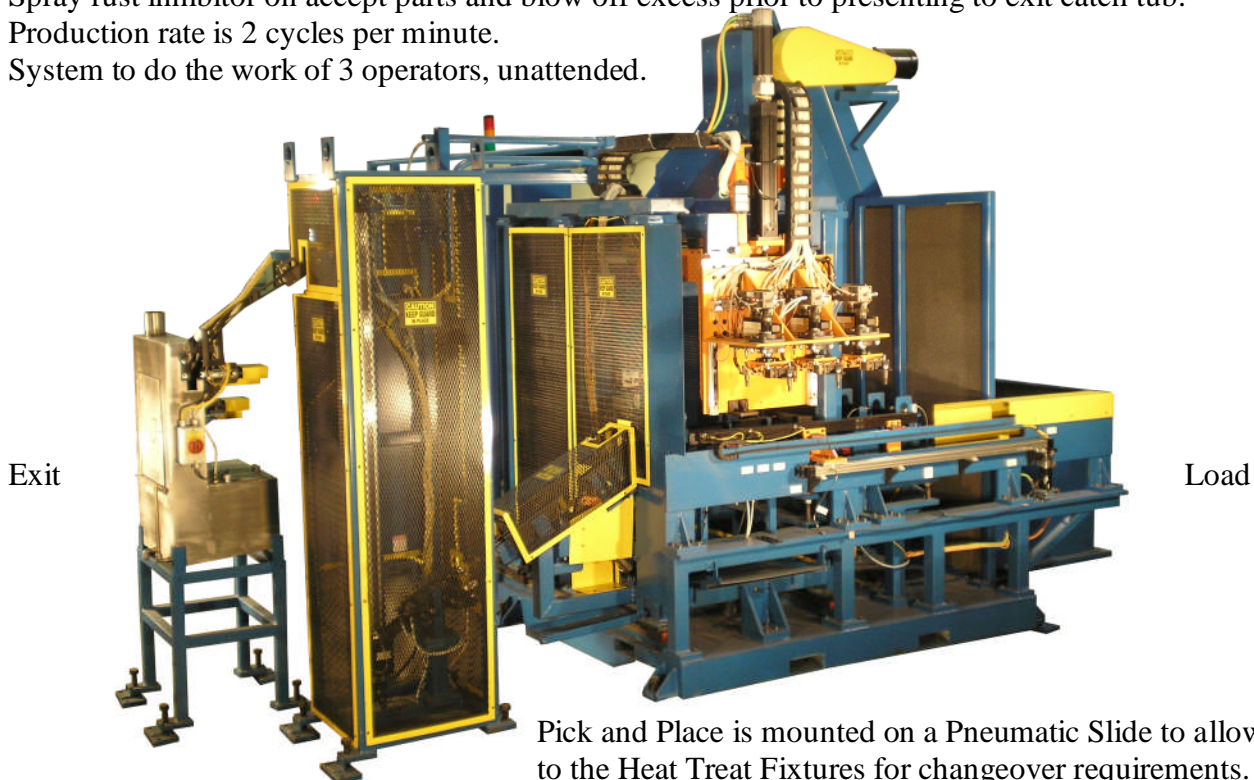
Remove all 3 and replace as quickly as possible to yield fastest machine cycle rate.

Sort with purge reject upon Heat Treat Machine signal.

Spray rust inhibitor on accept parts and blow off excess prior to presenting to exit catch tub.

Production rate is 2 cycles per minute.

System to do the work of 3 operators, unattended.



Pick and Place is mounted on a Pneumatic Slide to allow access to the Heat Treat Fixtures for changeover requirements.

SYSTEM SHOWN:

Drop Bottom Tub Dumper (On far side not seen)

Bulk Elevator Model #BE-CT-20-10

Bi-Flow In-Line Vibratory Feed Unit

Stop Gate/ Meter Unit w/ Length Detection Sensors

Reject Purge Gate with Gravity Chute

Dual Rail In-Line Feed Accumulation Track

1-3 Path Programmable Fast Track Strip Shuttle Unit

Z-Y-Z Axis Programmable Pick and Place Unit
(with (3) Spin Head with 6 Part Gripper for quick
part exchange at fixtures)

Reject Purge Gate with Gravity Chute

(3) Part Pneumatic Lift Unit

Flush Booth with Pump Spray and Blow-off

Turnkey Control Panel with HMI

SYSTEM BENEFITS:

Aids hazardous ergonomic considerations

Allows increased production capacity

Cuts part production labor cost

Maintains part quality

Reduces costly manual labor

Storage provides continued through put operation

Utilizes modern automation

Run (4) P/N with only push button change over