



Case Study:
Manufacture of Automotive Gaskets Using Servo Presses at American Leakless Company

Eric Sedensky, Facilities and Operations Manager

American Leakless Company, LLC.



Established: 2009 (Operation from 2010 – previously operated as a joint venture from 1992)

Employees: 74 (September, 2016)

Products: Metal Gaskets (Manufacture/Sales)
Soft Gaskets/Packing (Sales/Distribution)
Rubber coated steel

Customers: Honda North America: OEM/OES Tier 1
Other tier 2 automotive
Intra-Group NLK affiliates

Gross Sales: \$37,870K (2015)
\$39,200K (2016 Plan)

Facility: 80,000ft²

Equipment: Coil Coating Line (2)
Transfer Press Line (2)
Progressive Press Line (3 – 1 servo)
Servo press line (4)
Bead Blast Machine (3)
Assembly Machine (5)





Production - 18.5 million automotive gaskets produced in 2015

- Complete process line from material to finished goods

Quality - Consecutive OEM supplier awards from 2011
- ISO/TS 16949 certified as of October 2013

Environmental

- ISO 14001 certified as of September 2016

Delivery - 99.9% on time delivery since 2005

Documented advantages of servo presses:

- **Reduction in heat and noise**
- **Easier maintenance**
- **Less oil use**
- **More easily adjusted (compensate for changes in climate, die repair, tonnage changes, etc.)**
- **Faster cycle time in both pendulum and normal motion**



Servo press work cell



H1F150 C-frame
April, 2014



H1F150
April, 2010



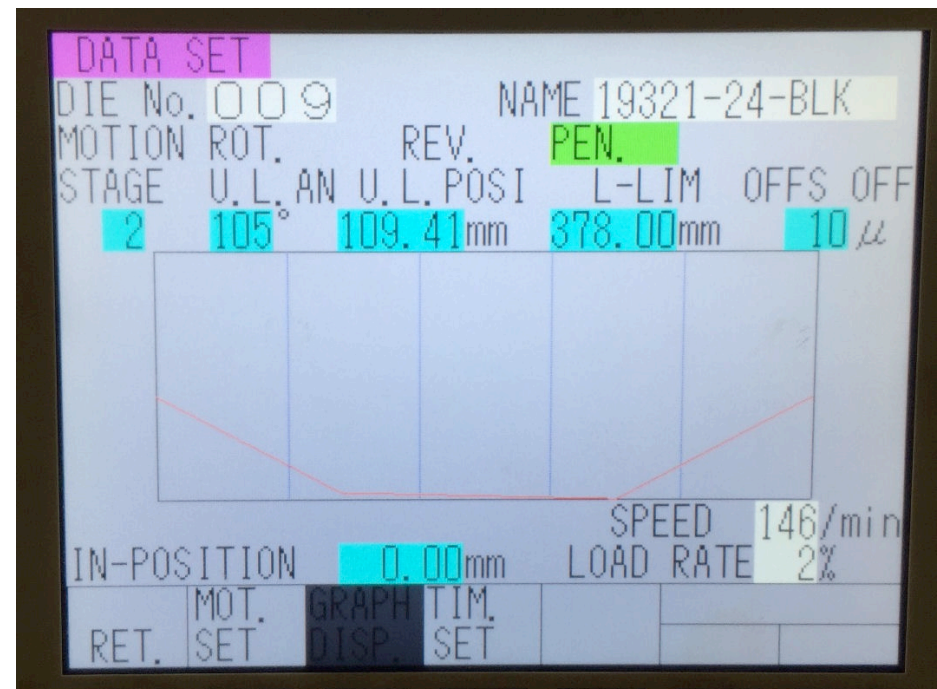
H1F200
April, 2013
October, 2015



**Servo press with progressive feeder
August, 2014**

Specific advantages for ALC:

- **Allows four different stamping operations with one press: progressive (using pendulum motion), blank, extended dwell, simulate link motion**
- **Cycle time increase (bottleneck moves from the press to feeder or other automation)**



- **Pendulum motion allows press motion without upper die leaving die section guideposts**

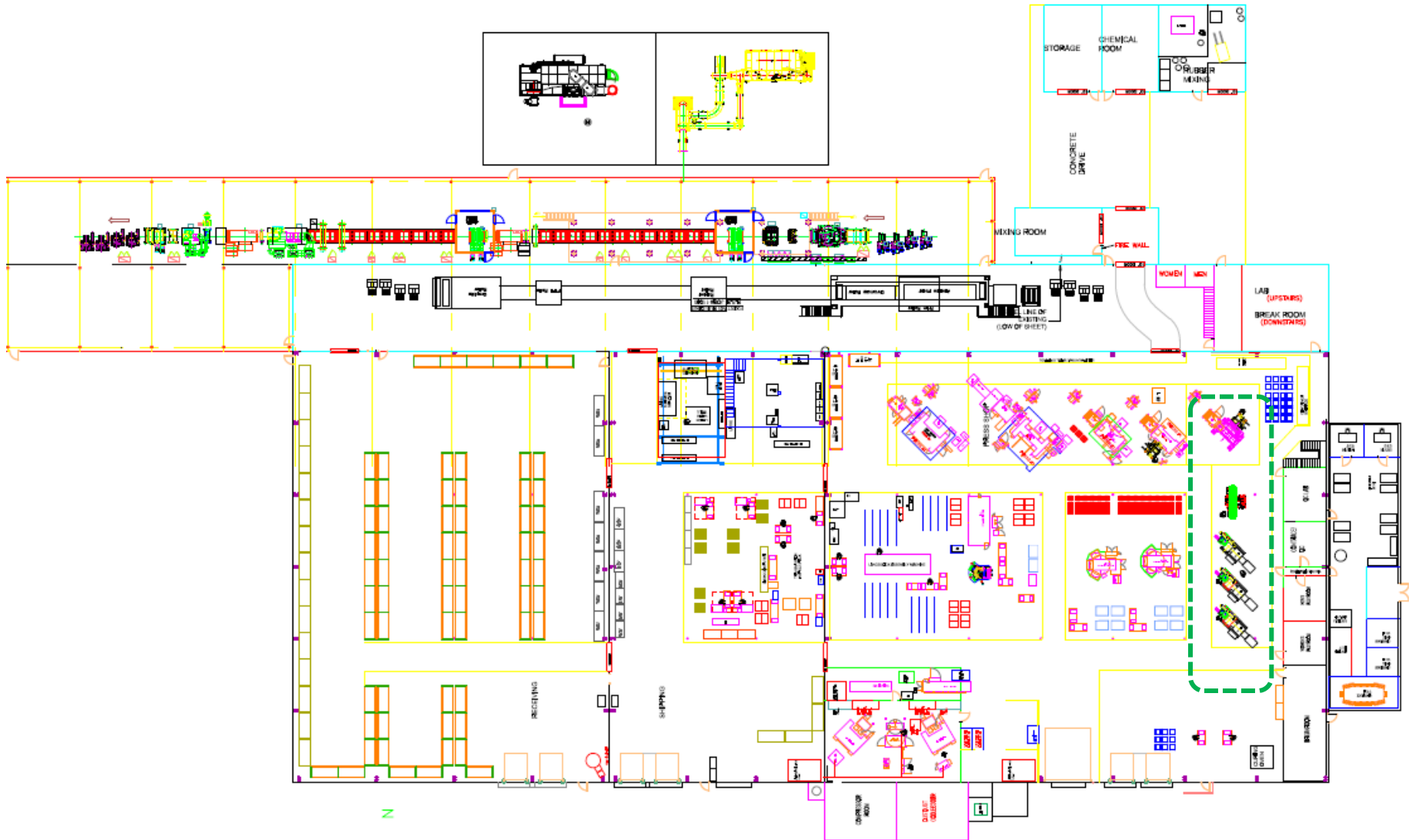




Specific advantages for ALC:

- **In-press adjustments in response to material changes**
- **Reduced noise and vibration actually allowed placement of presses closer to offices, saving space and easing layout constraints**

American Leakless Company, LLC.



Specific advantages for ALC:

- **Relatively easy to move presses in the plant layout to accommodate changes in production flow**
 - **Vibro/Dynamics mounts**
 - **No pits**
 - **Standard 8” concrete**
- **Improved quality: less scrap related to press faults, less feed waste, fewer set ups with continuous feed**
- **Can be synched to a robot more easily and accurately (video)**



**Nippon Leakless Kogyo
Tochigi, Japan**

American Leakless Company, LLC.



Thank you!

**For more about our company, please visit:
americanleakless.com**