

# DAHLSTROM

## DAHLSTROM ROLL FORM

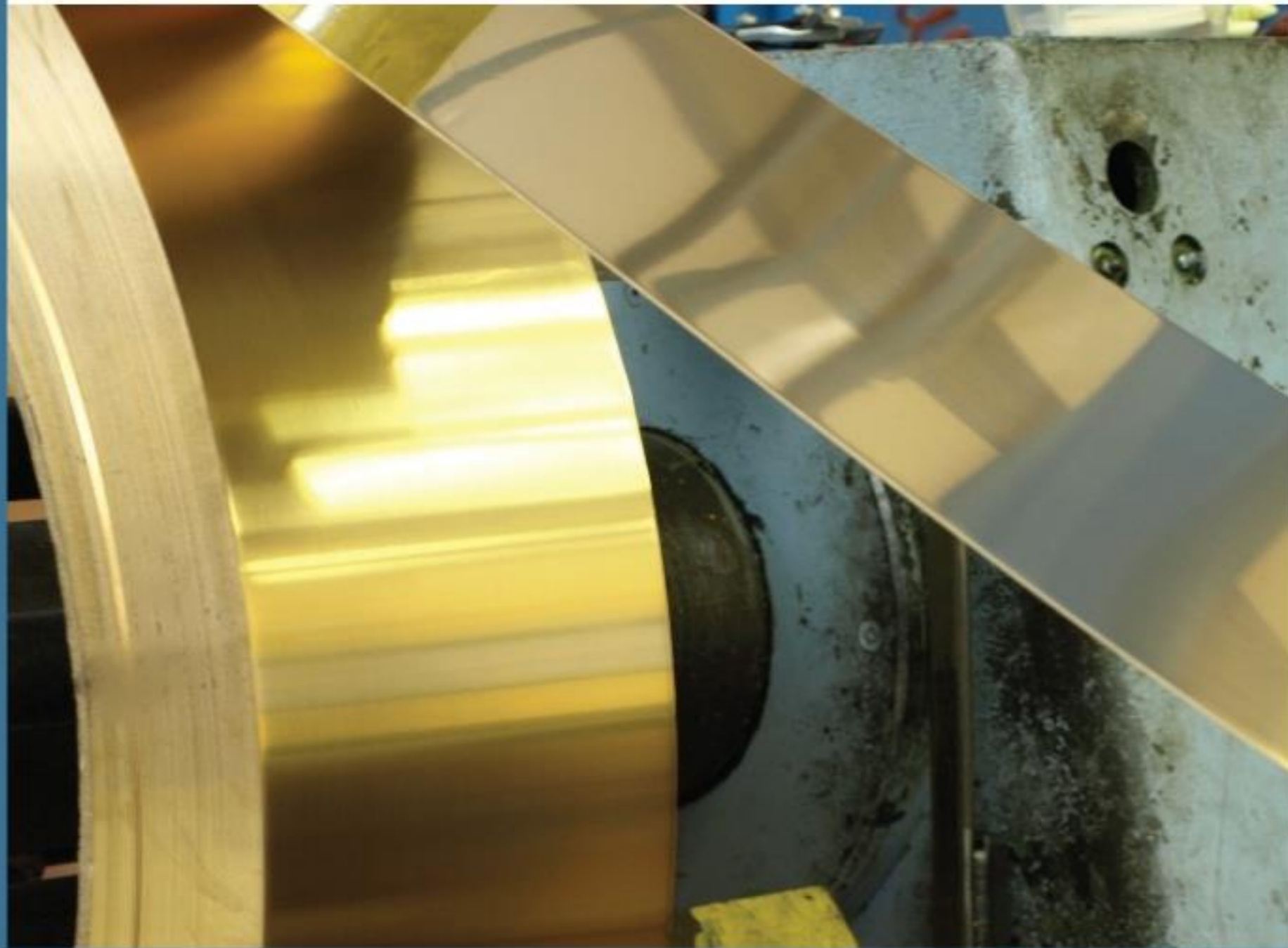
In House Engineering



Vendor Managed Inventory

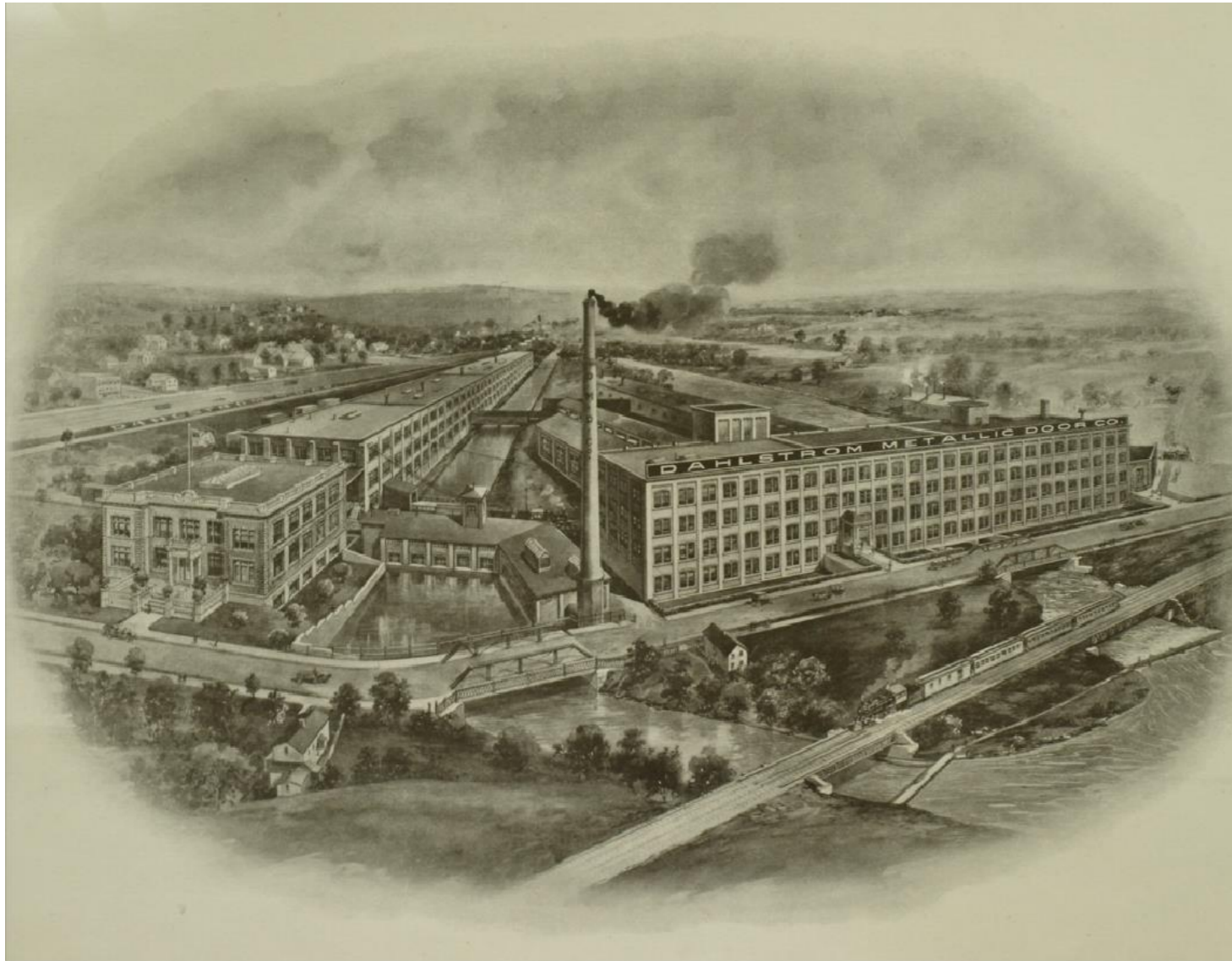


Low To Medium Volume



the shape of things to come





## History

Dahlstrom was started in 1904 when Charles Dahlstrom invented the first fire door, a hollow metal door filled with a fire retardant material. From there the construction industry demanded other materials that would build upon the fire retardant effectiveness of the metal door. Roll forming began with profiles that were developed for door and window mouldings, baseboard and cove mouldings and eventually, panels and wall partitions. These items formed the first fire protection for the many high rise buildings being constructed in the major cities throughout the nation.

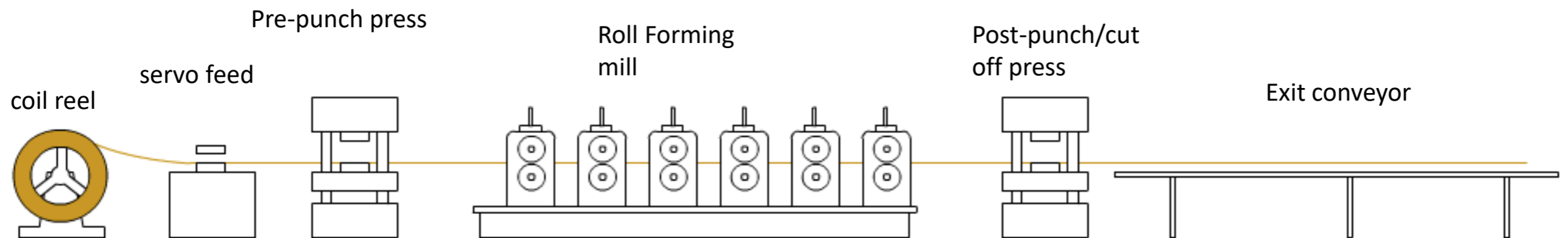
From this architectural beginning, Dahlstrom followed the industrialization of our country, participating in the advent of the automotive industry, the elevator industry, the rail industry and eventually in the computer industry. Over a century of continuous work in the roll forming industry has left the company with a wealth of proprietary tooling, over 1700 unique shapes that are available for our customers' use.

Today you can still see some of the early architectural products in important buildings in our country: the Library of Congress, the Empire State Building, Rockefeller Plaza, New Jersey State House, Federal Courthouse in Buffalo, NY, and many more state, federal, and commercial buildings.

Although the company has its roots in architectural metals, Dahlstrom Roll Form now supplies many OEM industries including transportation, elevator/escalator, refrigerated storage, solar racking systems, HVAC/cooling towers, steel doors and frames, and furniture/fixtures. Some current major customers include: Ingersoll Rand, The Schindler Companies, Otis Elevator, Saint-Gobain/CertainTeed, Loewen Windows, Alcoa/Kawneer, Legrand/Starline, Panel Claw Solar.

## The Roll Forming Process

- Roll formed profiles are created by a series of male and female rollers gradually adding work to coil fed sheet metal to create the final shape.
- Any ductile metal can be roll formed; steel, stainless steel, pre-painted steel, galvanized steel, aluminum, copper, bronze.
- In-line punching can be either pre-punch, post-punch, or both creating a very lean “from coil to pallet” scrap free process.
- Roll forming can produce shapes not attainable from other bending processes... closed shapes, different bend angles, hems, locked seams, and more can all be formed with no effect on run speed...which means no increase in cost.





## Dahlstrom Roll Form Today: Sales, Growth, Capability, and Capacity.

- Dahlstrom Sales have been consistent:
  - 2019 = \$11,400, 000
  - 2020 = \$11,600,000 (COVID delayed projects)
  - 2021 = \$13,650,000 plan
  - 2022 = \$15,525,000 plan
- Dahlstrom capital expenditures over the last three years have been > \$1,800,000. In addition, Dahlstrom acquired DC Roll Form, a local complementary business.
- By Q221 both business will combine in a new 130,000 SF production facility and warehouse with an additional 50,000 SF of expansion space available. Facility currently has full conveyORIZED powder coating line *specifically designed for long slender parts*.
- Dahlstrom currently operates 1 to 3 shifts as required by peak demands. Effectively today, there is one full shift of available capacity on 17 of our 20 roll forming lines. Our “rings of defense” strategy protects our customer’s ever changing demands:
  - If necessary, a split shift can started immediately
  - To guard against equipment failure, tools are cross-designed to work on several lines.
  - Sprint capacity via “*pit crew*” setup teams created 6% additional one shift capacity in 2020. Sprint capacity can be tapped immediately for a constrained line.
  - Our VMI safety stock system covers minor consumption variation and allows level loading of our production runs.



## Dahlstrom Quality Management...ISO 9001:2015 certified every year since 1995

- Documented manufacturing instructions for the machine operators, including requirements for frequency verification and recording of same (Self-Verification records)
- Product Audit requirements, such as First Articles, Independent Double Checks, Product Verification Records
- Operator Feedback Sheets, returned to the ISO Management Rep, to identify areas of need or improvement with each production cycle.
- Preventive Maintenance, including safety verifications.
- “Form F106” (Dahlstrom Roll Form – Clarifications and Exceptions to Specifications) – a process employed to mutually understand requirements, key characteristics and expectations, prior to starting roll form tools.
- Continuous Improvement program – 100% employee involvement capturing a broad array of Preventive Action and Continuous Improvement activities.
- Training Needs Assessment – performed annually, with quarterly reviews and updated documentation.
  - Dahlstrom operator pay grades are based on attaining new levels of acquired skills and cross training - *not tenure*.

### Our key results which we measure and communicate monthly:

- 3 year field defect PPM of 2590
- 3 year on-time delivery of 99.38%.
- 15 month DARTIR (days away due to injury) = 0
- On the road to SHARP certification. **SHARP** (Safety and Health Acknowledgment Recognition Program) is the highest OSHA certification given for exemplary safety practices. **SHARP** companies are excluded from OSHA inspections.



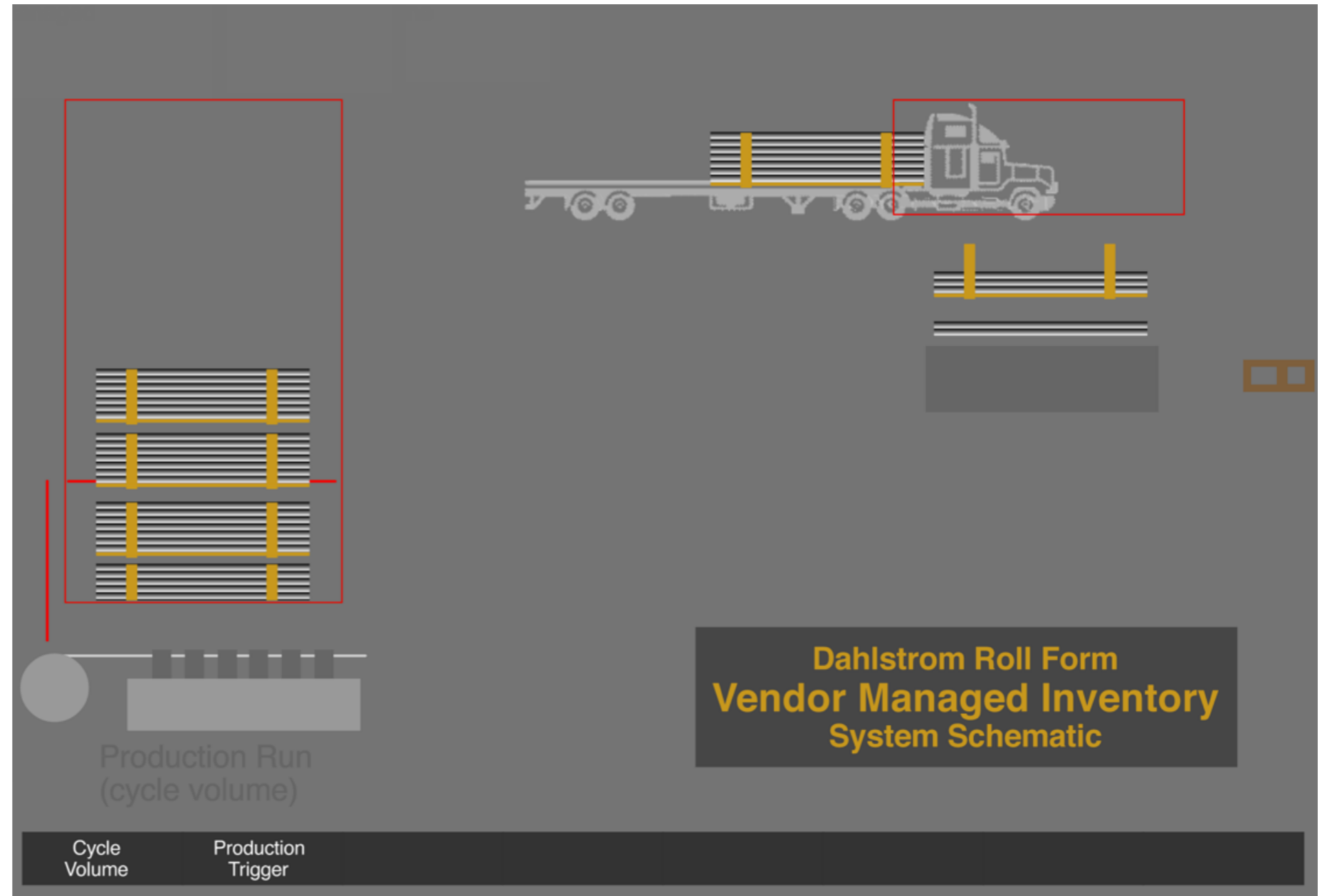


## Dahlstrom Inventory Management Service

Dahlstrom includes immediate access to managed inventory for all program customers.

Our key components to a well managed inventory system include:

- Initial part usage understanding and joint development of a Kanban container system...static number of containers in the beginning, dynamic after the consumption profile is learned.
- Creating a Kanban connection between finished goods and our raw material suppliers that is time phased to our production schedule.
- Weekly (or daily) consumption feedback from your point of use.
- Quarterly strategic system reviews between your supply manager and our account manager for any system adjustments.



**Our Mission:** We commit to our employees, our customers and all who touch our business that together, we will grow a reliable, prosperous future.

**Thank you for your interest in Dahlstrom Roll Form**

Robert White  
President  
Dahlstrom Roll Form

