

### Project Profile

- **Company:**  
JACQUET Mid Atlantic
- **Industry:**  
Metal Processing and Service Center
- **Project Location:**  
Limerick, PA
- **Ross Products:**  
Dexco<sup>®</sup> Narrow Aisle Cantilever Racks
- **Application:**  
Metal Bar Storage

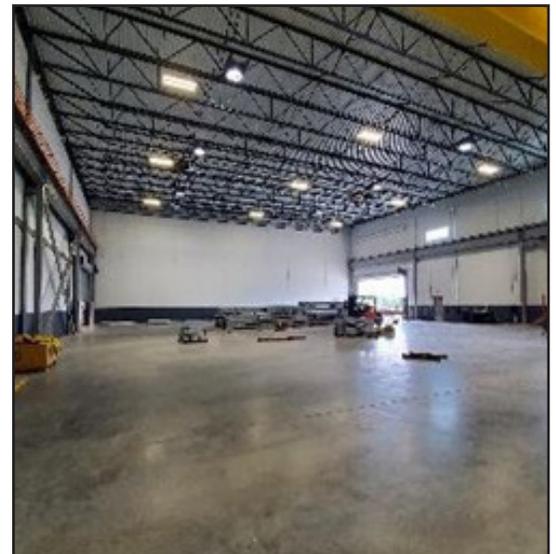
Opening a new facility is an opportunity to utilize vertical space and optimize inventory management with well-designed racking systems. JACQUET took advantage of this opportunity when they opened a new North American headquarters facility in Limerick, Pennsylvania. Before move-in, the company had over 200,000 lbs. of unmanaged bar stock that required storage solutions. Ross sales engineer Tracy Buck was contacted to provide assistance and insights for the project.

### Challenges:

#### Implement Rack System in New Facility with Existing Equipment

JACQUET has a side loader with a 5,000 pound weight limit for moving and managing long bar stock. Any rack design had to account for the unique specifications of the loader. In this case, the loader's guide wheels - which run along a floor rail system - had to be evaluated. Additionally, the lowest usable position of the side loader's chassis had to be determined. Lifts have a decelerating factor – the higher the lift and the heavier the load, the more deceleration occurs. All of these data points were needed when the floor rail system was designed to match the side loader requirements.

The facility has an overhead crane supported by building columns. The rack system needed to be designed within the boundaries of both, and accommodate doorways and building entries, so that storage space was maximized and crane operation was unaffected.



Storage Area (Before)

**Solution:**  
Dexco Heavy Duty Cantilever Racks

**Product Selection:**

After the consultation and engineering review, it was determined that cantilever racks were the best solution to store the different types of inventory:

- Cold-rolled steel bars
- Cut, rolled and flat steel

The final Dexco racking layout consisted of narrow aisle cantilever racks which best utilized the capabilities of the side loader, and included:

- Two rows of single-sided racks and five rows of double-sided racks in the primary storage area
- Three stand-alone, single-sided rack systems adjacent to the perimeter walls

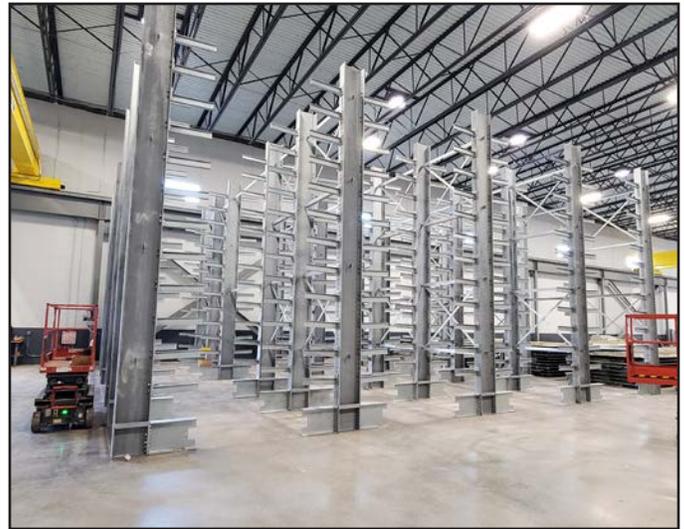
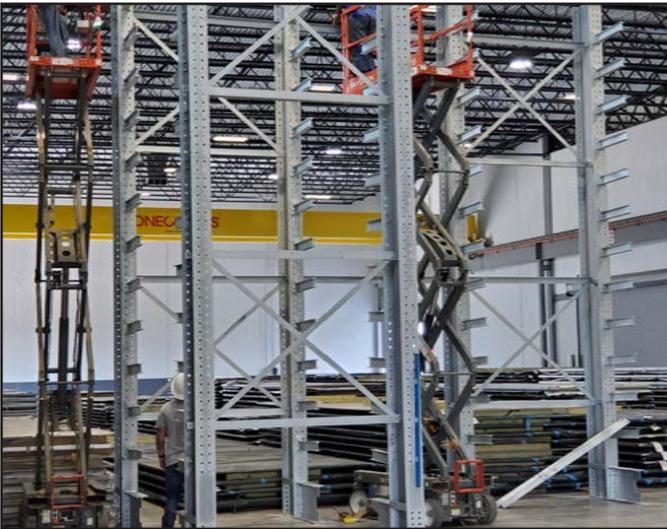
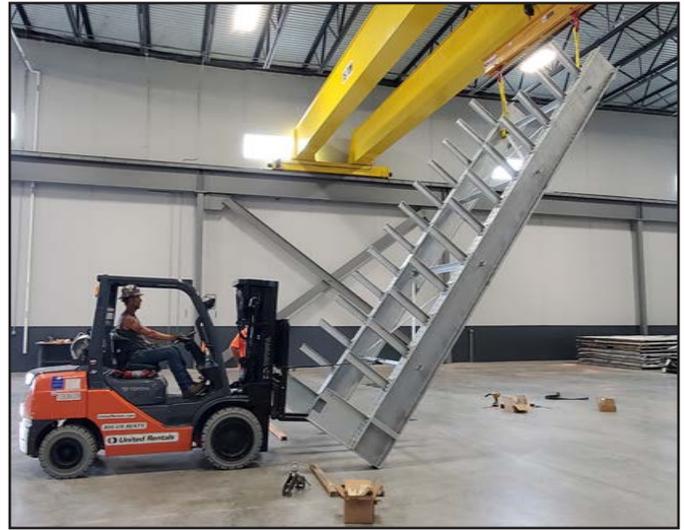
Ross designed the racks to store lighter items at the top of each rack. As an extra precaution against corrosion, the racks were hot-dip galvanized. Additionally, Ross designed and fabricated 45-degree and 90-degree steel plate entries for the guide rail system that ensure the side loader can safely enter each row of racking.

**Installation:**

Ross's installers completed the process in ten days.



**Case Study**  
Utilizing Vertical Space  
and Optimizing Inventory Management  
*JACQUET Mid Atlantic*



**Results:**

**Narrow Aisle Cantilever Racks Maximize Storage and Accommodate Site Equipment**

The Dexco racking systems maximize floor space, provide vertical organization, and accommodate the side loader. Since the racks utilize the facility's interior height, exponentially more bar stock inventory is available than if material was stored on the floor. Inventory is visible and accessible without having to move other stock items out of the way, thus reducing the potential for damage and providing more efficient inventory management.



*The rack systems were located outside the building columns and positioned below the overhead crane.*





*The primary racking system consists of five double-sided racks, two single-sided racks and the guide rail system.  
JACQUET-designed custom trays are used to hold the material.*

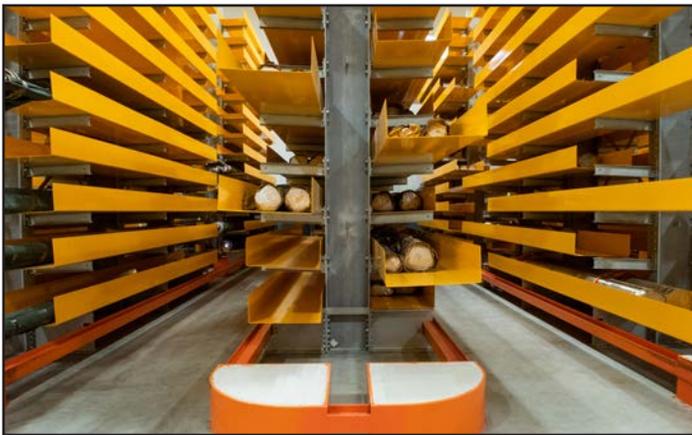


*The secondary racking systems consist of single-sided racks and guide rail systems.*

## Case Study

# Utilizing Vertical Space and Optimizing Inventory Management

*JACQUET Mid Atlantic*



**About JACQUET:** JACQUET in the USA is a service oriented stainless and nickel alloy processing company with 4 locations strategically placed to provide fast turnaround and delivery. JACQUET stocks 19 different grades in plate and bar as well as offer a wide range of processing capabilities to provide customers with unique and low cost solutions to their metal needs.

**About Ross:** Ross manufactures a diverse line of public safety and physical security solutions designed to protect people, property and products in a wide range of applications including heavy-duty industrial storage, anti-terrorism / force protection, and utility access. Based in Leola, Pennsylvania since 1962, the company supports ground-up construction and capital improvement projects throughout the world. Ross specializes in creating products that are engineered and tested to meet the highest standards for safety, quality and reliability within their respective fields.



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