BACKGROUND
The Kloeckner Metals Tulsa facility, part of the Kloeckner Metals Flat Rolled Group, is a 166,000 sq. ft. facility that produces stainless steel, aluminum, carbon flat rolled and building products for customers in the southwest region of the United States.

CHALLENGE
Kloeckner was looking for a way to streamline its operations to stop time being wasted on searching for materials at the facility. With such a huge facility, there were always stacks of metal stored at different locations, and no standard operating procedure across the organisation to locate the metals when they were needed. As a result, it was extremely time-consuming for employees to find any specific items, which led to inefficiency in operation and lower revenues for the company.

Kloeckner’s first goal was to simply save time locating metal in their facilities and to create a standardised locating procedure for the company. They started looking for a technology that would define and streamline operations, all the way from inventory checks to data analysis on orders, with the end goal of improving overall business efficiency. The new system also had to work effectively in a challenging and highly reflective environment.

SOLUTION
After some unsuccessful testing with various other solution providers, RTV Engineering’s solution, powered by Quuppa, finally convinced Kloeckner that their solution was up to the task. This solution was deployed to locate materials and assets faster, while maintaining a more accurate inventory.

A total of 70 Quuppa Locators were deployed throughout the facility, while 4000 tags were placed on items within the facility. Quuppa also developed a method to tune the reception sensitivity of each Locator to help the system deliver better results in the challenging metal environment.

RTV Engineering’s software, Site Director, was then used to convert the X,Y location of each asset into a specific zone location, for example bays, columns, rows, and sections. This allowed personnel to quickly locate assets based on the zone name. Moreover, the software filters the incoming raw data from Quuppa’s Positioning Engine and only reports asset movement between zones to Kloeckner’s ERP. The initial implementation only took 3 weeks to deploy.

“We were achieving roughly 20,000 USD more per day in shipments. As soon as we found out that we can actually ship more because we can find the material quicker, the ROI improved dramatically. It was paid off in a couple of months instead of a couple of years.”

JASON ALBRO
EVP Flat Rolled Group
Kloeckner Metals
RESULTS

By automating and providing accurate location updates, Kloeckner were able to find materials quicker, which translated into getting orders out of the door faster and generating more revenue. The following results speak for themselves:

- Load times **decreased from 45 minutes to 7 minutes**, contributing to massive savings on time and resources.
- Overtime was **reduced by 11%**.
- Production **increased by 3 truckloads** of steel a day (from 27 loads to 30 loads), leading to **15-20,000 USD more** in shipments per day.
- Improved operational efficiency enabled the company to negotiate better delivery rates.
- Safety procedures were improved at the facility.
- The initial investment was **paid off in just 4 months**, as opposed to the originally calculated ROI of around 16 months.

NEXT STEPS

Kloeckner sees plenty of potential to do more with the Quuppa technology and RTV Engineering’s solution. Their next step will be to digitalise the supply chain and automate the entire customer journey.

For example, the tags will be included in the customers’ orders, so that Klockner can see when they’ve been received by the customer and when they’ve been used up, triggering an automatic reorder to be generated.