

United Scrap Metal Inc.
Cicero, Illinois



MOBOTIX

CASE STUDY

Large Industrial Recycler Convinced By MOBOTIX-Solution

Customer

United Scrap Metal Inc. a buyer, processor and recycler was founded in 1978 through the same process in which their business is based: converting scrap metal into a more valuable commodity. Marsha Serlin, a single mother of two with \$200 and a rental truck, founded the business in a survival mode, attempting to provide for her family. From those humble beginnings, the company has grown into one of the largest industrial recyclers in the country, processing over 250,000,000 lbs. of material each year. The company now operates a 35-acre yard in Cicero, Ill., employs 180 team members while serving more than 2,500 commercial clients across the nation.



United Scrap strives to not only have a positive impact on the environment but to positively affect their community and emphasizes that commitment as one of their core values. The company has a particularly longstanding relationship with Ronald McDonald House Charities, for which it helps generate funds to provide a "home away from home" for the families of hospitalized children while also raising awareness for the benefits and importance of recycling. With help from United Scrap, Ronald McDonald House will open its largest facility in the nation in June of this year.

"Our mission is giving back to the community and we never hesitate to do so," said Brad Serlin, President, United Scrap, and son of the company's founder, Marsha. "We've been very fortunate to get where we are today. It doesn't always work out that way for other people so we want to make sure we give back when possible."

Challenge

United Scrap needed to replace its old analog surveillance system. It had quite simply reached the end of its life and it was time to upgrade to not only keep up with, but to jump ahead of pending government regulations that essentially require scrap metal recyclers to keep a record of materials it purchases from buyers as well as the identity of the people selling material. This includes not only verifying identities but also capturing license plate numbers on the vehicles that drive through the retail sales area of the facility. United Scrap pays immediately on the spot for scrap metal and, as a result, needs to turn away those attempting to sell stolen or hazardous material or track down people who may have been involved in criminal activity. Securing the company's own 35-acre facility is also a monumental task considering the size and make-up of the area.

Security-Vision-Systems





The Motion Detection, PTZ And IP Features Have Met The Needs Without Boggling Down The Network

"We are always trying to be progressive and implement technology before it is needed," Serlin said. "We never want to be short-sighted."

Additionally, the metal market is incredibly volatile, with prices fluctuating for different metals almost constantly. Prioritizing the processing of certain materials is sometimes key for ensuring profitability but it can be difficult to ensure the processing is going smoothly on such a large lot. Coupled with the often-sudden rush of people selling scrap metals, United Scrap also needed a method for quickly identifying high-priority areas and materials so they could deploy ample workers.

Solution

Paul Grefenstette, President of MOBOTIX partner and systems integrator Griffon Systems, recommended a comprehensive MOBOTIX system consisting of M12 and M24 cameras as well as MxControlCenter, the MOBOTIX advanced video management solution. Griffon Systems is a specialized and innovative systems integrator serving the Chicago area that emphasizes its ability to consult with end users and deliver a unique solution to their needs and budget. "Paul has been a great resource for us. He has a deep understanding of security industry trends and that helps us incorporate a proactive approach," Serlin said. "He is always looking out past the immediate technology need so we can have room to grow into new technology or

expand easily as our security needs grow."

Griffon Systems has completed two phases of the three-phase install with 25 MOBOTIX cameras deployed in the yard and parking lot as well as the drop-off center and payout window. The final phase will incorporate another 25 cameras. The MOBOTIX high-resolution cameras provide United Scrap with the best image clarity available and its decentralized approach to surveillance keeps the system cost-effective. One MOBOTIX camera with 3.1 megapixels records 30 times more detail than traditional CCTV cameras. As a result, larger image areas of up to 360-degree views are possible, which allows United to cover more of its property with fewer cameras and reduces upfront and long-term costs. Unlike other systems, the decentralized MOBOTIX concept incorporates a high-speed computer into every camera to reduce network bandwidth because video is processed on the cameras themselves and images do not have to be transferred continuously.

"About 90 percent of the new installs I do are MOBOTIX solutions," Grefenstette said. "The picture quality is unmatched." Grefenstette also recommended MxControlCenter, professional video management software included with the purchase of MOBOTIX cameras at no additional cost. It includes all the functions required from a robust security software solution including unlimited users, simple configuration and installation, layout editor for floor plans, and a user-friendly



interface and camera view. When combined with the MOBOTIX decentralized concept, it delivers a comprehensive security system at an extremely cost effective price.

Results

United Scrap has stayed ahead of regulations requiring metal recycling centers to record the license plate numbers of the vehicles used by sellers to drop off materials. The company now has a high-resolution camera aimed at the rear of vehicles as they stop by the payout window, allowing United to gather the data quickly.

In addition, when sellers drop off their material and it is being weighed, a MOBOTIX camera takes a snapshot of the items sold for the company's records.

"The ability to have such high resolution is such an advantage," Serlin said. "Having that kind of clarity is great, especially when you are dealing with hunks of metal that otherwise might not be so identifiable."

The MOBOTIX solution has dramatically reduced opportunity costs and, therefore, increased ROI by helping United's managers make better use of their time. They can easily access the video feed of the area they manage to make sure operations are running smoothly, check on inventory and ensure time-sensitive materials – which can change on a daily basis because of the volatility of the industry – are being processed fast enough from their desk chair. Managers can also see if a drop-off line is beginning to

form and quickly deploy more workers from other areas to help compensate for the rush.

"We can just hop on the computer to see if material is going through our processing areas as opposed to the old way of putting on a hardhat and taking a walk out there," Serlin said. "Plus, it can be accessed when we are out of town, which provides peace-of-mind that things are running as planned."

Additionally, many Fortune 500 companies depend on United to help mitigate risk. When large companies have hardware that could potentially contain valuable proprietary information, they contract with United Scrap to ensure destruction. United's advanced surveillance solutions add a valuable insurance policy to this process, reassuring both parties that the materials and information within have been completely destroyed.

The system is a huge improvement over United Scrap's previous analog system and allows them to better protect their assets. Monitoring a 35-acre yard is a herculean task, but made possible by MOBOTIX's 360-degree views and wireless capabilities.

"It helps us sleep better at night. We can't afford to take the risk of not having surveillance. That would be a big problem for us," Serlin said. "No part of our MOBOTIX system has fallen short of expectations."



Hemispheric Q24



MOBOTIX – Made in Germany: Innovative Technology, Reduced Total Costs

The German company MOBOTIX AG is known as the leading pioneer in network camera technology since its founding in 1999, and its decentralized concept has made high-resolution video systems cost-efficient.

Increased Resolution Reduces Amount Of Cameras Needed

1536-line, high-resolution sensors give a better overview and allow users to monitor an entire room with just one camera.

Reduced Installation Costs At Any Distance

Standard Ethernet connection enables the use of common network components such as fiber, copper and wireless (wi-fi).

Intelligent Cameras Reduce The Number Of Recording Devices

The decentralized MOBOTIX concept makes it possible to store data from approximately ten times more cameras to a single storage device than is normally possible.

Event-Controlled Image Format Minimizes Storage Costs

Automatic image adjustment (frame rate, size) based on movement, sound or signal input reduces the bandwidth and storage requirements.

Low Power Costs, No Extra Heating

Anti-fogging without heating allows usage of standard PoE technology to power the system via Ethernet or two-wire cable, saving power cabling costs.

Backup Power Supply Costs Reduced By Over 80 Percent

Low power consumption, approximately four watts, enables year-round PoE (no heating required) with one centralized UPS from installation room using the network cabling.

Robust And Practically Maintenance-Free

Fiberglass-reinforced composite housing with built-in cable protection and no mechanical moving parts (no auto iris) guarantees longevity.

Software For Thousands Of Cameras And Storage Devices Included

The right premium user interface software for every application: MxEasy for compact video solutions, MxControlCenter for professional control centers.

Unlimited Scalability And High Return On Investment

While in use, more cameras and storage can be added at any time; image format, frame rate & recording parameters are camera specific.

Additional Functions And Other Extras Included

Audio support, lens, wall mount and weatherproof housing (-30 to +60 °C; -22°F to +140°F) are included; microphone & speaker available in almost all models.