

CASE STUDY

Increased Safety and Cost-Efficiency Can Go Hand In Hand.



Snapshot:

Client – Caterpillar Logistics Services, Inc.

Website – <http://logistics.cat.com/>

Industry – Logistics and Supply Chain

Challenge – Cat Logistics needed a solution to expedite the creation and shipment of replacement OPS certification films.

Solution – As a part of Muir's **Total Program Management** services, inventory management and consolidated production of warning decals and certification markings was provided. Muir took over the creation and shipment of markings and created an OPS Replacement Kit.

Results – With Muir managing the OPS certification marking process, Cat Logistics saved resources, minimized equipment down time, and avoided OSHA fines. CAT increased legal awareness and reduced liability. And Muir is now regarded as a valuable consultant.



Client Overview:

Headquartered in Peoria, Illinois, Caterpillar Inc. (CAT) is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, and industrial gas turbines.

Caterpillar Logistics Services, Inc. (Cat Logistics) has provided world-class supply chain solutions to its parent company, Caterpillar Inc. for more than 80 years. Headquartered in Morton, Illinois, Cat Logistics operates 130 offices and facilities in 23 countries on six continents while serving more than 65 clients in distinct industries including automotive, aerospace, manufacturing, technology, industrial products, and consumer durables.

Challenge:

Cat Logistics needed a solution to expedite the creation of replacement certification markings and alleviate the pressure of hand stamping them without allocating thousands of dollars to create new engineering drawings for over 2,000 parts. A Caterpillar Six Sigma Team was formed and Muir's expertise was requested to establish a solution.

A significant number of CAT's off-highway construction equipment vehicles are equipped with a Rollover (ROPS) or Falling Objects (FOPS) Protective Structure. Its purpose is to protect the operator in the event of an accidental rollover. These Operator Protective Structures (OPS) originally donned aluminum plates (now polycarbonate films) that were inscribed with certification information, which verified that the structure had passed inspection, had not been altered, and is providing sufficient operator protection.

About ten years ago the supplier discontinued their OPS product line and released thousands of blank aluminum OPS plates to CAT, who sent them to Cat Logistics. For many years, this forced Cat Logistics to expedite orders and hand stamp certification information onto the aluminum plates themselves whenever dealers ordered replacement certification markings for their OPS. The arrangement resulted in incorrect and sometimes insufficient information being stamped on to the markings, oftentimes crooked, raising liability concerns for CAT.

In addition to the plates, Cat Logistics also had to ship one-offs of OPS required warning decals that they kept in inventory. And time was vital. OSHA safety fines mandate that equipment remain inoperable until it displays the required certification information displayed on these plates and film. It can cost approximately \$1500-2000 per hour in downtime, not including lost productivity of operations that depend on the output of the machine, at a mining site for example.

“ I really enjoyed working with Muir and helping streamline this process.”

*Compliance-Controls Analyst –
Caterpillar, Inc
Mossville, IL*



Solution:

After some collaboration, it was decided that when a CAT production facility places an order for an OPS certification film for *new equipment*, Muir would ship, on-demand, an original polycarbonate film. When Cat Logistics places an order for a replacement aluminum OPS plate for a *serviced piece of equipment*, Muir would automatically convert the plate into an OPS Replacement Kit. The kit consists of an instruction sheet, a no-drill warning film, a seatbelt required film and a custom replacement polycarbonate certification film (which replaces the former aluminum plate) with an added warning tab allowing for another chance to limit Caterpillar's liability for revamped equipment. Muir produces one offs of the kit on demand and ships directly to dealer locations worldwide in an expedited manner. As a part of Muir's **Total Program Management** services, inventory management and consolidated production of warning decals and certification markings was provided. By using Muir to supply these kits, both CAT and Cat Logistics can count on OPS information being accurate, meeting their stringent appearance standards, and being continually in stock. In addition, since CAT is not stocking these parts at various locations – or having to have staff ready to expedite shipments – there is a significant overall cost savings.

Results:

Muir ships replacement kits on demand directly to dealers saving Cat Logistics time and resources which also reduces equipment down time and OSHA fines.

The OPS kit also developed into a significant cost saver for CAT because it alleviated Cat Logistics of the burden of hand stamping the plates and inventorying and shipping separate warning decals.

Legal awareness was also increased and CAT's liability reduced, without Caterpillar spending funds on 2,000+ new engineering drawings.

As an added value...

Because project management teams at CAT have transitioned over the years it has become a value added benefit that Muir was involved with this particular project from inception to completion. Muir is often called upon to help key personnel understand the process and original intent of the arrangement, as well as to provide direction to the resources available in the CAT system.

“ Thank you for all your time and effort with the Rops program, you are such a wonderful and collaborative supplier to work with...! ”

*Buyer -
Caterpillar Global Purchasing
Mossville, IL*

About Muir Omni Graphics:

For more than forty years, Muir has been providing some of the world's leading manufacturers, utility companies and service organizations with turn-key decal production and management solutions, including OEM Markings and Decals, Fleet and Corporate Vehicle Markings, Corporate Identity, Control Panels and Fascias, Warning Labels and Signage, and Specialty Graphics. For more information, visit www.muirgraphics.com.

