



Columbus Stainless (Pty) Ltd

Award: Safety

Category: Workplace Improvement; Safety Training

Safety and Security of Transporting Stainless Steel Goods

Challenge

Columbus is a stainless steel manufacturing plant situated in Middelburg, Mpumalanga, South Africa.

Columbus faces logistical challenges as the South African Ports are a substantial distance (>600 km), from the manufacturing plant. One of the major challenges faced is the safety and quality of transportation of finished goods and incoming consumables.

In 2014, Columbus experienced a number of transport related incidents, which resulted in road accidents compromising the safety of the public as well as damage to material, and thus the quality of delivery. The following challenges were raised;

1. Transporters required awareness and training of the correct procedures and methods of loading, securing and protecting Columbus goods in transit. Different shaped product viz. coils, sheets, slits etc. require different methods of securing.
2. Transporters required increased awareness of

the precautions that need to be taken on the national roads when transporting Columbus goods.

3. There was no specific area for transporters to properly secure, tarp and double check cargo before the journey.
4. Transport drivers required a health and safety induction before being able to enter Columbus property and to transport Columbus goods.
5. Finished goods were being damaged by chain lashing.
6. The photographs of loads and transporter identity and number plates were not clear to assist in identifying non-conformance to safety and quality standards.
7. There was no procedure in place for reporting the origin of damaged goods throughout the delivery chain.

Action

After each of the above challenges was thoroughly investigated and a root cause analysis done by the distribution and safety team, the challenges were systematically addressed.

1. The distribution and safety team drew up a standard procedure and transcribed this into a “transporter manual” that needs to be adhered to by all transporters entering Columbus property and transporting Columbus goods to the appointed destination. The objective of the transporter manual is as follows;
 - Familiarise transporters with Columbus quality standards and requirements
 - Familiarise transporters with terminology used when handling Columbus goods.
 - A step by step procedure of what transporters should do and routes that need to be taken upon entering and exiting Columbus property.
 - Alert transporters of the safety hazards within Columbus and measures to be taken in case of emergencies.
 - Alert transporters of the risks associated

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with transporting Columbus goods and precautions that should be taken.

- The correct loading, securing and protection at different loading bays in Columbus. Each product shape has a required standard for securing on the trucks.



Columbus Stainless Transporter Manual

2. The operations and safety team assessed areas that were being used by transporters to secure and tarp material. A uniform process

and area was designed to create a dedicated space and check points for transporters. The objective for this project was to provide a dedicated area to ensure all loads are properly secured and thoroughly checked.

3. Each driver is now required to attend a health and safety induction and receive training in accordance with the transporter manual by the safety and distribution team once every six months. The transporter is required to sign a declaration of training received once every six months assisting Columbus to keep records and ensure all transporters are properly trained.
4. Steel coil edge protectors were designed and provided to transporters and transporter drivers trained on how to properly secure coils using the designed protectors.
5. A high resolution camera was installed at the axle scale to ensure visual record of material safely secured.
6. A procedure was drawn up involving the technical, distribution and commercial departments to ensure that all damages of

goods are reported, this assists in proper and accurate reporting allowing corrective measures and actions to be put in place.



Steel coil edge protectors have reduced the damage to coils by chains.

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Outcome

1. All transporters are now aware of the Columbus values, the terminology often used, the routes to be taken by transporters and the safety measures to be taken in case of emergency.
2. The dedicated area for securing and tarping of loads has ensured that every load is checked by the transporters before leaving Columbus. An extra lane was created for ease of traffic control and cut down on turnaround times.
3. All transporters are now aware of the precautionary measures to be taken when transporting Columbus goods and are being continuously trained every six months on the correct loading, securing and tarping of goods. Transport related incidents have declined by an average of 51.5% since 2014.
4. The steel coil edge protectors have reduced the damage to coils by chains.
5. The installed cameras at the axle scale provides clear pictures showing whether loads are secured. This has been efficient in providing visibility of all loads leaving the

Columbus gate and as a tool to investigate incidents of transport damage.



A high resolution camera was installed to ensure a visual record of the safely secured material

6. This procedure ensured that technical, distribution and commercial work jointly to report the damages to goods in transit and that the corrective processes can be followed.

The distribution and safety team actively engages with transporters to discuss safety and quality when they occur. Quarterly meetings and KPI reviews have been set up and is yielding positive reviews with improvements in a decrease of road accidents, material lost in transit and damages to coil edges.