

John Deere Tractor Works

Application: Inverted Power and Free Paint Chain

Product: Castrol LubeCon Motorized Chain Cleaner



THE SITUATION

John Deere was dry ice cleaning their paint power chain on a monthly to quarterly basis to prevent surging of the paint chain that goes through a robotic paint booth. Castrol was challenged to clean the paint from the chain so that dry ice cleaning and conveyor surge was minimized .

BEFORE

- Inverted power chain ran through the liquid down draft paint booths.
- Paint from the robotic paint guns and the manual paint guns coats the power chain during paint production.
- The robots were shutting down due to faults caused by the surging of the paint power chain.
- Conveyor chain pins and cat drive were being lubricated with Series 1/m-200 with lubricator set at 40 off cycles.

AFTER

- Castrol provided technical support to install an inverted chain cleaner, a standard chain cleaner, and a striker to help clean the paint off the chain.
- Lubricator chain pin valve time was increased and chain pin off cycle was reduced from 40 to 25 off cycles.
- After initial installation an air regulated “float kit” was installed to reduce downward pressure on chain and increase brush life.
- After the brush system was installed the chain ran smoothly and the need to clean the chain with dry ice was drastically reduced.

THE SOLUTION

- **The right Lubricant for the right application.**
- **An effective chain cleaning system to keep the chain running smoothly.**
- **The chain lubrication system is monitored by Castrol’s LubeCon Technical Sales Representative via by- monthly system inspections.**

CASE STUDY

YOUR ADVANTAGE IN AN INDUSTRIAL WORLD



FOR CASTROL AND CASTROL CUSTOMER USE ONLY. OTHER USES PROHIBITED. DO NOT FORWARD OR DUPLICATE.

Castrol LubeCon chain cleaner reduced cleaning costs.

Previous conditions

- Paint chain was cleaned with dry ice monthly to quarterly by an outside contractor.
- Estimated cost per cleaning \$2500.
- Minimum estimated cost per year \$15,000.
- **Total cost for one year: \$15,000 +.**

Current LubeCon system

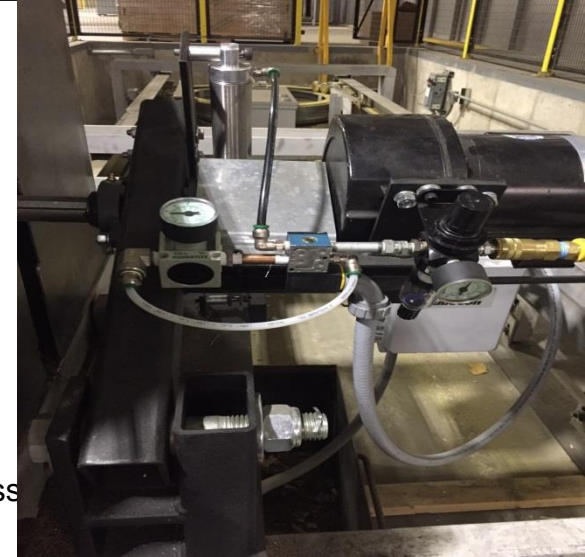
- Motorized chain cleaners and striker = \$13,969.
- Replacement 24" brush per replacement every two months at \$268 = \$1608.
- Existing Lubecon lubrication system applying slightly more lubricant.
- **Total costs for one year: \$15,577 ,each additional \$1608.**

Estimated cost savings for one year: \$0.00

Estimated cost savings over three years: \$27,000.00

Additional non-measurable savings

- Regular onsite Castrol technical support to ensure control of cost and program success
- Data collection to identify potential process problems.



CASE STUDY

YOUR ADVANTAGE IN AN INDUSTRIAL WORLD



FOR CASTROL AND CASTROL CUSTOMER USE ONLY. OTHER USES PROHIBITED. DO NOT FORWARD OR DUPLICATE.