

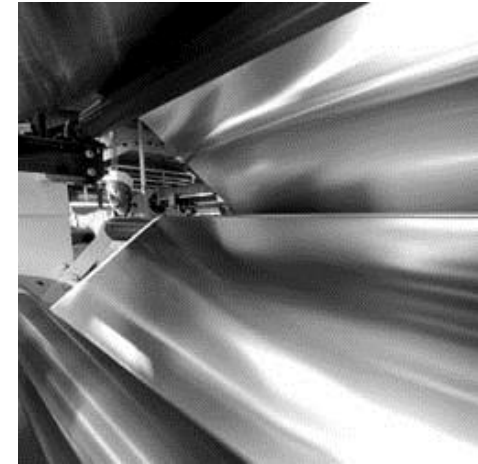
Huge Usage Reduction with ILOFORM PS 326

MACHINERY MANUFACTURE (USA)

METAL FAB – LAWN MOWERS

Castrol ILOFORM® PS 326

ANNUAL SAVINGS: \$16,860



THE SITUATION

A major lawnmower manufacturer was looking to reduce costs and chemical usage, while potentially improving tooling performance on their stamping and punching operations for lawn mower decks & handles (cold rolled steel). The previous fluid was used “once-through” and then dumped to waste. The customer was open to different fluid technologies that could potentially be recycled.

BEFORE

- Previous fluid was a once-through use
- Punch operation was run at 50% concentration with an annual usage of 8,250 gal
- Stamping operation was run at 100% concentration with annual usage of 17,160 gal

AFTER

- Converted to Castrol ILOFORM PS 326 @ 5-10% concentration
- New proportioning system used to control concentration
- **Fluid usage reduced by 90%!**

THE SOLUTION

- The customer had good success with the previous deformation fluid, but asked Castrol for any options that could improve their process further or reduce total cost.
- Castrol engineers reviewed the current process to determine the best fluid and concentration ranges for the customer.
- Utilizing the ILOFORM PS 326 fluid technology, operating concentrations were reduced by 90%.
- Production, quality and operator acceptance were all very high.
- Reclaiming and reuse are now possibilities with the new Castrol fluid technology.

• **90% usage reduction**

• **Reduction of oily discharge waste**

• **17% reduction in total cost**

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RECOMMENDATIONS

Castrol engineers recommended the use of ILOFORM PS 326 as a total shop replacement for all the stamping and punching operations.

Key performance factors for the customer included tool/die life, operating concentrations, and potential for recycling. This has been successful through customer support by Castrol and our authorized distributor.

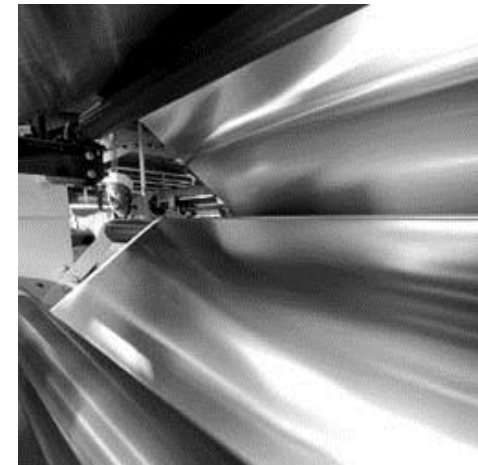
Punch Operation		
Metrics	Previous	Castrol
Usage (gal)	8250	825
Diluted Usage (gal)	16500	16500
Concentration	50%	5%
Diluted Price per gal	\$ 1.94	\$ 1.61
Total Cost	\$31,928	\$26,565
Difference		\$ (5,363)

CONCLUSION

By converting to ILOFORM PS 326, the customer was able to reduce concentrate usage by 90% or 22,869 gallons a year.

The result was a 17% total cost reduction equating to \$16,860.

Stamping Operation		
Metrics	Previous	Castrol
Usage (gal)	17160	1716
Diluted Usage (gal)	Not Diluted	17160
Concentration	100%	10%
Diluted Price per gal	\$ 3.87	\$ 3.20
Total Cost	\$ 66,409	\$ 54,912
Difference		\$ (11,497)



OTHER POTENTIAL APPLICATIONS

The ILOFORM PS 326 is a sulfur and chlorine free, water soluble forming fluid designed to replace traditional chlorinated drawing oils. It offers EP lubrication to extend die life and reduce blemishes & defective parts.