



HOUGHTON™

Rule 1144 Customer Impact

Presented by:

Mark Fretz

Date: March, 2012

Rule 1144

- What % of Metalworking Manufacturing Companies are affected?

Rule 1144

- What % of Manufacturing Companies are affected?

100%

Why Rule 1144?



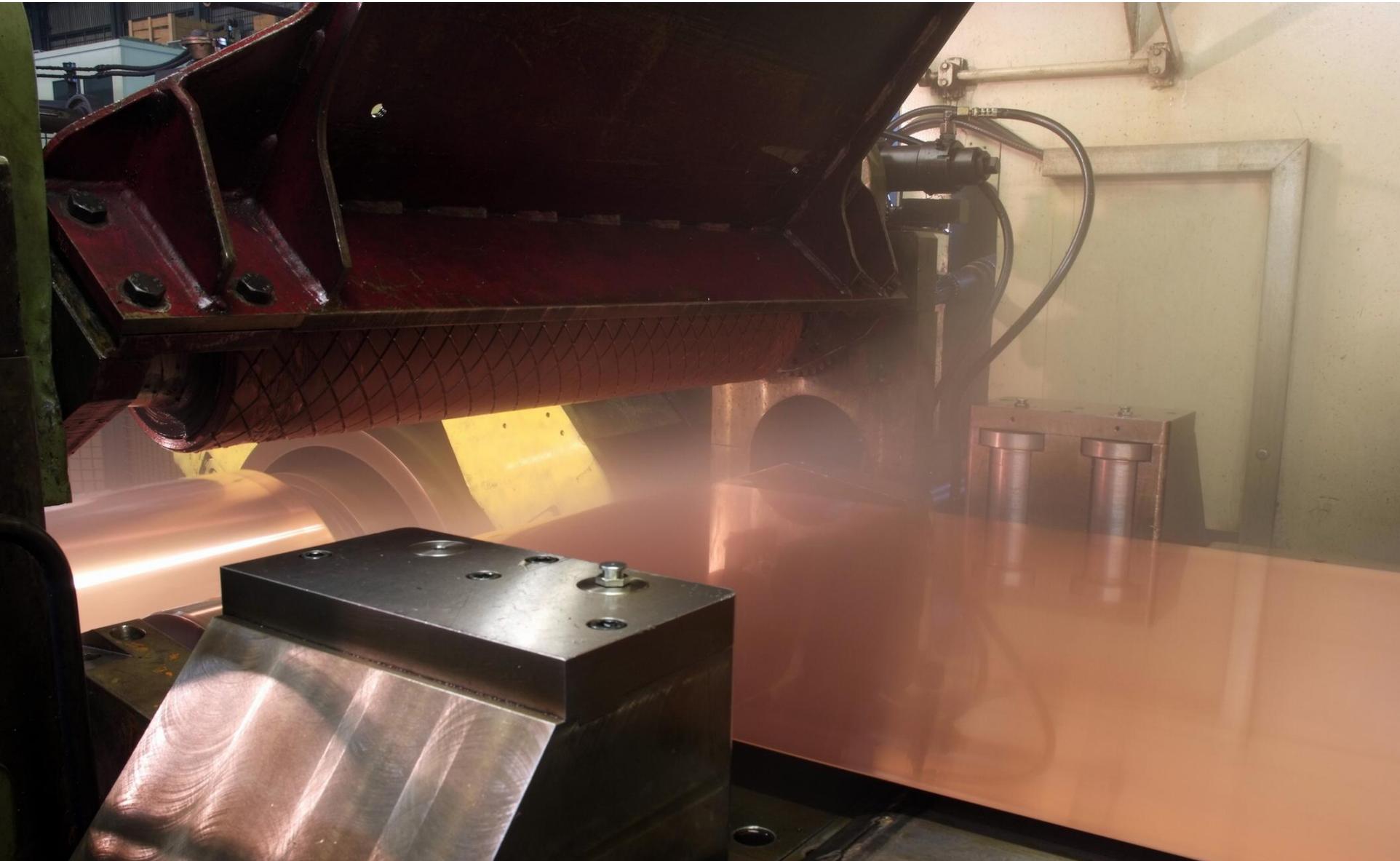
Rule 1144

- Why didn't we do this sooner?

Case Studies

- Steel Rolling
- Rust Prevention
- Metal Forming
- Metal Removal

Steel Rolling

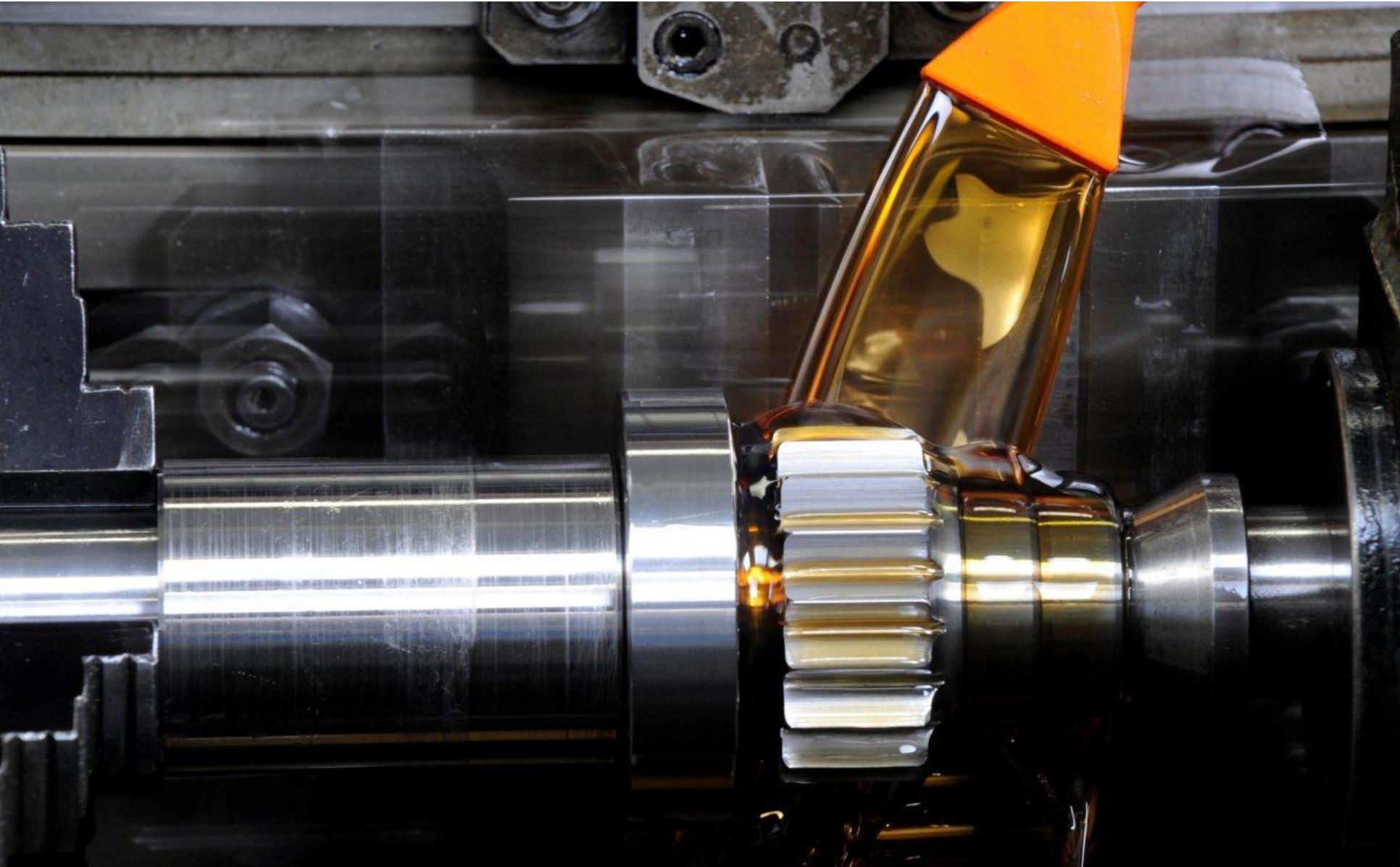


Steel Rolling



- Rust Preventive
- Electrostatic Application
- Near zero VOC
- Approval

Metal Removal



Metal Removal

Seal Compatibility
House Keeping
Hidden Benefits



Metal Forming



Metal Forming



- Seals/Elastomers
- Residue
- Process Changes
- Cost of New Technology
- Longer Lasting

Rust Prevention



Rust Prevention



- Evaporation
- Testing
- Process Changes

Take Home Lesson

- Process Changes
- Reformulations
- Replacements
- Cost
- Communication

Take Home Lesson

- Process Changes
- Reformulations
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- Cost
- **Communication**

What happens after we clear the SMOG?

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UCLA



HOUGHTON™

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