FLEXOCONCEPTS®
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THE ENVIRONMENTAL IMPACT OF DOCTOR BLADES: STEEL VS PLASTIC

RAW MATERIALS

Both Steel and Plastic consume fossil fuels during their production. Since the extraction of these fuels are not recorded separate by material, we mark both steel and plastic as equal in their CO2 emissions at the raw materials stage.

Steel generates over **3X** *its weight in* **CO2** *emissions!*

PRODUCTION

Steel production is an extremely energy intensive process, **generating 3.67 MTCO2E emissions for every short ton of steel produced*.**

The emissions generated during steel production account for as much as **5% of the world's total GHG emissions!** *(MIT Study 2013)*

The production of Plastic consumes significantly less energy than steel, **emitting 1.5 to 2.4 metric ton of CO2 equivalent (MTCO2E) emissions per every short ton of plastic produced.***

Plastic creates on avg. **1.84** *MTCO2E emissions per ton.*

TRANSPORTATION

According to the EPA*, transportation of steel emits **.37 MTCO2E emissions per ton.**

The specific **gravity** (SG) of traditional steel is **7.0 to 7.8**

Steel emits over **2X** *more CO2 in transport than plastic!*

According to the EPA*, transportation of plastic emits **an average of .13 MTCO2E emissions per ton.**

The specific **gravity** (SG) of plastics range from **.83 to 1.55**

Plastic is up to **9X** *LIGHTER than steel!*

YOUR FACILITY

Eco-Friendly Advantages of Steel Doctor Blades

Recyclable
Steel doctor blades are able to be recycled, however the majority of printers do not recycle steel blades due to ink contamination.

Did You Know:
1 TON of doctor blades is about:
54k feet of steel **or** **105k** feet of plastic

Eco-Friendly Advantages of Plastic Doctor Blades

Longer Blade Life
Reducing the harmful greenhouse gasses emitted during the process and transportation of more doctor blades

Eliminate Ink Spitting
Reducing the material and ink waste caused by dirty print

Stop Anilox Scoring
Reducing the energy consumed during re-engraving or the GHG emissions created during the production of new anilox rolls

Recapture CO2
The TruPoint Green doctor blade, created by Flexo Concepts, contains recaptured carbon within the blade material.

WE'RE IN THIS TOGETHER

"The **earth** is what we all have in ***common***"
- Wendell Berry

To learn more about Flexo Concepts and how TruPoint plastic and polymer doctor blades could help reduce your facility's carbon footprint, click on any link below.

Visit **www.flexoconcepts.com**

Request a **Free Blade Sample**

Schedule a **Call with a FC Consultant**

Flexo Concepts has made significant changes to reduce our carbon footprint. As of Fall 2017,

Flexo Concepts is powered 100% by Solar Energy!

Thanks to the 800+ solar panels on our roof, we can now proudly say your doctor blades are produced using sustainable energy!

LEARN MORE

*"Documentation for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction Model(WARM)" **U.S. Environmental Protection Agency Office of Resource Conservation and Recovery**, February 2016