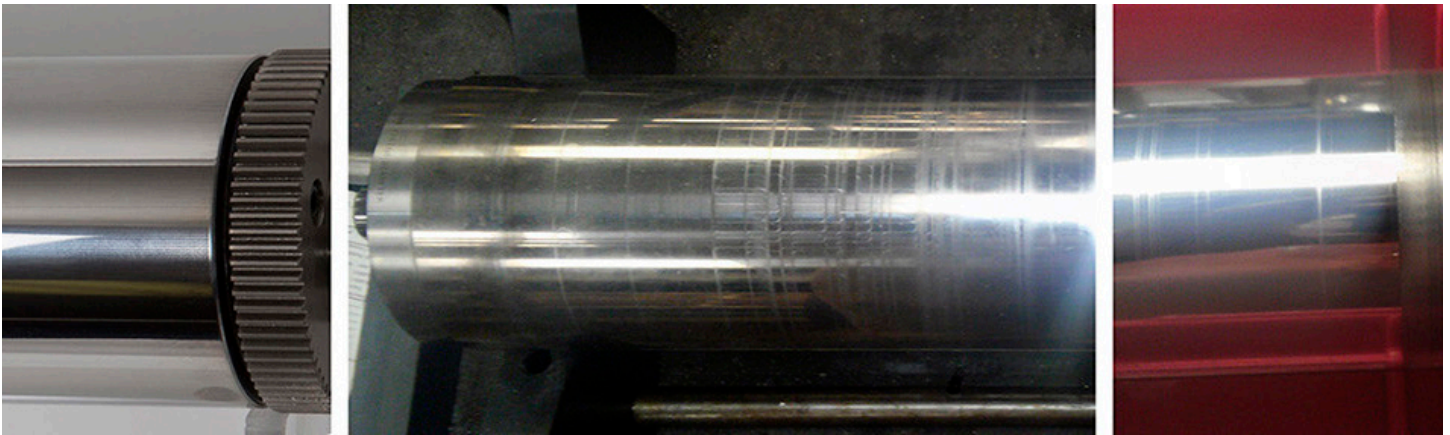


ANVILS



At Wilson, we're always focused on the technical aspects of flexography. TechTalk is your quick snapshot of key topics in our industry. Let us know what you think.

Are My Anvils the Issue?

The two most important components involved in getting a correct die strike and maintaining die life are the die and the anvil. But while the die gets most of the attention, the anvil is often overlooked. That's a mistake because a concentric, even surface on which to die cut against is critical to ensure correct depth of cut and maximum die life.

Here are four ways to get the most performance from your anvils.

#1: Inspect Your Anvils

It is simple to inspect your anvils and it should be done on a regular basis. First, visually examine the anvil. Look for scaring on the anvil's face. This can result from running metal-to-metal lineal blades in the same area of the anvil. It can also occur if a cross blade continually strikes the same area over and over again, or if a foreign object goes through the die station.

Secondly, look for any discoloration on the anvil. This could be an indication of excessive wear caused by friction. This often occurs where the bearers of the die ride on the anvil and could be the result of improper lubrication or debris from cutting that gets lodged between the bearer of the die and the anvil. (Running bearer wipers with a coat of light machine oil on them can help reduce both causes.) Finally, a bearing that doesn't turn properly on your hold-down system may also cause friction. These should turn easily without any grinding being felt.

#2: Inspect for Unevenness

Once you've visually inspected the anvil, feel it for any unevenness. The best way to do this is to run your fingernail from one end to the other on the anvil. You'll be able to uncover any low or high spots since your fingernail is quite sensitive.

#3: Inspect the Journals

Next, remove the anvil and inspect the journals. Look for any scaring or discoloration of these parts. This can be caused by a bad bearing block or foreign debris getting between the bearing block and the journal. The result is an anvil that turns in an untrue fashion.

#4: Consider Carbide Inlay Anvils

No anvil surface is exempt from wear, but you can extend the time between resurfacing or replacement by using Carbide Inlay anvils. These high-quality anvils will extend the life of the cutting surface considerably, particularly in metal-to-metal applications.

At Wilson, we use a proprietary process where the live cutting area is undercut and Tungsten Carbide is applied electrostatically to the body (usually .010 thick per side for Die Station Anvils and .020 thick per side on Sheeter Station Anvils). This creates a surface many times more durable than the fully hardened steel body can provide. Although the cutting surface will be more durable, the same lubrication and maintenance protocols should be followed to ensure the longest possible tool life.