RETROFIT INSPECTION CHECKLIST

When considering a retrofit, it’s important to evaluate the current state of your press brake, as you don’t want to make further investments in machinery that won’t continue to deliver reliable performance. When evaluating your machine, bear in mind that many press brake components can also be retrofitted. If only one or two features of your press brake are inadequate, it may be worth upgrading those specific components, rather than scrapping the entire machine. Please note: the Retrofit Inspection Checklist is not intended to serve as a sole determining factor; please consult with your WILA sales representative to help determine if your machine is suitable for a retrofit before making your investment.

1. OVERALL STATE OF MACHINE

Consider the general state of your machine. How long has your machine been in use? Is it used daily or does it sit for periods of time without being run? Does it generally perform well? Is it showing clear signs of wear that would bring into question its long-term durability?

1. HYDRAULICS

The hydraulic system is the lifeblood of your machine. It powers the ram’s up/down motions. Inspect the hydraulic system for signs of looming failure. Look for leaks, burning oil, uneven power distribution, etc. It’s vital that your hydraulics can provide accurate and repeatable results. Bring your oil up to normal operating temperature, and using a dial indicator to measure accuracy and repeatability, bring the ram down a few times.

1. BACK GAUGE

The back gauge is a critical measuring device in producing an accurate bend. It’s important to make sure your back gauge is in good condition and possesses the necessary features, capabilities, and axes for your bending operations. Pay particular attention to the drive screws, ensuring that there is no play in them, and surface condition of the gauge fingers.

1. RAM & BED

It’s important that your ram is accurate, consistent, and level on both sides. While normal wear and tear is to be expected, check for any significant dents or gouges along the ram and bed. To test the parallelism of your ram and bed, clear all tooling, clean the bed and ram, and run a dial indicator across the length of the machine to measure the distance between the ram and bed. In cases where the ram and bed are too worn or damaged, it may be worth looking into having the surfaces remachined.

1. PRESS BRAKE CONTROL

Sophisticated press brake control systems can vastly improve your bending operations in terms of both speed and accuracy, as well as help bridge the skills gap at the operator level. Consider the condition and capabilities of your current press brake control system. You may want to consider upgrading your control software to maximize the potential of your new tooling.

1. SAFETY

Workplace safety continues to be an increasingly important facet of running your business. It may be a good idea to ensure your press brake will remain safe for years to come before further investing in its operation. You may want to reference the ANSI B11 Standards as a benchmark.

1. REMAINING OPEN HEIGHT / STROKE

The most common hindrance to a retrofit project is available open height and stroke. Use WILA’s Retrofit Stack-Up Calculator to calculate the remaining open height for your machine after your retrofit. Once everything is installed, there must be enough remaining working space between the punch and die to allow for easy handling of parts. It is recommended that you have a minimum of at least 4 inches of remaining open height, but this varies depending on your specific bending needs.