Automec Inverted R-Axis

The Inverted R-Axis option allows operators to program the gauge bar down and out of the way so the material can be pushed past the backgauge travel limit. Many backgauges have manual gauge bar adjustments or even programmable gauge bar heights with mechanical assemblies that interfere with the sheet if an operator wants to gauge further than the backgauge travel limit. In order to bend a part that is longer than the backgauge travel limit, the operator must typically disassemble the gauge bar, gauge bar supports and the vertical gauge bar adjustment assemblies. More than likely a second person could be needed to help as well. This could take 15-20 minutes to disassemble the components... NOT ANYMORE!!!

Automec's Inverted R-Axis Option not only provides the productivity gains of the programmable gauge bar height, but also with the push of a button, the gaugebar can be sent down below the die and out of the way! The system is totally programmable within the full 8" vertical adjustment range in increments of 0.1". Repeatability is ± 0.002 ".

INVERTED R-AXIS SPECFICATIONS:

Speed: 2.5"/Second Vertical Travel: 8 Inches

Resolution: 0.1" **Repeatability:** ± 0.002"

Availability: All Automec controls that offer X-Y Axis are also available with Inverted R-Axis option

Motor: DC Servo with encoder and disc brake

Drives: Dual precision ball screws with recirculating ball nuts

Holding Force: Electro-Magnetic disc brakes yield 200 lbs. holding force



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4 MAIN FACTORS TO JUSTIFY INVERTED R-AXIS:

Frequent Die Height Changes:

Shops that perform frequent die changes throughout the day can eliminate the time required to manually reposition the gauge bar height. These changes can be made at the control without the need to walk around to the rear of the press brake to adjust the manual hand-wheels.

Workpiece Changes During Bend Sequence:

Oftentimes, the reference plane where the workpiece contacts the gauge finger changes as parts are formed with sequential bending. The gauge bar can be programmed up or down on every bend to put the gauging surface at exactly the right height for each bend.

Progressive Die Setups:

Some set-ups require multiple dies sitting across the press brake bed to form the workpiece. A separate pair of gauging fingers is required for each die set, so the programmable R-Axis lets those fingers move to the proper height for each die set.

Workpiece Needing to be Gauged Beyond the Backgauge Travel Limit:

Sometimes the material needs to be gauged past the travel limit of the backgauge. In this case, the Inverted R-Axis option allows operators to program the gauge bar down below the die so that the area is clear for a deep sheet to go beyond the backgauge travel limit. The operator now has the capability of manually measuring this one-off part without having to disassemble any mechanical components on the backgauge. The capabilities of your press brake will increase!

