

ABSTRACT

APPARATUS FOR BENDING BARS EFFICIENTLY

A turn table incorporating a centre roll and a drive pin is provided with at least one mechanised backup ram, a mechanized gauge marker, and a
5 controller coupled to the turn table, the backup ram and the gauge marker. A structure adjacent to the turn table receives bars as input and allows the operator to align the bars between the backup ram and the centre roll. The backup ram has a backup assembly coupled to a ball screw joint and a
10 prime mover for improving the resolution between the backup assembly and the bar. The backup ram, the gauge marker and the drive pin in cooperation with the controller guide the operator through the bending sequence once a shape is selected. The controller requires as input parameters from a predetermined data structure from a remote site or an
15 operator before the bars is to be bent efficiently and accurately. As such, minimum number of setup operations is required to bend a large variety of bars without supervision. Thus, productivity of bar bending is enhanced.

Figure 1B.