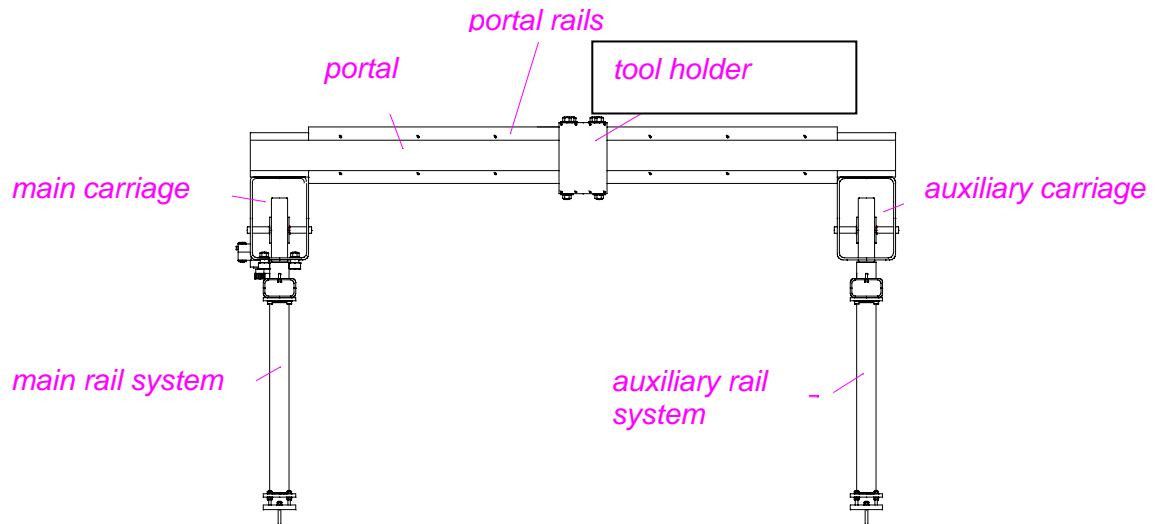


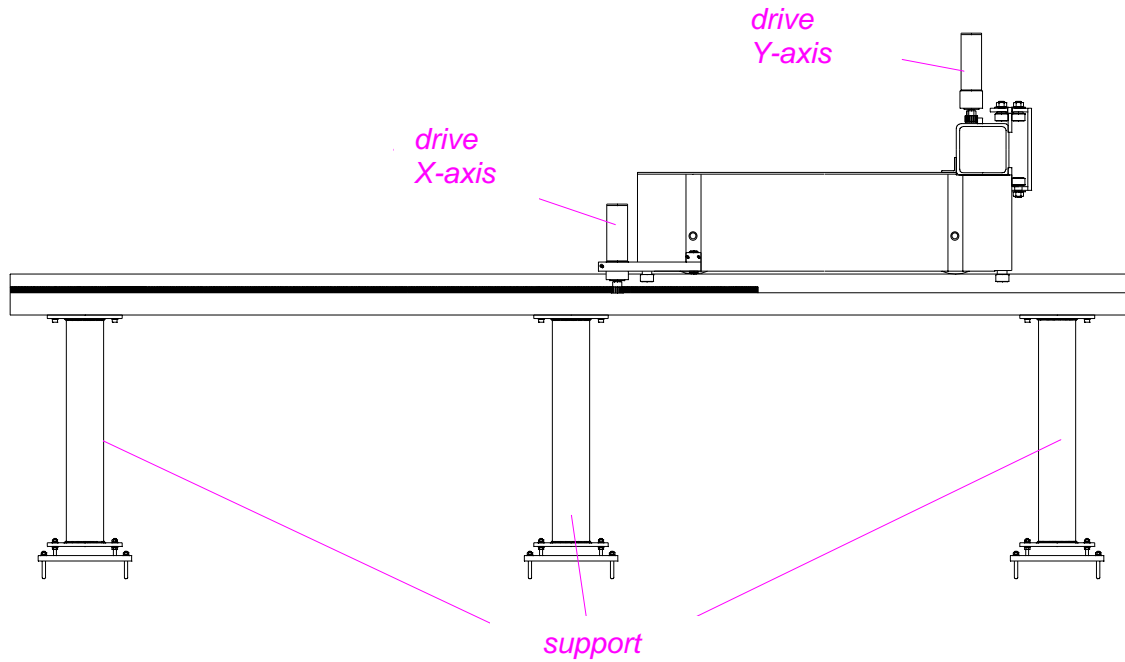
Instructions for the Construction of the Gas-Cutting Machine CODIMAT UL-N

Terms and Definitions



Codimat UL-N – front view – schematic representation

The rail system consists of the main rail system and the auxiliary rail system. On the rail system the portal moves along, supported by main and auxiliary carriages, and constitutes in this way the longitudinal axis (X-axis) of the machine. Along the portal move the tool holders on the portal rails and constitute in this way the transversal axis (Y-axis) of the machine.

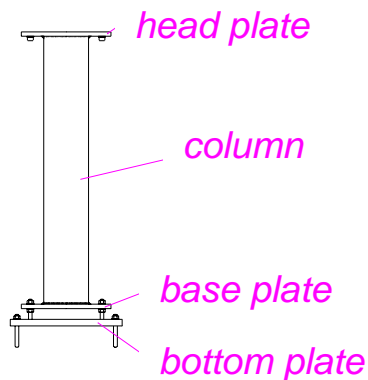


Codimat UL-N – view from the main side – schematic representation

The X-axis and the Y-axis are each driven by an AC servomotor that is controlled by means of the CNC-control. The machine processes in this way the NC-program and cuts the programmed parts to be gas-cut out of a steel sheet.

Structure of the Rail System

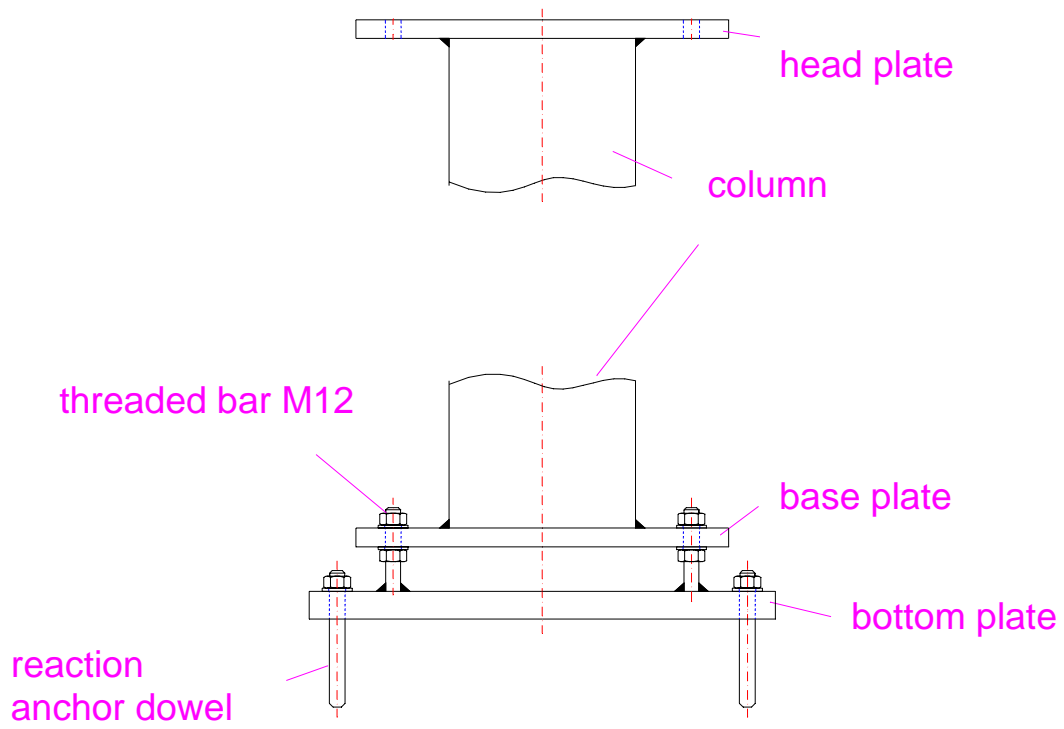
The rail systems of the main side and the auxiliary side are structurally identical. The one and only difference is that a toothed rack is mounted to the main rail that together with the pinion of the drive of the X-axis constitutes the longitudinal drive.



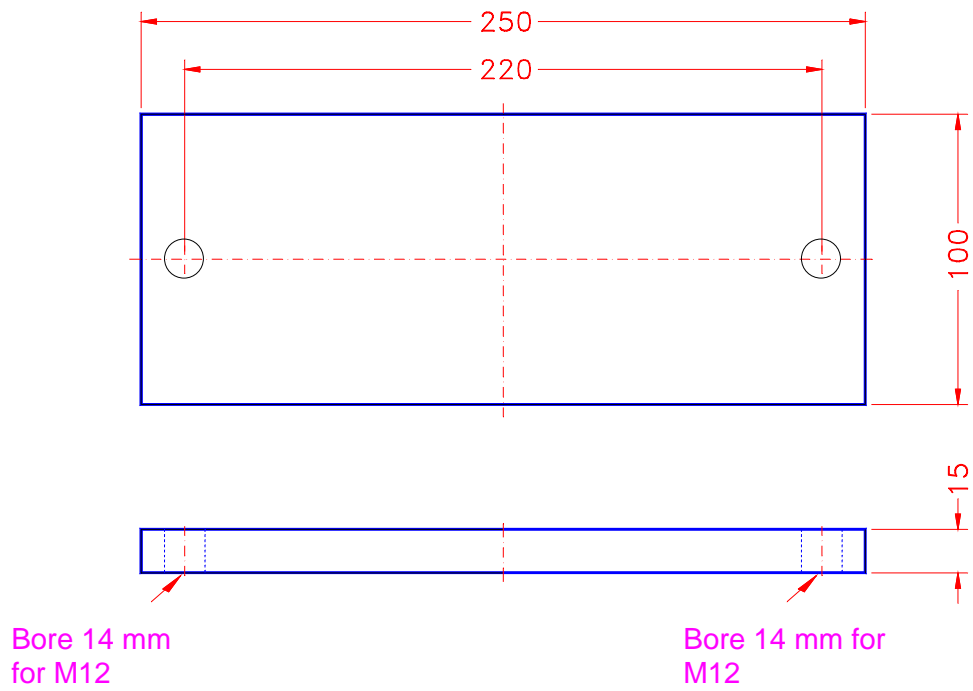
Codimat UL-N – view of support from the main side – schematic representation

The rail system is borne by the supports. The supports consist of the bottom plates which are firmly anchored in the hall bottom. Onto the bottom plates the base plates are bolted by means of threaded bars. The columns that bear the head plates are welded to the baser plates.

Production memo for supports

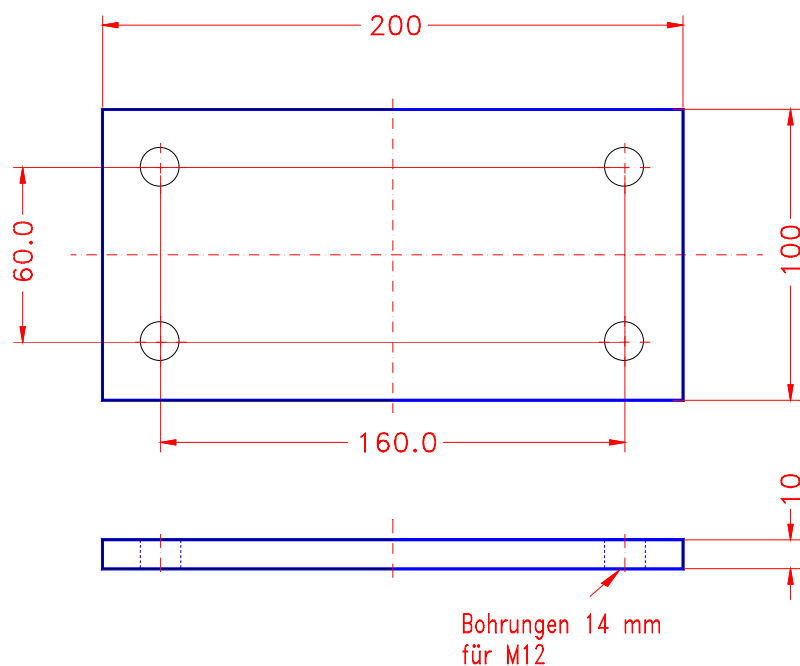


Production memo for bottom plate



The bottom plate is a steel plate with a thickness from 12 ... 15 mm. In the plate, there are drilled 2 holes with a diameter of 14 mm each. When mounting the rails, one installs the reaction anchor dowels M12 into these holes for fixing the bottom plates to the hall bottom by means of them. Depending on properties and condition of the hall bottom larger reaction anchor dowels may be chosen in order to give the system more stability. In unfavourable cases it may be necessary to replace the bottom plates with a double-T beam (HE B beam) and to fix the latter to the hall bottom. After that the threaded bars that bear the base plate are welded.

Production memo for bottom plate



The base plate is a steel plate with a thickness of 10 mm. In the plate, there are drilled 4 holes with a diameter of 14 mm each. When the rails are mounted, there are installed the threaded bars M12m, that are welded on the bottom plate, into these holes. By means of the threaded bars it is possible to set the height and the inclination of the support.