

SYSTEM FOR VERTICAL CENTERING AND POSITIONING OF STEEL PLUNGE
COLUMN IN TOP-DOWN CONSTRUCTION METHOD
ABSTRACT OF THE DISCLOSURE

A system for vertical centering and positioning of steel plunge column in top-down construction includes multiple hydraulic adjustment units spaced around a steel
5 plunge column positioned in a foundation pile hole. Each hydraulic adjustment unit includes a base for pressing against a wall surface of the pile hole, and at least one push plate, at least one hydraulic-actuated extendable supporting arm and at least two pivoted arms pivotally connected to one another and the base, such that the push plate
10 the steel plunge column for adjusting the latter to a vertically centered position in the foundation pile hole. Verticality of the steel plunge column is measured by an electronic inclinometer and shown on a monitor of a computerized digital positioning monitoring system to ensure real-time and precise adjustment of the vertical position of the steel plunge column.

Fig. 1A