Patent claims

1. A formwork (10) for producing concrete tubbing (500) for a tunnel lining system, having a concrete tray for receiving a quantity of concrete required for producing the tubbing and, if required, for receiving the envisaged reinforcement of the concrete tubbing (500),

wherein the concrete tray has at least one base (16) and lateral walls (14, 15) adapted to the base (16), wherein at least one wall (14, 15) is disposed so as to be releasable from the base (16) and pivotable between a closed position and an opened position in relation to the base,

wherein the formwork (10) has at least one drive system for pivoting the at least one wall (14, 15) between the open position and the closed position and for retaining said wall (14, 15) in the respective position, and wherein the drive system has at least one first actuator (32, 35) for pivoting the at least one wall (14, 15) between the open position and the closed position;

wherein the drive system is a hydraulic system having at least one hydraulic circuit, wherein the drive system has at least one hydraulic cylinder as a first actuator (32, 35) which is connected to the hydraulic circuit;

characterized in that at least one cover (50) element is provided so as to be pivotable on the formwork (10), said cover element (50) being able to be disposed on the upper side of the concrete tray and on the latter at least partially covering the upper side;

in that the cover element by at least one second actuator (54) is pivotable between an open position and a closed position, said second actuator (54) preferably retaining the cover element in the respective position;

wherein the at least one second actuator (54) is a hydraulic cylinder connected to the drive system,

wherein the cover element has an arrestor element which arrests the cover element in the closed position in relation to the formwork, and

wherein the arrestor element by at least one actuator is pivotable between an open position and a closed position.

2. The formwork (10) as claimed in claim 1, wherein in the closed position at least two walls (14, 15) at one of two external end regions thereof contact one another by way of the short sides of said walls and herein form a corner (46) of the concrete tub.

3. The formwork (10) as claimed in claim 2, wherein a male engagement element (44) is provided in the external end region on one of the two walls, and a female engagement element (45) is provided in the external end region on the other wall, said engagement elements in the closed position of the two walls engaging in one another.

4. The formwork (10) as claimed in claim 2, wherein the two walls in the external end regions thereof are connected to one another by means of at least one screw connection (18) or one clamping connection, wherein the screw connection (18) or clamping connection preferably serves for securing the position, and/or wherein the screw connection (18) has a screw (19) having a spring element (23) which is disposed along at least part of the screw (19).

5. The formwork (10) as claimed in one of claims 1 to 4, wherein the at least one wall for moving between the open position and the closed position is connected to at least two actuators of the drive system.

6. The formwork (10) as claimed in one of claims 1 to 5, wherein at least one wall has two external end regions, and in that at least one actuator for moving and retaining the wall is provided per end region.

7. The formwork (10) as claimed in one of claims 1 to 6, wherein the drive system at a workstation is able to be connected to an external drive.

8. The formwork (10) as claimed in claim 1, wherein the hydraulic circuit has a blocking element (60) for maintaining the pressure in the hydraulic circuit, wherein said blocking element (60) is preferably a load-bearing valve.

9. The formwork (10) as claimed in claim 8, wherein the hydraulic circuit has an element for equalizing a variation in terms of pressure and/or a variation in terms of volume in the hydraulic circuit, wherein said element is preferably a dummy cylinder or a diaphragm accumulator.

10. The formwork (10) as claimed in one of clams 8 to 9 as appended to claim 7, wherein the hydraulic circuit has at least one connector element for releasably connecting the hydraulic circuit to a hydraulic apparatus as the external drive of the drive system at a workstation.

11. The formwork (10) as claimed in claim 4, wherein the clamping connection has an arrestor element which is disposed on one of the wall elements and by at least one actuator is pivotable between an open position and a closed position.

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