CLAIMS

1.

A cable-operated hammering tool (20) for downhole operations, comprising
an extended cylinder (3) with an axially through-going internal opening in the cylinder (3),
a hammering part (10) arranged in a lower section of the cylinder (3), said hammering part (10) is fitted with a detachable coupling for connection with a downhole equipment,
a release strut (1) arranged in the upper section of the cylinder (3), said release strut (1) is connected to a surface installation via a cable,
said hammering part (10) is detachably fastened to the cylinder (3) with the help of, at least, one locking body (4) **characterised in that**
the cable operated hammering tool (20) further comprises a force spring (2) that is in contact with the release strut (1) and set up for the pre-stressing of said release strut (1) by movement in a first direction, that said release strut (1) can be displaced relative said hammering part (10) and set up for release of the hammering part (10) from the cylinder (3) by movement of the release strut (1) in an opposite, second direction opposite to the first direction.

2.

A cable-operated hammering tool according to claim 1, wherein the cylinder (3) is fitted with a cylinder edge (3e), and is set up to hit against the hammering edge (10f) at the release of the, at least, one locking body (4).

3.

A cable-operated hammering tool according to claim 2, wherein the pre-stressing of the hammering tool (20) by the release strut (1) is infinitely variable and set up to impart variable blows between the cylinder edge (3e) and the hammering edge (10f).

4.

A cable-operated hammering tool according to one of the claims 1-3, **wherein** the

locking bodies (4) are held in detachable engagement by a release mechanism (21) and a release spring (9).

5.
A cable-operated hammering tool according to claim 4, **wherein** the release mechanism (21) and the release spring are arranged between the release strut (1) and the hammering part (10).

6.
A cable-operated hammering tool according to claims 4 or 5, **wherein** the release mechanism (21) has a released mode where it can be displaced axially relative the hammering part (10) and a fixed mode where it is in a fixed position relative the hammering part (10), said release mechanism (21) comprises a ball housing (5) arranged adjoining the inside of the hammering part (10) and a ball wedge (7) arranged on the inside of the ball housing (5), a blocking element (8) arranged between the ball housing (5) and the ball wedge (7) is arranged to fasten the ball housing (5) and the ball wedge (7) together in the released mode of the release mechanism.

7.
A cable-operated hammering tool according to claim 1, **wherein** the blocking element is a ball (8).

8.
A cable-operated hammering tool according to claim 4, **wherein** a fastening mechanism (6) is arranged between the ball wedge (7) and the release strut (1) and is set up to lead the release strut (1) in the opposite direction.

9.
A cable-operated hammering tool according to claim 4, **wherein** the fastening mechanism (6) is a friction ring (6).

10.

A cable-operated hammering tool according to claim 1, **wherein** the hammering force of the hammering tool is defined by supplying pulling power in the cable.

11.

Method for the operation of a hammering tool for downhole operations, comprising,
an extended cylinder (3) with an axially through-going internal opening in the cylinder (3), where said cylinder (3) is fitted with an internal cylinder edge (3e),
a hammering part (10) arranged in a lower section of the cylinder (3) and fitted with a detachable coupling for the connection with downhole equipment, said hammering part (10) is fitted with a hammering edge (10f),
a release strut (1) arranged in the upper section of the cylinder (3) is connected to a cable that is connected to a surface installation,
cylinder (3) and hammering part (10) are initially coupled together by the locking body (4) that is pre-stressed with the help of, at least, one release mechanism (21):
characterised in that the method comprises the following steps: a) the release strut is led some distance in a first axial direction to a force spring (2) arranged between the cylinder (3) and the release strut (1), which is compressed to a predetermined pre-stressing force,
b) the release strut (1) is led a smaller distance in the axially opposite direction and the release mechanism (21) is led a distance from the locking bodies so that the pre-stressing diminishes,
c) the locking bodies (4) are released from the cylinder housing (3),
d) the pre-stressing force in the force spring (2) leads the cylinder (3) a distance in the first axial direction,
e) the lower edge (3e, 300h) in the cylinder (3) meets the hammering edge (10f, 1000f) in the hammering part (10) resulting in a blow by the tool,
f) the release strut (1) is pulled back by the force spring (2) and the, at least, one release mechanism (21) is pulled towards the locking bodies (4), the locking bodies (4) are led back in engagement with the initial position of the cylinder (3).

12.

The method to operate a hammering tool according to claim 11, **wherein** the release strut in step a) is pulled upwards will the lower edge 3e meet the hammering edge 10f in an upwards blow.

13.

The method to operate a hammering tool according to claim 11, **wherein** the steps a) – f) are repeated in that the release strut in a) is led alternately in the opposite direction in a double action hammering operation.