CLAIMS

1. Mooring unit (1) for mooring a ship, the mooring unit (1) comprising a base (2), an arm (3) mounted on the base (2), and a hook (4) supported by the arm (3) for connecting a mooring line of the ship, wherein the arm (3) is movable between a retracted position and an extended position, and wherein the unit (1) comprises an actuating device (5) for moving the arm (3) from the extended position to the retracted position, wherein the arm (3) is mounted on a first part (2') of the base (2) wherein the first part (2') of the base (2) is rotatably mounted on a second part (2") of the base (2) that is rotationally fixed, to enable rotation of the first part (2') of the base (2) around a vertical axis perpendicular to the horizon, wherein the arm (3) is mounted to the base with an intermediate rod (7), wherein one extremity of the rod (7) connects to the base (2) and an opposite extremity of the rod (7) connects to the arm (3) at a hinge (8) distant from the hook (4), wherein the hinge (8) is positioned on the arm (3) between the hook (4) and a position (9) where the actuating device (5) connects to the arm (3), wherein the actuating device (5) is selected as a device arranged to release potential energy to an energy storage device or accumulator (10) of said mooring unit (1), preferably a hydraulic cylinder, and wherein between the actuating device (5) and said energy storage device or accumulator (10) an energy dissipation element (11) is provided to said mooring unit (1) such to absorb at least a part of the energy received from the actuating device (5) when the arm (3) moves from the retracted position towards the extended position.

2. Mooring unit (1) according to claim 1, **characterized in that** the unit (1) comprises a control system (6) to enable that the arm (3) moves from the retracted position towards the

extended position when a force (F) applied on the hook (4) away from the base (2) exceeds a pre-established first threshold value.

3. Mooring unit (1) according to any one of the previous claims 1 - 2, **characterized in that** the unit (1) comprises a control system (6) to arrange that the arm (3) moves towards the retracted position when a force (F) applied on the hook (4) away from the base (2) falls below a pre-established second threshold value.

4. Mooring unit (1) according to any one of the previous claims 1 - 3, **characterized in that** the unit (1) comprises an arm balancing element (12) that acts as a spring to support the arm (3) in moving towards the retracted position.

5. Mooring unit (1) according to any one of the previous claims 1 - 4, **characterized in that** the actuating device (5) is one selected from the group comprising a hydraulic cylinder, a mechanical spring, a rotatable screw powered by an electric motor, a pneumatic cylinder, a mechanical energy dissipater, and any combination thereof.