



1 GENERAL DESCRIPTION

The MPMA-P-2500, Multipurpose Manipulator Arm, is supported on a pedestal placed on drillfloor and is special designed for handling drillfloor equipment and tubulars/subs around on drillfloor area.

It is an all round machine suitable for handling a wide variety of equipment and has a gripper head for lifting 3 1/2" –9 5/8" subs., and a guidehead for guiding tubulars up to 26".

The machine is designed for lifting 2.5 t in pad eye or gripperhead at full stroke (4.8m).

1.1 TELESCOPE

The MPMA arm itself consists of a 3 part telescopic section (inner, middle and outer box) which gives a 2500 mm stroke. The end of the telescope connecting with the different heads. A telescope cylinder mounted inside the box section enables the telescopic function. At the end of the telescope is a hook for doing for multipurpose use. The machine is provided with a tilt function to able handling on drillfloor level.

A hydraulic pressure sensor gives a signal for the anti-collision system that the telescope is fully retracted.

1.2 GRIPPER AND GUIDE HEADS

The MPMA Gripper Head is designed to handle a range of vertically stored tubulars, the size of the tubulars varies from 3 1/2" to 9 5/8" diameter. The head grips the tubular from vertical position. It is supplied with a level function to able the head to be in horizontal position when gripping. The Gripper Head does not require any adjustments or inserts when changing from one size of tubular to another size. The Gripper Head is designed to grip a maximum load of 2.5t.

In addition to the gripper head the machine is delivered with guiding heads for tubulars and casing.

The 3 1/2" - 9 1/2" head uses a mechanical finger to restrain the tubular, which is driven by a rotary actuator mounted within the head. An adapter plate is provided to achieve the tubular range using 1 (one) head.

The 26" head uses a pair of mechanical fingers to restrain the tubular, which are operated, by a pair of hydraulic cylinders mounted within the head. This head has no adapter plates.

Manipulatorarm 10BC3026 har en maksimal rekkevidde på 4828mm