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| Data Definitions | |
| User Manual | |
| August 20, 2018 | |



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# INTRODUCTION

The three principal stresses should be calculated at all critical locations in the riser. At locations with axisymmetric geometry such as plain pipe, the principal stresses will usually be in the axial, hoop and radial directions. For nonaxisymmetric geometry, the directions may be different.

We also need to figure out on how to handle units? Should we just plainly define the units in this document and leave it?

# Pipe Objects

## RigidPipe

Key attributes for Pipe objects are:

* Nominal diameter
* Nominal wall thickness
* Nominal Area
* Nominal Moment of intertias (Ixx, Iyy and J)

Material Properties

### DNVOSF101RigidPipe

Subclass of RigidPipe. Inherits all the attributes of RigidPipe

Additional attributes are per DNV-OS-F101 Code.

## FlexiblePipe

## DrillingRiserPipe

Consists of the following pipes:

## SteelCatenaryRiserPipe

## FlexibleRiserPipe

## RigidJumper

# Vessel Objects

A drill ship, boat, vessel. The key attributes are:

* Key Dimensions
* RAOs

## SPM

## SEMI

## FSO

Also known as tanker.

## FPSO

## Installation Barge