

## Objective 1

W1000 being fully loaded carries a mass per unit length of  $20 + 200x - 0.005x^2$  kg/m, where  $x$  is the distance from the rear to applications with  $0 \leq x \leq 10$  m and density increases at  $1 = 0.0005x^2$  kg/m<sup>3</sup>. It also has a constant cross-section with a constant radius of 0.05 m.

W1000 also has a system of jib cranes on the 200 m long - Cable Carriage A, Carriage B and the End Carriage. The jib can be positioned to meet the requirements for particular activities like (Manufacturing and Transportation).

W1000 is equipped with supports and bearings. These are used for the loading of the cable after the work is installed.

## System 1

1. Carriage A and Carriage B
2. W1000 of jib cranes (see W1000-1000-10)
3. System of jib cranes
4. Cable carriage A and Carriage B (Manufacturing and Transportation)
5. Supports and bearings (see loading of the cable)