







# Understanding Cranes. A Comprehensive Guide for All Types of Cranes

## CRANES @ SBMPL

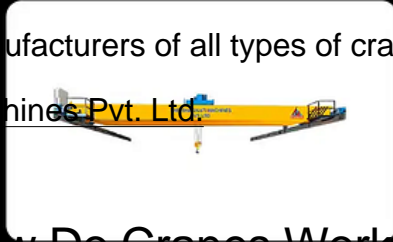



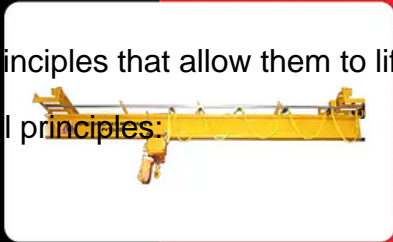

Manufacturers of all types of cranes, including the cranes exclusively manufactured by Shri B. S. Bhatnagar Pvt. Ltd.

How Do Cranes Work?

Cranes operate on fundamental principles that allow them to lift heavy loads with ease. Here is a breakdown of the basic operational principles:

### Mechanical Advantage

Cranes use levers and pulleys to gain a mechanical advantage. This reduces the amount of effort required to lift heavy objects, making it easier for operators to manage large loads.

## 2. Distribution of Loads

Cranes are designed to distribute weight evenly across their structure. This distribution minimizes structural stress and enhances stability during lifting operations. Key components such as the base, boom, and counterweights work together to maintain balance.

## 3. Control Systems

Modern cranes are equipped with sophisticated control systems that allow operators to maneuver loads precisely. These systems may include levers, joysticks, or remote controls, enabling smooth operation even in complex environments.

## Types of Cranes and Their Purposes

### 1. Overhead & Gantry Cranes

