

## Design of bolted joints - Introduction.

- ✓ A screw thread is formed by cutting a continuous helical groove on a cylindrical surface.
- ✓ A screw made by cutting a single helical groove on the cylinder is known as single threaded screw and if a second thread is cut in the space between the grooves of the first, a double threaded screw is formed.
- ✓ A screwed joint is mainly screw composed of two elements,
  - \* bolt
  - \* nut.

## Advantages and Disadvantages of screwed joints

### Advantages

- ✓ Screwed joints are highly reliable in operation.
- ✓ Screwed joints are convenient to assemble and disassemble.
- ✓ A wide range of screwed joints may be adopted to various operating conditions.

### Disadvantages

- ✓ The screwed joints is the stress concentration in the threaded portions which are vulnerable points under various load conditions.