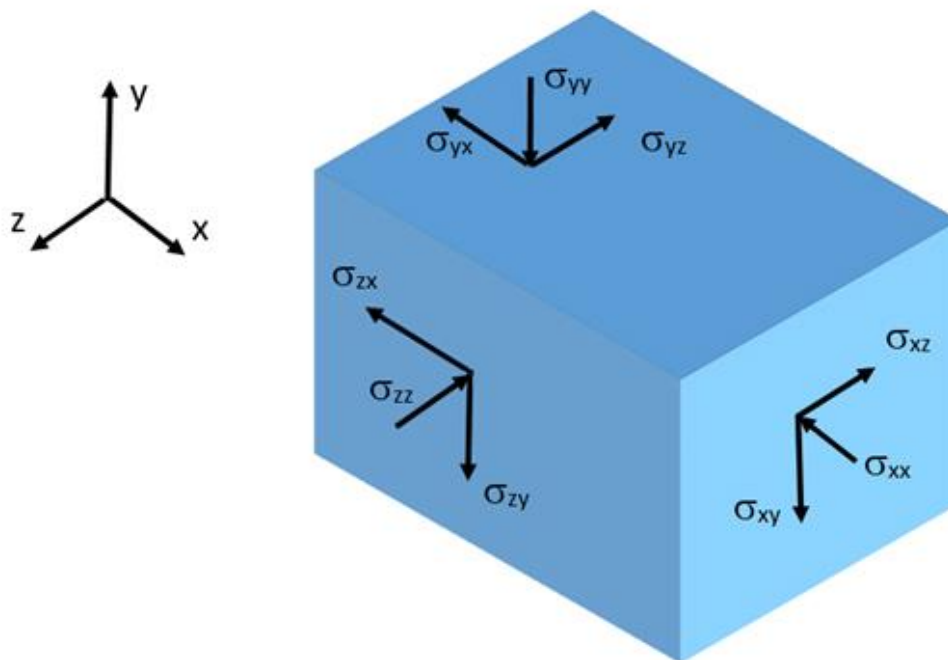# Stress Conventions

The following conventions are used for solid element stresses, and liner axial stress, shear stress and bending moments in *RS3*.

In the following figures, local coordinate axes are assumed.

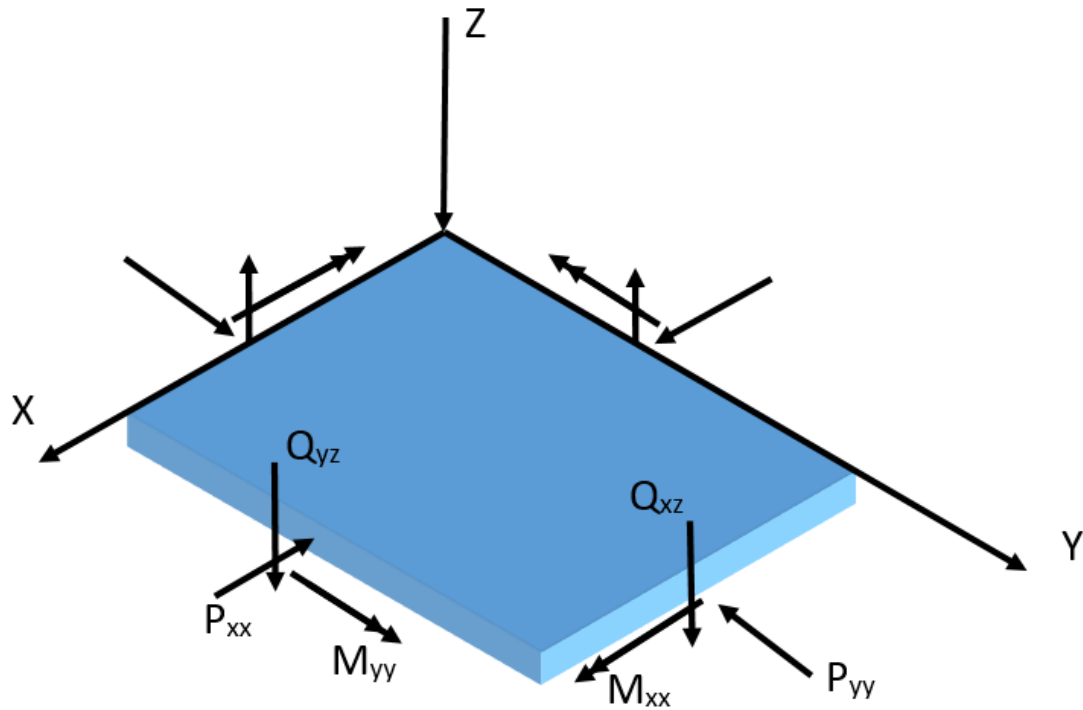## Stress convention for Solid Elements (Compression positive)

End liner elements: convention for positive liner Axial Stress, Moment and Shear forces
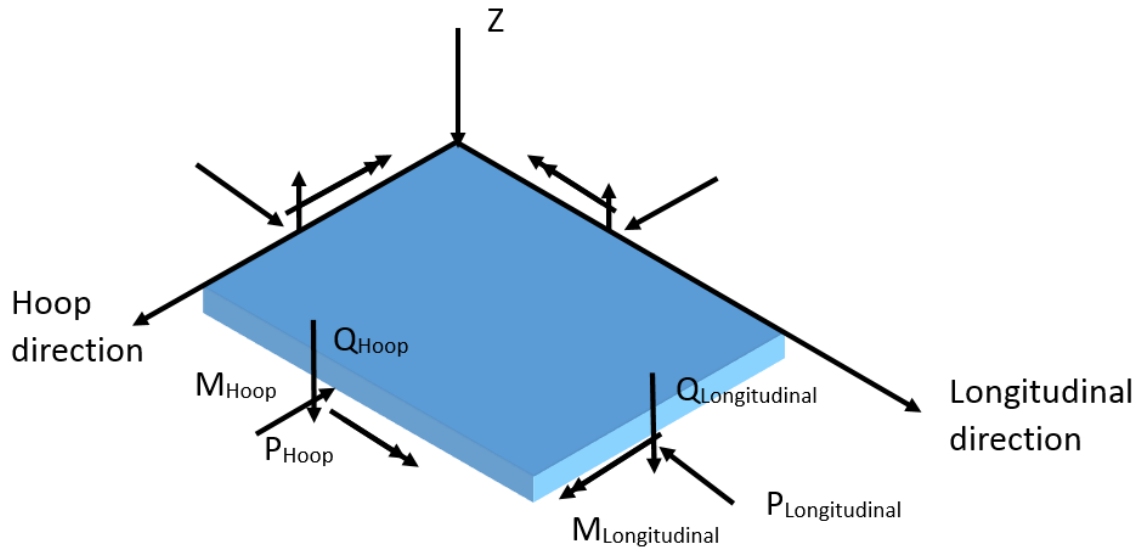
The axial, shear and moment conventions for liners applied to the ends of an *RS3* model are given below.

Extruded liner elements: convention for positive liner Axial Stress, Moment and Shear stress

The axial, shear and moment conventions for liners applied along the extruded (longitudinal) direction of an *RS3* model are given below.

Comparison of Liner Conventions in RS2 and RS3

For a comparison of liner force conventions in the programs *RS2* (2-dimensional finite element analysis) and *RS3* (3-dimensional finite element analysis) see the verification document in the theory section.

Note: in RS3, joint compression is positive.