PAT

(Pressure Activated Tendon)

MULTIAXIAL POST COMPRESSION

- A special tube wrapped with the FRP tape (see below) is pressurized causing it to stretch in the axial direction
- After concrete casting and curing, the pressure is removed, so that the FRP axial stripes can provide a post compression in the concrete
- This post compression can be multi axial

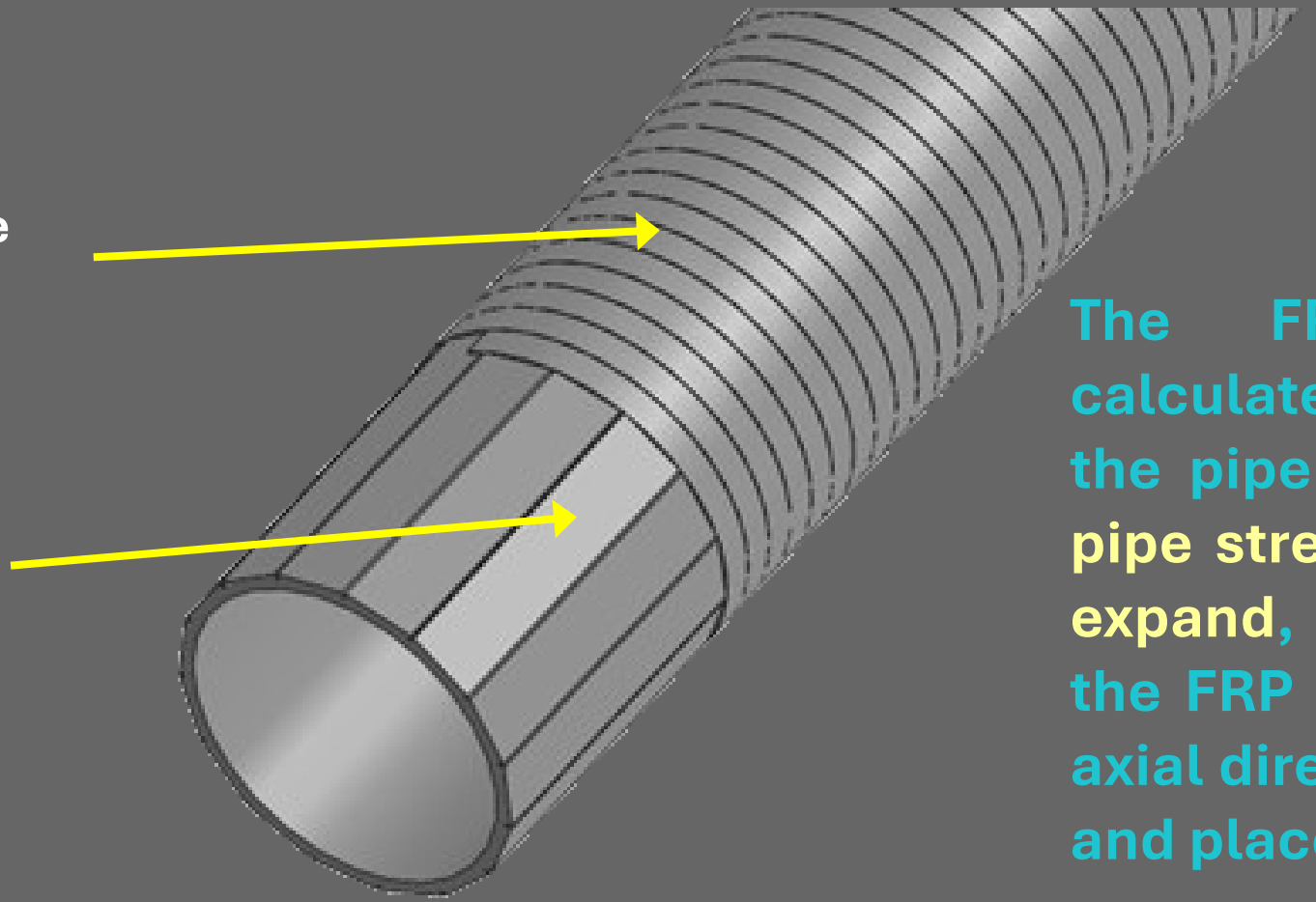
PAT

(Pressure Activated Tendon)

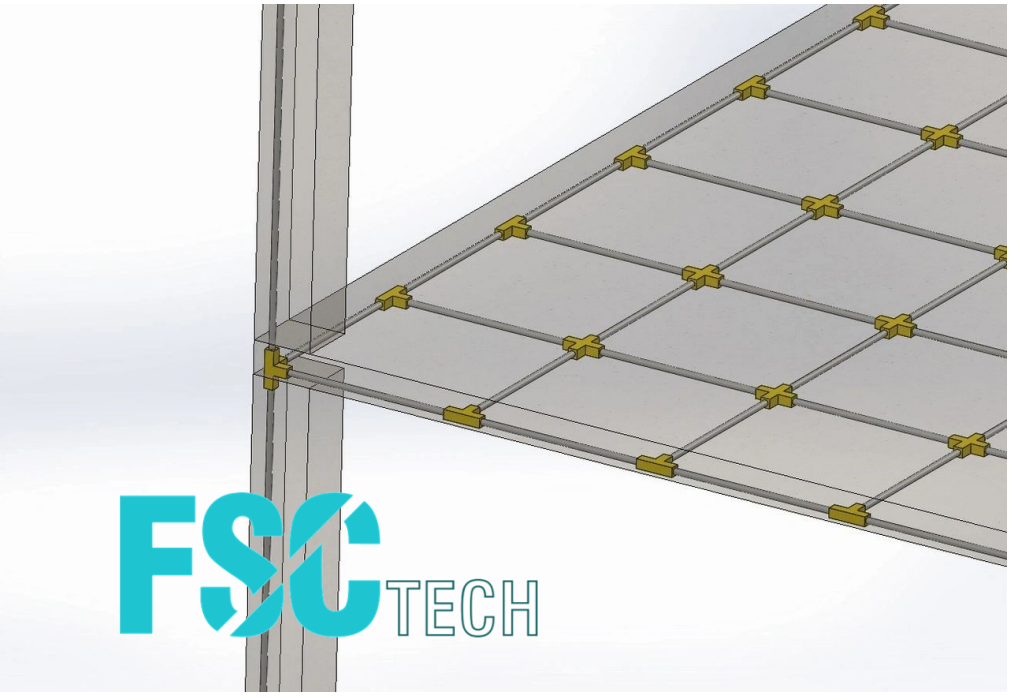
MULTIAXIAL POST COMPRESSION

Wrapping of FRP in the orthogonal direction

Stripes of FRP in the axial direction



The FRP wrapping is calculated so that, in case the pipe is pressurized, **the pipe stretches and does not expand**, with the result that the FRP strips placed in the axial direction are stretched, and placed “in tension”



MULTIAXIAL POST COMPRESSION

Can replace steel reinforcing in cast in situ

Retrofit of post tensioned bridges

Also applicable to joint less roads and airport runways (very low maintenance and long life)

For highly fire resistant and seismic resistant buildings