

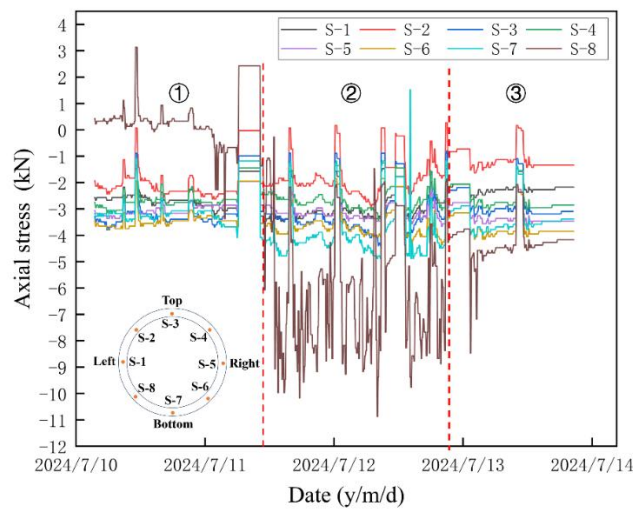


Fig.11 Reinforcement stress of pipe segment #251 (Supplementary data)

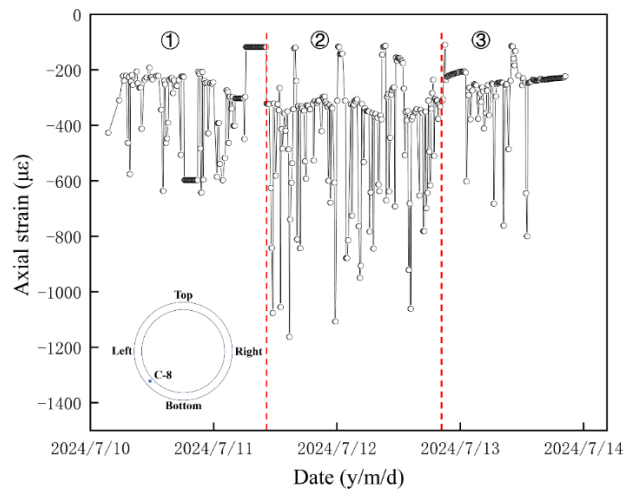


Fig.12 Concrete strain on the lower left side of pipe segment #251 (Supplementary data)

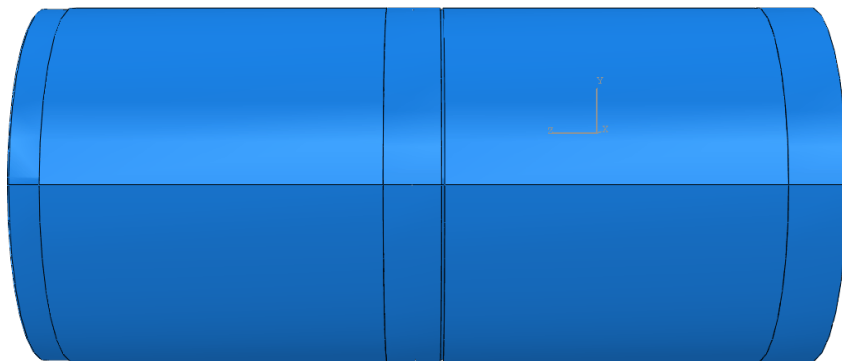


Fig.13 Overall model of the pipe segment (Supplementary data)

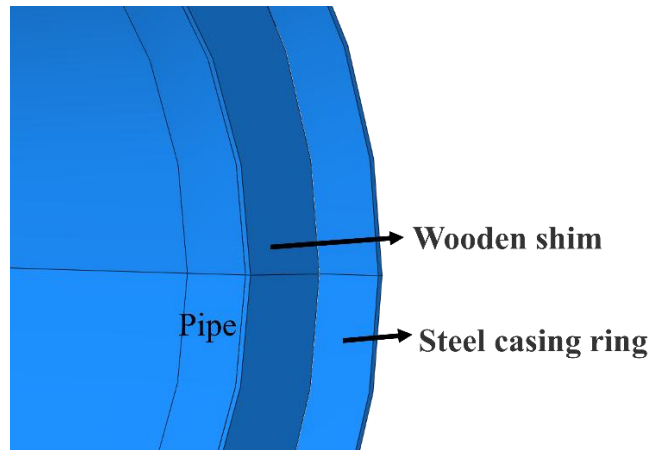


Fig.14 Local model of the spigot end of pipe segment (Supplementary data)

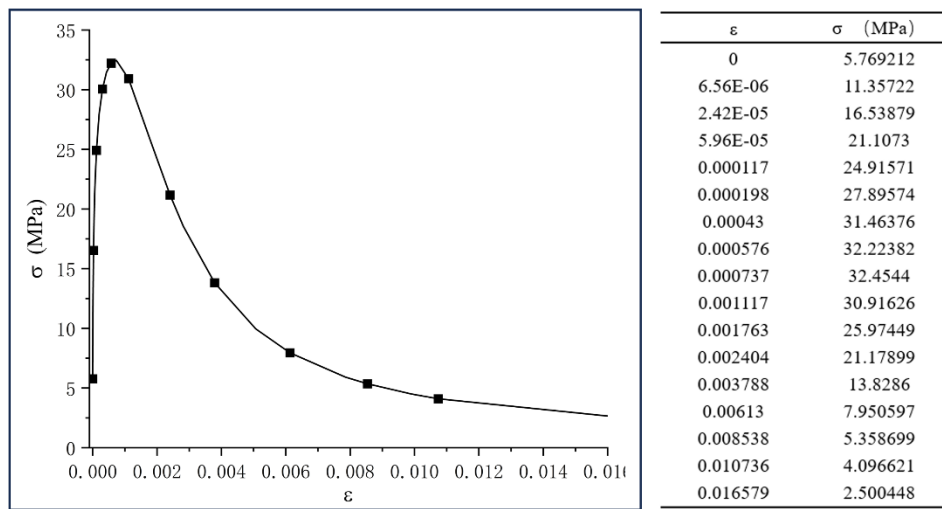


Fig.15 Concrete compressive stress-strain curve and parameters (Supplementary data)

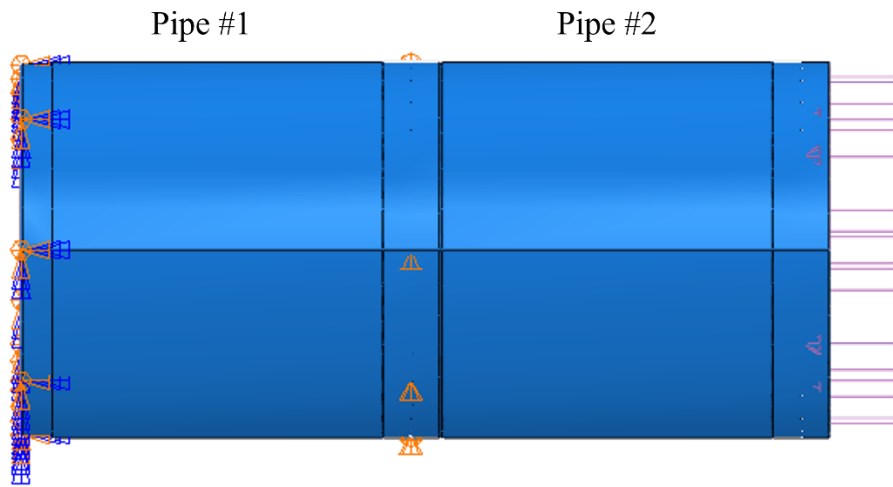
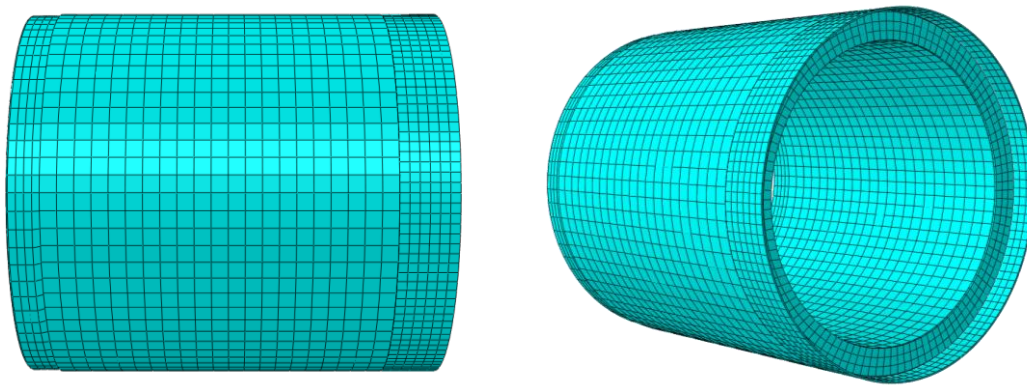


Fig.16 Boundary conditions (Supplementary data)



(a) Overall mesh

(b) Local mesh at the spigot end

Fig.17 Mesh division (Supplementary data)

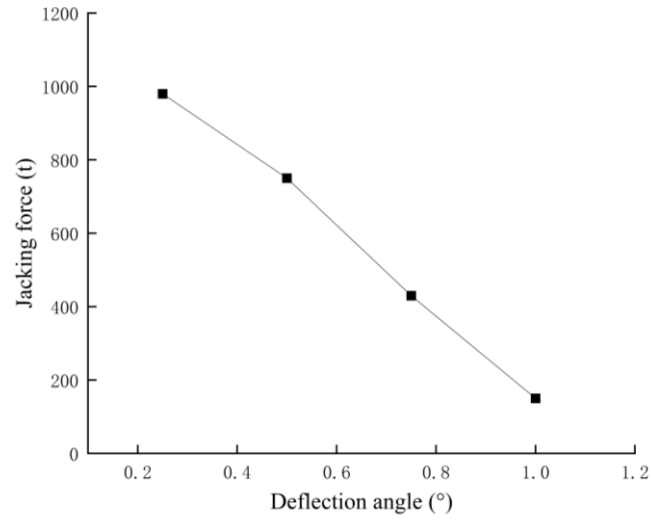


Fig.18 Limit jacking force corresponding to different deflection angles (Supplementary data)

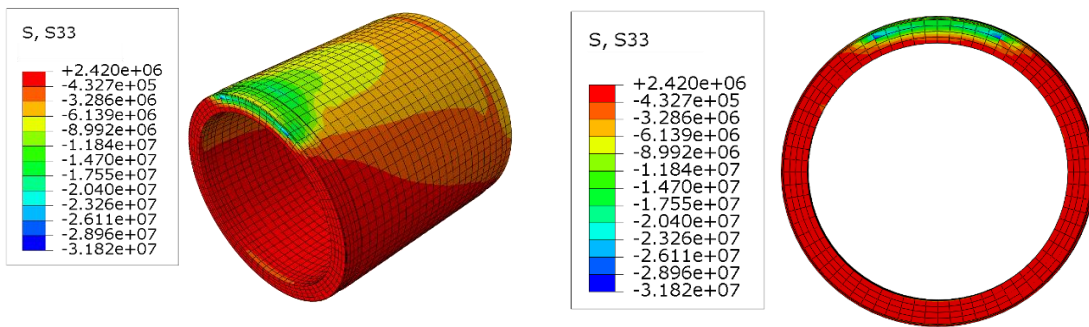
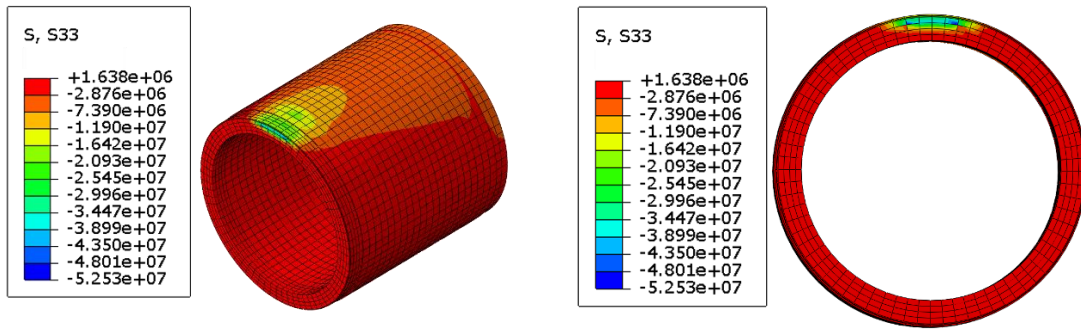
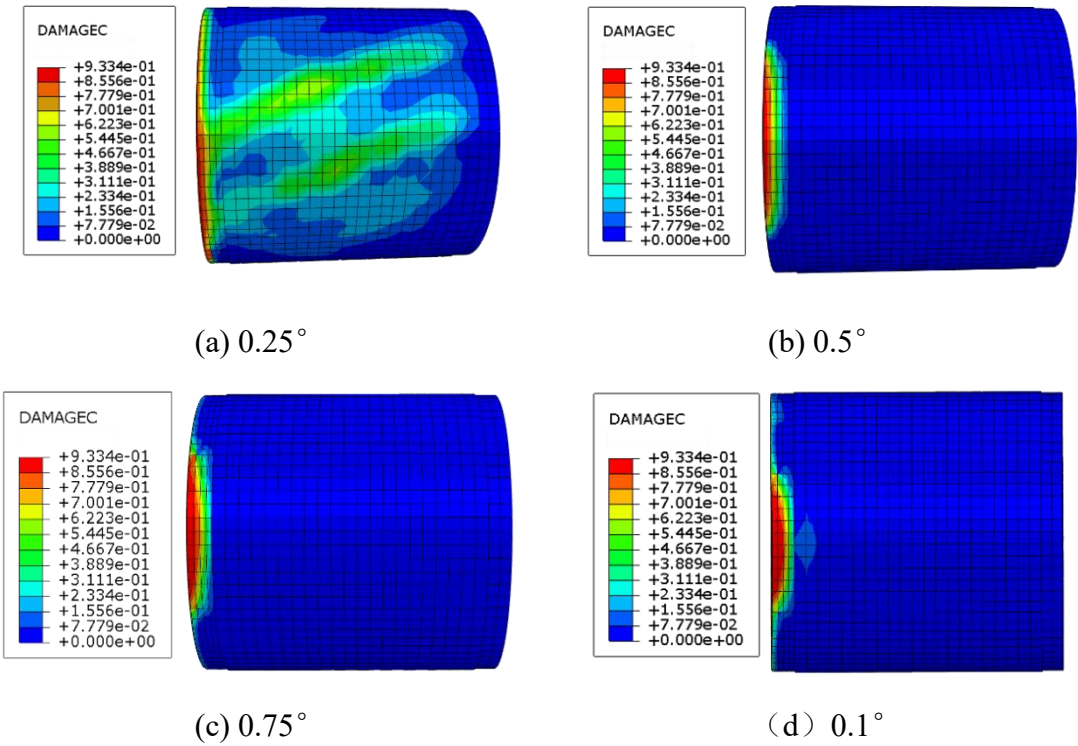
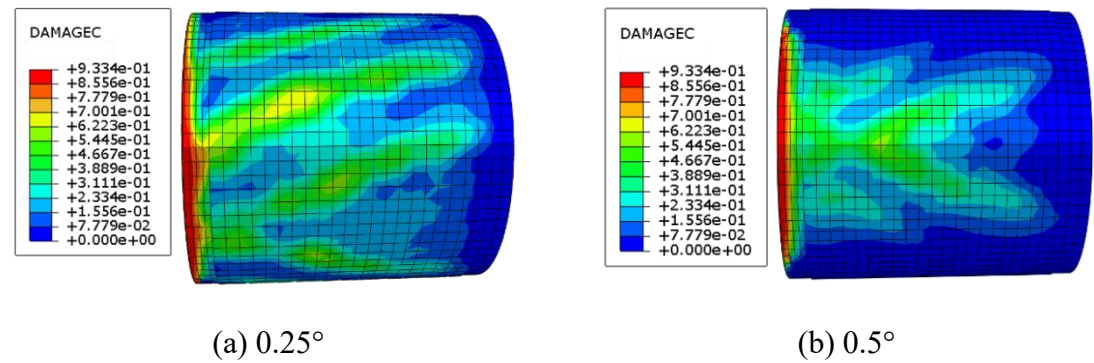


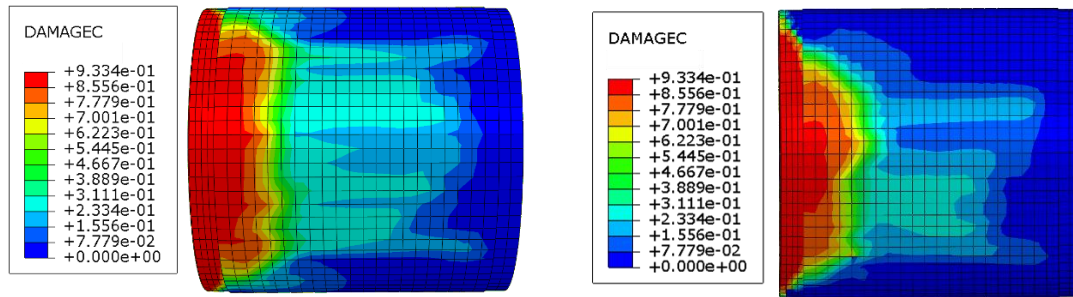
Fig.19 Axial stress distribution law of pipe joints when deflection is 1° (Supplementary data)



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Fig.20 Concrete compression damage degree under limit jacking condition (Supplementary data)

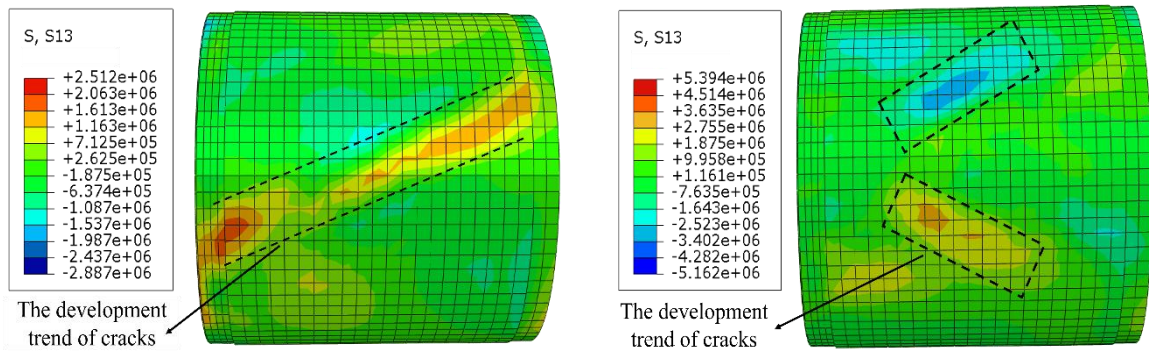




(c) 0.75°

(d) 0.1°

Fig.21 Compression damage degree of concrete as the jacking force increases (Supplementary data)



(a) 0.25°

(b) 0.5°

Fig.22 Shear stress distribution along the pipe barrel (Supplementary data)