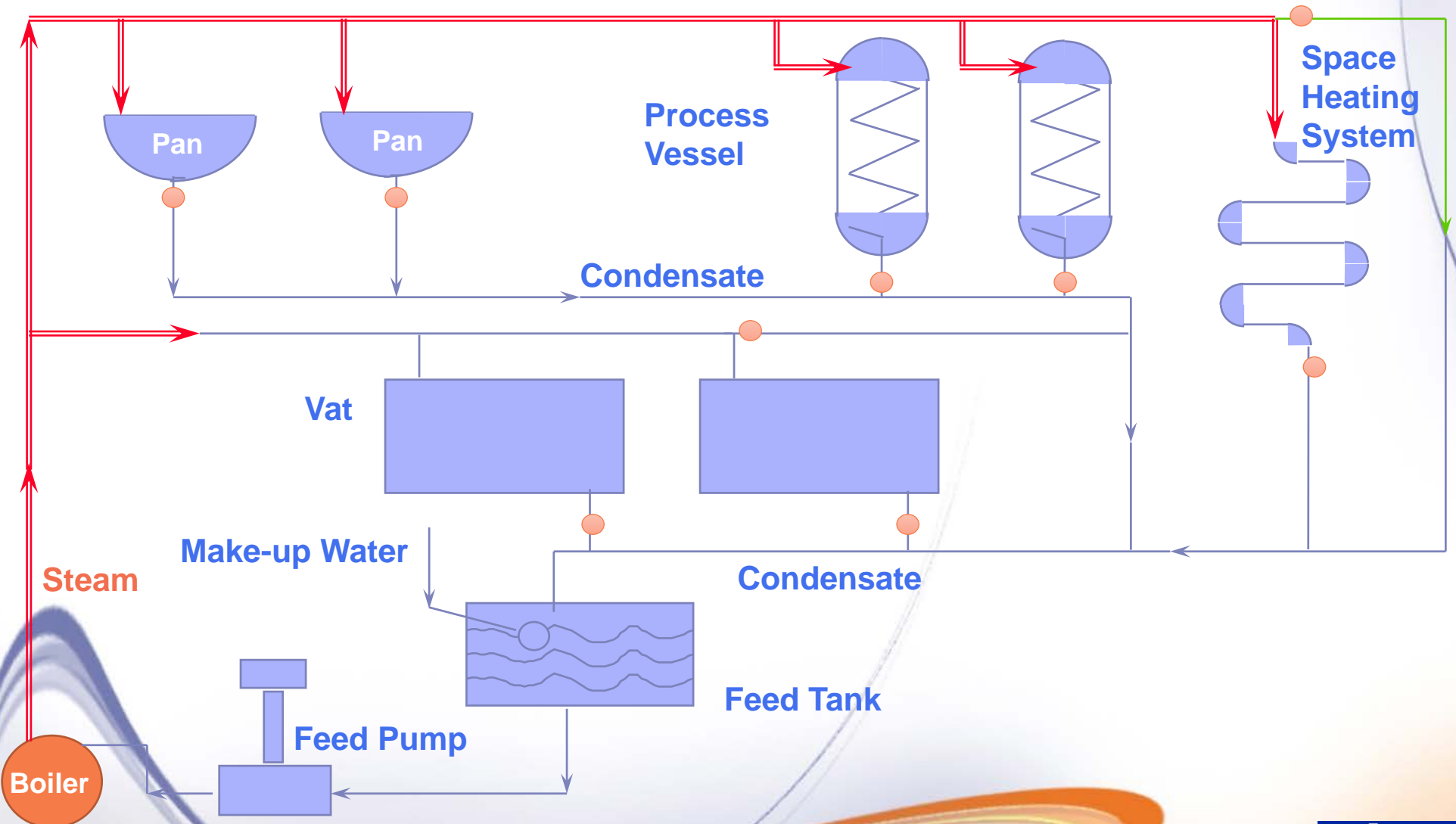
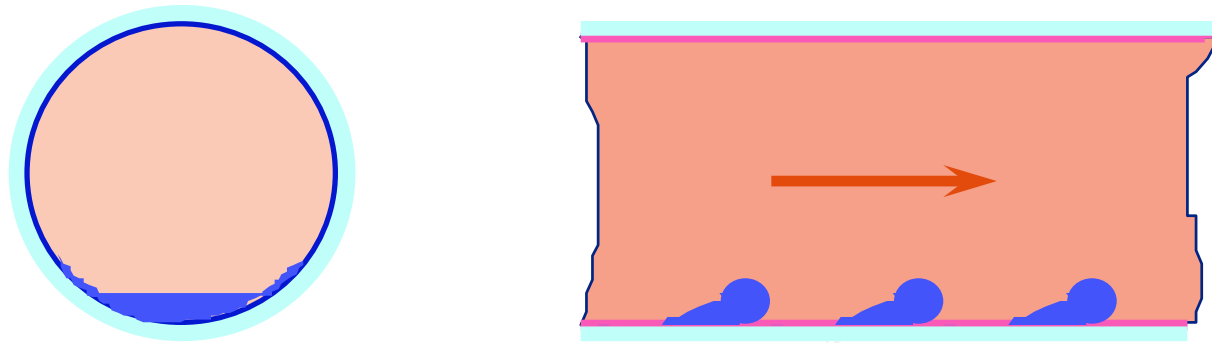


Steam distribution

Typical Steam Circuit

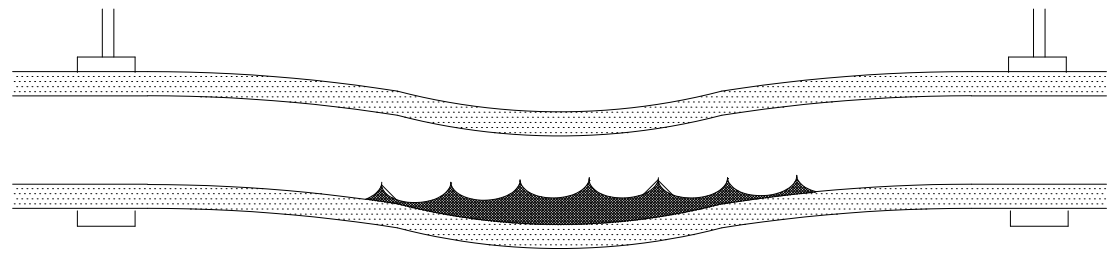


Condensate forming within a steam pipe

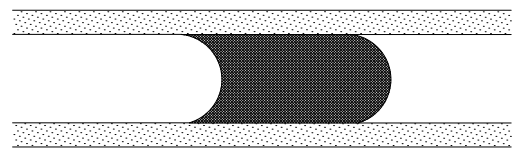


Waterhammer

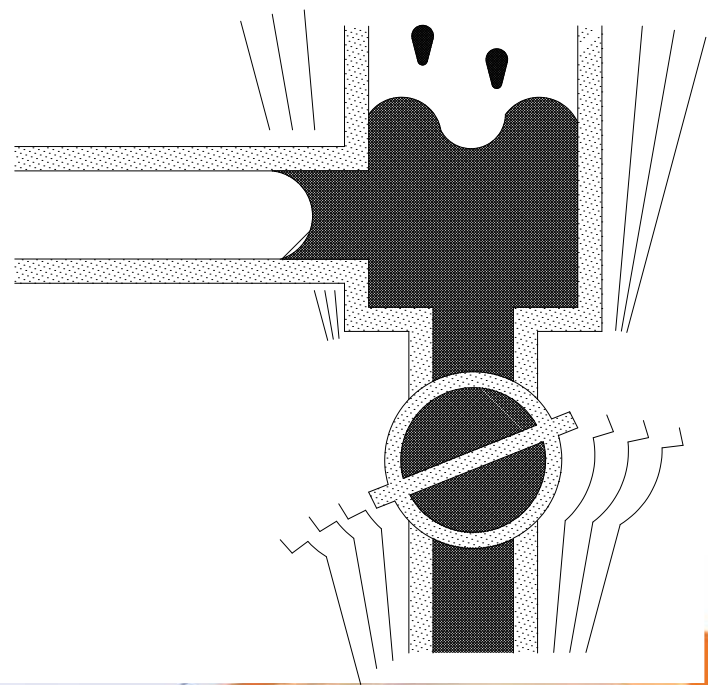
SAGGING MAIN



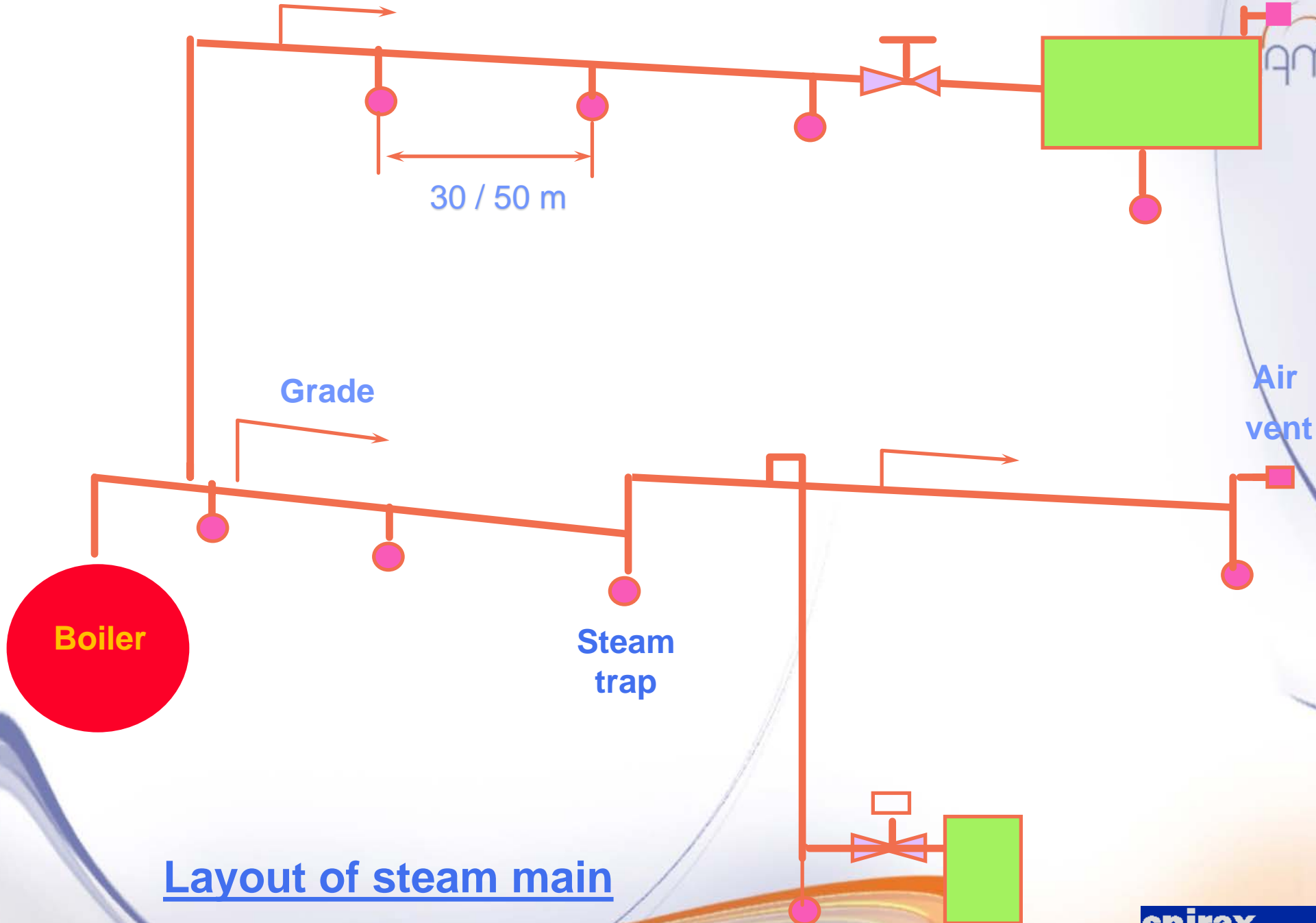
Condensate



Slug of water from condensate

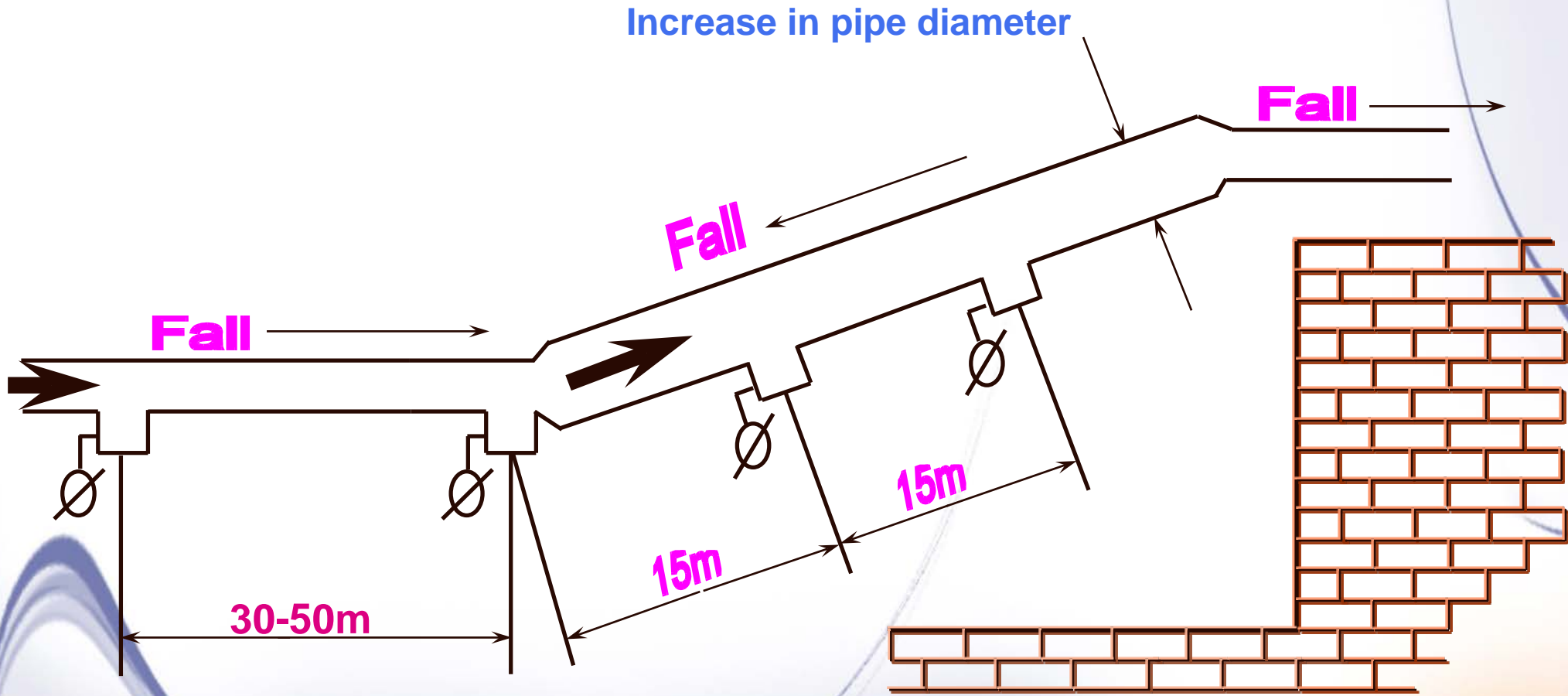


Vibration and noise caused by waterhammer

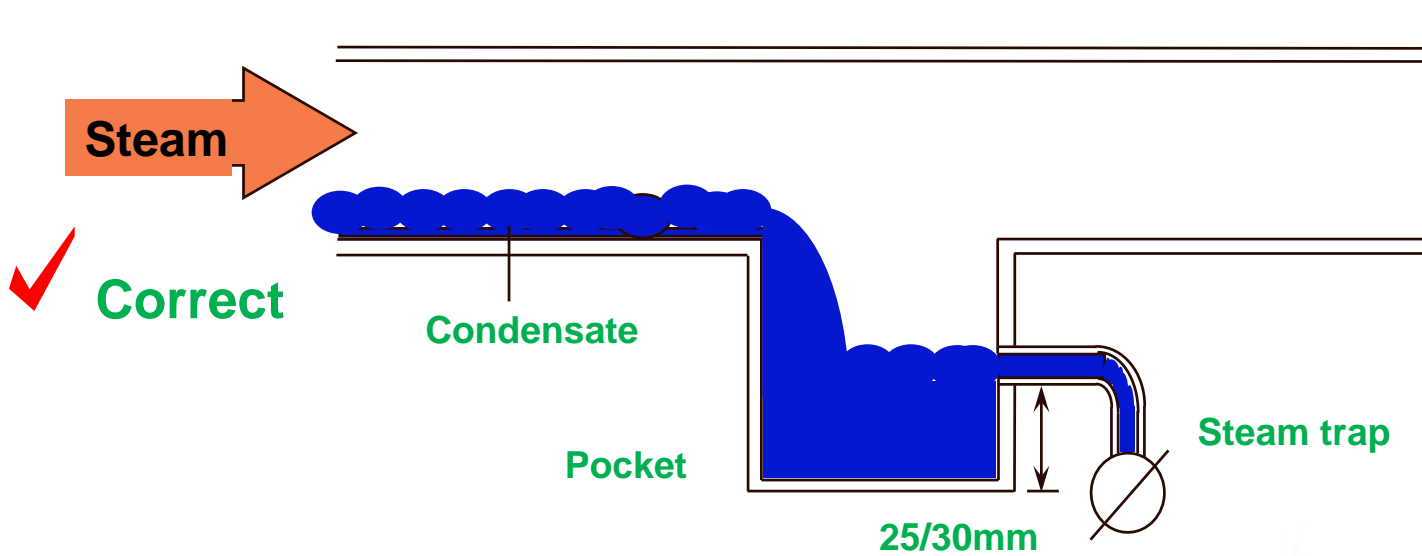


Layout of steam main

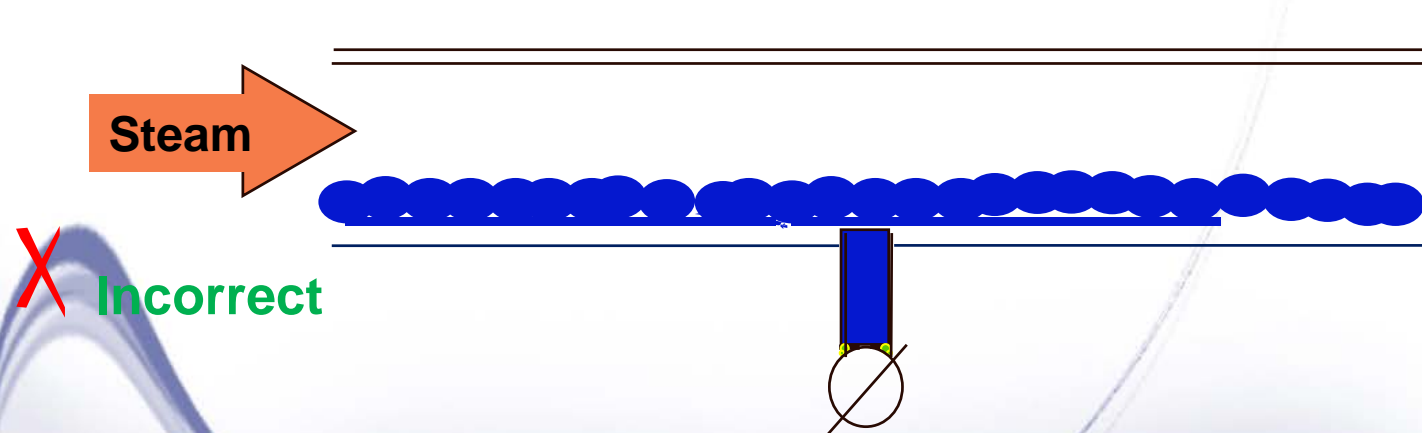
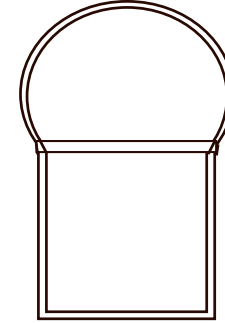
Reverse Gradient On Steam Main



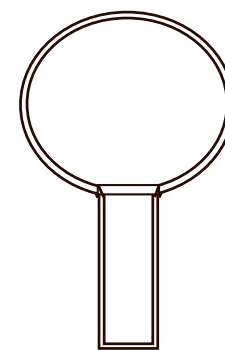
Ineffective, and Proper Drain Points



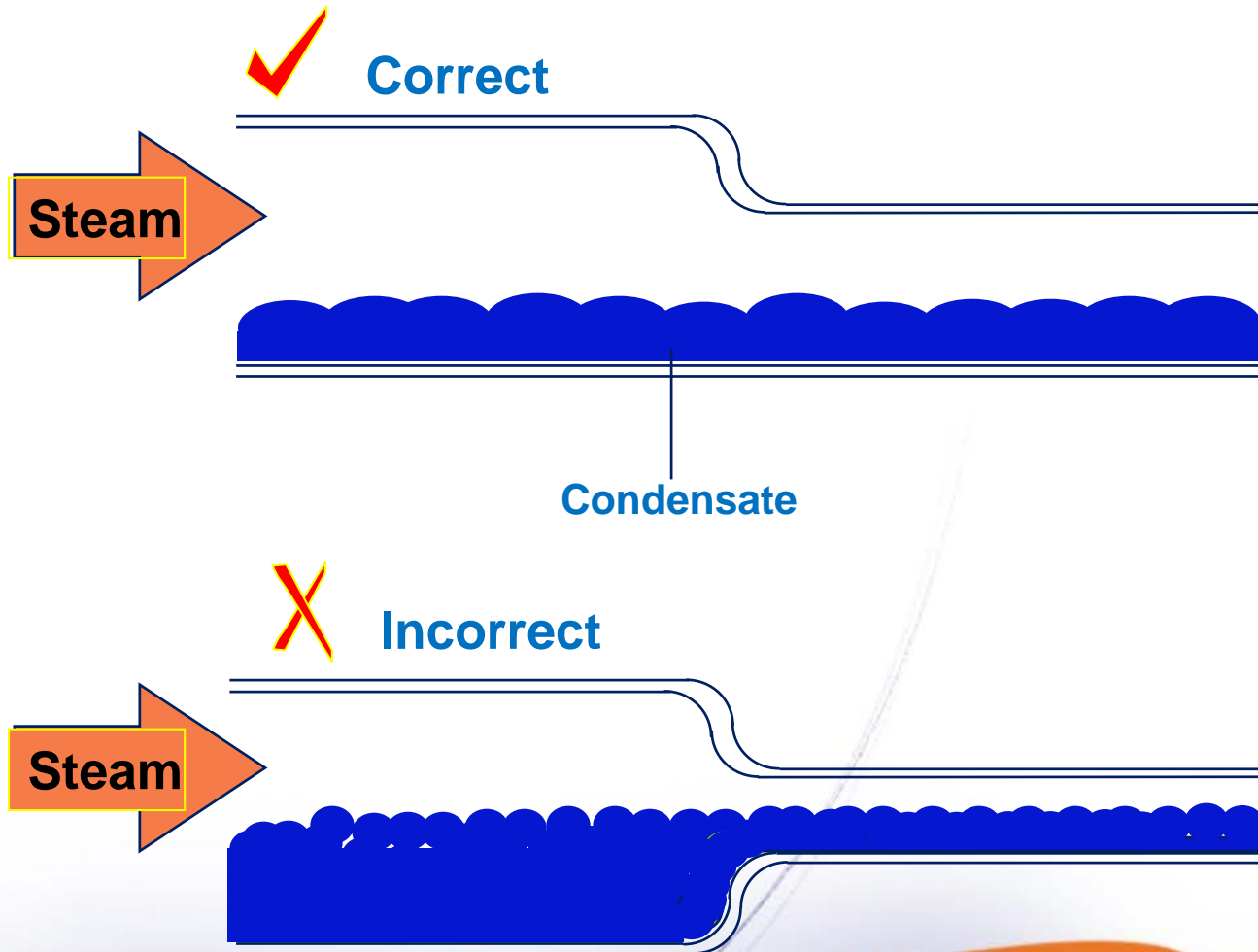
Cross-Section



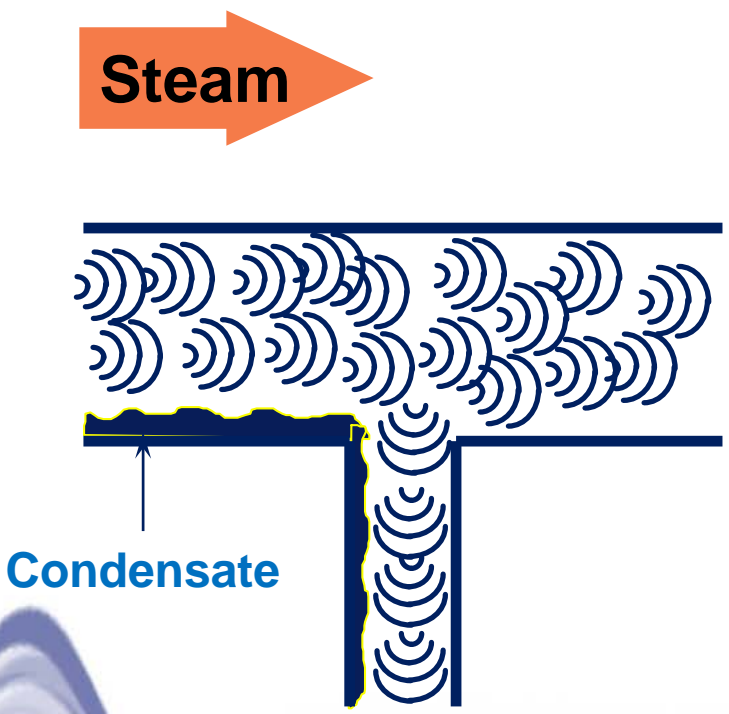
Cross-Section



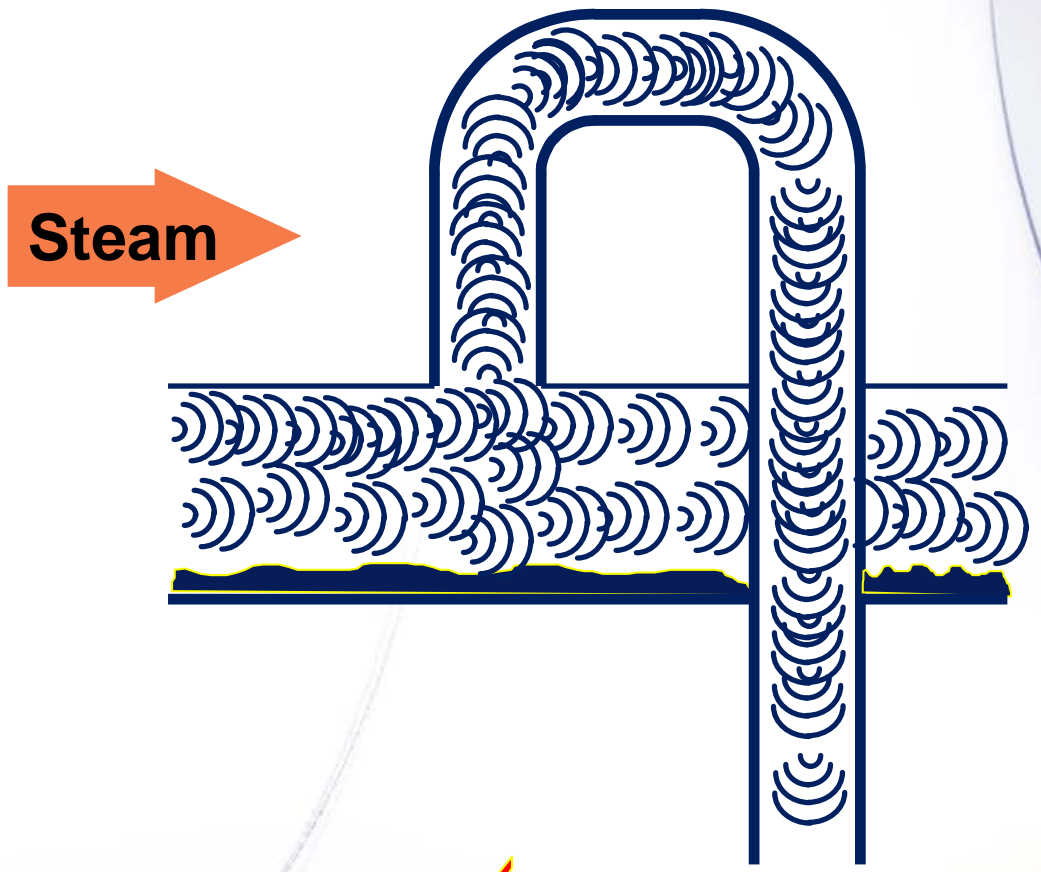
Steam Line Reducers



Branch Connections

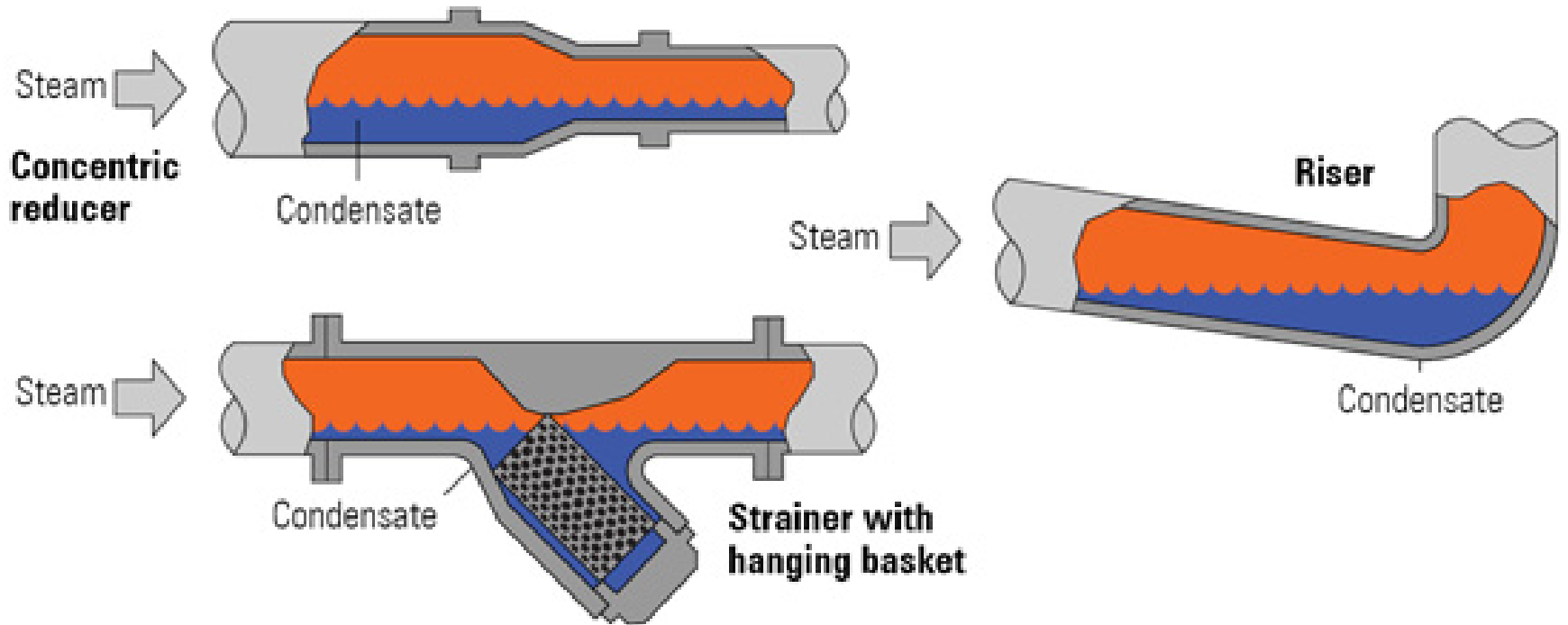


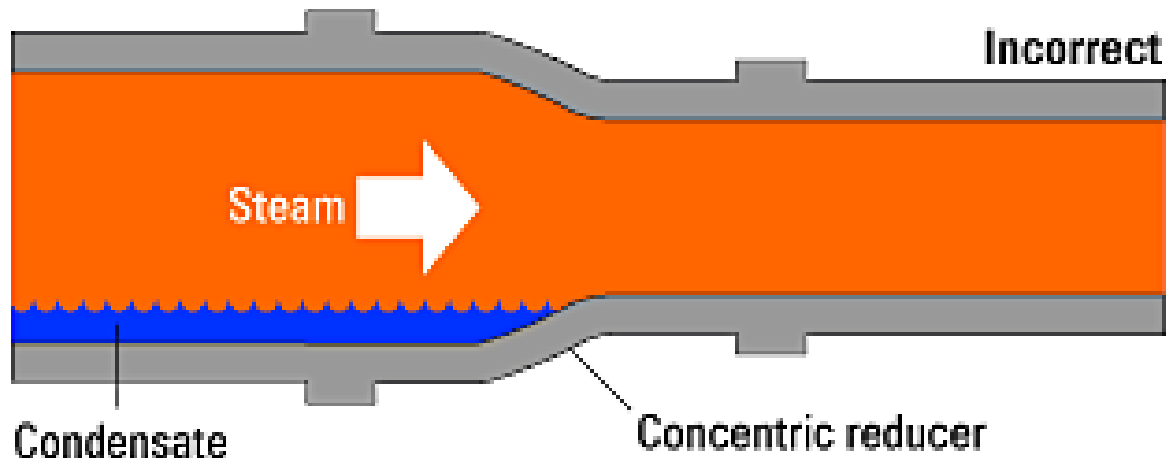
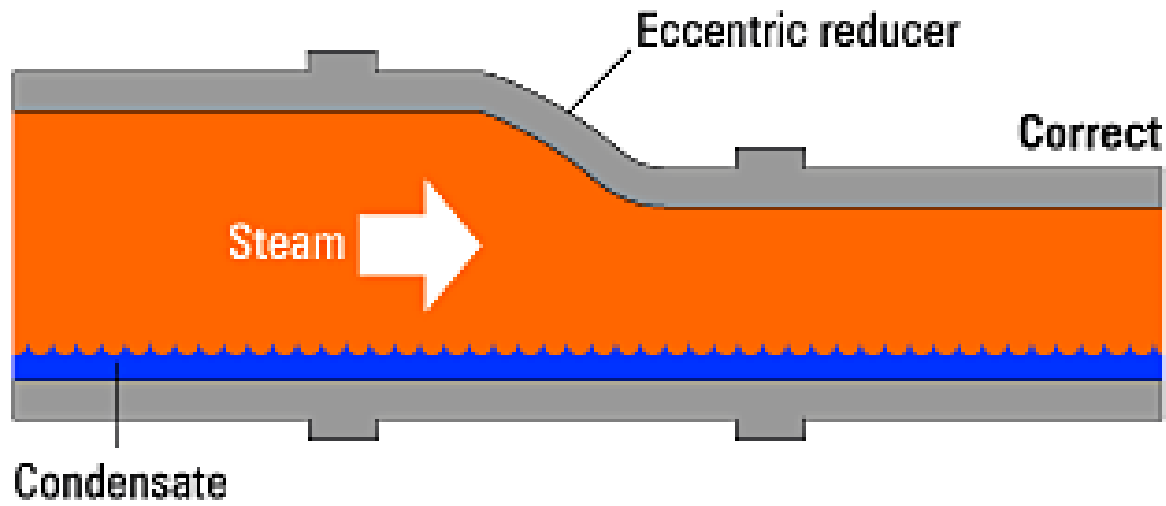
X Incorrect



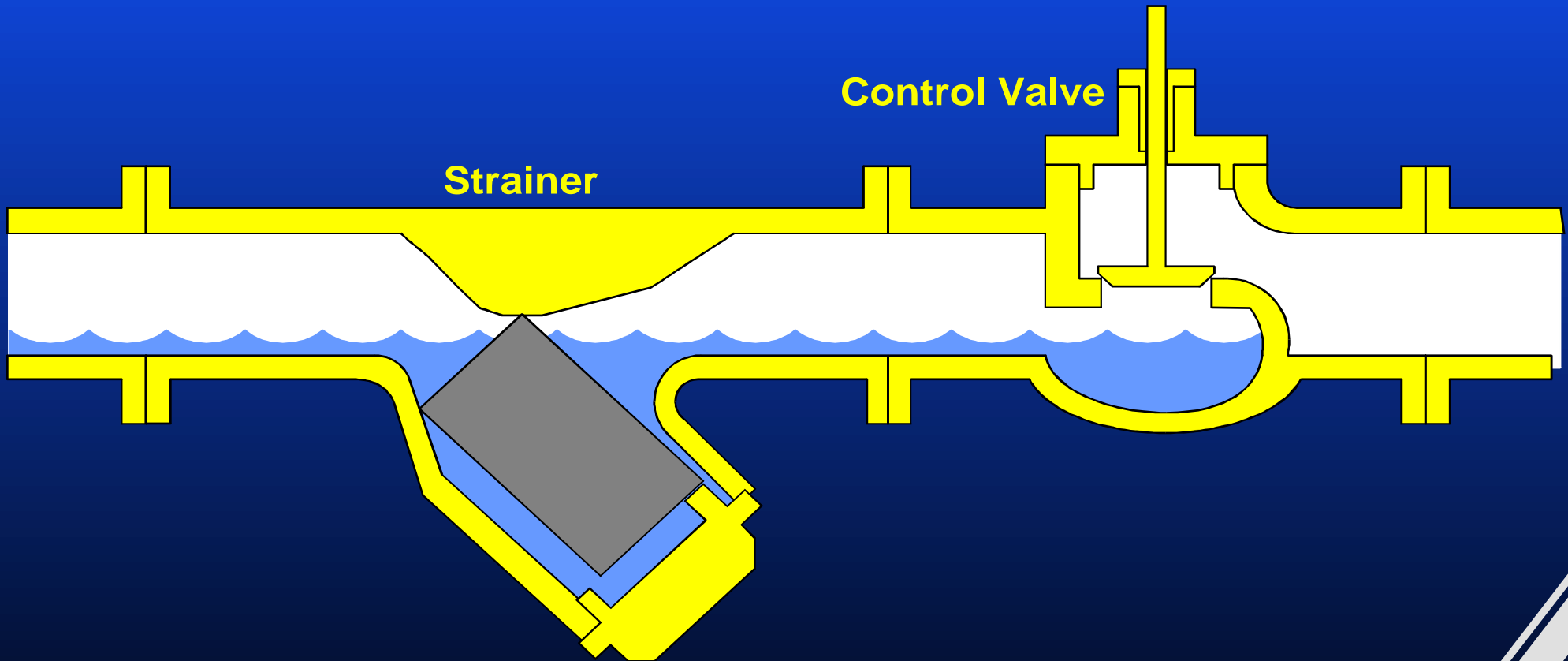
✓ Correct

Piping Problems

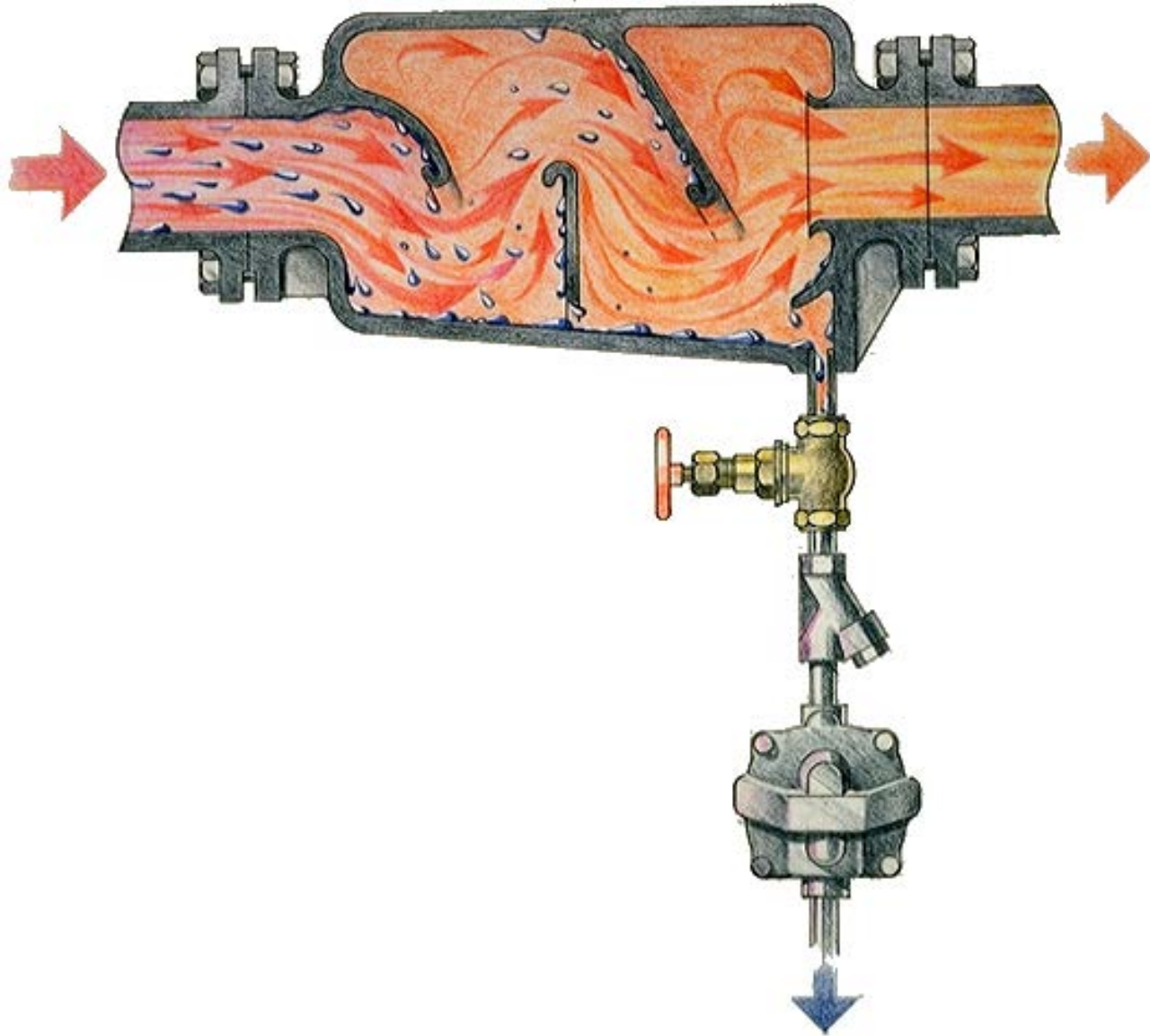




Strainers



Separator



Effect of insulation



Heat losses per m run

Bare pipe

525 W

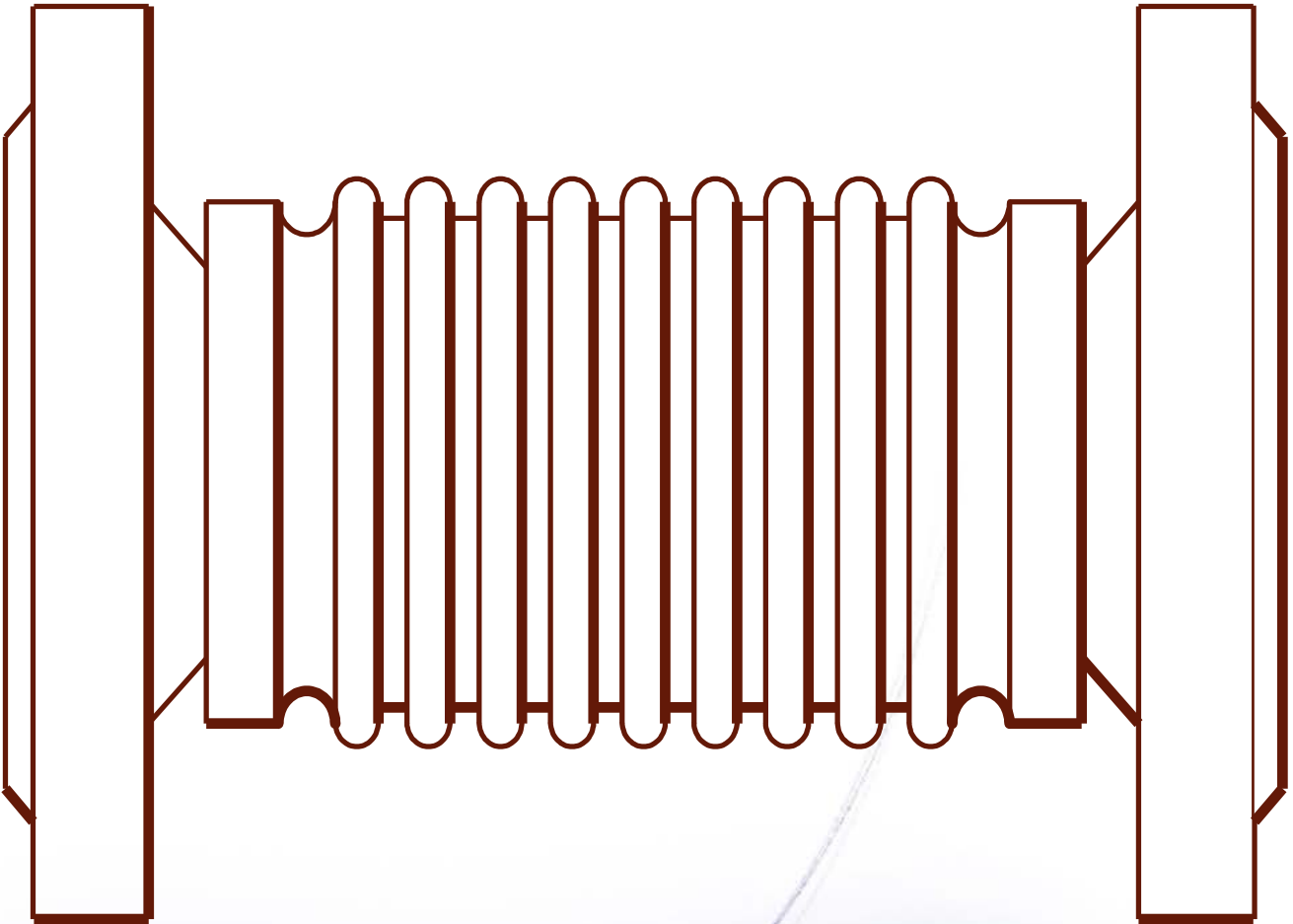


Insulated pipe

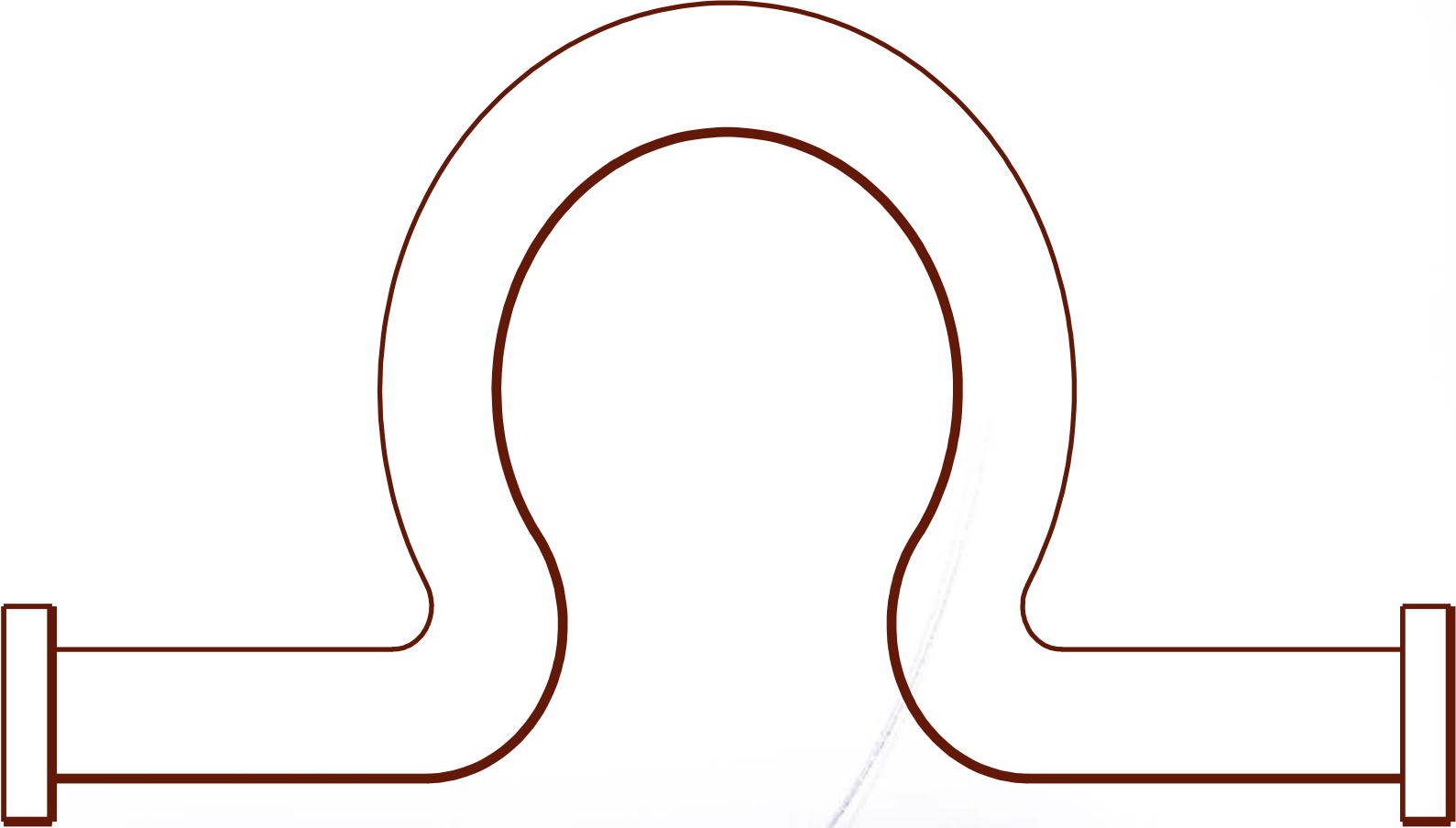
80 W



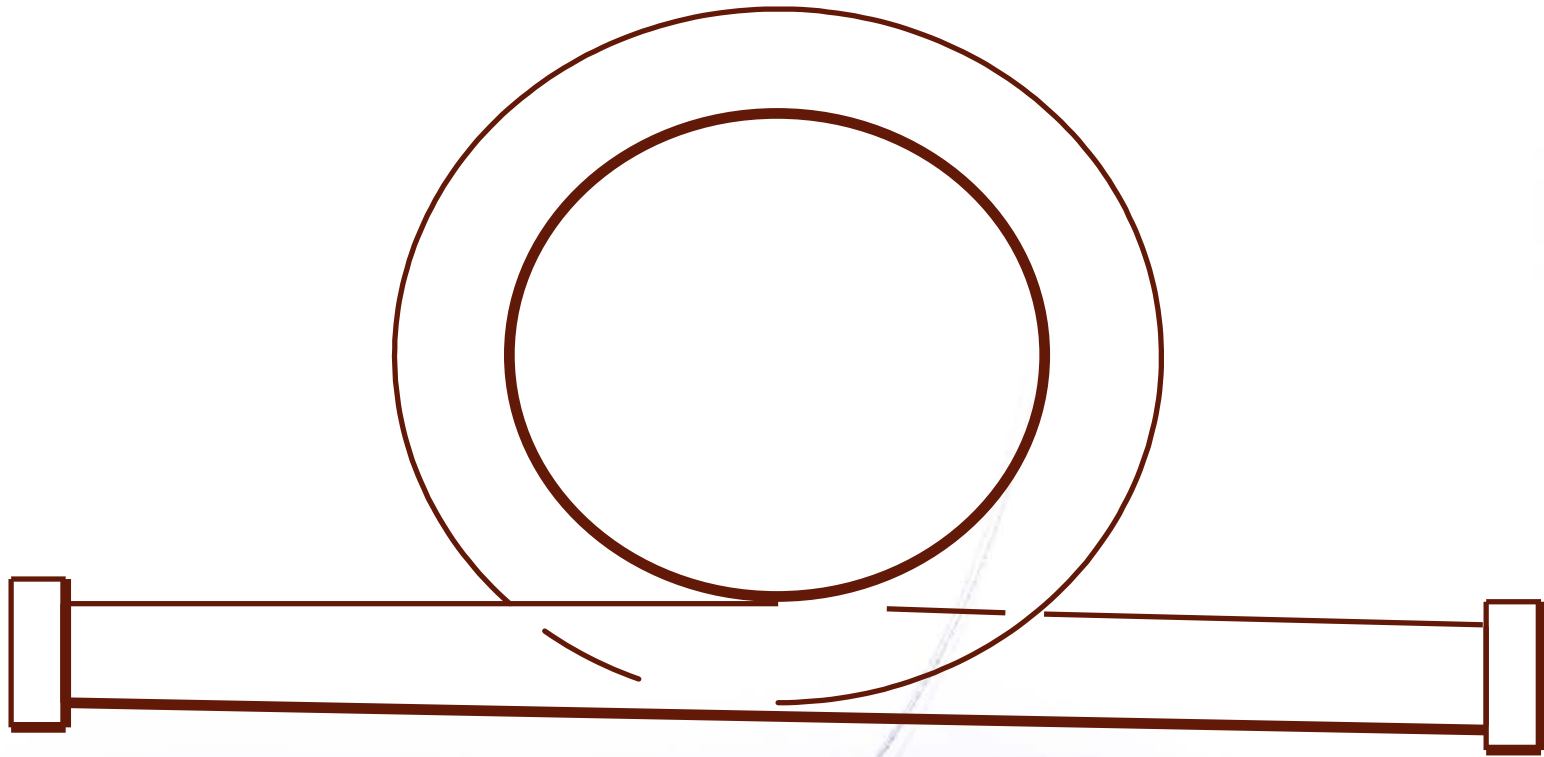
Expansion Bellows



Horse Shoe Loop

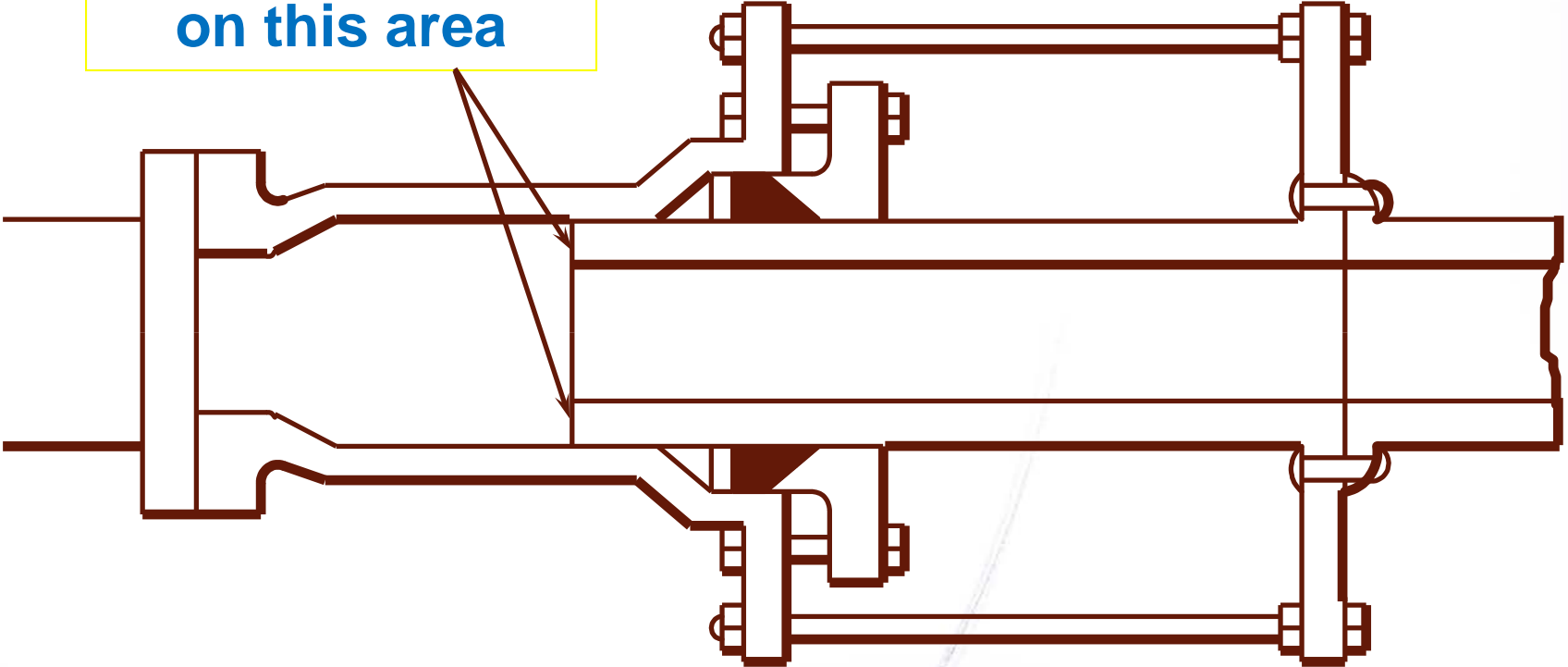


Full Loop



Sliding Joint

Pressure acts on this area



Movement due to pipework expansion