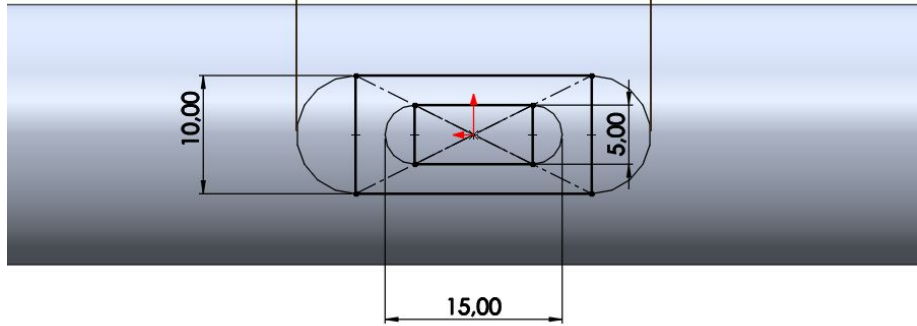


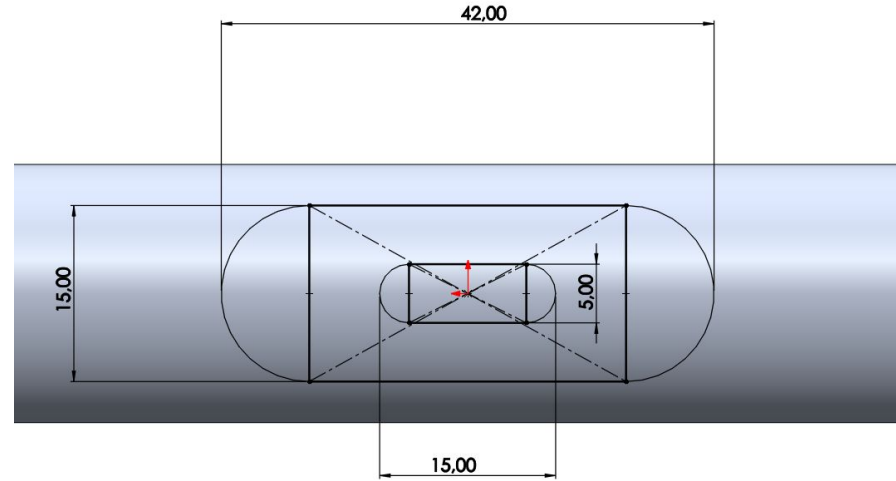
# Stress test

e-Kick 1.0 steer

# Original steer



# New steer



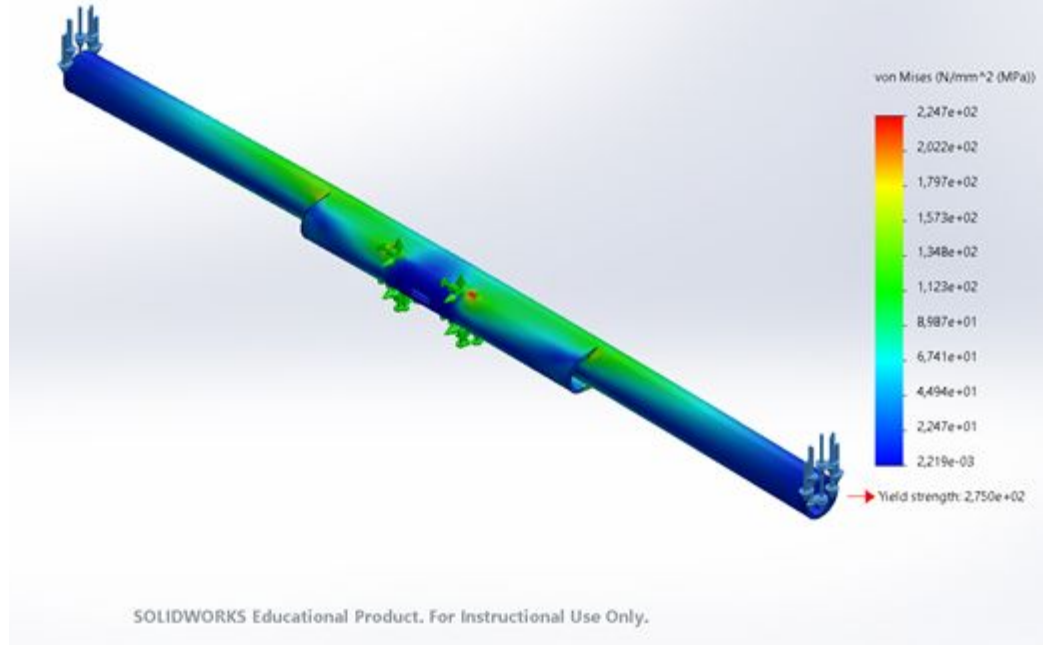
# Original steer

Yield strength : 275 MPa

Load: 2x 500N

Max stress : 225 MPa

Max deformation: 3.7mm



**STRONG ENOUGH**

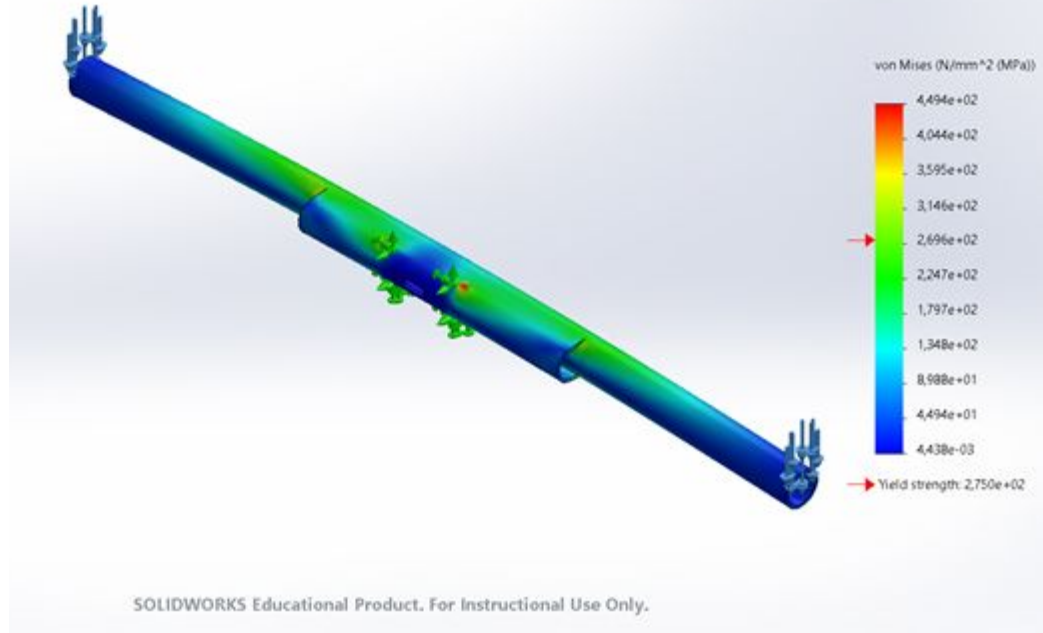
# Original steer

Yield strength : 275 MPa

Load: 2x 1000N

Max stress : 449 MPa

Max deformation: 7.5mm



**BREAKS DOWN**

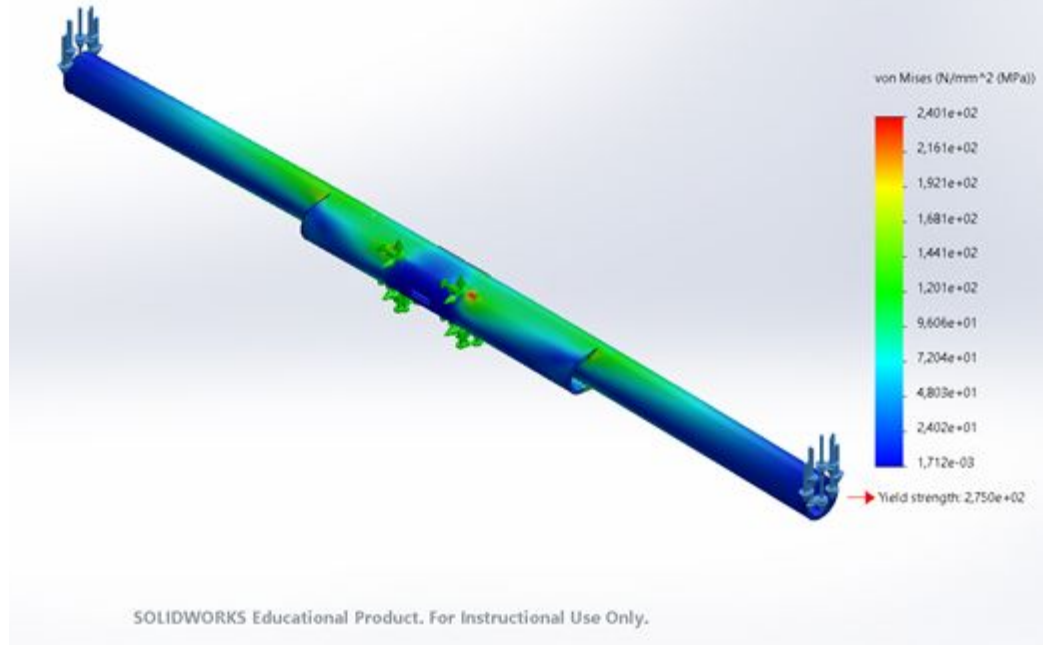
# New steer

Yield strength : 275 MPa

Load: 2x 500N

Max stress : 240 MPa

Max deformation: 3.8mm



**STRONG ENOUGH**

# New steer

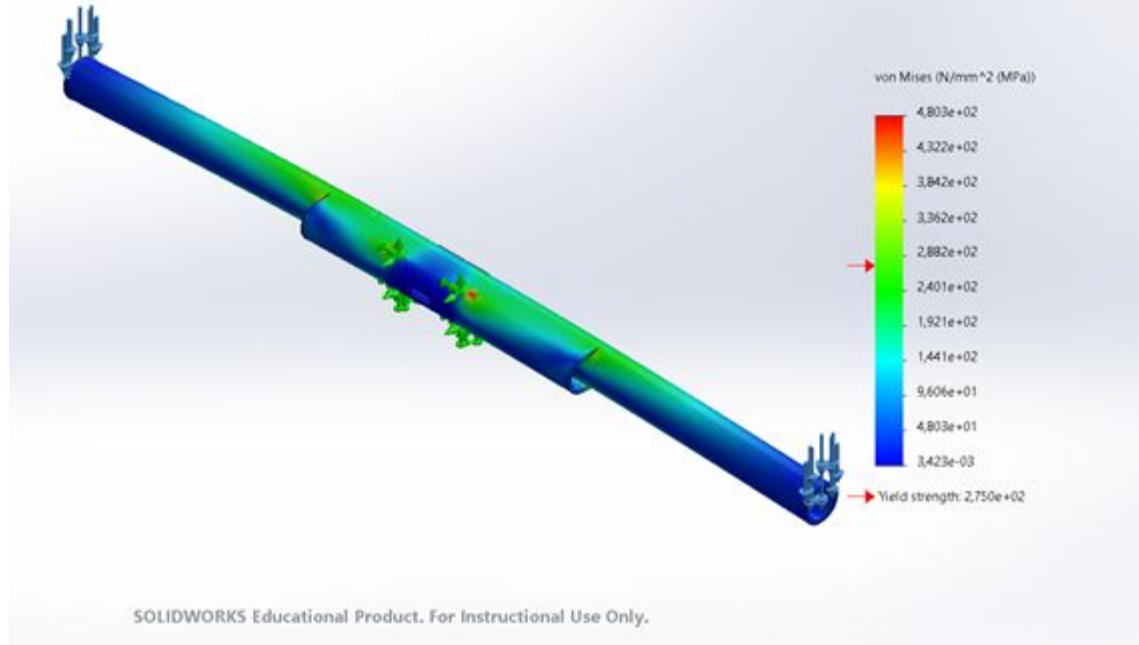
Yield strength : 275 MPa

Load: 2x 1000N

Max stress : 480 MPa

Max deformation: 7.6mm

**BREAKS DOWN**



## Original steer

Yield strength : 275 MPa

Load: 2x 500N

Max stress : 225 MPa

Max deformation: 3.7mm

**STRONG ENOUGH**

## New steer

Yield strength : 275 MPa

Load: 2x 500N

Max stress : 240 MPa

Max deformation: 3.8mm

**STRONG ENOUGH**

# Stress test

According to NEN-EN 15194:2017



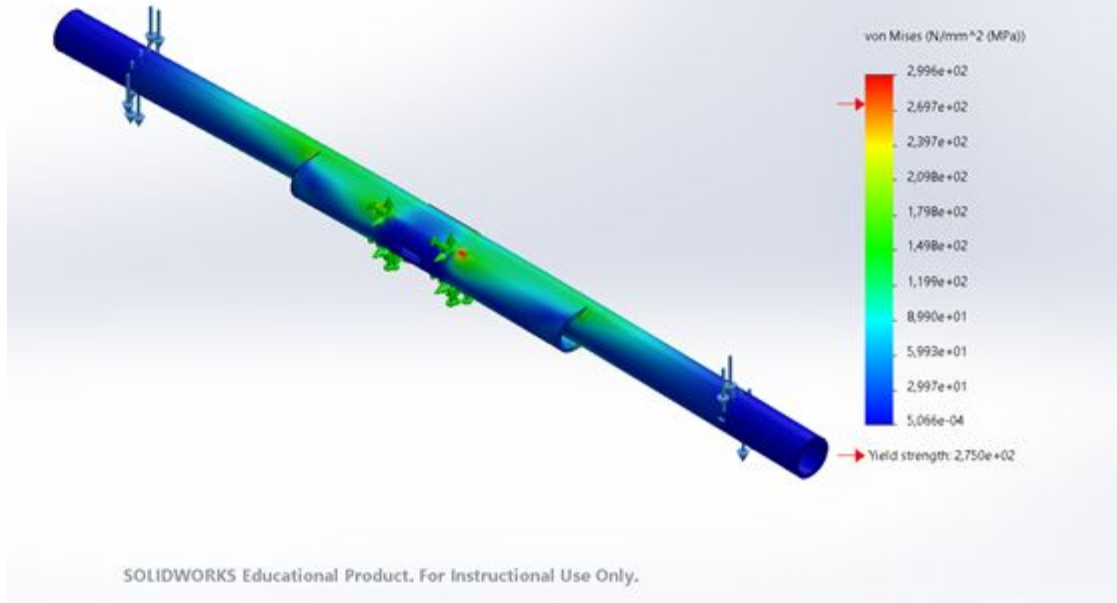
# New steer

Yield strength : 275 MPa

Load: 2x 800N

Max stress : 300 MPa

Max deformation: 4.0mm



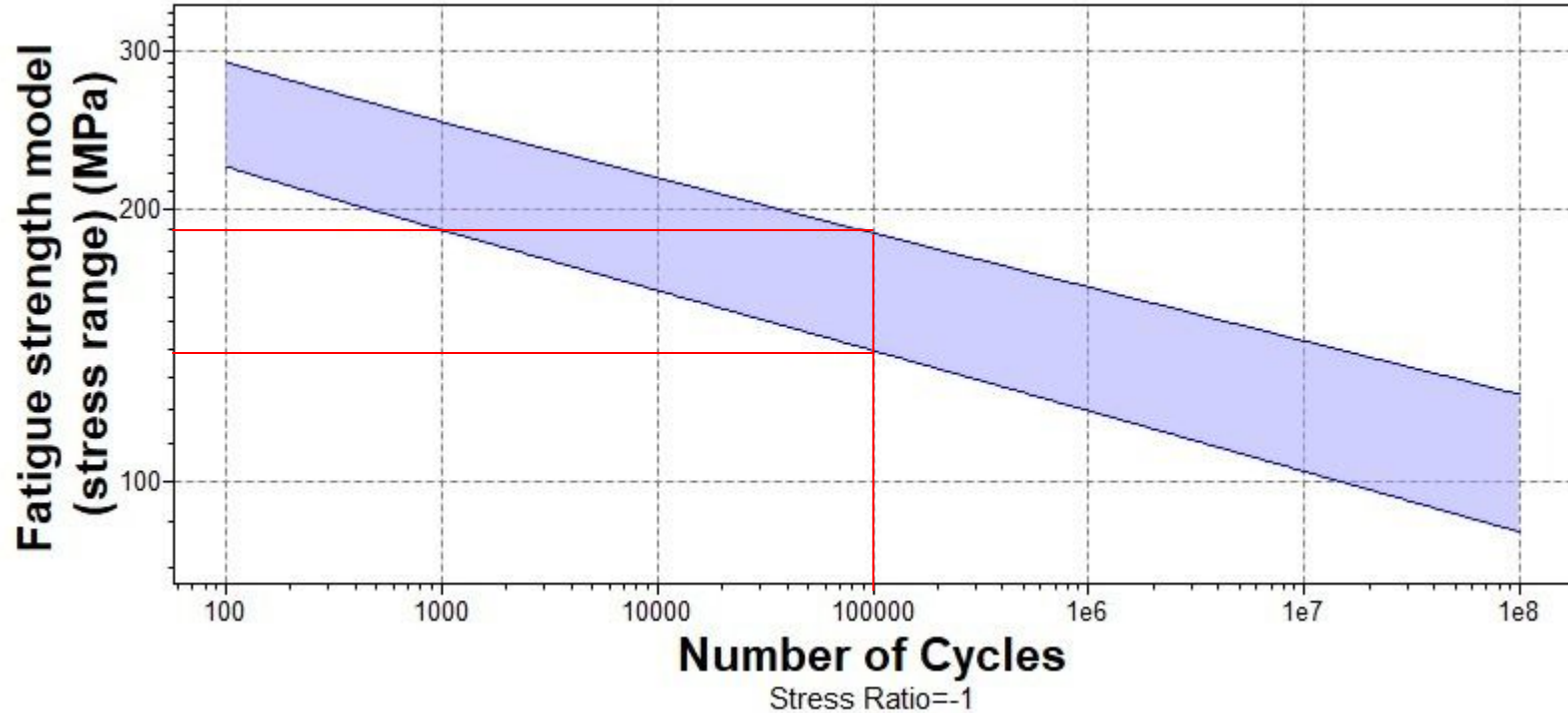
## PLASTIC DEFORMATION

Acceptable according to NEN-EN 15194:2017 p. 43

# Fatigue test

According to NEN-EN 15194:2017

# Fatigue SN curve ALU 6061-T6



# New steer

Yield strength : 275 MPa

Load: 2x 280N

Cycles: 100,000

Max stress : 105 MPa

Max deformation: 1.4mm

**STRONG ENOUGH**

Acceptable according to NEN-EN 15194:2017 p. 48

