

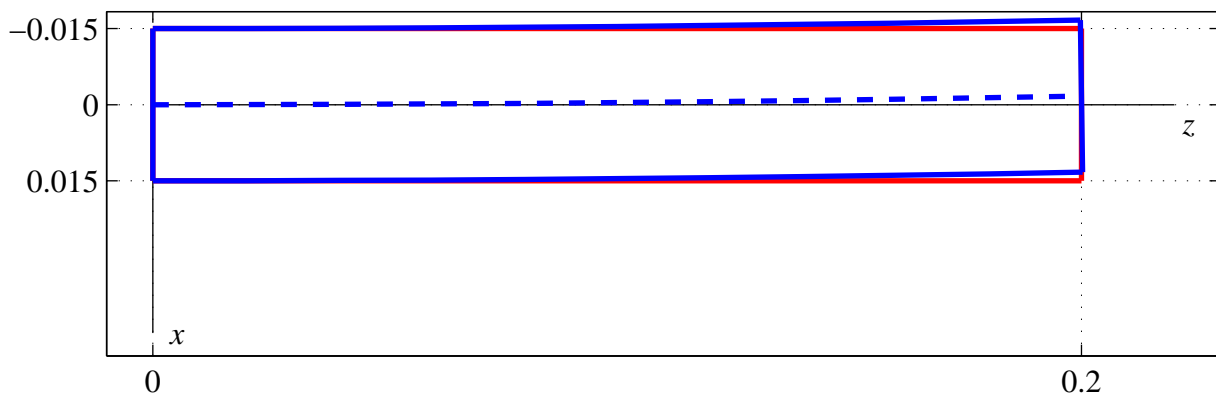
○ Tala: pikkus  $l = 0.2$  m; laius  $2b = 0.05$  m; kõrgus  $2a = 0.03$  m

○ Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 2$  kNm

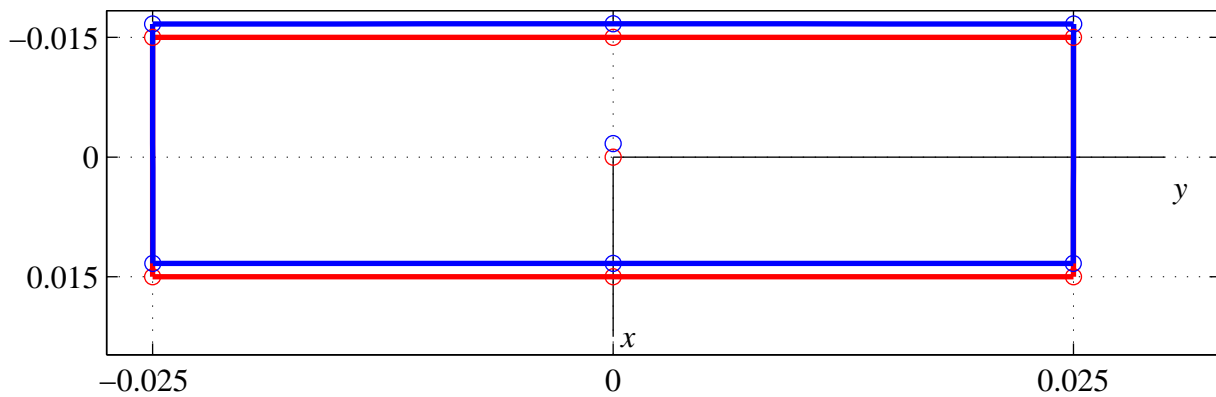
○ Materjal: teras;  $E = 210$  GPa;  $\nu = 0.3$

NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.06

Tala peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju



Tala otsa  $z = l$  siirded ja deformeerunud kuju



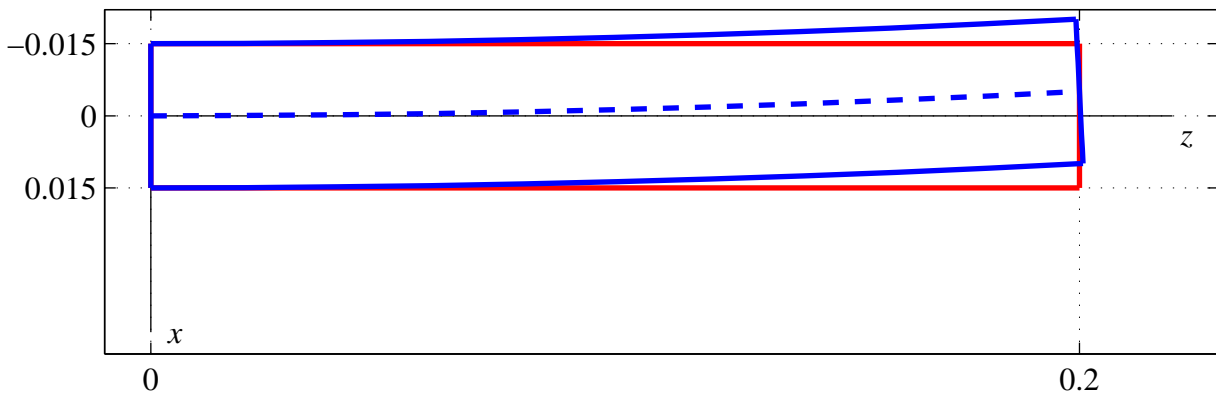
Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.001693$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.015$ ;  $y = 0.025$ ;  $u = -0.001688$ ;  $v = -0.00000952$ ;  $w = 0.00025397$
- $x = 0.015$ ;  $y = 0.000$ ;  $u = -0.001696$ ;  $v = 0.00000000$ ;  $w = 0.00025397$
- $x = 0.015$ ;  $y = -0.025$ ;  $u = -0.001688$ ;  $v = 0.00000952$ ;  $w = 0.00025397$
- $x = -0.015$ ;  $y = -0.025$ ;  $u = -0.001688$ ;  $v = -0.00000952$ ;  $w = -0.00025397$
- $x = -0.015$ ;  $y = 0.000$ ;  $u = -0.001696$ ;  $v = 0.00000000$ ;  $w = -0.00025397$
- $x = -0.015$ ;  $y = 0.025$ ;  $u = -0.001688$ ;  $v = 0.00000952$ ;  $w = -0.00025397$

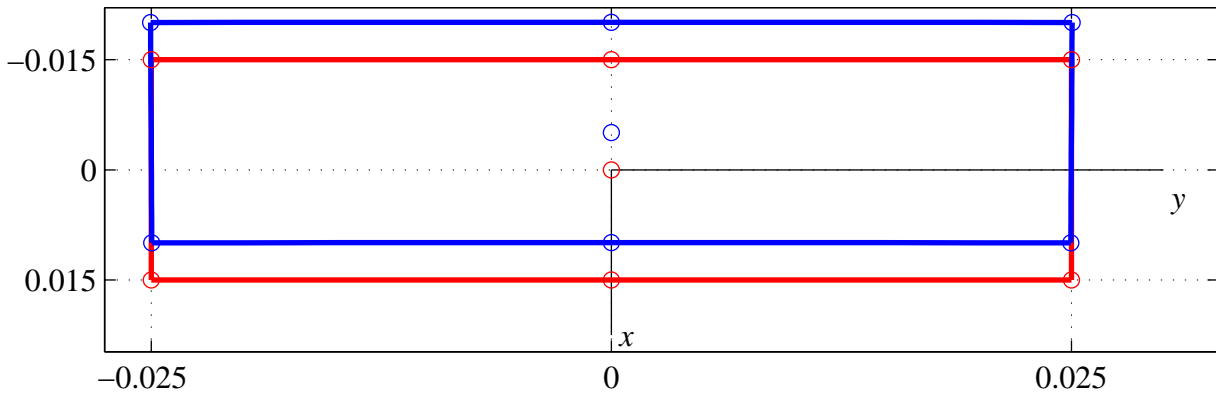
- Tala: pikkus  $l = 0.2$  m; laius  $2b = 0.05$  m; kõrgus  $2a = 0.03$  m
- Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 2$  kNm
- Materjal: alumiinium;  $E = 70$  GPa;  $\nu = 0.35$

NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.17

Tala peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju



Tala otsa  $z = l$  siirded ja deformeerunud kuju



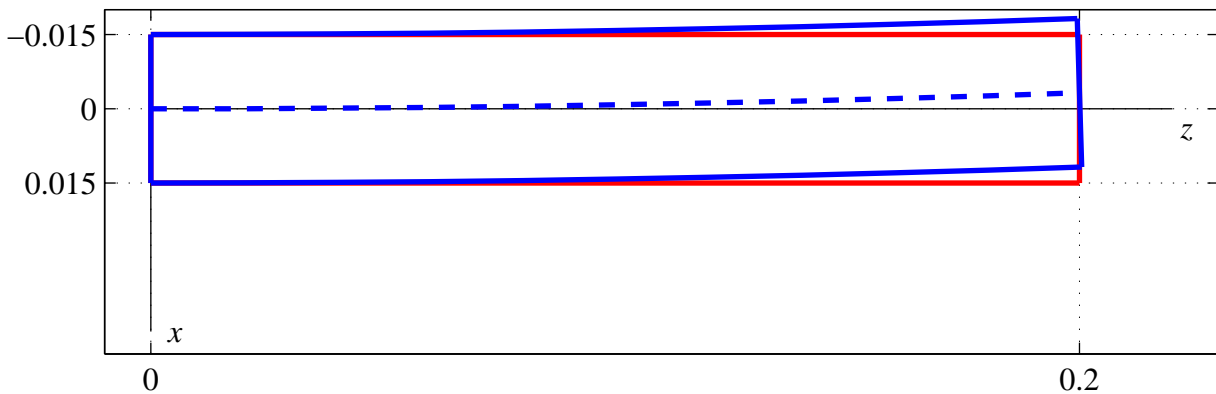
Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.005079$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.015$ ;  $y = 0.025$ ;  $u = -0.005062$ ;  $v = -0.00003333$ ;  $w = 0.00076190$
- $x = 0.015$ ;  $y = 0.000$ ;  $u = -0.005089$ ;  $v = 0.00000000$ ;  $w = 0.00076190$
- $x = 0.015$ ;  $y = -0.025$ ;  $u = -0.005062$ ;  $v = 0.00003333$ ;  $w = 0.00076190$
- $x = -0.015$ ;  $y = -0.025$ ;  $u = -0.005062$ ;  $v = -0.00003333$ ;  $w = -0.00076190$
- $x = -0.015$ ;  $y = 0.000$ ;  $u = -0.005089$ ;  $v = 0.00000000$ ;  $w = -0.00076190$
- $x = -0.015$ ;  $y = 0.025$ ;  $u = -0.005062$ ;  $v = 0.00003333$ ;  $w = -0.00076190$

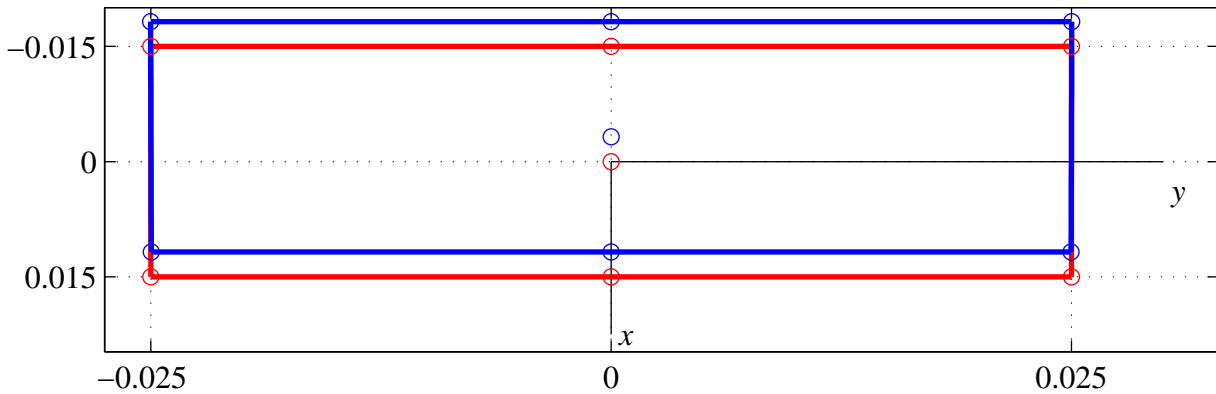
- Tala: pikkus  $l = 0.2$  m; laius  $2b = 0.05$  m; kõrgus  $2a = 0.03$  m
- Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 2$  kNm
- Materjal: vask;  $E = 110$  GPa;  $\nu = 0.32$

NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.11

Tala peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju



Tala otsa  $z = l$  siirded ja deformeerunud kuju



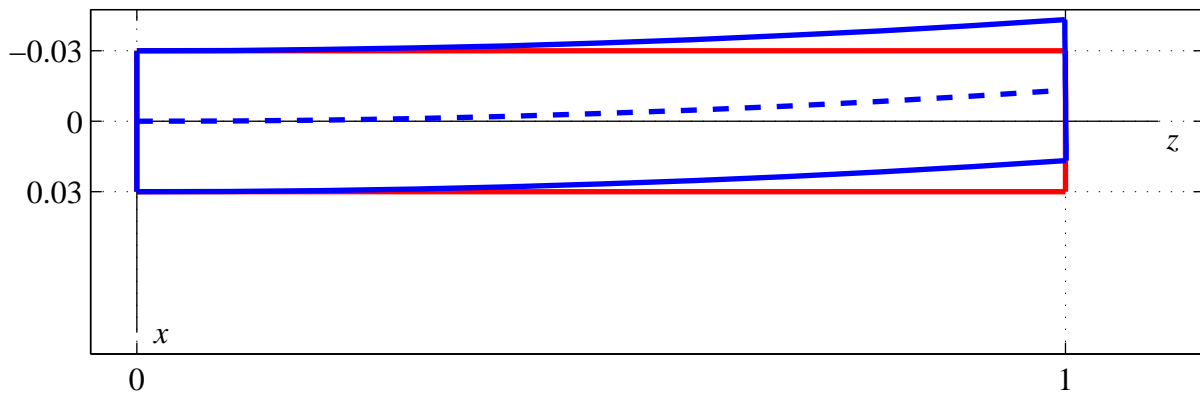
Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.003232$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.015$ ;  $y = 0.025$ ;  $u = -0.003222$ ;  $v = -0.00001939$ ;  $w = 0.00048485$
- $x = 0.015$ ;  $y = 0.000$ ;  $u = -0.003238$ ;  $v = 0.00000000$ ;  $w = 0.00048485$
- $x = 0.015$ ;  $y = -0.025$ ;  $u = -0.003222$ ;  $v = 0.00001939$ ;  $w = 0.00048485$
- $x = -0.015$ ;  $y = -0.025$ ;  $u = -0.003222$ ;  $v = -0.00001939$ ;  $w = -0.00048485$
- $x = -0.015$ ;  $y = 0.000$ ;  $u = -0.003238$ ;  $v = 0.00000000$ ;  $w = -0.00048485$
- $x = -0.015$ ;  $y = 0.025$ ;  $u = -0.003222$ ;  $v = 0.00001939$ ;  $w = -0.00048485$

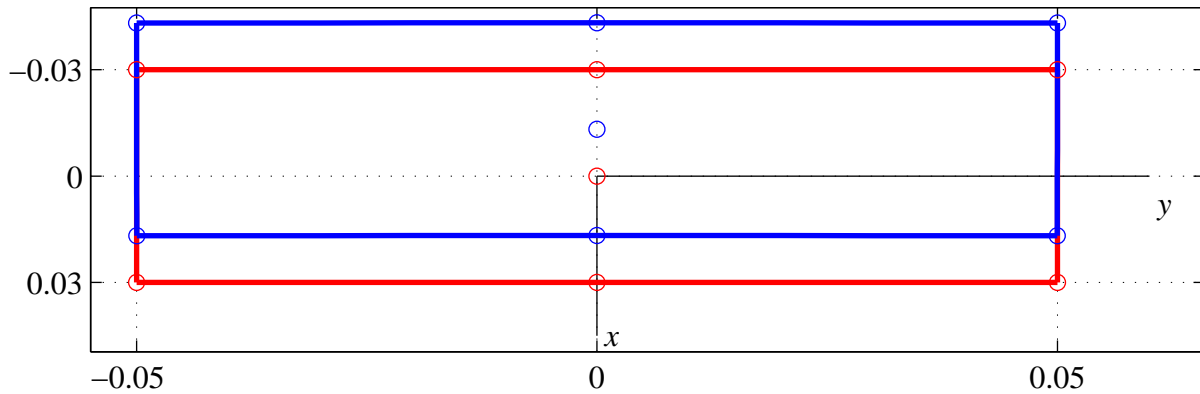
- Tala: pikkus  $l = 1$  m; laius  $2b = 0.1$  m; kõrgus  $2a = 0.06$  m
- Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm
- Materjal: teras;  $E = 210$  GPa;  $\nu = 0.3$

NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.22

Tala peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju



Tala otsa  $z = l$  siirded ja deformeerunud kuju



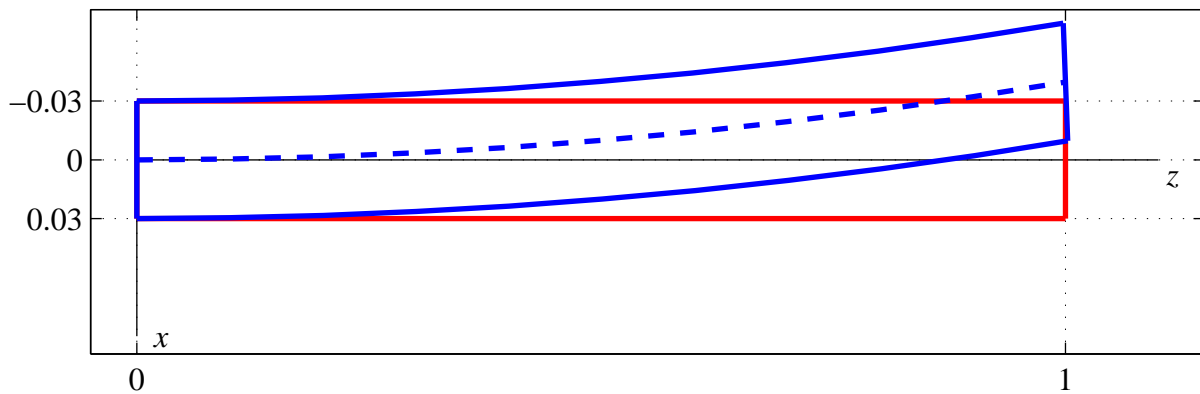
Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.013228$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.030$ ;  $y = 0.050$ ;  $u = -0.013221$ ;  $v = -0.00001190$ ;  $w = 0.00079365$
- $x = 0.030$ ;  $y = 0.000$ ;  $u = -0.013231$ ;  $v = 0.00000000$ ;  $w = 0.00079365$
- $x = 0.030$ ;  $y = -0.050$ ;  $u = -0.013221$ ;  $v = 0.00001190$ ;  $w = 0.00079365$
- $x = -0.030$ ;  $y = -0.050$ ;  $u = -0.013221$ ;  $v = -0.00001190$ ;  $w = -0.00079365$
- $x = -0.030$ ;  $y = 0.000$ ;  $u = -0.013231$ ;  $v = 0.00000000$ ;  $w = -0.00079365$
- $x = -0.030$ ;  $y = 0.050$ ;  $u = -0.013221$ ;  $v = 0.00001190$ ;  $w = -0.00079365$

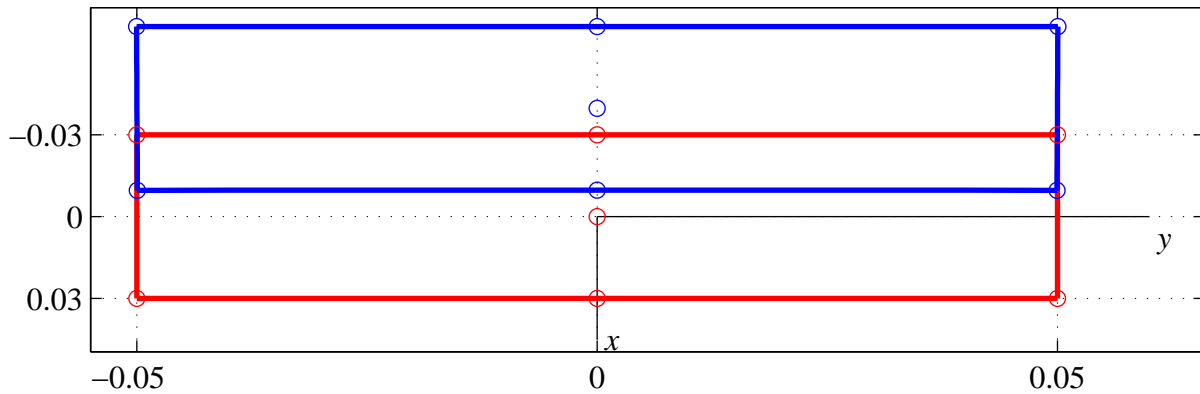
- Tala: pikkus  $l = 1$  m; laius  $2b = 0.1$  m; kõrgus  $2a = 0.06$  m
- Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm
- Materjal: alumiinium;  $E = 70$  GPa;  $\nu = 0.35$

NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.66

Tala peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju



Tala otsa  $z = l$  siirded ja deformeerunud kuju



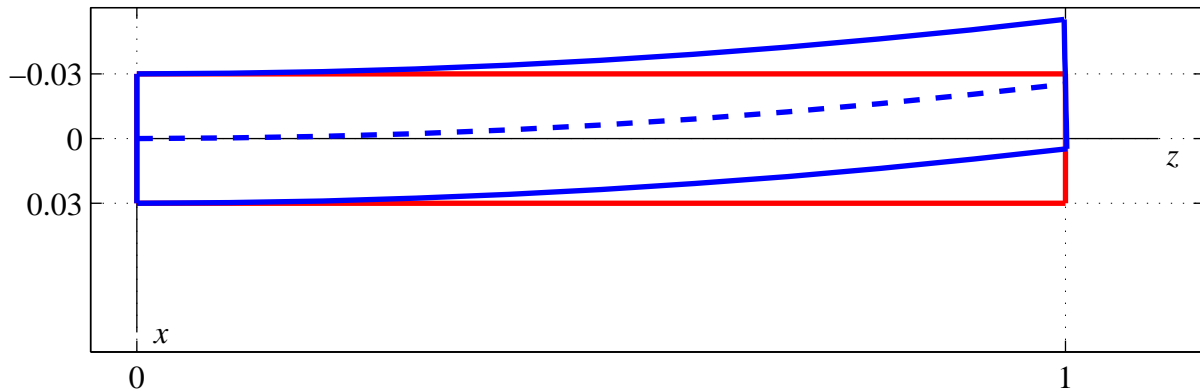
Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.039683$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.030$ ;  $y = 0.050$ ;  $u = -0.039660$ ;  $v = -0.00004167$ ;  $w = 0.00238095$
- $x = 0.030$ ;  $y = 0.000$ ;  $u = -0.039695$ ;  $v = 0.00000000$ ;  $w = 0.00238095$
- $x = 0.030$ ;  $y = -0.050$ ;  $u = -0.039660$ ;  $v = 0.00004167$ ;  $w = 0.00238095$
- $x = -0.030$ ;  $y = -0.050$ ;  $u = -0.039660$ ;  $v = -0.00004167$ ;  $w = -0.00238095$
- $x = -0.030$ ;  $y = 0.000$ ;  $u = -0.039695$ ;  $v = 0.00000000$ ;  $w = -0.00238095$
- $x = -0.030$ ;  $y = 0.050$ ;  $u = -0.039660$ ;  $v = 0.00004167$ ;  $w = -0.00238095$

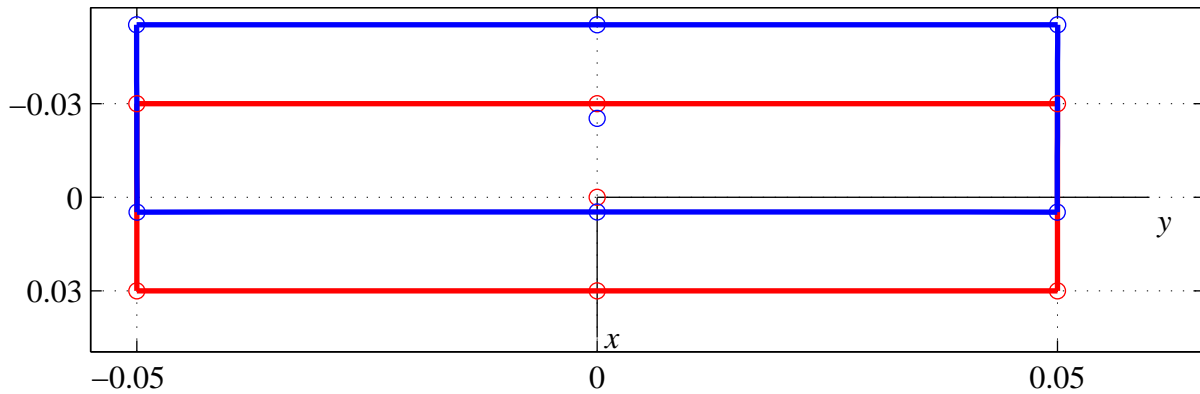
- Tala: pikkus  $l = 1$  m; laius  $2b = 0.1$  m; kõrgus  $2a = 0.06$  m
- Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm
- Materjal: vask;  $E = 110$  GPa;  $\nu = 0.32$

NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.42

Tala peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju



Tala otsa  $z = l$  siirded ja deformeerunud kuju



Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.025253$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.030$ ;  $y = 0.050$ ;  $u = -0.025240$ ;  $v = -0.00002424$ ;  $w = 0.00151515$
- $x = 0.030$ ;  $y = 0.000$ ;  $u = -0.025260$ ;  $v = 0.00000000$ ;  $w = 0.00151515$
- $x = 0.030$ ;  $y = -0.050$ ;  $u = -0.025240$ ;  $v = 0.00002424$ ;  $w = 0.00151515$
- $x = -0.030$ ;  $y = -0.050$ ;  $u = -0.025240$ ;  $v = -0.00002424$ ;  $w = -0.00151515$
- $x = -0.030$ ;  $y = 0.000$ ;  $u = -0.025260$ ;  $v = 0.00000000$ ;  $w = -0.00151515$
- $x = -0.030$ ;  $y = 0.050$ ;  $u = -0.025240$ ;  $v = 0.00002424$ ;  $w = -0.00151515$

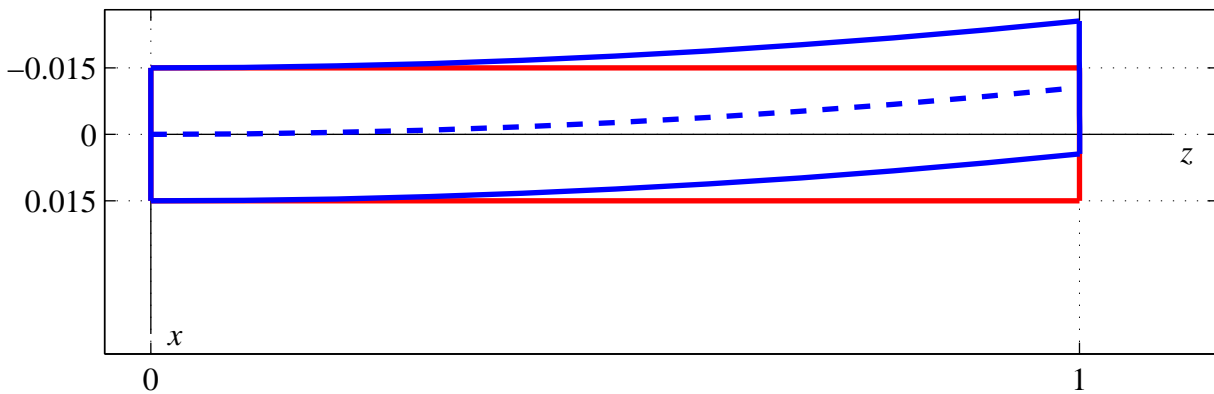
○ *Plaat: pikkus  $l = 1$  m; laius  $2b = 1$  m; kõrgus  $2a = 0.03$  m*

○ *Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm*

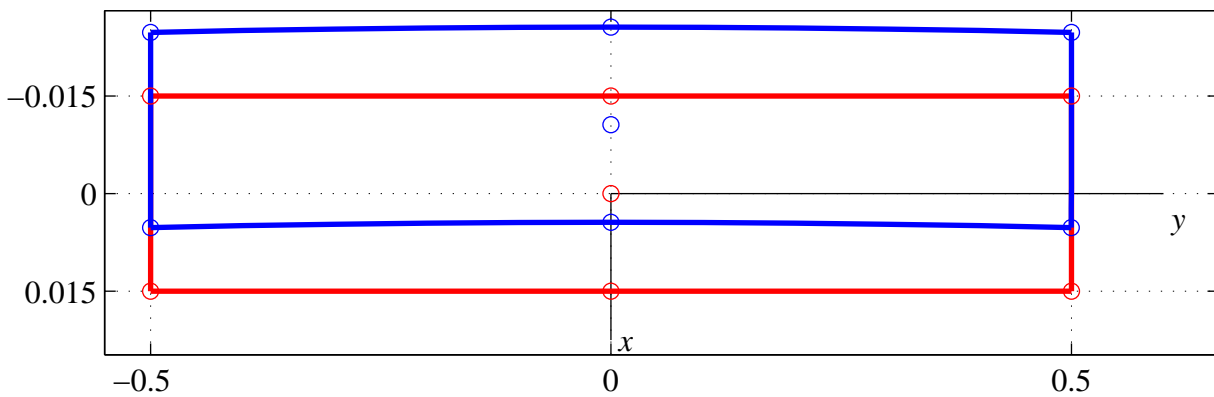
○ *Materjal: teras;  $E = 210$  GPa;  $\nu = 0.3$*

*NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.35*

*Plaadi peatasandi  $x-z$  punktide siirded ja deformeerunud kuju*



*Plaadi serva  $z = l$  siirded ja deformeerunud kuju*



*Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$*

- $x = 0.000; y = 0.000; u = -0.010582; v = 0.00000000; w = 0.00000000$
- $x = 0.015; y = 0.500; u = -0.009789; v = -0.00004762; w = 0.00031746$
- $x = 0.015; y = 0.000; u = -0.010583; v = 0.00000000; w = 0.00031746$
- $x = 0.015; y = -0.500; u = -0.009789; v = 0.00004762; w = 0.00031746$
- $x = -0.015; y = -0.500; u = -0.009789; v = -0.00004762; w = -0.00031746$
- $x = -0.015; y = 0.000; u = -0.010583; v = 0.00000000; w = -0.00031746$
- $x = -0.015; y = 0.500; u = -0.009789; v = 0.00004762; w = -0.00031746$

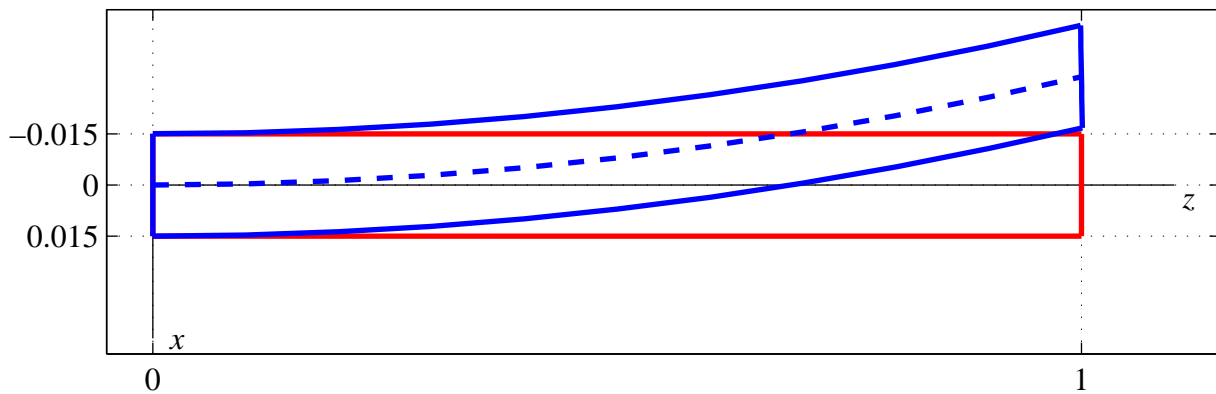
○ *Plaat: pikkus  $l = 1$  m; laius  $2b = 1$  m; kõrgus  $2a = 0.03$  m*

○ *Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm*

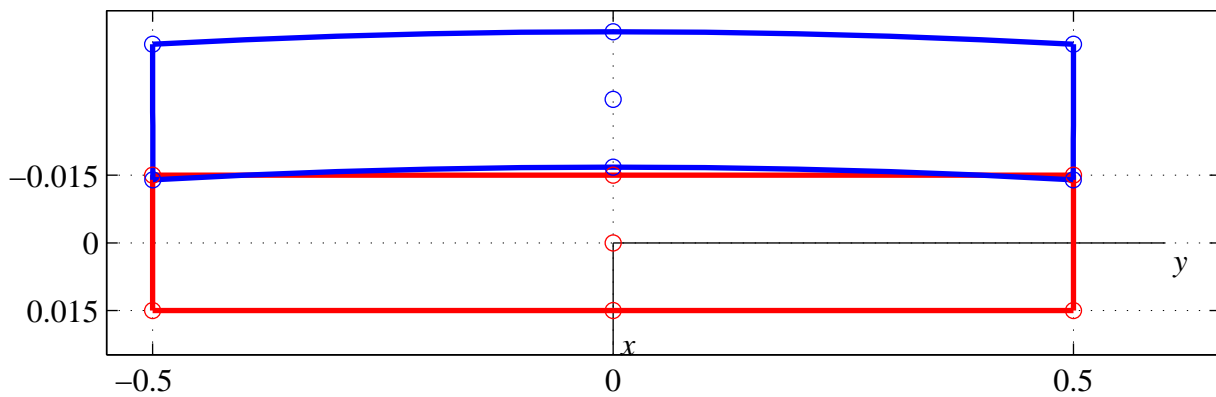
○ *Materjal: alumiinium;  $E = 70$  GPa;  $\nu = 0.35$*

*NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 1.06*

*Plaadiga peatasandi  $x-z$  punktide siirded ja deformeerunud kuju*



*Plaadiga serva  $z = l$  siirded ja deformeerunud kuju*



*Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$*

- $x = 0.000; y = 0.000; u = -0.031746; v = 0.00000000; w = 0.00000000$
- $x = 0.015; y = 0.500; u = -0.028971; v = -0.00016667; w = 0.00095238$
- $x = 0.015; y = 0.000; u = -0.031749; v = 0.00000000; w = 0.00095238$
- $x = 0.015; y = -0.500; u = -0.028971; v = 0.00016667; w = 0.00095238$
- $x = -0.015; y = -0.500; u = -0.028971; v = -0.00016667; w = -0.00095238$
- $x = -0.015; y = 0.000; u = -0.031749; v = 0.00000000; w = -0.00095238$
- $x = -0.015; y = 0.500; u = -0.028971; v = 0.00016667; w = -0.00095238$



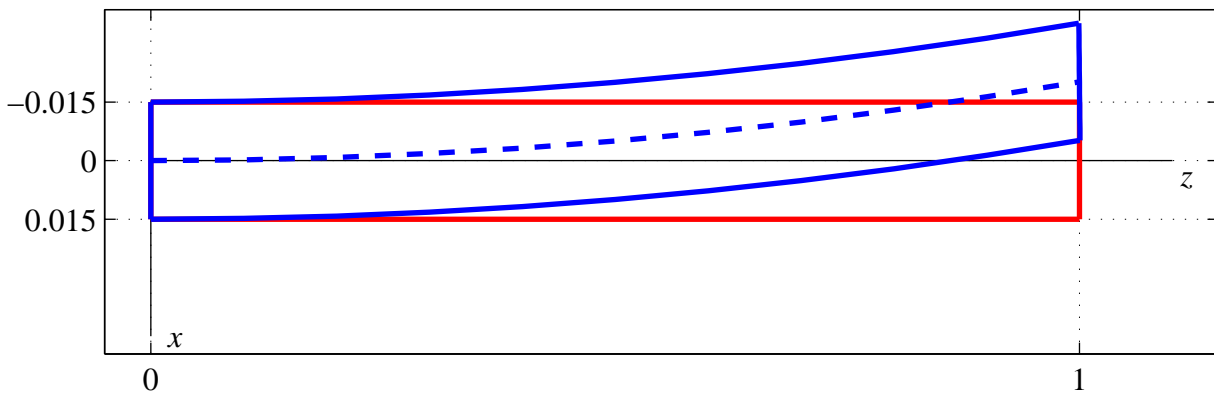
○ *Plaat: pikkus  $l = 1$  m; laius  $2b = 1$  m; kõrgus  $2a = 0.03$  m*

○ *Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm*

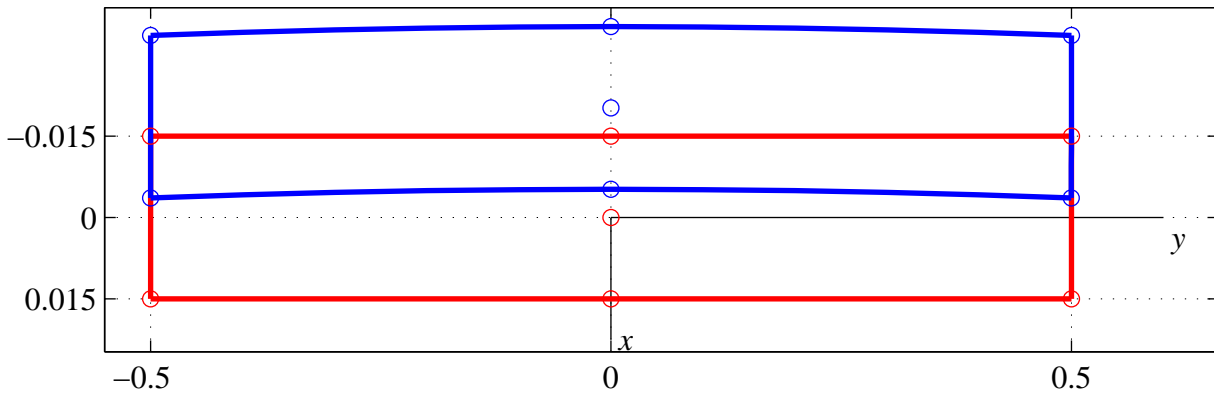
○ *Materjal: vask;  $E = 110$  GPa;  $\nu = 0.32$*

*NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.67*

*Plaadi peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju*



*Plaadi serva  $z = l$  siirded ja deformeerunud kuju*



*Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$*

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.020202$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.015$ ;  $y = 0.500$ ;  $u = -0.018587$ ;  $v = -0.00009697$ ;  $w = 0.00060606$
- $x = 0.015$ ;  $y = 0.000$ ;  $u = -0.020203$ ;  $v = 0.00000000$ ;  $w = 0.00060606$
- $x = 0.015$ ;  $y = -0.500$ ;  $u = -0.018587$ ;  $v = 0.00009697$ ;  $w = 0.00060606$
- $x = -0.015$ ;  $y = -0.500$ ;  $u = -0.018587$ ;  $v = -0.00009697$ ;  $w = -0.00060606$
- $x = -0.015$ ;  $y = 0.000$ ;  $u = -0.020203$ ;  $v = 0.00000000$ ;  $w = -0.00060606$
- $x = -0.015$ ;  $y = 0.500$ ;  $u = -0.018587$ ;  $v = 0.00009697$ ;  $w = -0.00060606$

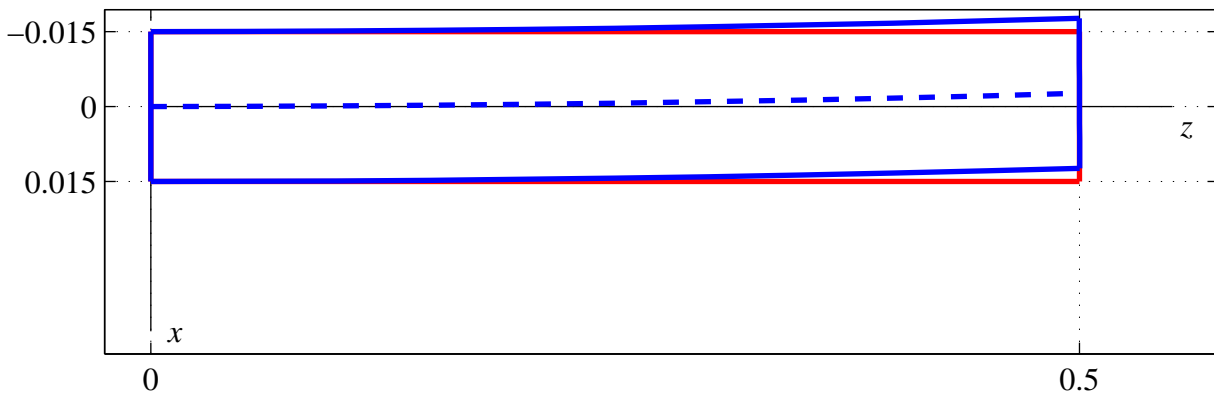
○ *Plaat: pikkus  $l = 0.5$  m; laius  $2b = 1$  m; kõrgus  $2a = 0.03$  m*

○ *Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm*

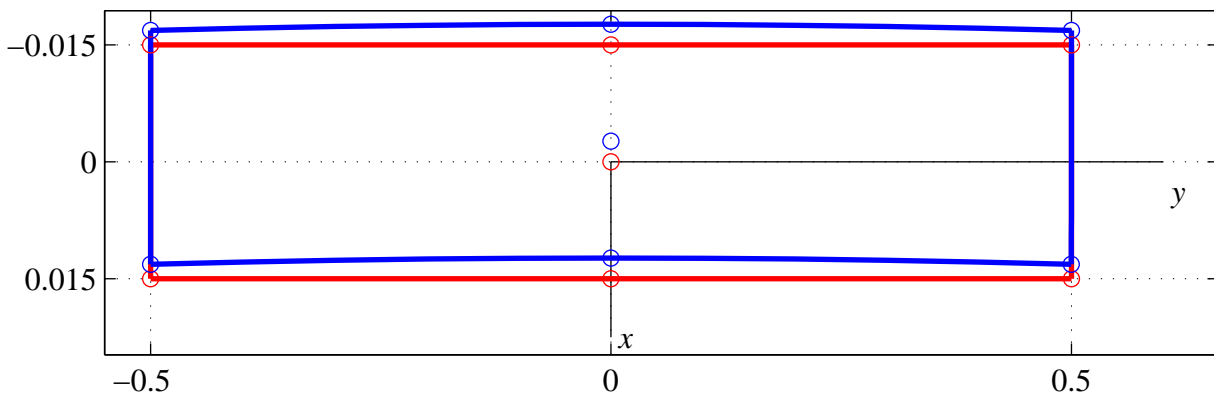
○ *Materjal: teras;  $E = 210$  GPa;  $\nu = 0.3$*

*NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.09*

*Plaadi peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju*



*Plaadi serva  $z = l$  siirded ja deformeerunud kuju*



*Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$*

- $x = 0.000; y = 0.000; u = -0.002646; v = 0.00000000; w = 0.00000000$
- $x = 0.015; y = 0.500; u = -0.001853; v = -0.00004762; w = 0.00015873$
- $x = 0.015; y = 0.000; u = -0.002646; v = 0.00000000; w = 0.00015873$
- $x = 0.015; y = -0.500; u = -0.001853; v = 0.00004762; w = 0.00015873$
- $x = -0.015; y = -0.500; u = -0.001853; v = -0.00004762; w = -0.00015873$
- $x = -0.015; y = 0.000; u = -0.002646; v = 0.00000000; w = -0.00015873$
- $x = -0.015; y = 0.500; u = -0.001853; v = 0.00004762; w = -0.00015873$

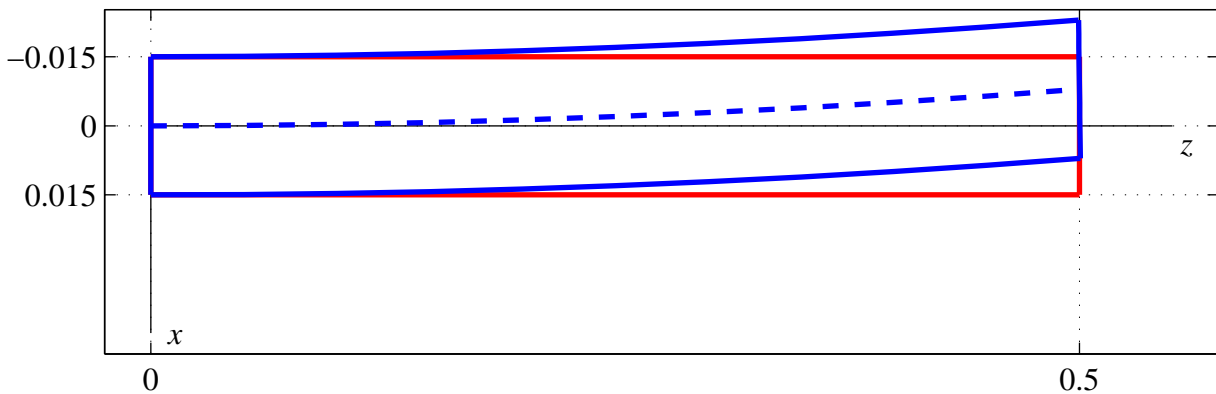
○ *Plaat: pikkus  $l = 0.5$  m; laius  $2b = 1$  m; kõrgus  $2a = 0.03$  m*

○ *Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm*

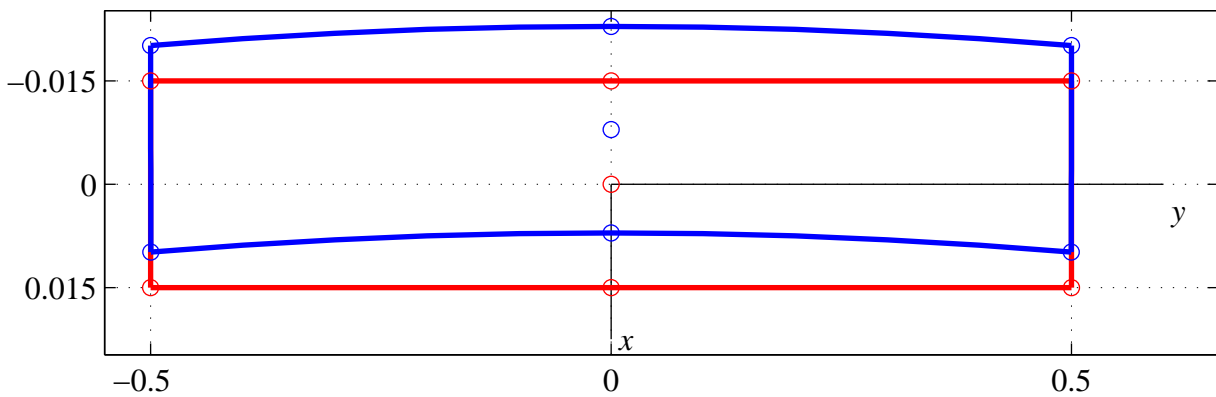
○ *Materjal: alumiinium;  $E = 70$  GPa;  $\nu = 0.35$*

*NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.26*

*Plaadi peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju*



*Plaadi serva  $z = l$  siirded ja deformeerunud kuju*



*Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$*

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.007937$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.015$ ;  $y = 0.500$ ;  $u = -0.005161$ ;  $v = -0.00016667$ ;  $w = 0.00047619$
- $x = 0.015$ ;  $y = 0.000$ ;  $u = -0.007939$ ;  $v = 0.00000000$ ;  $w = 0.00047619$
- $x = 0.015$ ;  $y = -0.500$ ;  $u = -0.005161$ ;  $v = 0.00016667$ ;  $w = 0.00047619$
- $x = -0.015$ ;  $y = -0.500$ ;  $u = -0.005161$ ;  $v = -0.00016667$ ;  $w = -0.00047619$
- $x = -0.015$ ;  $y = 0.000$ ;  $u = -0.007939$ ;  $v = 0.00000000$ ;  $w = -0.00047619$
- $x = -0.015$ ;  $y = 0.500$ ;  $u = -0.005161$ ;  $v = 0.00016667$ ;  $w = -0.00047619$

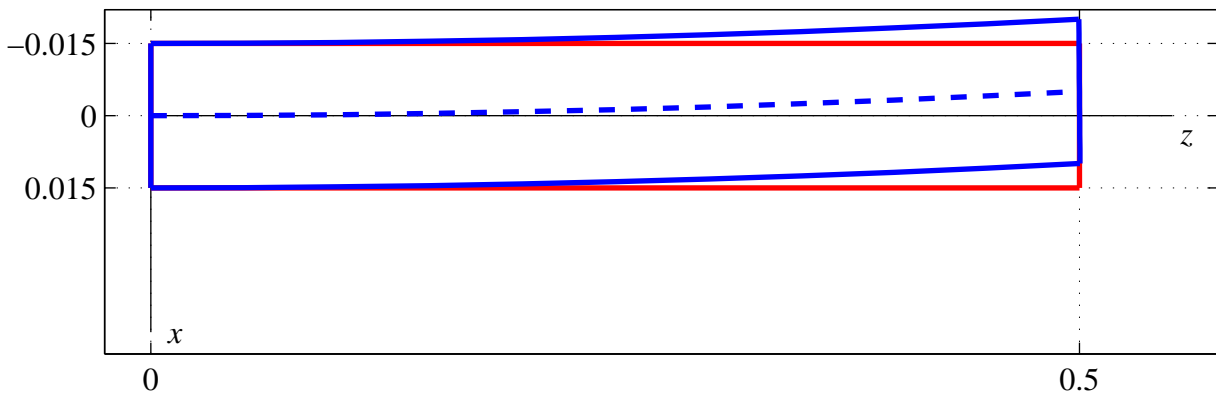
○ *Plaat: pikkus  $l = 0.5$  m; laius  $2b = 1$  m; kõrgus  $2a = 0.03$  m*

○ *Koormus otstes  $z = 0$  ja  $z = l$ :  $M = 10$  kNm*

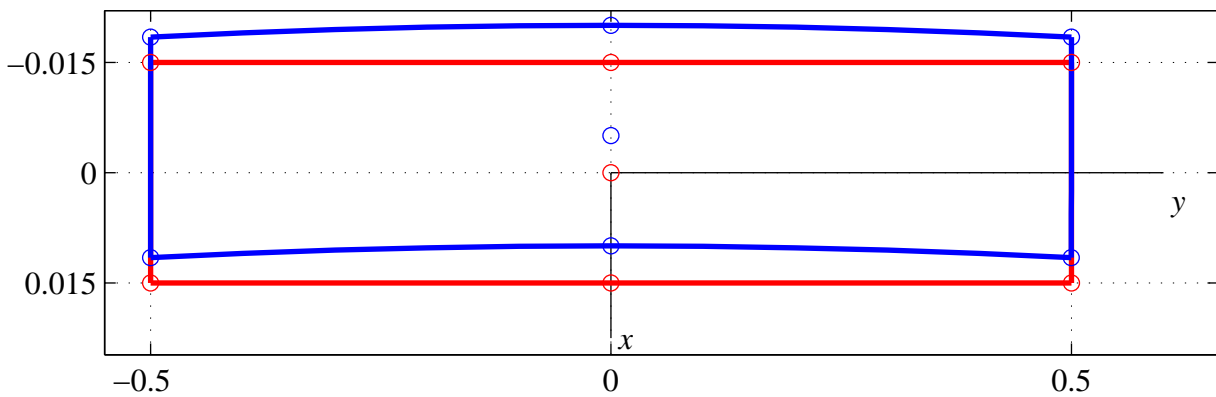
○ *Materjal: vask;  $E = 110$  GPa;  $\nu = 0.32$*

*NB! Maksimaalse vertikaalsiirde ja paksuse suhe on 0.17*

*Plaadi peatasandi  $x$ - $z$  punktide siirded ja deformeerunud kuju*



*Plaadi serva  $z = l$  siirded ja deformeerunud kuju*



*Punktide  $(x, y)$  siirded  $(u, v)$  lõikes  $z = l$*

- $x = 0.000$ ;  $y = 0.000$ ;  $u = -0.005051$ ;  $v = 0.00000000$ ;  $w = 0.00000000$
- $x = 0.015$ ;  $y = 0.500$ ;  $u = -0.003436$ ;  $v = -0.00009697$ ;  $w = 0.00030303$
- $x = 0.015$ ;  $y = 0.000$ ;  $u = -0.005052$ ;  $v = 0.00000000$ ;  $w = 0.00030303$
- $x = 0.015$ ;  $y = -0.500$ ;  $u = -0.003436$ ;  $v = 0.00009697$ ;  $w = 0.00030303$
- $x = -0.015$ ;  $y = -0.500$ ;  $u = -0.003436$ ;  $v = -0.00009697$ ;  $w = -0.00030303$
- $x = -0.015$ ;  $y = 0.000$ ;  $u = -0.005052$ ;  $v = 0.00000000$ ;  $w = -0.00030303$
- $x = -0.015$ ;  $y = 0.500$ ;  $u = -0.003436$ ;  $v = 0.00009697$ ;  $w = -0.00030303$