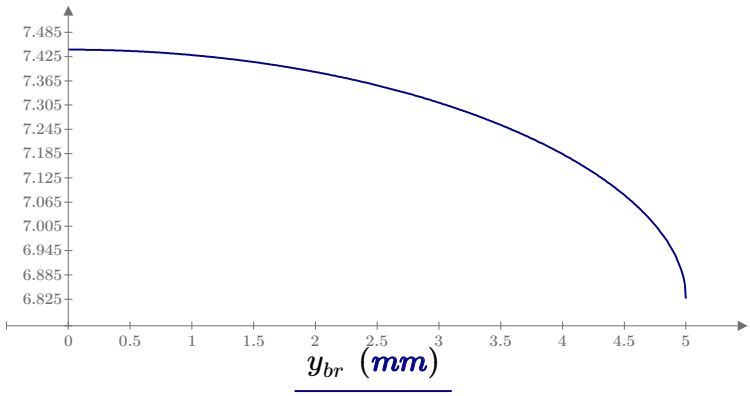
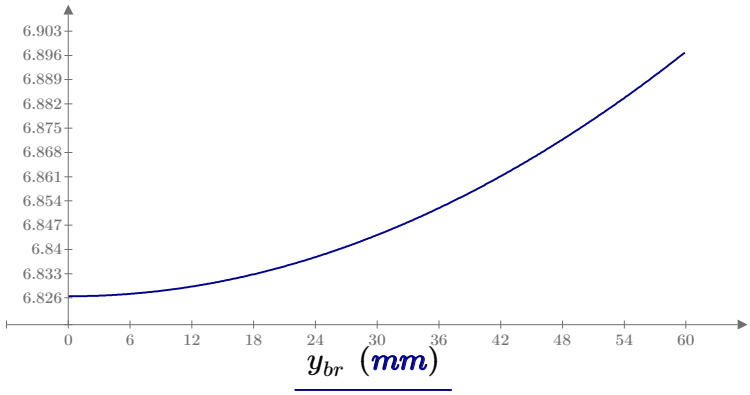
$y_{br} := 0, \frac{r}{div} .. r$ $\sigma_{1BBid}(y_{br}) := \sqrt{\sigma_{BB}(y_{br})^2 + 3 \cdot \tau_{z1}(y_{br})^2}$



$\sigma_{1BBid}(y_{br})$ $\left(\frac{kgf}{mm^2}\right)$

$y_{br} := 0, \frac{R}{div} .. R$ $\sigma_{2BBid}(y_{br}) := \sqrt{\sigma_{BB}(y_{br})^2 + 3 \cdot \tau_{z2}(y_{br})^2}$



$\sigma_{2BBid}(y_{br})$ $\left(\frac{kgf}{mm^2}\right)$

$\sigma_{1BBid}(0\ mm) = 7.442\ \frac{kgf}{mm^2}$ $\sigma_{BB}(0\ mm) = 0\ \frac{kgf}{mm^2}$ $\tau_{z1}(0\ mm) = 4.297\ \frac{kgf}{mm^2}$

$\sigma_{1BBid}(r) = 6.826\ \frac{kgf}{mm^2}$ $\sigma_{BB}(r) = 0.575\ \frac{kgf}{mm^2}$ $\tau_{z1}(r) = 3.927\ \frac{kgf}{mm^2}$

$\sigma_{BB}(R) = 6.897\ \frac{kgf}{mm^2}$ $\sigma_{2BBid}(r) = 6.826\ \frac{kgf}{mm^2}$

$\sigma_{2BBid}(R - 0.001\ mm) = 6.897\ \frac{kgf}{mm^2}$

$\tau_{z2}(r) = 3.927\ \frac{kgf}{mm^2}$

$\tau_{z2}(R - 0.001\ mm) = 0.023\ \frac{kgf}{mm^2}$