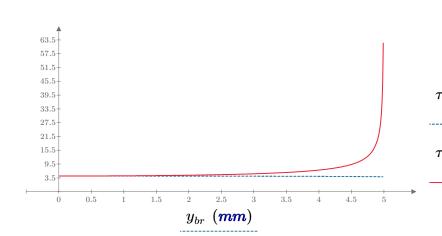
$$lpha\left(y_{br}
ight)\coloneqq \operatorname{atan}\left(rac{y_{br}}{\sqrt{R^{2}-y_{br}^{2}}}
ight)$$

$$\left(y_{br} \right) \coloneqq \operatorname{atan} \left(\frac{y_{br}}{\sqrt{R^2 - {y_{br}}^2}} \right) \qquad \qquad \alpha_p \left(y_{br} \right) \coloneqq \operatorname{asin} \left(\frac{y_{br}}{r} \right)$$

$$\tau_{z}\left(y_{br}\right)\coloneqq\frac{\frac{T_{BB}}{2}}{\frac{J_{Bn}}{2}}\cdot\frac{S_{nr1}\left(y_{br}\right)}{b_{r1}\left(y_{br}\right)\cdot\cos\left(\alpha\left(y_{br}\right)\right)}\qquad\qquad\tau_{zp}\left(y_{br}\right)\coloneqq\frac{\frac{T_{BB}}{2}}{\frac{J_{Bn}}{2}}\cdot\frac{S_{nr1}\left(y_{br}\right)}{b_{r1}\left(y_{br}\right)\cdot\cos\left(\alpha_{p}\left(y_{br}\right)\right)}$$



$$egin{aligned} au_zig(y_{br}ig) & \left(rac{m{kgf}}{m{mm}^2}
ight) \ au_{zp}ig(y_{br}ig) & \left(rac{m{kgf}}{m{mm}^2}
ight) \end{aligned}$$

$$\tau_z(0 \ mm) = 4.297 \ \frac{kgf}{mm^2}$$

$$\tau_{zp}(0 \ mm) = 4.297 \ \frac{kgf}{mm^2}$$

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