Errata of Design Concepts and Strategies, second edition (April 2021)

| Page | Place | Error | It should be |
| :---: | :---: | :---: | :---: |
| 41 | line 8 and 9 | translation in $z$ direction | translation in $y$ direction |
| 57 | equation 6.4 | $k_{\text {large_angle }}=\frac{K G}{L}+\frac{1}{120} E\left(\frac{\varphi^{2}}{L^{3}}\right) t b^{5}$ | $k_{r_{\text {large_angle }}}=\frac{K G}{L}+\frac{1}{360} E\left(\frac{\varphi^{2}}{L^{3}}\right) t b^{5}$ |
| 57 | below equation $6.4$ | ... the factor of stiffness $k_{\text {large_angle }}$ divided by the torsional stiffness $k_{\mathrm{I}}$ is plotted against the angle to length ratio $\theta / L \ldots$ | ... the factor of stiffness $k_{r_{\text {large_angle }}}$ divided by the torsional stiffness $k_{\mathrm{I}}$ is plotted against the angle to length ratio $\varphi / L \ldots$ |
| 58 | figure 6.7 | figure of stiffening should be as in figure: |  |
| 60 | calculation | $C_{\mathrm{w}}=\ldots . .=8.10 \cdot 10^{5} \mathrm{~mm}^{4}$ | $C_{\mathrm{w}}=\ldots . .=8.10 \cdot 10^{5} \mathrm{~mm}^{6}$ |
| 61 | calculation | $\beta=\ldots . .=3.04 \cdot 10^{3} \frac{1}{\mathrm{~mm}}$ | $\beta=\ldots=3.04 \cdot 10^{-3} \frac{1}{\mathrm{~mm}}$ |
| 61 | calculation | $k_{\mathrm{r}_{\mathrm{I}}}=\ldots . .=15.7 \frac{\mathrm{Nmm}}{\mathrm{rad}}$ | $k_{\mathrm{r}_{\mathrm{I}}}=\ldots .=1.57 \cdot 10^{4} \frac{\mathrm{Nmm}}{\mathrm{rad}}$ |

Errata of Design Concepts and Strategies, second edition (April 2021)

| Page | Place | Error | It should be |
| :---: | :---: | :---: | :---: |
| 61 | calculation | $k_{\mathrm{r}_{\mathrm{II}}}=\ldots . .=529 \frac{\mathrm{Nmm}}{\mathrm{rad}}$ | $k_{\mathrm{r}_{\mathrm{II}}}=\ldots .=5.29 \cdot 10^{5} \frac{\mathrm{Nmm}}{\mathrm{rad}}$ |
| 61 | calculation | $k_{\mathrm{r}_{\mathrm{III}}}=\ldots . .=20.6 \cdot 10^{2} \frac{\mathrm{Nmm}}{\mathrm{rad}}$ | $k_{\mathrm{r}_{\text {III }}}=\ldots .=2.06 \cdot 10^{6} \frac{\mathrm{Nmm}}{\mathrm{rad}}$ |
| 61 | calculation | $k_{\mathrm{r}_{\mathrm{IV}}}=\ldots . .=40.5 \cdot 10^{2} \frac{\mathrm{Nmm}}{\mathrm{rad}}$ | $k_{\mathrm{r}_{\mathrm{IV}}}=\ldots .=4.05 \cdot 10^{6} \frac{\mathrm{Nmm}}{\mathrm{rad}}$ |
| 66 | equation 6.16 line 1 | $\sigma_{\max }=\ldots . \quad$ for $\quad a \geq \frac{1}{2}$ | $\sigma_{\max }=\ldots . \quad \text { for } \quad a \leq \frac{1}{2}$ |
| 66 | equation 6.16 line 3 | $\sigma_{\max }=\ldots . \quad$ for $\quad a \quad \leq \frac{1}{2}$ | $\sigma_{\max }=\ldots . \quad \text { for } \quad a \geq \frac{1}{2}$ |
| 77 | figure 6.34e | lenght $p$ | lenght $p L$ |
| 90 | equation 8.7 | $\delta_{\mathrm{sh}}=-\frac{1}{2} \frac{\delta_{\mathrm{c}}^{2}}{L}$ | $\delta_{\mathrm{sh}}=-\frac{1}{2} \frac{\delta^{2}}{L}$ |
| 90 | last paragraph | The shortening of the simple beam is easier to derive when it is modelled as two cantilever beams with a force at the ends. | This is valid for simple beams where the force is applied exactly in the middle (and an approximation for forces close to the middle). |
| 123 | equation 10.22 | $\frac{W}{d t}=\frac{F x}{d t}=\ldots$ | $\frac{W}{d t}=\frac{F d x}{d t}=\ldots$ |


| Page | Place | Error | It should be |
| :--- | :--- | :--- | :--- |
| 123 | equation 10.30 | $\zeta \approx \frac{\omega_{2}-\omega_{1}}{\omega_{n}} \approx \frac{\Delta \omega}{\omega_{n}}$ | $\zeta \approx \frac{\omega_{2}-\omega_{1}}{2 \omega_{n}} \approx \frac{\Delta \omega}{2 \omega_{n}}$ |
| 182 | equation 13.25 | $c=\eta \cdot\left(\frac{3 \pi(2 r)^{3} w}{4 L^{3}}\left(1+\frac{h}{r}\right)\right)$ | $c=\eta \cdot\left(\frac{3 \pi(2 r)^{3} L}{4 h^{3}}\left(1+\frac{h}{r}\right)\right)$ |

