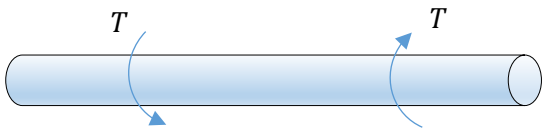
The torque T acting on a shaft is normally distributed. If the probabilities of the torques less than 200 kN·m and 250 kN·m are 0.7 and 0.8, respectively. What are the mean and standard deviation of the torque?



Solution

$$\mu = 117.3448 \text{ kN·m}$$
$$\sigma = 157.6187 \text{ kN·m}$$