

Tab. 1. Soluțiile analitice pentru configurația circulară

Cazul/ Modelul	Condiții la limită extinse ($R_e \neq R$)	Condiții la limită restrânse ($R_e = R$)
Viteză impusă, V	$\bar{F} = \frac{\pi \sigma_0^2}{8} \left[\frac{4(H - \sigma_0)}{H(1 - \sigma_0)^3} \ln \frac{R_e}{R} + \frac{1}{H(H - \sigma_0)^2} \right]$	$\bar{F} = \frac{\pi \sigma_0^2}{8H(H - \sigma_0)^2}$
Forță impusă, F	$\tau = \frac{\pi}{8} \left[\frac{4\sigma_0^2}{(1 - \sigma_0)^3} (1 - H + \sigma_0 \ln H) \ln \frac{R_e}{R} + \ln \frac{H - \sigma_0}{H(1 - \sigma_0)} + \frac{\sigma_0(1 - H)}{(H - \sigma_0)(1 - \sigma_0)} \right]$	$\tau = \frac{\pi}{8} \left[\ln \frac{H - \sigma_0}{H(1 - \sigma_0)} + \frac{\sigma_0(1 - H)}{(H - \sigma_0)(1 - \sigma_0)} \right]$
Impuls de impact dat, $M \cdot V_0$	$\bar{F}_s = \frac{\pi \sigma_0^2}{8H(H - \sigma_0)^2} \left[\frac{4(H - \sigma_0)^3}{(1 - \sigma_0)^3} \ln \frac{R_e}{R} + 1 \right] \cdot \left\{ 1 - \frac{\pi}{8M} \left[(1 - H + \sigma_0 \ln H) \frac{4\sigma_0^2}{(1 - \sigma_0)^3} \ln \frac{R_e}{R} + \ln \frac{H - \sigma_0}{H(1 - \sigma_0)} + \frac{\sigma_0(1 - H)}{(H - \sigma_0)(1 - \sigma_0)} \right] \right\}$	$\bar{F}_s = \frac{\pi \sigma_0^2}{8H(H - \sigma_0)^2} \left\{ 1 - \frac{\pi}{8M} \left[\ln \frac{H - \sigma_0}{H(1 - \sigma_0)} + \frac{\sigma_0(1 - H)}{(H - \sigma_0)(1 - \sigma_0)} \right] \right\}$