Can always do this by using $L = \frac{1}{1+Af}$

So for simple systems (1/1000)

Read $Af \leq 1$ then $Af = \frac{1}{100}$

Stable (ie. $Af > 0$)

If $Af < 0$ we are unstable. The system is

$\frac{1}{Af} > 0$

Typically for $Af$ (v & $Af$ grows can in LTP)

System will be stable for a desired range of $Af$. open loop gain A$g$. Set the closed loop

Closed loop gain $\frac{A}{A}$

Open loop gain $\frac{Af}{A}$

Feedback gain $\frac{Af}{A}$

$Af$ cancellation gain $\frac{Af}{A}$

Definition
No. 1 crane.

Plate margin = 22.5°

$\tau_{\text{avg}} = 180° - \phi$

Yes. $\phi < 180°$

Adjust $C$ or $L$ as needed.

How much do I need to reduce loop gain to make it stable?

A: At least 10x. $e_0 = 0.1$

$s + 0.1 = 0$

Gain $= 9.27$

$\frac{C_{\text{avg}}}{C_{\text{avg}} + \frac{1}{s}}$

$\frac{1}{s + 0.1} = \frac{0.1}{s + 0.1}$

Double-check the circuit layout.

No. 1 crane.

Gain $= 9.27$

$\tau_{\text{avg}} = 180° - \phi$

Yes. $\phi < 180°$

Adjust $C$ or $L$ as needed.

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Double-check the circuit layout.

No. 1 crane.
\[ \text{Weight of m} = \text{W}_m \]

\[ C_{\text{mill}} = C \]

\[ L_{\text{mill}} = C(1 - A)_v + C_v/A_m \]

\[ \text{Volume} = 100 + L_{\text{mill}} \]

\[ C_{\text{mill}} = 0.1 \text{ lbf} \]

\[ C = 0.7 \text{ lbf} \]