

**Control Systems for Machine Tools**  
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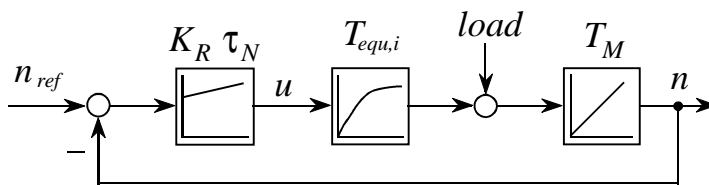
**Knowledge Test - Answers**

1.  $\frac{d\vec{P}}{ds} = \frac{d\vec{P}}{du} \cdot \frac{du}{ds}$

2.  $\vec{a} \times \vec{b} = \begin{bmatrix} 0 \\ 0 \\ -1 \end{bmatrix}$  ;  $\vec{a}^T \cdot \vec{b} = 0$  .

3.  $F(s) = \frac{1}{1+s \cdot T_{equ,i}} \cdot \frac{1}{s \cdot T_M}$

4.



The purpose of the integral part of the controller is to compensate loads stationary.