

PID

PID

PID

:C

:P_s

:m

:H

:τ_h

:k_h

:τ_f

:k_f

:Q₁

:Q_o

:Q_i

:y

:Q₂

-

PID

[] []

[] PID

()

[]

PID

)

)

()

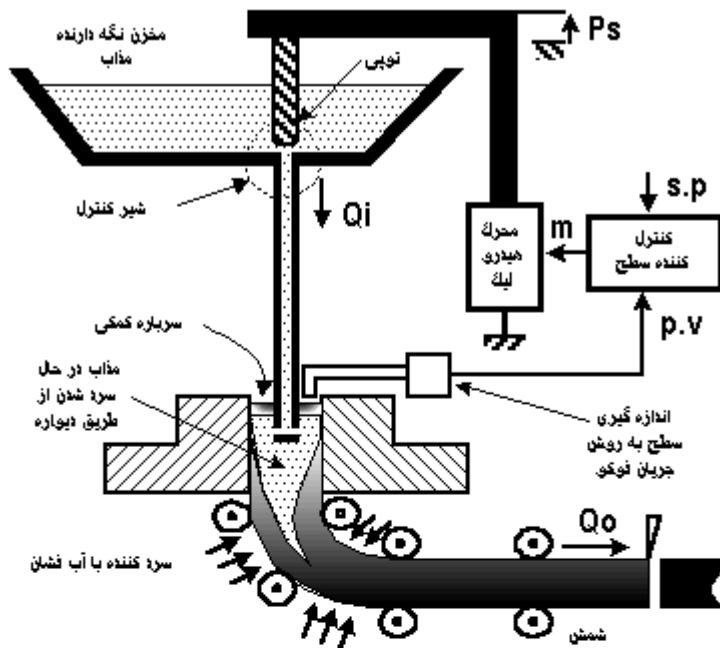
PID

(...)

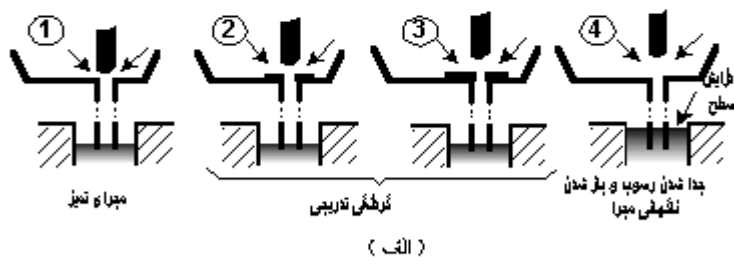
(

[] [] []

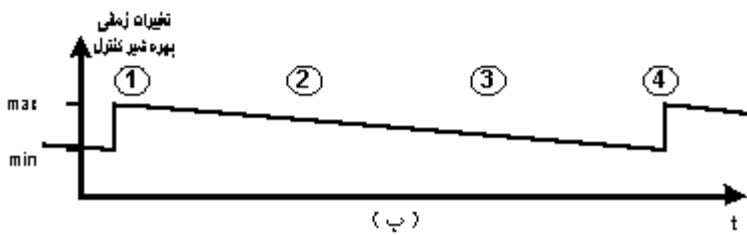
[] []



شکل ۱- ریخته گری پیوسته فولاد



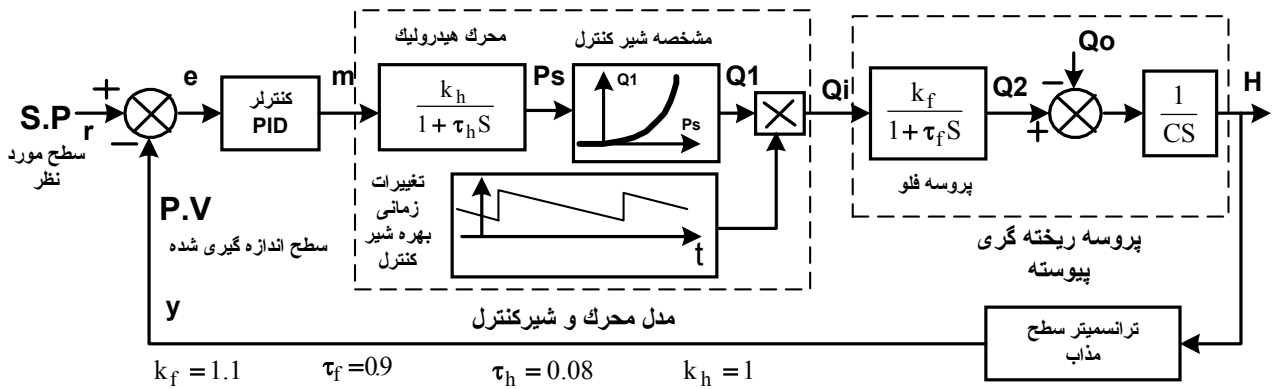
(الف)



(ب)

شکل ۲- بهره متغیر با زمان برای (محرک) در اثر گر فتگر , مجرای شیر کنترل

Actuator
Valve
Tundish
Seat

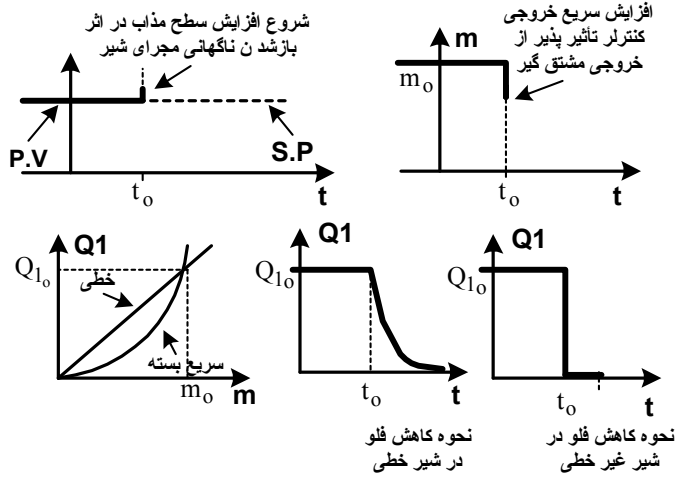


$p_s >$

PID

PID
(S.P)

(



()

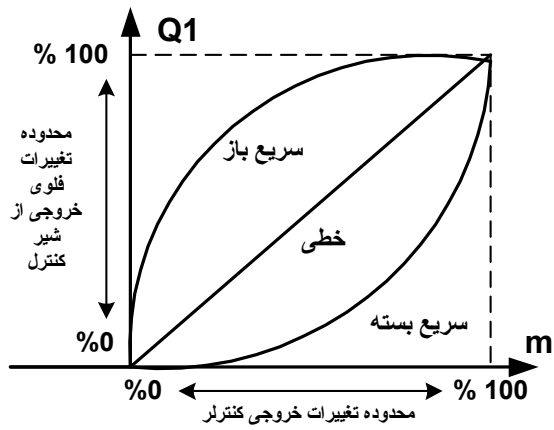
)

- -

(.

)

(



()

- -

()

SIMULINK

)

.[]

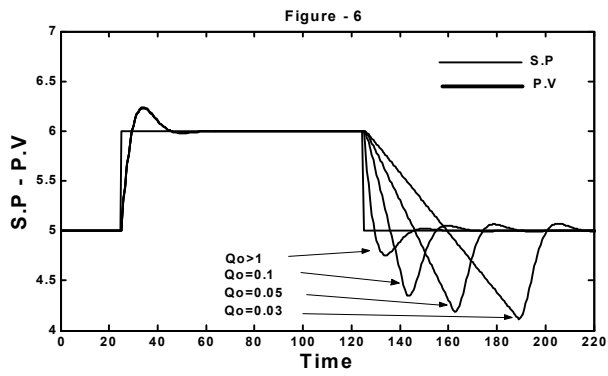
(

(

: Q_o)

() S.P

PID



($Q_i =$)

($- Q_o$)

)

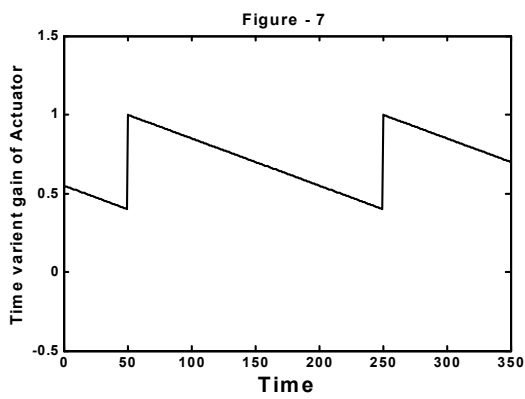
)

PID

(

(

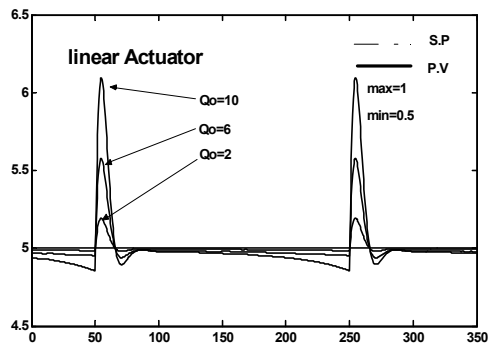
$Q_o >$



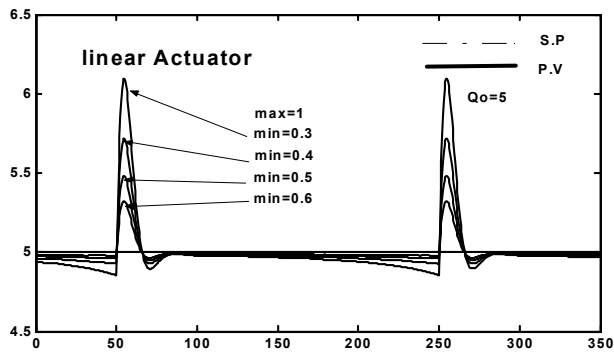
()

(min = / max =)

(Q_o)



(-)

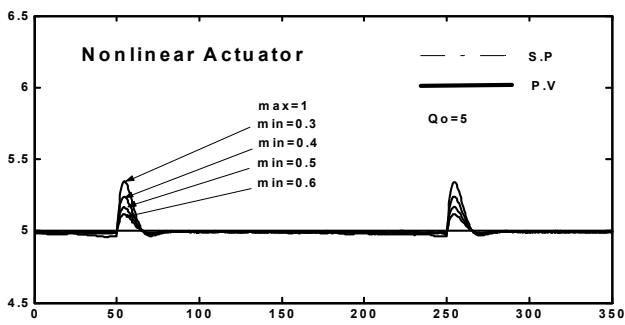


$$(\quad = \max - \min)$$

$$. (Kn =) \quad (\quad)$$

.(

$$(\quad)$$



[5]

$$Q_1 = m^{k_n} \quad :$$

$$(\quad)$$

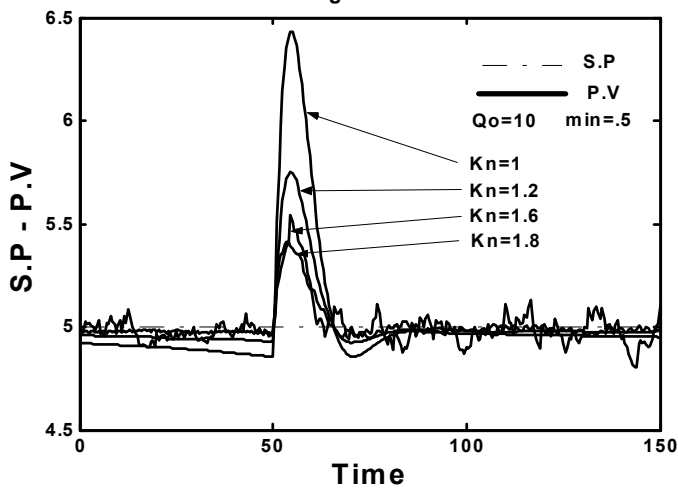
$$.(k_n \geq)$$

$$(\quad) k_n =$$

$$k_n = /$$

$$(\quad) \quad (\quad)$$

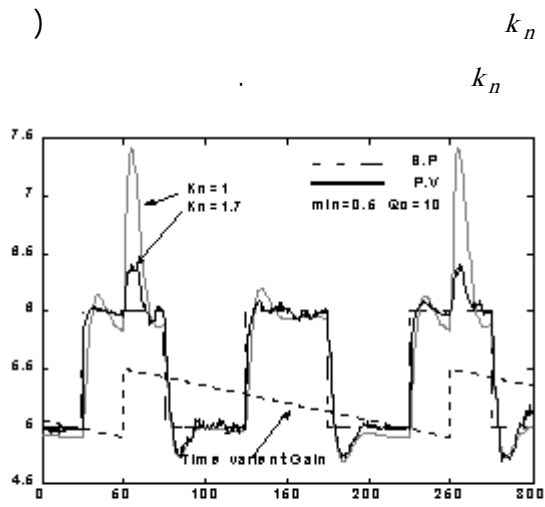
Figure - 11



$$(\quad)$$

$$k_n$$

$$(\quad)$$



شکل ۶۲

(k_n) ()

PID

[]

() () .[]

Signal Conditioner
Transmitter
Equal Percentage
Valve Positioner
Cam

