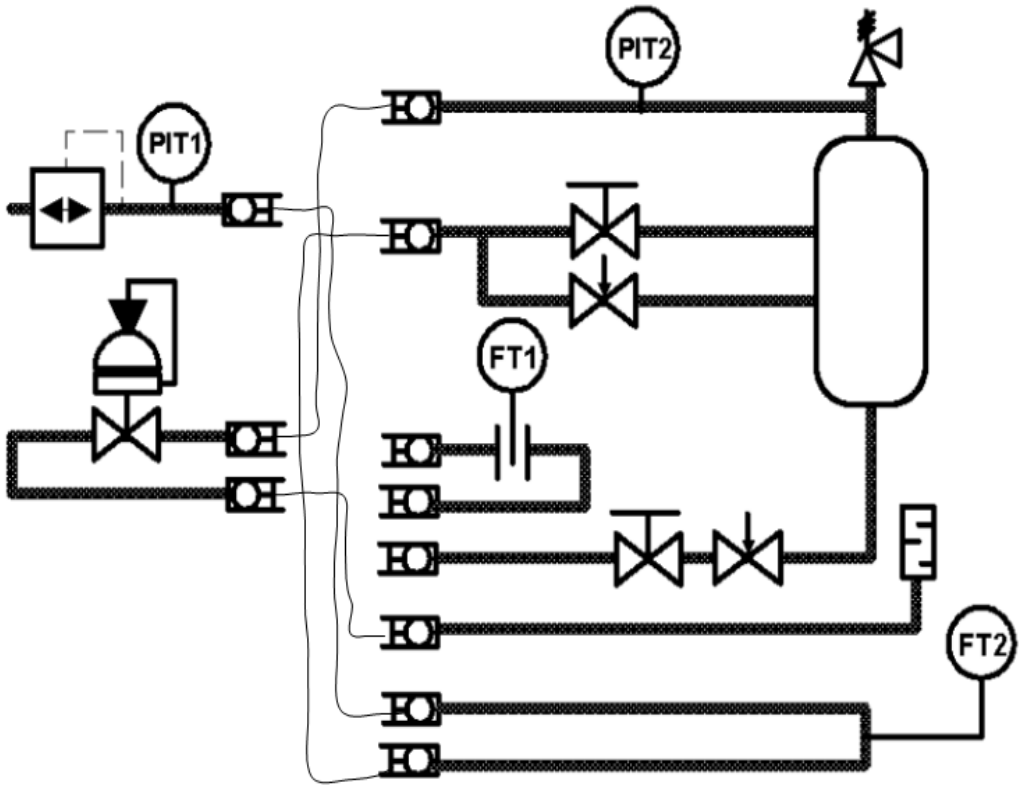
	TP3 SAD - Sanna Blanchon	Pt		A	B	C	D	Note	
	INSTRUMENTATION								
	Mise à l'échelle de l'affichage des mesures	2	X					0	
	Cablage électrique et pneumatique	3	A					3	
	REGULATION								
	Mise en place de la régulation	3	A					3	
	Réglage de la boucle de régulation	3	A					3	
	AUTOMATISMES								
	GRAFCET	3	C					1,05	
	SUPERVISION								
	Respect du synopsys	3	C					1,05	
	Programmation du bouton	3	X					0	
								Note : 11,1/20	

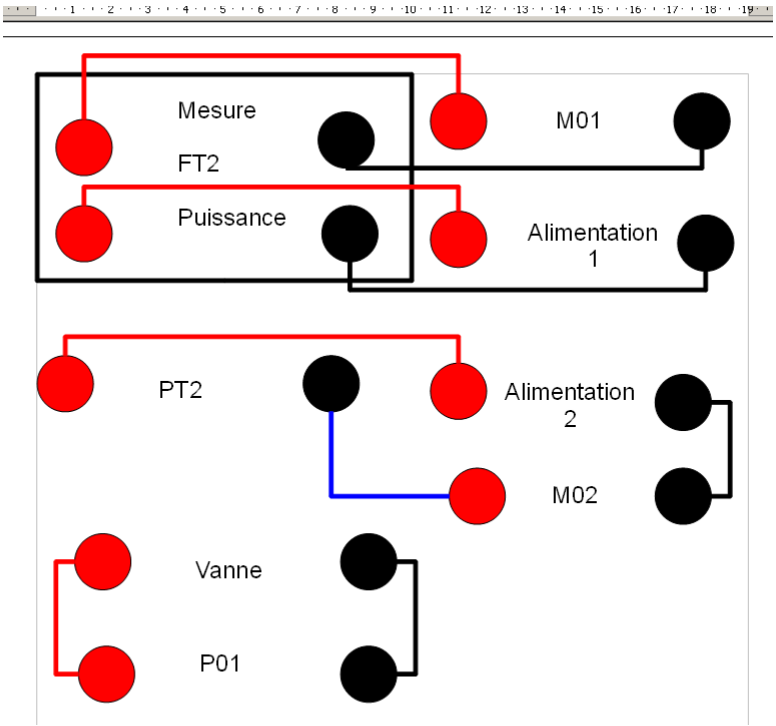
Blanchon
Sanna

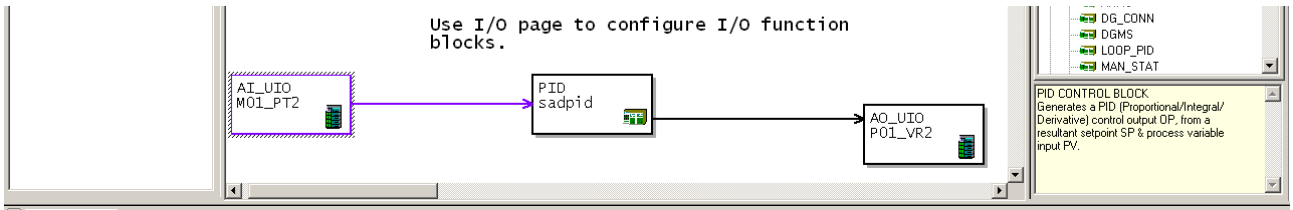
tp3 sad

1)



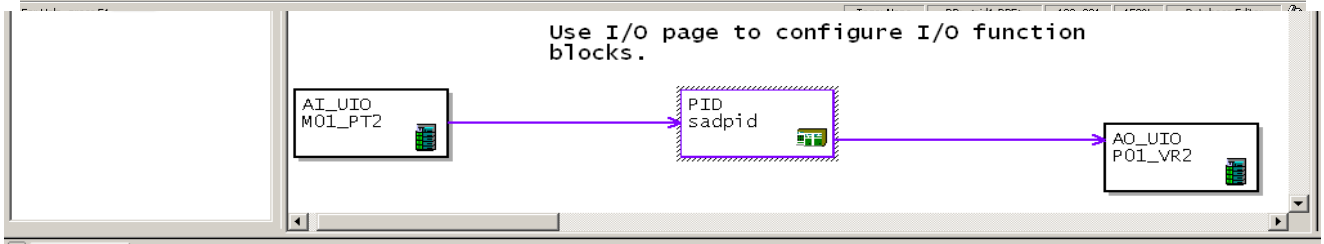
2)





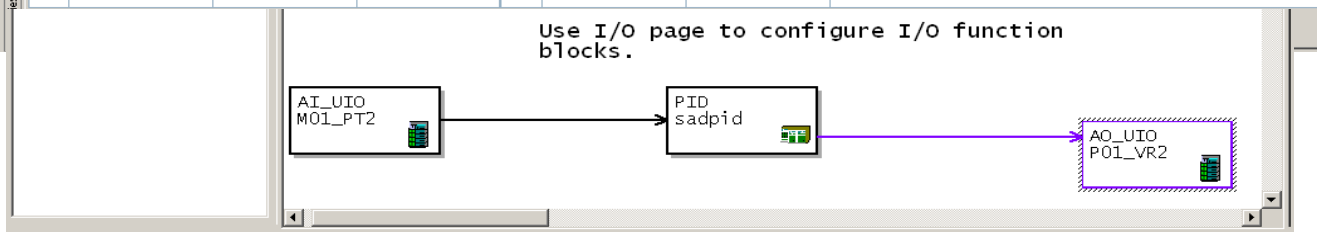
Block: M01_PT2 | Comment | Connections

TagName	M01_PT2		LIN Name	M01_PT2	
Type	AI_UIO		DBase	<local>	
Task	3 (110ms)		Rate	0	
MODE	AUTO		Alarms		
Fallback	AUTO		Node	>00	
			SiteNo	1	
PV	0.0	%	Channel	1	
HR	100.0	%	InType	mA	
LR	0.0	%	HR_in	20.00	mA
			LR_in	4.00	mA
HiHi	100.0	%	AI	0.00	mA
Hi	100.0	%	Res	0.000	Ohms
Lo	0.0	%			
LoLo	0.0	%	CJ_type	Auto	
Hyst	0.5000	%	CJ_temp	0.000	
			LeadRes	0.000	Ohms
Filter	0.000	Secs	Emissiv	1.000	
Char	Linear		Delay	0.000	Secs
UserChar					
			SBreak	Up	
PVoffset	0.000	%	PVErrAct	Up	
AlmOnTim	0.000	Secs	Options	>0000	
AlmOfTim	0.000	Secs	Status	>0000	



Block: sadpid | Comment | Connections

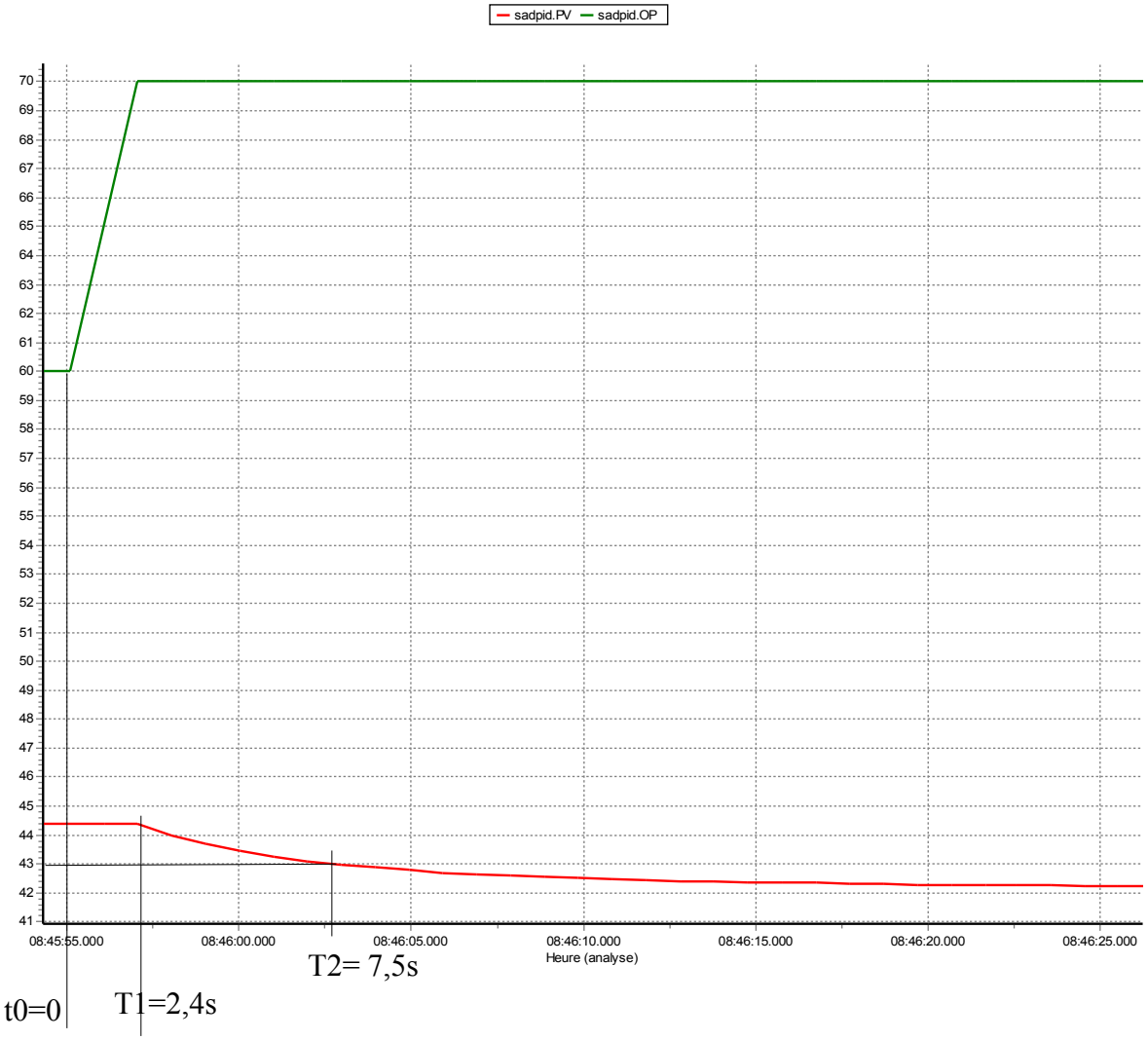
TagName	sadpid		LIN Name	sadpid	
Type	PID		DBase	<local>	
Task	3 (110ms)		Rate	0	
Mode	MANUAL		Alarms		
FallBack	MANUAL				
			HAA	100.0	%
→ PV	0.0	%	LAA	0.0	%
SP	0.0	%	HDA	100.0	%
OP	0.0	%	LDA	100.0	%
SL	0.0	%			
TrimSP	0.0	%	TimeBase	Secs	
RemoteSP	0.0	%	XP	100.0	%
Track	0.0	%	TI	0.00	
			TD	0.00	
HR_SP	100.0	%			
LR_SP	0.0	%	Options	00101100	
HL_SP	100.0	%	SelMode	00000000	
LL_SP	0.0	%			
			ModeSel	00100000	
HR_OP	100.0	%	ModeAct	00100001	
LR_OP	0.0	%			
HL_OP	100.0	%	FF_PID	50.0	%
LL_OP	0.0	%	FB_OP	0.0	%



Block: P01_VR2 | Comment | Connections

TagName	P01_VR2		LIN Name	P01_VR2	
Type	AO_UIO		DBase	<local>	
Task	3 (110ms)		Rate	0	
MODE	AUTO		Alarms		
Fallback	AUTO		Node	>00	
			SiteNo	2	
→ OP	0.0	%	Channel	1	
HR	100.0	%	OutType	mA	
LR	0.0	%	HR_out	20.00	mA
			LR_out	4.00	mA
Out	0.0	%	AO	0.00	mA
Track	0.0	%			
Trim	0.000	mA	Options	>0000	
			Status	>0000	

On règle les paramètres du capteurs du pid et de la vanne sur lintools,
on cherche Xp ti et td à l'aide de la méthode simple
pour cela on règle en position initial la pression à 1,35bar et une commande de 60% cela nous fait un débit de 12,6m^3/h
on réalise un échelon de commande de 10%



T2= 7,5s

t0=0 T1=2,4s

44,4-42,2=2,2 → 100%
1,38→ 63%

T=t1-t2= 2,5s
t=t2-t1= 5,1s
k=dx/dy= 2,2/10=0,22

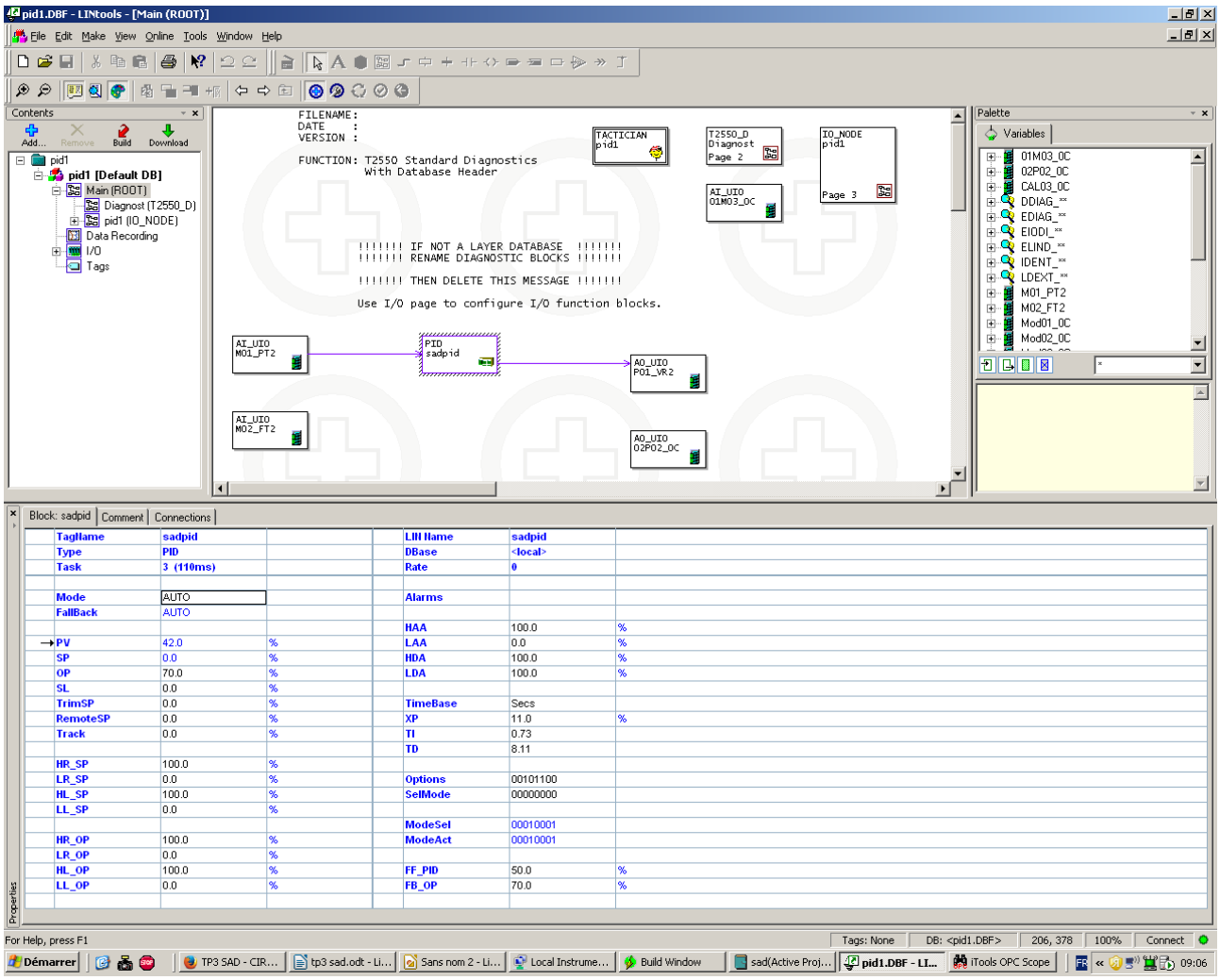
quand on augmente y, x diminue procédé inverse donc régulateur direct

kr= 2,5/5,1= 0,5 → pid //

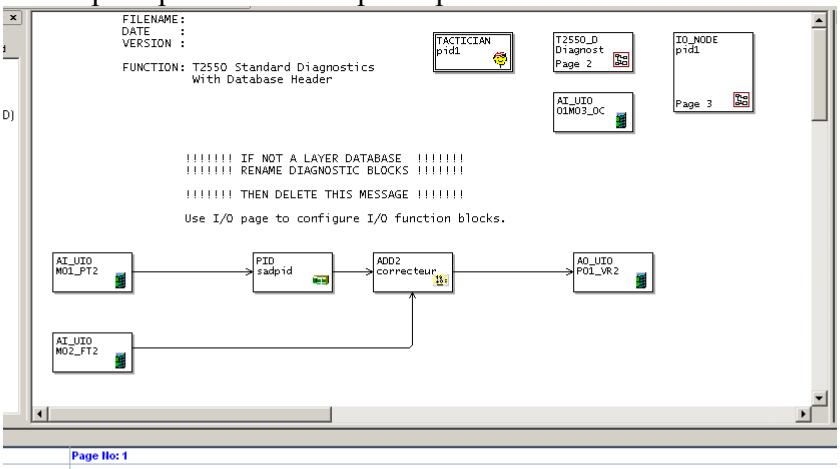
A= 9,05 xp=100/A = 11,04

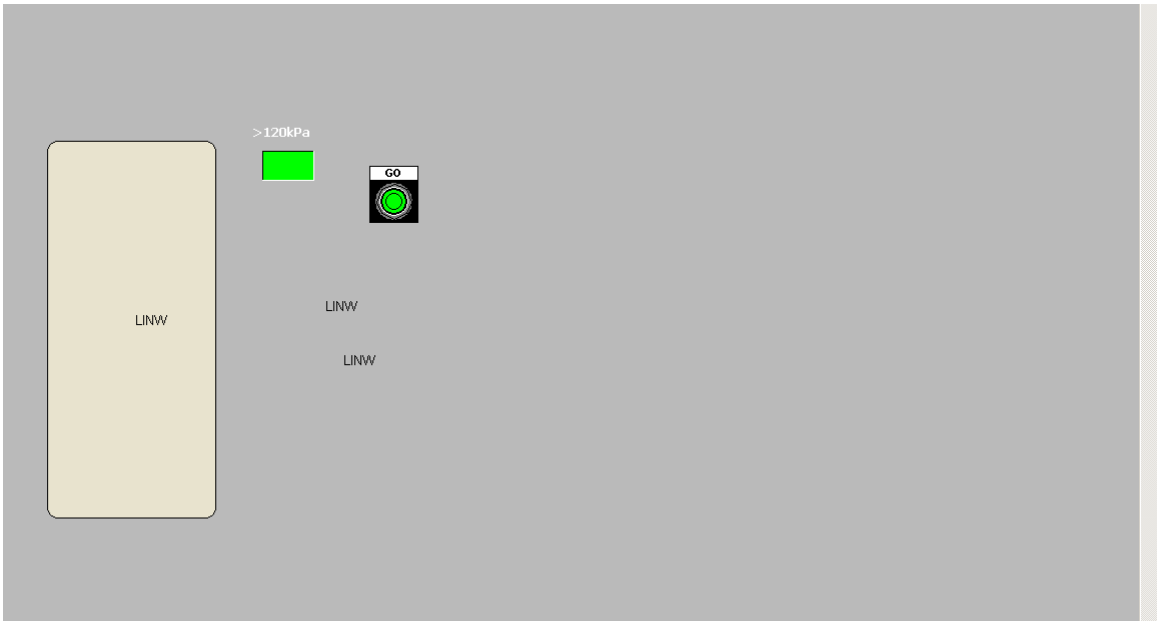
ti= 0,73s
td=8,11s

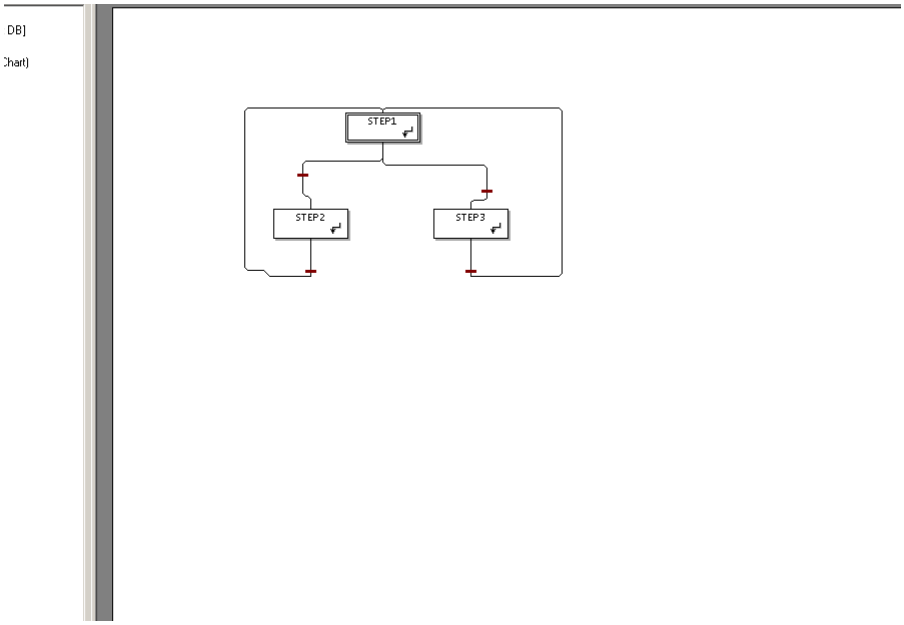
on regle le pid



on modifie notre boucle pour prendre en compte la perturbation







C0,X>49,3
10s/x2
C0X<39,5
10s/x1