S_1

Start

Close all valves & Pumps

open V_1

$HL_1 == 1$ — NO

S_2

yes

Close V_1

Eenable H_1

S_3

$T_1 = 67°$ — NO

Yes

open V_3 & start P_2

S_4

$HL_2 == 1$ — NO

yes

Close V_3 & stop P_2 &

open V_1

$HL_1 == 1$ — NO

S_5

yes

Close V_1 & Eenable H_1

S_6

$T_1 == 80°$ — NO

Yes

S_7 sleep = 60'

open V_4 start P_1 ($V_2 = 1$)

sleep = 80'

S_8

kup 80° S_6

Stop P_1 $V_2 = 2$

start P_1

$LL_2 == 1$ — NO

S_9

yes

$H_2 = \% 100$

open V_3 start P_2

$T_3 == 100°C$ — NO

yes

Wait = $1'_{min}$

$FC_1 == X_{Liter}$ — NO

Vi broker timer istede ★

yes

$H_2 = \%40$

Close V_3 stop P_2

S_9

$LL_1 == 0$ — NO

S_{10}

stop P_1 close V_4

S_{11} sleep = 90'$_{min}$

S_{12} $H_2 = \%0$

HLT Mesh Boil

V_1

HL_1

H_1

T_1

$V_{2=2}$ HL_2

V_2 & P_1

$V_{2=1}$

LL_1

V_3

FC_1

V_4

P_2

① 67°
② 80°

HL_3

H_2 LL_2

T_3

V_5

V_6

T_2

V_1 er 1-1	P_1	H_1	HL_1	T_1	HLT	FC_1
V_2 er 1-2	P_2	H_2	HL_2	T_2	mesh	
V_3 er 1-1			HL_3	T_3	Boil	
V_4 er 1-1			LL_1			
V_5 er 1-1			LL_2			

state ① setup ~~full HLT~~. close all valves and pumps

state ② fill HLT start
  ① open V_1
  ② close V_1 hven HLT is full

state ③ initiall heating for meshing 67°C

State ④ fill mesh

State ⑤ fill HLT for Circulation

state ⑥ Heating HLT } for circulation 80°C

state ⑦ execute meshing

state ⑧ Circulation

State ⑨ fill boil and heat "

state ⑩ rinse   ★ v: har ikke flow Controller. det blir manuel,

state ⑪ Boiling 90 min

State ⑫ fill yeast bucket

Huske liste

1. HLT skal være nok stor til å dekke kjøle spiralen etter at vannet er pumpet til neste gryte.

2. før brygging må begynne med en sterilisering prosses.