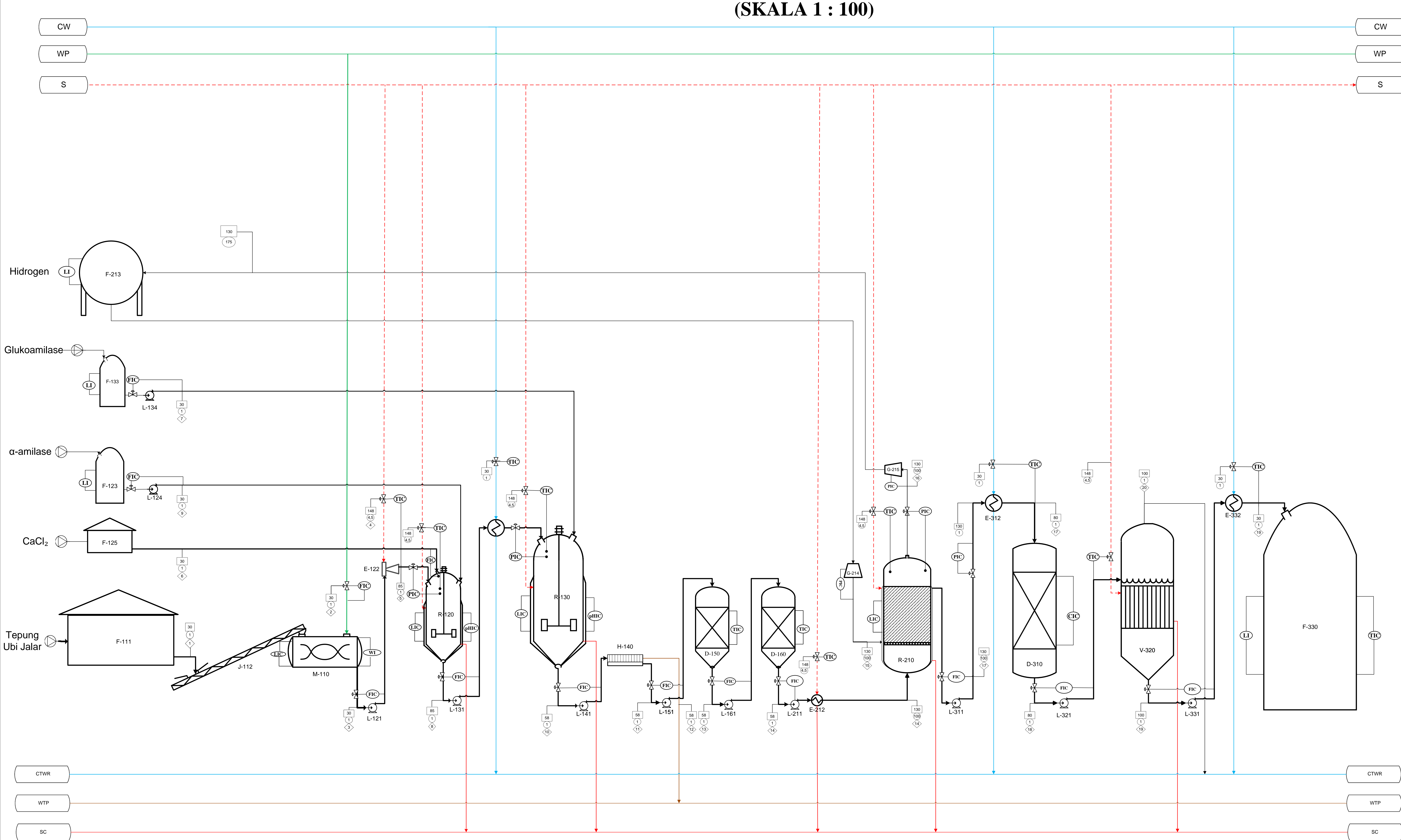


# PABRIK SORBITOL DARI TEPUNG UBI JALAR DENGAN PROSES HIDROLISIS ENZIMATIK DAN HIDROGENASI KATALITIK (SKALA 1 : 100)



SIMBOL	KETERANGAN
S	STEAM
SC	STEAM CONDENSAT
CW	COOLING WATER
WP	WATER PROCESS
CTWR	COOLING WATER RETURN
pHIC	pH INDICATING CONTROLLER
WI	WEIGHT INDICATOR
CIC	COLOR INDICATING CONTROLLER
LI	LEVEL INDICATOR
LIC	LEVEL INDICATING CONTROLLER
FIC	FLOW INDICATING CONTROLLER
TIC	TEMPERATURE INDICATING CONTROLLER
PIC	PRESSURE INDICATING CONTROLLER
□	TEMPERATURE (°C)
◇	NOMOR ALIRAN
○	TEKANAN (ATM)
34	E-332 COOLER 3
33	L-331 POMPA RECIPROCATING
32	F-330 TANGKI PENAMPUNG SORBITOL
31	L-321 POMPA RECIPROCATING
30	V-320 EVAPORATOR
29	E-312 COOLER 2
28	L-311 POMPA RECIPROCATING
27	D-310 TANGKI KARBONASI
26	G-215 KOMPRESOR
25	G-214 EKSPANDER
24	F-213 TANGKI PENYIMPANAN HIDROGEN
23	E-212 HEATER
22	L-211 POMPA RECIPROCATING
21	R-210 REAKTOR HIDROGENASI
20	L-161 POMPA RECIPROCATING
19	D-160 ANION EXCHANGER
18	L-151 POMPA RECIPROCATING
17	D-150 KATION EXCHANGER
16	L-141 POMPA RECIPROCATING
15	H-140 FILTER PRESS
14	L-134 POMPA RECIPROCATING
13	F-133 TANGKI PENYIMPANAN GLUKOAMILASE
12	E-132 COOLER 1
11	L-131 POMPA RECIPROCATING
10	R-130 REAKTOR SAKARIFIKASI
9	F-125 GUDANG PENYIMPANAN CaCl <sub>2</sub>
8	L-124 POMPA RECIPROCATING
7	F-123 TANGKI PENYIMPANAN α-AMILASE
6	E-122 JET COOKER
5	L-121 POMPA RECIPROCATING
4	R-120 REAKTOR LIKUIFIKASI
3	J-112 SCREW CONVEYOR
2	F-111 GUDANG TEPUNG UBI JALAR
1	M-110 RIBBON BLENDER
NO	KODE NAMA ALAT


Komponen	Aliran Massa (kg/jam)																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Karbohidrat (Pati)	7477.0199		7477.0199		7477.0199		6355.4669		127.1093		127.1093		127.1093							
Air	967.6143	5149.9474	6117.5617	1039.5080	7157.0697		7094.7635		6341.6894	6319.4934			6319.4934	6319.8857		6383.0311	6383.0311	2896.4801	3486.5510	
Protein	263.8948		263.8948		263.8948		263.8948		263.8948	262.9712			262.9712	262.9712						
Lemak	43.9825		43.9825		43.9825		43.9825		43.9825				43.9825							
Abu	43.9825		43.9825		43.9825		43.9825		43.9825				43.9825							
CaCl <sub>2</sub>						1.1891			1.1891		1.1849									
NaCl						0.0231			0.0231		0.0230									
MgCl <sub>2</sub>						0.0012			0.0012		0.0012									
α - amilase							11.7763		11.7763		11.7763				11.7763					
Glukoamilase								8.7705		8.7705					8.7705					
Dekstrin							280.3882		5.6078	5.5881			5.5881	5.5881		5.5881	5.5881	5.5881		
Maltosa							591.9296		11.8386	11.7972			11.7972	0.1864	0.1864	0.1864	0.1864	0.1864		
Dekstrosa							311.5413		8147.8446	8119.3271			8119.3271	8119.3271		230.9638	230.9638	230.9638		
HCl													0.7938							
Resin H+											0.0220									
Resin OH-													0.3703							
H <sub>2</sub>															235.9369	154.6617				
Impurities H <sub>2</sub>															0.2359	0.2359				
Sorbitol																	7338.0943	7338.0943	7338.0943	
Maltitol																	11.6792	11.6792	11.6792	
Amadori																	831.3015			
Filtrat cake												51.7023								
Karbon Aktif																	88.0571			
Total	8796.4940	5149.9474	13946.4414	1039.5080	14985.9494	1.2134	11.7763	14998.9391	8.7705	15007.7096	14720.4082	287.3234	14720.3412	14719.5693	236.1728	154.8977	14888.9016	13969.5429	10482.9919	3486.5510

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TTD :

FLOWSHEET  
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SURABAYA  
2023