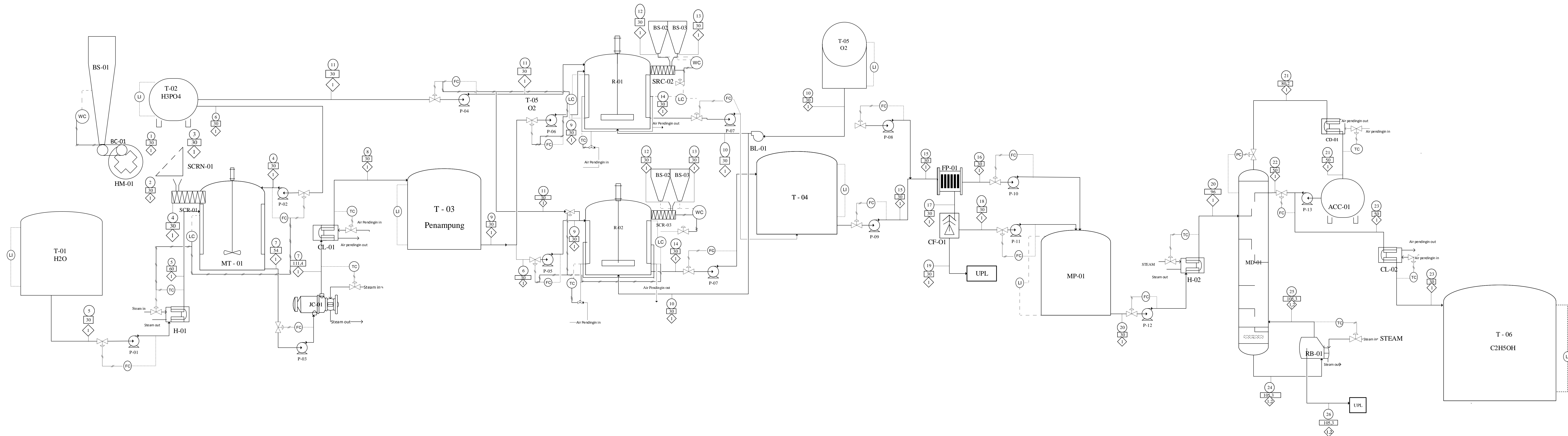


# PROCESS ENGINEERING FLOW DIAGRAM PRA RANCANGAN PABRIK BIOETANOL DARI BIJI SORGUM KAPASITAS 10.000 TON/TAHUN



NO	KOMPONEN	NOMOR ARUS																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	Biji Sorgum	21252,762	4675,608	4675,608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Tepung Sorgum	-	16577,155	-	16577,155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Pati	-	-	-	-	-	-	12492,544	12492,544	12492,544	-	-	-	5496,719	5496,719	-	5496,719	-	5496,719	-	5496,719	-	-	-	-	-	-
4	inert	-	-	-	-	-	-	1738,944	1738,944	1738,944	-	-	-	1738,944	1738,944	-	1738,944	-	1738,944	-	1738,944	-	-	-	-	-	-
5	H2O	-	-	-	-	4285,194	1,341	6632,203	6632,203	6632,203	-	0,015	-	5854,904	5854,904	4976,668	878,236	746,500	131,735	5723,168	242,728	92,475	149,693	8834,521	2037,687	6796,834	
6	H3PO4	-	-	-	-	-	0,014	0,014	0,014	0,014	-	0,00015	-	-	-	-	0,014	-	0,014	-	-	-	-	-	-	-	
7	Glukosa	-	-	-	-	-	-	-	-	-	-	-	-	3186,987	3186,987	-	3186,987	-	3186,987	-	3186,987	-	-	-	-	-	
8	Etanol	-	-	-	-	-	-	-	-	-	-	-	-	2344,033	2344,033	2297,152	46,881	45,943	0,938	2343,095	1797,000	684,626	1112,933	8,843	2,040	6,804	
9	CO2	-	-	-	-	-	-	-	-	-	-	-	-	2242,119	2242,119	-	2242,119	-	2242,119	-	-	-	-	-	-	-	
10	O2	-	-	-	-	-	-	-	-	-	-	2086,370	-	2086,370	2086,370	-	2086,370	-	2086,370	-	2086,370	-	-	-	-	-	
11	Aspergillus Niger Ragi	-	-	-	-	-	-	-	-	-	-	-	2086,370	-	2086,370	2086,370	-	2086,370	-	2086,370	-	-	-	-	-	-	
12		-	-	-	-	-	-	-	-	-	-	-	2086,370	2086,370	-	2086,370	-	2086,370	-	2086,370	-	-	-	-	-	-	
	JUMLAH	21252,762	21252,762	4675,608	16577,15468	4285,194486	1,354616839	20863,70379	20863,704	20863,70379	2086,370	0,015	2086,370	2086,370	27122,830	27122,830	7273,821	19849,009	792,443	19056,566	8066,264	2039,727	777,101	1262,626	8843,365	2039,727	6803,638

ALAT	KETERANGAN
MD	Menara Destilasi
T	Tangki
R	Reaktor
HE	Heat Exchanger
ACC	Accumulator
CD	Condensator
RB	Reboiler
FP	Filter Press
MP	Mixing Point
CF	Centrifuge
HM	Hammer Mill
SC	Screw Conveyor
SCRN	Screening
BS	Bin Storage
JC	Jet Cooker
BC	Belt conveyor
P	Pompa
BL	Blower
CL	Cooler
MT	Mixing Tank

SIMBOL	KETERANGAN
LC	Level Controller
WC	Weight Controller
FC	Flow Controller
LI	Level Indikator
PC	Pressure Controller
TC	Temperature Controller
○	Nomor Arus
□	Suhu, C
◇	Tekanan, atm
◇	Control Valve
—	Electric Connection
—	Piping
—	Udara Tekan



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YOGYAKARTA

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**PROCESS ENGINEERING FLOW DIAGRAM PRA RANCANGAN PABRIK BIOETANOL DARI BIJI SORGUM KAPASITAS 10.000 TON/TAHUN**

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