

Bazirano na 8.400 h/y rada

1	PLANT PERFORMANCE - PGP		For design capacity 200,000 t/y	For maximum production volume 220,000 t/y	
Feedstock yearly consumption					
95% CGP HIPP SC		t/y	97.000	106.700	
95% RGP RNP FCC		t/y	113.500	124.850	
Feedstock hourly consumption					
95% CGP HIPP SC		t/h	11,55	12,70	
95% RGP RNP FCC		t/h	13,51	14,86	
Utilities hourly consumption					
Cooling water		t/h	575,0	632,5	
Quench Oil		t/h	79,3	87,2	
Electric Power		kWh	4.406	4.847	
Instrument Air		Nm3/h	52,0	57,2	
Total Product yearly production			t/y	210.500	231.550
Product yearly production					
Propylene Polymer grade		t/y	200.000	220.000	
Propane		t/y	10.500	11.550	
Product horyly production					
Propylene Polymer grade		t/h	23,81	26,19	
Propane		t/h	1,25	1,38	

2	PLANT PERFORMANCE - PP		For design capacity 240,000 t/y	For maximum production volume		264,000 t/y
Propylene hourly consumption						
Propylene PGP Unit		t/h	23,81			26,19
Propylene OCT Unit		t/h	5,95			6,35
Propylene Total		t/h	29,76			32,54
Ethylene hourly consumption		t/h	0	2,14	0	2,35

Polypropylene Product		HOMOPOLYMER		IMPACT COPOLYMER		HOMOPOLYMER		IMPACT COPOLYMER	
Percent of total production volume		%	70%	30%	70%	30%			
Polymer yearly production		t/y	168.000	72.000	184.800	79.200			
Polymer hourly production, total		t/h	28,57		31,43				
Utilities specific consumption									
Ethylene		t of ethylene / t of polymers	0	0,075	0	0,075			
HP steam		kg of steam / t of polymers	0	0	0	0			
MP steam		kg of steam / t of polymers	0	0	0	0			
LP steam		kg of steam / t of polymers	0	0	0	0			
Instrument Air		Nm3 / t of polymers	20	20	20	20			
Cooling water		m3 / t of polymers	80	125	80	125			
Demi water		m3 / t of polymers	0,2	0,2	0,2	0,2			
Hydrogen		Nm3 / t of polymers	0.5-1.5	2.0-3.0	0.5-1.5	2.0-3.0			
Nitrogen		Nm3 / t of polymers	20	20	20	20			
Electricity		kWh / t of polymers	285	418	285	418			
Utilities hourly consumption									
HP steam		t/h	0	0	0	0			
MP steam		t/h	0	0	0	0			
LP steam		t/h	0	0	0	0			
Instrument Air		Nm3/h	571,4	571,4	628,4	628,4			
Cooling water		m3/h	2.285,0	3571,0	2.513,0	3927,0			
Demi water		m3/h	5,7	5,7	6,28	6,28			
Hydrogen		Nm3 of H2/h	14.0-42.0	57.0-85.0	15.71-47.13	62.84-94.26			
Nitrogen		Nm3 of N2/h	571,4	571,4	628,6	628,6			
Electricity		kWh/h	8.142,0	11.942,0	8.954,0	13.133,0			

3	PLANT PERFORMANCE - OCT		For maximum production volume 55,000 t/y
Feedstock yearly consumption			
Rafinat2 HIPP MTBE		t/y	61.000
Rafinat2 RNP ETBE		t/y	12.000
Ethylene		t/y	18.300
Feedstock total hourly consumption			
Rafinat2 HIPP MTBE		t/h	1,429
Rafinat2 RNP ETBE		t/h	7,262
Rafinat2 TOTAL		t/h	8,69
Ethylene		t/h	2,18
Utilities specific consumption			
Cooling water - circulating		m3 / t of PGP	85,73
LP steam		t / t of PGP	1,84
Natural Gas		GI / t of PGP	0,90
Electric Power		kWh / t of PGP	23,75
Hydrogen		kg / t of PGP	0,38
Propylene refrigerant		GI / t of PGP	0,64
Utilities hourly consumption			
Cooling water - circulating		m3/h	545,00
LP steam		t/h	11,70
Natural Gas		GI/h	5,74
Electric Power		kWh	151,00
Hydrogen		kg/h	2,40
Propylene refrigerant		GI/h	4,06
Propylene Polymer Grade Product production			
Propylene Polymer grade		t/y	53.400
Propylene Polymer grade		t/h	6,36
By Products			
Iso C4s		t/h	2,960
C4 LPG		t/h	1,120
C5+		t/h	0,350
C4 vent		t/h	0,030
OCU vent		t/h	0,065

4	FLARE (BAKLJA)		
Utilities hourly consumption			
Natural Gas/Purge Gas Flow - estimate		kg/h	30
Smokeless Steam Flow - estimate		kg/h	1.900
Cooling Water		kg/h	4.100
Instrument Air		Nm3/h	20
Peak Load			
Propylene from PGP, max 60 minutes		kg/h	43.000
Propylene from PP, max 30 minutes		kg/h	30.000
C4 from OCT, max 60 minutes		kg/h	96