

EXERGY BALANCE

		$Q_{th} \text{ (kW)}$	η_{energy}			
component	Resource	Product	Exergy efficiency	Irreversibilities	% total	
feedwater pump		10.02	9.35	93.30%	0.67	0.15%
turbine		194.70	171.71	88.19%	22.99	4.99%
IP1 turbine		115.35	105.22	91.22%	10.13	2.20%
IP2 turbine		147.07	132.18	89.88%	14.89	3.23%
IP3 turbine		373.42	314.76	84.29%	58.66	12.73%
extraction pump		0.33	0.29	90.43%	0.03	0.01%
LPH2 pump		0.85	0.79	93.24%	0.06	0.01%
LPH1		74.82	40.40	0.00%	34.42	7.47% LPH1-extraction_2
LPH2		12.20	9.23	0.00%	2.97	0.64% LPH2-extraction_1
condenser		28.75	0.00	0.00%	28.75	6.24% Tk = 20,00 °C
economizer		370.43	241.06	65.08%	129.37	28.08% Tk = 700,00 °C
superheater		320.24	264.52	82.60%	55.72	12.09% Tk = 700,00 °C
evaporator		313.55	238.83	76.17%	74.71	16.22% Tk = 700,00 °C
reheater		169.24	141.92	83.86%	27.32	5.93% Tk = 700,00 °C
global		1,173.45	712.77	60.74%	460.68	100.00%
$T_0 = 293,15 \text{ K}$		1,679.33	42.44%			