

ENERGY CONSERVATION U3200-4600-4602-9200

Client / End User : Hellenic Petroleum s.a. _ Aspropyrgos Refinery (Greece)

Year : 2016

Work Description :

Detailed engineering, material procurement, fabrication, non destructive testing, sandblasting - painting, PED Certification, delivery D.D.P. Aspropyrgos Refinery of Heat Exchangers.

Design Code : API 660 / TEMA 'R' / PED 97/23/EC, ASME VIII-1

Item	Type	Weight (kgs)	I.D. (mm)	TL-TL (mm)	Design Temp. Shell/Tube (°C)		Design Pressure Shell/Tube (bar g)		Shell Material Tube Material
M-4603C Reactor Effluent / Adsorber Feed Exchanger	AFS	31.275	1.450	7.036	310	373	29,5 / -0,2	26,5 / -0,2	SA 516 Gr 70 _ 22mm SA 213 Gr T11 _ Ø19,05x2,11 "
M-4603B Reactor Effluent / Adsorber Feed Exchanger	AFS	31.275	1.450	7.036	310	373	29,5 / -0,2	26,5 / -0,2	SA 516 Gr 70 _ 22mm / SA 213 Gr T11 _ Ø19,05x2,11 "
M-4104C Slurry Pumparound / Feed	AES	29.720	1.650	7.187	370	400	25,2	29,7	SA 516 Gr 70+ Clad 410S _ 18+3mm SA 268 Tp 410 _ Ø25,4x2,11 'U'
M-9203C CDHDS Feed / Overhead Condenser	AEU	20.100	1.254	5.435	290	400	34,8 / F.V.	33,7 / F.V.	SA 516 Gr 70 _ 20mm SA 213 Tp 304L _ Ø19,05x2,11 'U'
M-2624 Splitter N-2602 Reboiler	AGS	15.490	1.120	7.017	138	270	23,5	30,5	SA 516 Gr 70 _ 15mm SA 210 Gr A1 _ Ø25,4x2,77 "
M-4621 Recycle Gas Preheater	AES	5.515	680	5.570	372	310	24,6 / VAC:1	29,5 / VAC : 0,2	SA 516 Gr 70 _ 12mm SA 210 Gr A1 _ Ø19,05x2,11 "
M-3226A Feed Preheater	AEU	5.500	700	7.532	180	230	40,7 / VAC. 1kg/cm ²	31,3	SA 516 Gr 70 _ 14mm / SA 210 Gr A1 _ Ø25,4x2,11 'U'
M-3226B Feed Preheater	AEU	5.500	700	7.532	180	230	40,7 / VAC. 1kg/cm ²	31,3	SA 516 Gr 70 _ 14mm / SA 210 Gr A1 _ Ø25,4x2,11 'U'
M-2623 Deethanizer Reboiler	AGS	5.400	775	4.615	149 / -5	270 / -5	36,6	30,5	SA 516 Gr 70 _ 14mm SA 210 Gr A1 _ Ø19,05x2,11 "
M-9223B N-9205 Bottoms / KERO from U-9200 Preheater	AES	3.289	490	5.873	225	280	32,7	25,2	SA 516 Gr 70 _ 12mm SA 210 Gr A1 _ Ø19,05x2,11 "
M-9223A N-9205 Bottoms / KERO from U-9200 Preheater	AES	3.081	490	5.717	225	280	32,7	25,2	SA 516 Gr 70 _ 12mm SA 210 Gr A1 _ Ø19,05x2,11 "
M-9225 CDHDS Reflux Drum Condenser	AEU	2.912	610	4.234	200	375	24,5 / VAC : 1	24,5 / VAC : 1	SA 516 Gr 70 _ 10mm SA 210 Gr A1 _ Ø25,4x2,11 'U'