

**E-1010**  
FEED PREHEATER  
STEAM REFORMER

A	304	m2
Shell - ps	N.A.	bar
Shell - t	N.A.	°C
Tube - ps	49	bar
Tube - t	570	°C
* = MECH.DESIGN		

**H-1002**  
FLUE GAS WASTE  
HEAT RECOVERY SYSTEM

**R-1003**  
PRERFORMER

Vnom	34.0	m3
od	2900	mm
ITL-TL	4200	mm
ps	54	bar
t	500	°C
* = MECH.DESIGN		

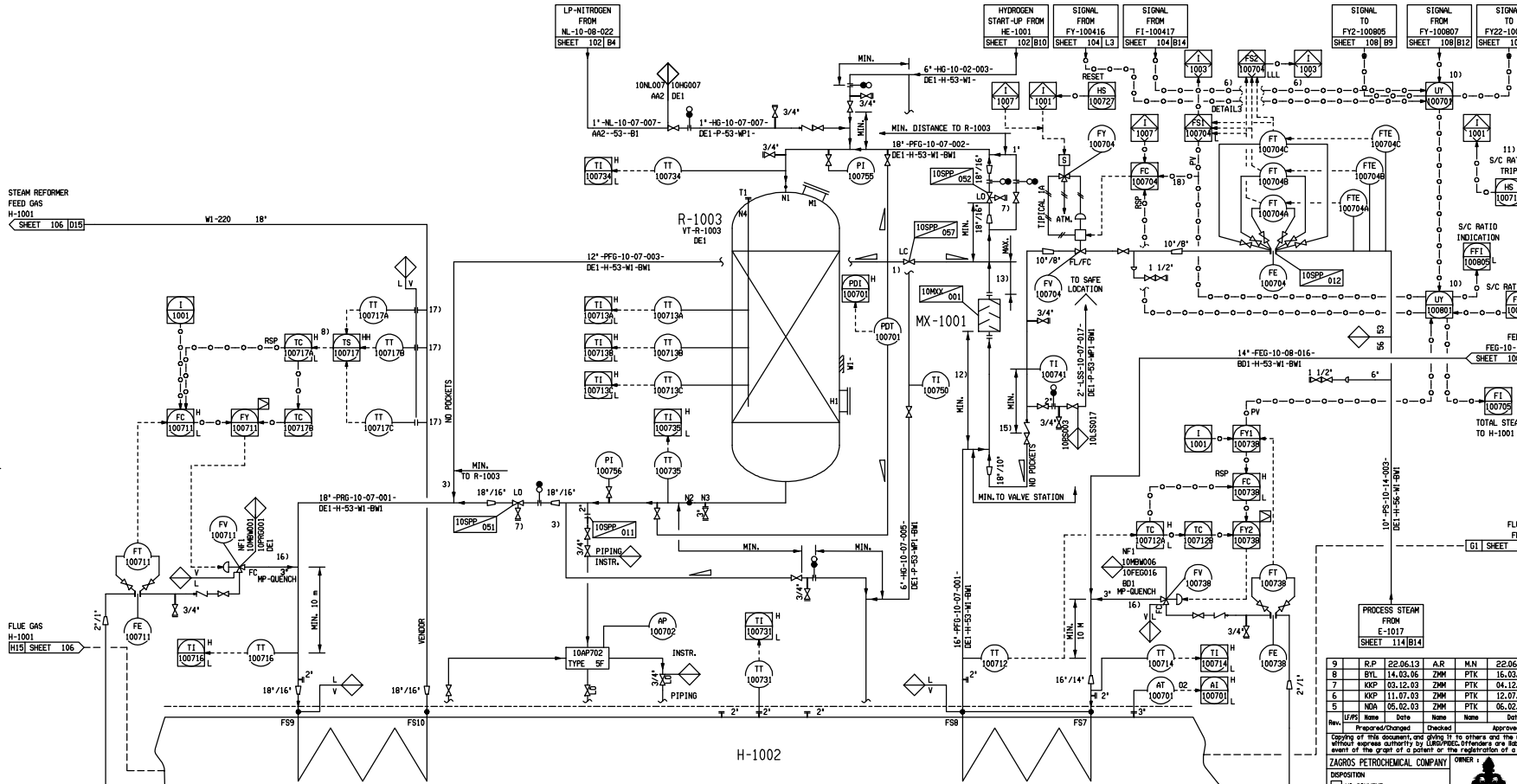
**MX-1001**  
PIPING IN-LINE  
MIXER

Vnom	308	m3
od	457	mm
ITL-TL	1500	mm
ps	54	bar
t	500	°C
* = MECH.DESIGN		

**E-1012**  
FEED PREHEATER  
PRERFORMER

A	308	m2
Shell - ps	N.A.	bar
Shell - t	N.A.	°C
Tube - ps	54	bar
Tube - t	535	°C
* = MECH.DESIGN		

- REMARKS:
- ALL PRESSURES ARE IN GAUGE IF NOT STATED OTHERWISE
  - VALVE (WITH KEY-LOCK) TO BE LOCATED ABOVE MAIN LINE OR AT SAME LEVEL
  - LINE TO MEET AT TIE-IN FROM TOP
  - RELATED TO FIRED HEATER PH-1001 CONTROL SYSTEM
  - GATE VALVE, BLOCK & BLEED WITH KEY-LOCK
  - RAMP OPEN SIGNAL VALVE FV-100711
  - COMPLEX CALCULATION STEAM TO CARBON RATIO
  - SELECTOR S/C RATIO FOR BYPASS OPERATION R-1003 SEE INTERLOCK DESCRIPTION
  - MIN. 1 X D STRAIGHT PIPE LENGTH UPSTREAM MIXER
  - MIN. 2 X D STRAIGHT PIPE LENGTH DOWNSTREAM MIXER
  - S/C RATIO TRIP
  - S/C RATIO INDICATION
  - TERMOUCUPLE BY LUGRI
  - PV - TOTAL STEAM TO R-1003. SEE COMPLEX LOOP S/C FOR DETAILS
  - SEE INTERLOCK DESCRIPTION FOR FURTHER DETAILS



9	R.P	22.06.13	A.R	M.N	22.06.13	REVISED AS MARKED
8	S.VL	14.03.06	Z.M	P.TK	15.03.06	AFC REVISED AS MARKED
7	K.KP	02.12.03	Z.M	P.TK	04.12.03	AFC REVISED AS MARKED
6	K.KP	11.07.03	Z.M	P.TK	12.07.03	AFC REVISED AS MARKED (FROZEN)
5	N.D.A	05.02.03	Z.M	P.TK	06.02.03	AFC REVISED AS MARKED (FROZEN)

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**ZAGROS PETROCHEMICAL COMPANY** OWNER: NATIONAL PETROCHEMICAL COMPANY  
ZAGROS PETROCHEMICAL COMPLEX  
شركت پتروشیمی زاگرس

PROJECT: 4th METHANOL PROJECT

OWNER: NATIONAL PETROCHEMICAL COMPANY  
CONTRACTOR: PETROCHEMICAL INDUSTRIES DESIGN & ENGINEERING COMPANY  
شركت طراحی و مهندسی صنایع پتروشیمی

SIGNATURE DATE: \_\_\_\_\_

ZAGROS REVIEW COMMENTS DOES NOT RELIEVE THE DESIGNER OF HIS RESPONSIBILITY FOR THE CORRECT DESIGN, MANUFACTURING AND OPERATION OF EQUIPMENT.

Scale: \_\_\_\_\_ Original Size: \_\_\_\_\_

Rev: 9

**engineering LUGRI**

REFORMING  
PRERFORMER  
UNIT 100  
P&I DIAGRAM SHEET 107

DOC: \_\_\_\_\_ BY: \_\_\_\_\_ DL-NO: \_\_\_\_\_

Job name: MEGA METHANOL IRAN  
Lugri Job No: 16966601  
Lugri Document No: 37111

Rev: 9

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