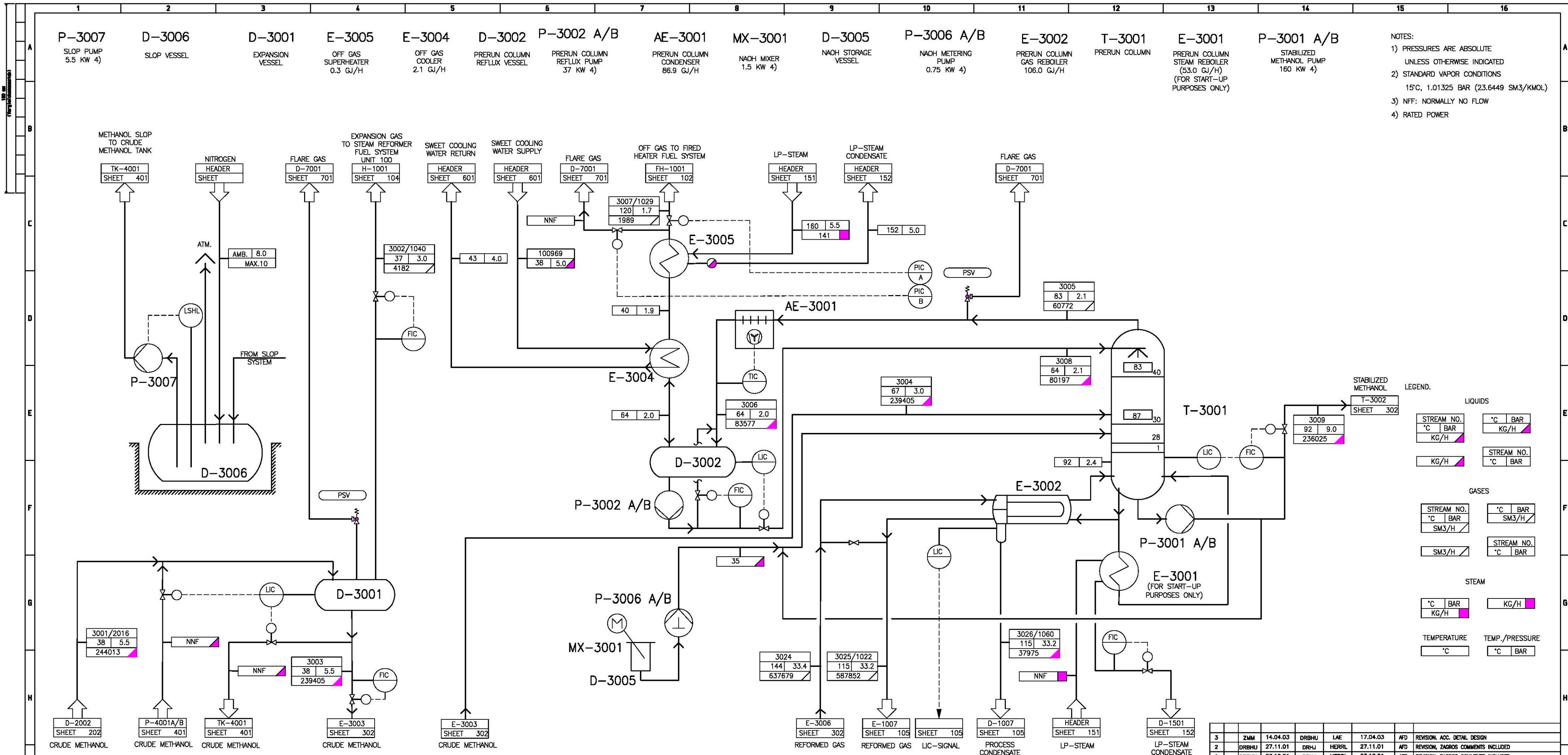




- NOTES:
- 1) PRESSURES ARE ABSOLUTE
UNLESS OTHERWISE INDICATED
 - 2) STANDARD VAPOR CONDITIONS
15°C, 1.01325 BAR (23.6449 SM3/KMOL)
 - 3) NFF: NORMALLY NO FLOW
 - 4) RATED POWER

LEGEND.

LIQUIDS	
STREAM NO.	°C BAR
°C BAR	KG/H
KG/H	°C BAR
°C BAR	SM3/H
GASES	
STREAM NO.	°C BAR
°C BAR	SM3/H
SM3/H	°C BAR
SM3/H	°C BAR
STEAM	
°C BAR	KG/H
KG/H	°C BAR
TEMPERATURE	
°C	°C BAR
°C BAR	°C BAR

STREAM NO:		3001/2016		3002/1040		3003		3004		3005		3006		3007/1029		3008		3009		3024		3025/1022		3026/1060			
PROCESS STREAM		CRUDE METHANOL		EXPANSION GAS		CRUDE METHANOL FROM EXPANSION VESSEL		CRUDE METHANOL TO PRERUN COLUMN		OVERHEAD VAPOR FROM PRERUN COLUMN		LIQUID FROM PRERUN COLUMN CONDENSER		OFF GAS		REFLUX TO PRERUN COLUMN		STABILIZED METHANOL TO PRESSURE COLUMN		REFORMED GAS EX E-3006		REFORMED GAS EX E-3002		CONDENSATE EX E-3002			
PHASE		MIXED (LIQUID/VAPOR)		VAPOR		LIQUID		MIXED (LIQUID/VAPOR)		VAPOR		MIXED (LIQUID/VAPOR)		VAPOR		LIQUID		LIQUID		VAPOR		VAPOR		LIQUID			
COMP.		MOLWEIGHT		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%		KMOL/H MOL%			
K	CO2	44.010	134.0	1.62	74.7	42.26	59.2	0.73	59.2	0.73	67.8	2.64	67.8	2.64	59.2	70.40	8.8	0.35			1834.3	6.80	1833.5	7.37	0.8	0.04	
	CO	28.010	4.1	0.05	3.7	2.10	0.4	0.01	0.4	0.01	0.4	0.02	0.4	0.02	0.4	0.50	<0.1	<0.01			5218.5	19.35	5218.3	20.99	0.2	0.01	
	H2	2.016	48.1	0.58	46.8	26.48	1.2	0.02	1.2	0.02	1.3	0.05	1.3	0.05	1.2	1.48	<0.1	<0.01			15655.9	58.05	15655.2	62.97	0.7	0.03	
	CH4	16.043	34.3	0.41	30.3	17.11	4.1	0.05	4.1	0.05	4.2	0.16	4.2	0.16	4.1	4.83	0.1	<0.01			411.1	1.52	411.1	1.65	<0.1	<0.01	
	N2	28.016	11.5	0.14	11.1	6.29	0.4	0.01	0.4	0.01	0.4	0.02	0.4	0.02	0.4	0.48	<0.1	<0.01			330.1	1.22	330.0	1.33	<0.1	<0.01	
	O2	32.000																									
	H2O	18.015	1499.0	18.10	0.6	0.35	1498.4	18.46	1498.4	18.49	0.3	0.01	0.3	0.01	<0.1	<0.01	0.3	0.01	1498.4	18.69	3511.6	13.02	1405.4	5.65	2105.8	99.92	
	CH3OH	32.042	8540.9	79.00	9.2	5.18	8531.7	80.61	8531.7	80.61	2478.2	96.42	2478.2	96.42	15.8	18.77	2482.5	99.05	8515.9	81.28							
	C2H6	30.069																									
	C3H8	44.096																									
L	C4H10	58.123	<0.1	<0.01	<0.1	0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	0.04	<0.1	<0.01									
	CSH12	72.151	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	0.05	<0.1	<0.01									
	ARGON	39.948	0.3	<0.01	0.3	0.15	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	<0.01	<0.1	0.02	<0.1	<0.01									
	LOW BOILERS		2.9	0.04	0.1	0.06	2.8	0.03	2.8	0.03	16.8	0.85	16.8	0.85	2.8	3.31	13.8	0.55	<0.1	<0.01		8.3	0.03	8.3	0.03	<0.1	<0.01
	HIGH BOILERS		4.5	0.05	<0.1	<0.01	4.5	0.06	4.5	0.06	0.8	0.03	0.8	0.03	0.1	0.11	0.7	0.03	4.4	0.05							
	TOTAL FLOW	KMOL/H	8279.8		176.9		8102.9		2570.2		2570.2		2570.2		84.1		2486.1		8018.8		26989.0		24861.7		2107.3		
	TOTAL FLOW	KG/H	244013		4608		239405		83577		83577		83577		3380		80197		236025		337885		299910		37975		
	TOTAL FLOW	SM3/H			4182				80772						1989				637679		587852						
	MOLWEIGHT	KG/KMOL	29.546/26.053		26.052		29.546		29.503/26.490		32.516		32.254/27.160		40.182		32.258		29.434		12.528		12.063		18.020		
	STAND.DENS.	KG/SM3	814.21/1.10		1.10		814.22		814.59/1.54		1.38		798.97/1.57		1.70		797.01		814.54		0.53		0.51		987.84		
EFF.DENSITY	KG/M3	787.76/5.59		3.05		787.77		784.73/3.94		2.38		748.75/2.70		2.10		748.78		741.79		12.15		12.38		945.17			
SPECIFIC HEAT	KJ/KG°C	2.78/1.35		1.35		2.78		2.99/1.14		1.53		2.81/1.20		1.11		2.81		3.20		2.54		2.58		4.24			
VISCOSITY	CP	0.489/0.014		0.014		0.490		0.333/0.014		0.012		0.327/0.013		0.018		0.328		0.248		0.018		0.017		0.239			
ENTHALPY	GJ/H	26.30		1.70		24.61		45.12		103.62		16.72		1.85		13.20		62.05		323.90		199.43		18.37			
M	TEMP	°C	38		37		38		67		83		64		120		84		92		144		115		115		
	PRESSURE	BAR ABS	5.5		3.0		5.5		3.0		2.1		2.0		1.7		2.1		9.0		38.4		33.2		33.2		
	LIQUID MOLAR FRACTION		0.98						0.99				0.95				1.00		1.00						1.00		

3	ZMM	14.04.03	DRBHU	LAE	17.04.03	AFD	REVISION, ACC. DETAIL DESIGN
2	DRBHU	27.11.01	DRHJ	HERRL	27.11.01	AFD	REVISION, ZAGROS COMMENTS INCLUDED
1	DRBHU	23.10.01	DRHJ	HERRL	23.10.01	AFD	REVISION, ZAGROS COMMENTS INCLUDED
0	DRBHU	13.07.01	DRHJ	KRER	13.07.01	FI	FIRST ISSUE
REV.	LF/PS	NAME	DATE	NAME	DATE	STATUS	KIND OF REVISION
	PREPARED/CHANGED	CHECKED	APPROVED				

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ZAGROS PETROCHEMICAL COMPANY OWNER: **NATIONAL PETROCHEMICAL COMPANY**
شرکت پتروشیمی زاگرس
PROJECT: **4th METHANOL PROJECT**

OWNER: CONTRACTOR: DWG. NO. **DIG-PR-016** REV. **3**

CONTRACTOR: **PETROCHEMICAL INDUSTRIES**
DESIGN & ENGINEERING COMPANY
شرکت طراحی و مهندسی صنایع پتروشیمی

ZPC PROJ. NO. **40404277** DWG. NO. **1175** REV.

PIDEC PROJ. NO. **1175**

SCALE: ORIGINAL SIZE: **A1**

NOMINATION: **PRERUN COLUMN**

BASIC DOCUMENT: **UNIT 300**

DCC DG VT 011430 **PROCESS FLOW DIAGRAM SHEET 301**

JOB NAME: **MEGA METHANOL IRAN** LURGI JOB NO.: **169666-01** LURGI DOCUMENT NO.: **02046** REV. **3**

EDV-IDNET-NO.: IGS7 E:\PIPE\6966601\PFDRUI D-02046.PID 008 29.03.04 RP IGW60