



GENERAL NOTES:

- A. FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001 & .002.
- B. ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 530--.
- C. ALL INSTRUMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 030--.
- D. FOR TYPICAL INSTRUMENT CONNECTION SBDV, XV, MOV & ESDV DETAILS SEE DRAWINGS 50489-530-020-PID-1106.002, .003, .004, .005, .006 & .007.
- E. FOR MISCELLANEOUS PIPING TYPICAL VALVING, DRAINAGE & GENERAL ARRANGEMENT OF LEVEL INSTRUMENTS, PUMPS, STRAINERS & CONTROL VALVES SEE DRAWINGS 50489-530-020-PID-1108.001 TO 1108.010.
- F. DRAWING NUMBERS SHOWN IN P&ID CONTINUATION BOXES ARE ABBREVIATED SHOWING DRAWING SEQUENTIAL NUMBERS ONLY. THE FULL FORM OF THE DRAWING NUMBER IS 50489-530-020-PID-XXXX.SHT.NO.
- G. FOR MATERIAL SELECTION DIAGRAM SEE DRAWINGS 50489-530-020-MSD-1001.001 TO 1023.
- H. DETAIL NUMBERING FOR CI, SC, CC & CP SEE DRAWING 50489-530-020-PID-1108.003.
- I. PAINTING & COATING ARE IN ACCORDANCE WITH KOC-P-001.
- J. LOW POINT DRAIN & HIGH POINT VENT ARE INDICATED IN P&ID.
- K. FOR CAUSE & EFFECT REFER DOC. NO. 50489-530-020-PHL-1009.
- L. FOR ALARM VALUES REFER DOC. NO. 50489-530-020-SUM-1006.

NOTES:

- 1. PROVISION IS AVAILABLE FOR LIMITING THE OPENING OF TCV TO A LOW FIRE POSITION (65 kg/h) AT THE START-UP AND TO A HIGH FIRE POSITION AT THE MAXIMUM SAFE FIRING RATE (651 kg/h). NECESSARY PROVING SWITCHES, INTERLOCKS & MANUAL LOADING STATIONS SHOULD BE PROVIDED FOR START-UP AND SHUTDOWN.
- 2. TYPICAL FP01 IS PROJECT SPECIFIC. REFER P&ID 50489-530-020-PID-1133.003 FOR DETAILS.
- 3. DELETED.
- 4. DELETED.
- 5. DELETED.
- 6. HEATER LOCAL CONTROL PANEL INCLUDES ALL RELATED ALARM SEQUENCE AND OPERATING LIGHT REPEATS.
- 7. VALVES ARE TIGHT SHUT-OFF (TSO) TYPE PER ANSI CLASS VI OR HIGHER REQUIRED.
- 8. DELETED.
- 9. PROVISION AVAILABLE FOR SAFE DRAINAGE OF CONDENSATE FROM FUEL GAS LINE (FOR START-UP).
- 10. VENT ARE AS PER KOC STANDARD KOC-G-002.
- 11. DELETED.
- 12. DELETED.
- 13. REFERENCE VENDOR DRAWING NO. 50489-530-020-29021-PID-V002
- 14. SHUTDOWN LEVELS ARE EXECUTED IN BMS (BURNER MANAGEMENT SYSTEM) LOGIC.
- 15. STRAIGHT RUN :420 UPSTREAM - 70 DOWNSTREAM.
- 16. ELECTRICAL HEAT TRACING FOR FUEL GAS LINES UP TO PREHEATER.
- 17. MECHANICAL MINIMUM STOP TO ENABLE MINIMUM FIRING RATE OF 10%.
- 18. UPSTREAM ISOLATION VALVE OF TCV IS KEPT CLOSE WHILE NOT USING THAT TCV.
- 19. PIT USED IN START UP SEQUENCE IN BMS LOGIC DIAGRAM.
- 20. VALVE PRESSURE RATING 300#
- 21. VOLUMETRIC FLOW RATE FOR FIC-1173A & FIC-1174A SET@ 630 kg/hr (842 Nm3/hr) WITH MOLECULAR WEIGHT OF 16.75.

TIE IN POINT LIST

No.	SERVICE	SIZE	RATING
TP-401	FUEL GAS SUPPLY	3"	150#

AS-BUILT

KOC APPROVAL

NAME / KOC No:

DESIGNATION :

GROUP / TEAM :

SIGNATURE :

DATE :

AS-BUILT

LARSEN & TOUBRO LIMITED

NAME :

DESIGNATION :

SIGNATURE :

DATE :

DEPT/ DIVISION :

ZO	ISSUED FOR AS-BUILT	BAK/SSI	AKG	SRA	RAK	06.09.18
01	ISSUED FOR CONSTRUCTION	BAK/SSI	AKG	SRA	RAK	12.12.16
0	ISSUED FOR CONSTRUCTION	PAK/PRS	AKG	SRA	RAK	10.06.16
D	ISSUED INCORPORATED CLIENT COMMENTS	HSH/PS	AKG	SRA	RAK	09.05.16
C	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	11.09.15
B	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	17.02.15
A	ISSUED FOR APPROVAL	BAK/VSA	AKG	SRA	RAK	29.11.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE

CONTRACTOR REVISION

KUWAIT OIL CO.  
K. S. C.

شركة نفط الكويت  
ش.م.ك.

CONTRACTOR DETAILS:-



LARSEN & TOUBRO LIMITED  
FARIDABAD

PROJECT TITLE:-

NEW GATHERING CENTRE GC-30  
IN NORTH KUWAIT

DOCUMENT TITLE:-

PIPING & INSTRUMENTATION DIAGRAM  
DESALTER FEED HEATER FUEL GAS SYSTEM TRAIN A (F-101A)

PROJECT NO.	DRAWING NO.
EF1902	50489-530-020-PID-1133.002
CONTRACTOR DRG. NO.	REV. KOC DRG. NO.
50489-530-020-PID-1133.002	Z0
SHEET NO. 2 OF 16	SHEET NO.
COMPANY DRG. NO.	REV.
EF1902-530-DCO-PID-0133.002	A2
SHEET NO.	