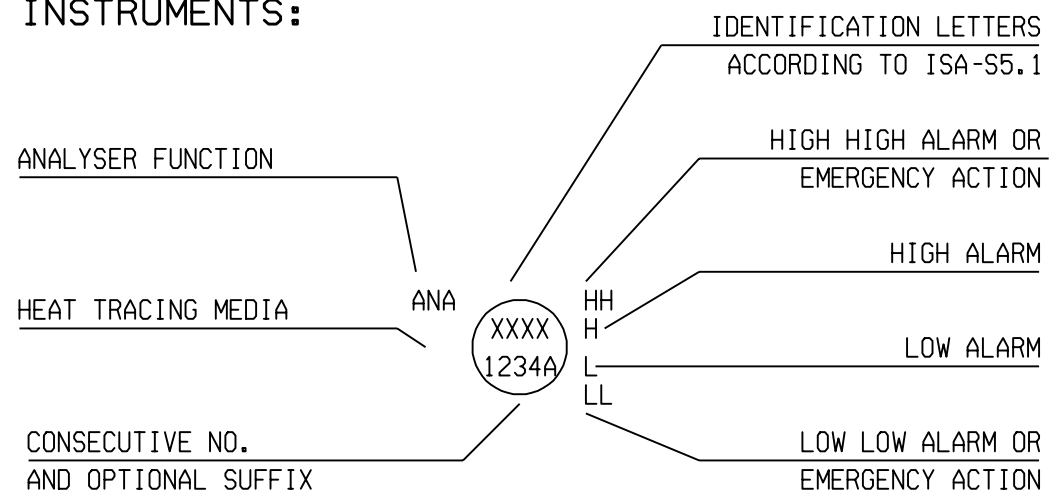


NUMBERING AND IDENTIFICATION SYSTEM OF INSTRUMENTS

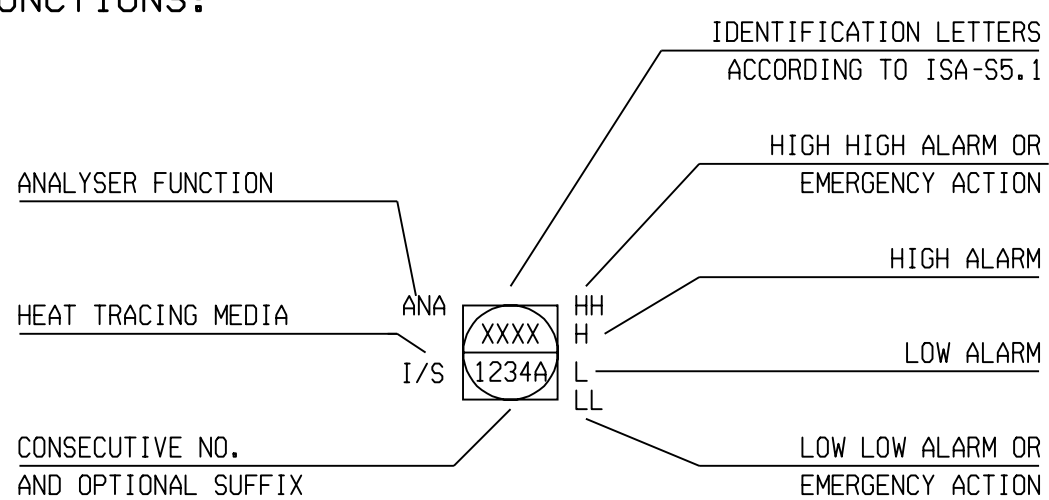
TYPICAL TAG NUMBER:

PDC 02005	FULL TAG NUMBER
P 02005	LOOP IDENTIFICATION (USED INDCS AND PLC)
020	PLANT IDENTIFIER (KEY NO.)
05	LOOP NUMBER (01.....99)
P	IDENTIFICATION LETTER ACCORDING TO ISA-S5.1
PDC	FUNCTIONAL IDENTIFICATION
DC	SUCCEEDING LETTERS ACCORDING TO ISA-S5.1
05	LOOP IDENTIFICATION (CONSECUTIVE NUMBER 01...99)
B	SUFFIX FOR LOOPS WITH MORE THAN ONE INSTRUMENT WITH THE SAME FUNCTION (E.G. SPLIT RANGE VALVES A AND B)

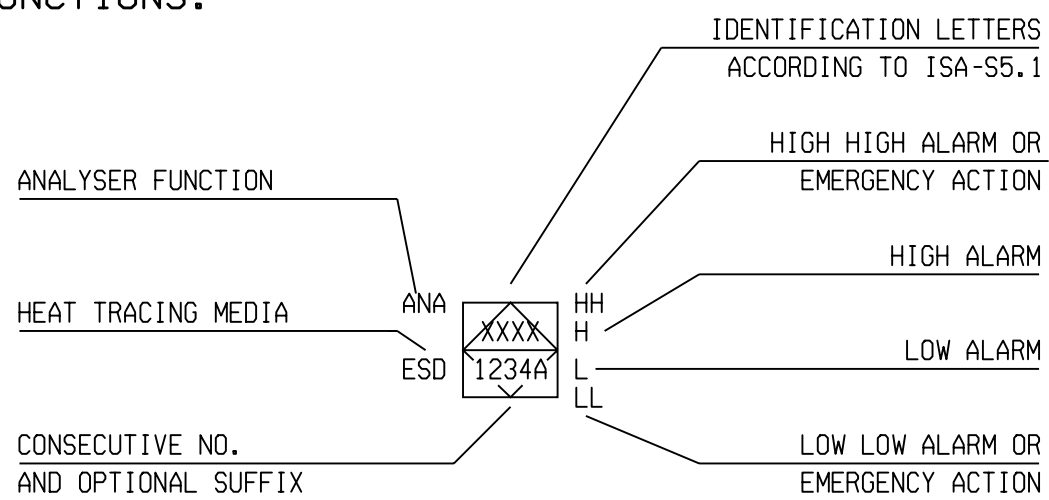
FIELD INSTRUMENTS:



DCS FUNCTIONS:



PLC FUNCTIONS:



IDENTIFICATION LETTERS ACCORDING TO ISA-S5.1

FIRST LETTER		SUCCEEDING-LETTERS		
MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A ANALYSIS		ALARM		
B BURNER, FLAME DETECTOR		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C			CONTROL	
D	DIFFERENTIAL, INTERFACE			
E VOLTAGE		SENSOR(PRIMARY ELEMENT)		
F FLOW	RATIO (FRACTION)			
G GAUGING(DIM.)		GAUGE		
H HAND				HIGH
I CURRENT		INDICATE	INDICATE	
J POWER	SCAN			
K TIME	TIME RATE OF CHANGE			
L LEVEL				LOW
M				
N USER'S CHOICE		USER'S CHOICE		USER'S CHOICE
O USER'S CHOICE		ORIFICE RESTRICTION		
P PRESSURE, VACUUM		POINT(TEST)		
Q QUANTITY	INTEGRATE, TOTALIZE			
R RADIATION		RECORD		
S SPEED	SAFETY		SWITCH TRANSMIT	
T TEMPERATURE			MULTIFUNCTION	MULTIFUNCTION
U MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V VIBRATION			VALVE, LOUVER DAMPER	
W WEIGHT, FORCE		WELL		
X MISCELLANEOUS	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y UNCLASSIFIED	Y AXIS		SOLENOID VALVE, COMPUTE	
Z POSITION	Z AXIS			

INSTRUMENT FUNCTION SYMBOLS (REFER TO ISA-S5.1 AND ISA-S5.3)

INSTRUMENT LOCATED IN FIELD	XXXX 1234A
INSTRUMENT LOCATED ON CONTROL PANEL (NOT USED)	XXXX 1234A
(BEHIND-THE-PANEL DEVICE; NON-VIEWABLE) OR INSTALLED IN CENTRAL AUXILIARY ROOM (CAR)	XXXX 1234A
(FRONT-DISPLAYED)	XXXX 1234A
(BEHIND-THE-PANEL DEVICE; NON-VIEWABLE)	XXXX 1234A
INSTRUMENT LOCATED IN FIELD WITH FUNCTION IDENTIFIER	XXXX 1234A
HARD-WIRED RECORDER LOCATED ON CONTROL PANEL IN CENTRAL CONTROL ROOM (CCR) (-R) REPRESENTS THE IDENTIFICATION LETTER F, L, P ECT.)	-R 1234A
DISTRIBUTED CONTROL SYSTEM (DCS), INTERNAL FUNCTION, WITH EXPLICIT FUNCTION IDENTIFIER NON-ACCESSIBLE TO OPERATOR BY MEANS OF DCS OPERATOR STATION(S)	XXX 1234A
DISTRIBUTED CONTROL SYSTEM (DCS), ACCESSIBLE TO OPERATOR BY MEANS OF DCS OPERATOR STATION(S)	XXXX 1234A
DISTRIBUTED CONTROL SYSTEM (DCS), INTERLOCK OR SAFETY SEQUENCE (I/S), NON-ACCESSIBLE TO OPERATOR BY MEANS OF DCS OPERATOR STATION(S)	XXXX 1234A
PROGRAMMABLE LOGIC CONTROL (PLC), EMERGENCY SHUT-DOWN (ESD) FUNCTION WITHOUT ACCESS TO OPERATOR, NON-VIEWABLE ON DCS OPERATOR STATION(S)	ESD XXXX 1234A
PROGRAMMABLE LOGIC CONTROL, INTERLOCK OR SAFETY SEQUENCE (I/S), NON-ACCESSIBLE BUT VIEWABLE TO OPERATOR BY MEANS OF DCS OPERATOR STATION(S)	I/S XXXX 1234A
X-OUT-OF-Y SELECTION SYSTEM PERFORMED BY PROGRAMMABLE LOGIC CONTROL (PLC), RESULT PARAMETER VIEWABLE ON DCS OPERATOR STATION(S)	XXXX 1234A
HARD-WIRED LOGIC CONTROL, EMERGENCY SHUT-DOWN (ESD) OR INTERLOCK/SAFETY FUNCTION (IS) NON-ACCESSIBLE TO OPERATOR, I/S PARAMETER VIEWABLE ON PATCH BOARD	ESD XXXX 1234A OR I/S XXXX 1234A
INSTRUMENT AIR	IA
INSTRUMENT LOCATED ON LOCAL PANEL	XXXX 1234A

INSTRUMENT SYMBOLS (REFER TO ISA-S5.1)

RESTRICTION ORIFICE	FO 1234A
MEASURING ORIFICE	FT 1234A FE 1234A
FLOW ELEMENT, GENERAL	FT 1234A FE 1234A
TURBINE FLOWMETER	FT 1234A FE 1234A
ELECTROMAGNETIC FLOWMETER	FT 1234A FE 1234A
VORTEX FLOWMETER	FT 1234A FE 1234A
PITOT OR ANNUBAR	FT 1234A FE 1234A
CORRIOLIS METER	FT 1234A FE 1234A
POSITIVE DISPLACEMENT METER	FT 1234A FE 1234A
VENTURI TUBE	FT 1234A FE 1234A
VARIABLE AREA FLOWMETER (ROTAMETER)	FI 1234A
BUTTERFLY VALVE	PCV
T-NOZZLE	
FLOW ORIFICE	FT 1234A FE 1234A
ORIFICE WITH TWO TRANSMITTERS	FT 1234B FE 1234A
ORIFICE WITH THREE TRANSMITTERS	FT 1234C FE 1234B FE 1234A

VALVE ACTUATORS INSTRUMENT SYMBOLS (REFER TO ISA-S5.1)

CONTROL VALVE WITH PNEUMATIC ACTUATOR, FAIL CLOSED (FC)	
CONTROL VALVE WITH PNEUMATIC ACTUATOR, FAIL OPEN (FO)	
CONTROL VALVE WITH PNEUMATIC ACTUATOR, FAIL LOCKED, LAST POSITION (FL)	
CONTROL VALVE WITH PNEUMATIC ACTUATOR, AND HANDWHEEL	
ACTUATORS	
3-WAY CONTROL VALVE WITH PNEUMATIC ACTUATOR	
SINGLE OR DOUBLE ACTING PNEUMATIC OR HYDRAULIC ON-OFF VALVE	
ELECTRICAL MOTOR ACTUATED VALVE	
3-WAY SOLENOID VALVE	
2-WAY SOLENOID VALVE	
SELF ACTUATED PRESSURE REDUCING REGULATOR	PCV
SELF ACTUATED BACK PRESSURE REGULATOR	PCV

REMARKS:

FOR DETAILS SEE CHAPTER 7.1.1 SYMBOLS & IDENTIFICATION

INSTRUMENT LINE SYMBOLS (ACCORDING TO ISA-S5.1)

	INSTRUMENT CONNECTION TO PROCESS
///	PNEUMATIC SIGNAL
-----	ELECTRONIC SIGNAL
—o—o—o—o—	INTERNAL SYSTEM LINK (SOFTWARE OR DATA LINK)
—x—x—x—x—	CAPILLARY TUBE
///	ELECTRIC SIGNAL
~ ~ ~ ~	ELECTROMAGNETIC OR SONIC SIGNAL

FUNCTION IDENTIFIERS (REFER TO ISA-S5.1)

Σ	SUM	⊠	HIGH SELECTOR
⊗	MULTIPLY	⊞	LOW SELECTOR
÷	DIVIDE	⊡	HIGH LIMITER
✓	EXTRACT SORT	⊞	LOW LIMITER
△	DIFFERENCE		

ABBREVIATIONS

PV = PROCESS VALUE
RSP = REMOTE SETPOINT

1	VCK	19.03.04	HENS	PTK	22.03.04	AFC	FINAL ISSUE
0	KKP	16.11.01	HENS	PTK	16.11.01	FI	FIRST ISSUE
Rev.	U/P/PS	Name	Date	Name	Date	Status	Kind of Revision
Prepared/Changed		Checked		Approved			
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DISPOSITION <input type="checkbox"/> NO COMMENT <input type="checkbox"/> COMMENTS AS MARKED. FABRICATION CAN PROCEED ACCORDINGLY. REVISED DOCUMENT TO BE ISSUED EITHER FOR REVIEW OR AS FINAL CERTIFIED. HOWEVER ZAGROS WILL CHECK THIS REVISED DOCUMENT FOR PROPER INCORPORATION. <input type="checkbox"/> REJECTED DOCUMENT TO BE REISSUED. <input type="checkbox"/> USE FOR INFORMATION ONLY.				PROJECT : 4th METHANOL PROJECT			
SIGNATURE				DATE		OWNER : CONTRACTOR : DWG. NO. DIG-PI-002 Rev. 1	
ZAGROS REVIEW & COMMENTS DOES NOT ABSOLVE THE VENDOR OF THE RESPONSIBILITY FOR THE CORRECT DESIGN, MANUFACTURING AND OPERATION OF EQUIPMENT.				ZPC PROJ. NO. 40404277 PIDEC PROJ. NO. 1175		DWG. NO. Rev.	
Scales: Original Size:				engineering Lurgi			
Nominations:				LEGENDS			
Basic documents:							
DCC R/C DL-No.				P&I DIAGRAM SHEET 002			
Job names: MEGA METHANOL IRAN				Lurgi Job No. I69666-01		Lurgi Document No. 37102 Rev. 1	
EDV-Ident-No.: Igs7 e:\pipe\6966601\ru				d_37102.pid		005 25.03.04 VCK IGW61	