

APPENDIX A1 (continued)

SIGNAL LEVEL (INPUT, OUTPUT, TYPE)		FUNCTION MODE		ALARM (DCS ALARM)	
I	4-20mA dc	DDC	DIGITAL CONTROL	HHA	HIGH-HIGH ALARM
V	1-5Vdc	SPC	SUPERVISORY COMPUTER CONTROL	HA	HIGH ALARM
S	TYPE "S" THERMOCOUPLE	AI	ANALOG SIGNAL TAKE-IN	LA	LOW ALARM
K	TYPE "K" THERMOCOUPLE	AO	ANALOG SIGNAL OUT	LLA	LOW-LOW ALARM
E	TYPE "E" THERMOCOUPLE	DI	ON-OFF SIGNAL TAKE-IN	RECORDER	
J	TYPE "J" THERMOCOUPLE	DO	ON-OFF SIGNAL OUT	M	MULTIPOINT RECORDER
T	TYPE "T" THERMOCOUPLE	PI	PULSE SIGNAL TAKE-IN	D	DEDICATED RECORDER
PT	RESISTANCE BULB	PO	PULSE SIGNAL OUT	S	SOFT RECORDER
PLS	PULSE				
ON/OFF	CONTACT				
EXTERNAL CONVERTER (AUX INST)		MODE/ALGRTHM		FLOW TOTALIZATION (DCS TTL MODE)	
DIS	DISTRIBUTOR	HC	HAND CONTROL	YES	WHEN FLOW TOTALIZING IS NECESSARY
MV/V	mV/V CONVERTER	RATIO	RATIO SET CONTROL		
PT/V	pt/V CONVERTER	OPR	OPERATOR SET CONTROL		
AS1	ALARM SETTER, 1 SETTING	CAS	REMOTE SET CONTROL (CASCADE)		
AS2	ALARM SETTER, 2 SETTING	COMP	REMOTE SET CONTROL (COMPUTER)		
ISO	ISOLATOR	SELECT	AUTO SELECTING CONTROL		
F/V	PULSE/V CONVERTER	IND	INDICATOR (NO CONTROL FOR ANALOG INPUT)	ANN	HARD ANNUNCIATOR
SCA	SCALER	ALM IND	ALARM INDICATE (NO CONTROL FOR ON-OFF INPUT)	SEQ	SIGNAL TO S/D SEQ CIRCUIT
L	LINEARIZER	XC	OTHER CONTROL	VSI	VARIABLE SIGNAL INDICATING CONTROLLER
UNITS (ENGINEERING UNIT)		TCP	TEMPERATURE COMPENSATE	M-BU	MANUAL BACK-UP INSTRUMENT
ENGINEERING UNIT		PCP	PRESSURE COMPENSATE	A-BU	ANALOG BACK-UP INSTRUMENT
ENGINEERING UNIT (DCS)		b) ALGORITHM (DCS ALGORITHM)			
1) FLOW RATE		P PROPORTIONAL			
a) LIQUID	m <sup>3</sup> /hr	I	INTEGRAL		
b) FUEL OIL	m <sup>3</sup> /day	D	DERIVATIVE		
c) STEAM	Kg/hr	+FB	WITH EXTERNAL FEEDBACK CONTROLLER		
d) GAS & VAPOR	Nm <sup>3</sup> /hr	+BS	WITH BATCH SWITCH CONTROLLER		
2) PRESSURE		NL	NONLINEAR		
a) GAGE	Kg/cm <sup>2</sup> G	TP-ON/OFF	TIME PROPORTIONING ON-OFF CONTROLLER		
b) ABSOLUTE	Kg/cm <sup>2</sup> abs	ON/OFF	ON-OFF CONTROLLER		
3) LOW PRESSURE		ON/OFF-DG	DIFFERENTIAL GAP ON-OFF CONTROLLER		
a) DRAUGHT OR DIFFERENTIAL	mmH <sub>2</sub> O	ON/OFF-3P	THREE POSITION ON-OFF CONTROLLER		
b) ABSOLUTE	mmHgabs	IRY	PRIMARY CONTROLLER OF CASCADE CONTROL LOOP		
4) DENSITY		2ND	SECONDARY CONTROLLER OF CASCADE CONTROL LOOP		
5) LEVEL OR UNITLESS	KG/m <sup>3</sup>				
6) LENGTH	m				
7) ANALYSER	pH				
a) pH	%				
b) OXYGEN	%				
8) TEMPERATURE	.DEG C				
UNITS (ENGINEERING UNIT)					
ENGINEERING UNIT					
ENGINEERING UNIT (DCS)					
1) FLOW RATE					
a) LIQUID	m <sup>3</sup> /hr				
b) FUEL OIL	m <sup>3</sup> /day				
c) STEAM	Kg/hr				
d) GAS & VAPOR	Nm <sup>3</sup> /hr				
2) PRESSURE					
a) GAGE	Kg/cm <sup>2</sup> G				
b) ABSOLUTE	Kg/cm <sup>2</sup> abs				
3) LOW PRESSURE					
a) DRAUGHT OR DIFFERENTIAL	mmH <sub>2</sub> O				
b) ABSOLUTE	mmHgabs				
4) DENSITY					
5) LEVEL OR UNITLESS	KG/m <sup>3</sup>				
6) LENGTH	m				
7) ANALYSER	pH				
a) pH	%				
b) OXYGEN	%				
8) TEMPERATURE	.DEG C				
UNITS (ENGINEERING UNIT)					
ENGINEERING UNIT					
ENGINEERING UNIT (DCS)					
1) FLOW RATE					
a) LIQUID	m <sup>3</sup> /hr				
b) FUEL OIL	m <sup>3</sup> /day				
c) STEAM	Kg/hr				
d) GAS & VAPOR	Nm <sup>3</sup> /hr				
2) PRESSURE					
a) GAGE	Kg/cm <sup>2</sup> G				
b) ABSOLUTE	Kg/cm <sup>2</sup> abs				
3) LOW PRESSURE					
a) DRAUGHT OR DIFFERENTIAL	mmH <sub>2</sub> O				
b) ABSOLUTE	mmHgabs				
4) DENSITY					
5) LEVEL OR UNITLESS	KG/m <sup>3</sup>				
6) LENGTH	m				
7) ANALYSER	pH				
a) pH	%				
b) OXYGEN	%				
8) TEMPERATURE	.DEG C				

WHEN SEQUENCE IS NECESSARY