



### Legend

	Main Line		Filter
	Secondary Line		Pressure membrane
	Auxiliary Line		Utility Air
	Vent Line		Utility Nitrogen
	Flexible Pipe		Air supply
	Electrical Signal		Gas feed
	Pressure Signal	F-	Reactor furnace
	On/Off Actuated Valve	Q-	Totalizer
	Globe Actuated Valve	T-	Trap
	Back Pressure	E-01	Electric Heater
	Pressure reducer	E-02	Oil heater
	Three Way Valve	E-03	Heat exchanger
	On/Off Valve	E-04	Cooling unit
	Check Valve	P-01	Pump
	Gate Valve	R-01	Reactor
	Mass flow controller	S-01	Wax Separator
	Pressure Safety Valve	S-02	LLG Separator
	Bursting Disc	V-01	Wax Vessel
	High Temperature On/Off Valve*	V-02	Condensate Vessel
		V-03	Light Condensate Vessel
		V-04	Ethanol Vessel
		V-05	Purge Vessel
		V-06	Mobile Vessels on Wheels
		V-07	
		V-08	
		GC	Gas chromatograph
		FV	Flow Valve
		LV	Level Valve
		PV	Pressure Valve
		UV	Actuated Valve

\*Valid for all red valves

### Symbols and Notation

	Primary location accessible to operator	Field mounted	Auxiliary location accessible to operator
Discrete instruments			
Shared display Shared control			
Computer function			

  

TI	Temperature Indicator	CE	Concentration Sensor
TT	Temperature Transmitter	CI	Concentration Indicator
TIC	Temperature Indicator and Controller	CT	Concentration Transmitter
PI	Pressure Indicator	TSH	Temperature Switch High
PT	Pressure Transmitter	TSHH	Temperature Switch High High
PIC	Pressure Indicator and Controller	PSH	Pressure Switch High
FI	Flow Indicator	PSHH	Pressure Switch High High
FT	Flow Transmitter	LSH	Level Switch High
FIC	Flow Indicator and Controller	LSL	Level Switch Low
LI	Level Indicator	CSH	Concentration Switch High
LT	Level Transmitter	PDT	Pressure Differential Transmitter
LIC	Level Indicator and Controller	HS	Manual Switch

Index	Date	Modifications	Technician	Check	Approval
1	01/2018	Revisione P&ID preliminare	Ing. Tinelli	Ing. Ghelli	Prof. Ing. Visconti

**POLITECNICO MILANO 1863**

**erc**

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