

ABBREVIATIONS USED IN MEP (HVAC, PHE, ELECTRICAL) ENGINEERING

	A	
1.	AAV	Automatic Air Vent
2.	AC	Air Conditioning
3.	AC	Alternate Current
4.	abs.	Absolute
5.	ACD	Automatic Control Damper
6.	AD	Access Door
7.	ADC	Air Diffusion Council
8.	ADP	Apparatus Dew Point
9.	ADPI	Air Diffusion Performance Index
10.	AF	Air Foil
11.	AFD	Adjustable Frequency Drive
12.	AFF	Above Finished Floor
13.	AFG	Above Finished Grade
14.	AHJ	Authority Having Jurisdiction
15.	AHU	Air Handling Unit
16.	ACCU	Air Cooled Condensing Unit
17.	ACPH	Air Change Per Hour
18.	AFD	Air Flow Diagram
19.	AI	Analog Input
20.	AISC	American Institute of Steel Construction
21.	ALARP	As Low As Reasonably Possible
22.	AMCA	Air Movement and Control Association Inc.
23.	ANSI	American National Standards Institute
24.	AO	Analog Output

25.	AP	Access Panel
26.	API	American Petroleum Institute
27.	ARI	Air Conditioning and Refrigeration Institute
28.	AS	Air Separator
29.	ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
30.	ASME	American Society of Mechanical Engineers
31.	ASTM	American Society for Testing and Materials
32.	ATC	Automatic Temperature Control
33.	ATEX	ATmospheres EXplosible
34.	ATM	Atmosphere
35.	ATU	Air Terminal Unit
36.	AUX	Auxiliary
37.	AVM	Anti Vibration Mounting
38.	AWG	American Wire Gauge
39.	AWS	American Welding Society
	B	
40.	BAC	Building Automation and Control
41.	BAS	Building Automation System
42.	BBD	Boiler Blow Down
43.	BC	Backward Curved (Fan blade)
44.	BCU	Blower Coil Unit
45.	BD	Balcony Drain
46.	BDD	Back Draft Damper
47.	BEP	Best Efficiency Point
48.	BF	Bypass Factor
49.	BF	Bag Filter
50.	BF	Boiler Feed

51.	BHP	Brake Horse Power
52.	BI	Backward Included (Fan Blade)
53.	BIM	Building Information Model
54.	BMS	Building Management System
55.	BOD	Bottom of Duct
56.	BOE	Bottom of Equipment
57.	BOM	Bill of Material
58.	BOP	Bottom of Pipe
59.	BOQ	Bill of Quantity
60.	BOSIET	Basic Offshore Safety Induction and Emergency Training
61.	BP	Booster Pump
62.	BP	Back Pressure
63.	BS	British Standard
64.	BSP	British Standard Pipe (thread)
65.	BTU	British Thermal Unit
66.	BV	Butterfly Valve
	C	
67.	CADD	Computer-aided Design and Drafting
68.	CAFS	Compressed Air Foam System
69.	CAPEX	CAPital EXpenditure
70.	CAV	Constant Air Volume
71.	CB	Circuit Breaker
72.	CC	Cooling Coil
73.	CCP	Coordinated Ceiling Plan
74.	CCR	Central Control Room
75.	CD	Condensate Drain
76.	CDD	Cooling Degree Day

77.	CDL	Condensate Drain Line
78.	CDP	Condensate Drain Pipe
79.	CF	Contact Factor
80.	CFC	Chlorofluorocarbon
81.	CFD	Computational Fluid Dynamics
82.	CFM	Cubic Feet per Minute
83.	CFS	Cubic Feet per Second
84.	CFU	Chemical Filter Unit
85.	CHW	Chilled Water
86.	CHWP	Chilled Water Pump
87.	CHWR	Chilled Water Return
88.	CHWS	Chilled Water Supply
89.	CIBSE	Chartered Institution of Building Services Engineers
90.	CL	Centre Line
91.	CL	Cover Level
92.	CLF	Cooling Load Factor
93.	CMH	Cubic Meter per Hour
94.	CO	Clean Out
95.	CO	Carbon Monoxide
96.	COG	Centre of Gravity
97.	COP	Coefficient of Performance
98.	COP	Centre of Pipe
99.	CPP	Central Processing Platform
100.	CPU	Central Processing Unit
101.	CT	Cooling Tower
102.	CTR	Cost Time Resource
103.	CU	Cabin Unit

104.	CU	Condensing Unit
105.	CUH	Cabin Unit Heater
106.	CV	Check Valve
107.	CVU	Constant Volume Unit
108.	CW	Cold Water
109.	C/W	Complete With
110.	CWR	Condenser Water Return
111.	CWS	Condenser Water Supply
	D	
112.	DBT	Dry Bulb Temperature
113.	DB	Distribution Board
114.	DC	Direct Current
115.	DDC	Direct Digital Control
116.	DCS	Distributed Control System
117.	DFT	Dry Film Thickness
118.	DG	Diesel Generator
119.	D&ID	Ducting and Instrumentation Diagram
120.	DI	Digital Input
121.	DIN	Deutsches Institute Fur Normung (Germany Institute of Normative)
122.	DN	Down
123.	DNV	Det Norske Veritas
124.	DO	Digital Output
125.	DOE	Department of Energy
126.	DP	Differential Pressure
127.	DPT	Differential Pressure Transmitter
128.	DPT	Dew Point Temperature
129.	DRV	Double Regulating Valve

130.	DS	Data Sheet
131.	DSA	Double Strength Sheet Glass
132.	DWDI	Double Width Double Inlet
133.	DX	Direct Expansion
	E	
134.	EAT	Entering Air Temperature
135.	EAL	Exhaust Air Louver
136.	EC	European Commission
137.	EDG	Emergency Diesel Generator
138.	EDH	Electric Duct Heater
139.	EER	Energy Efficient Ratio
140.	EEV	Electronic Expansion Valve
141.	EF	Exhaust Fan
142.	EMC	Electro Magnetic Compatibility
143.	EMS	Energy Management System
144.	EN	European Norm
145.	EPIC	Engineering, Procurement, Installation and commissioning
146.	EPCI	Engineering, Procurement, Construction and Installation
147.	ETQ	Engineering Technical Query
148.	ETS	Energy Transfer Station
149.	ESD	Emergency Shut Down
150.	ESDD	Equivalent Salt Deposit Density
151.	ESP	External Static Pressure
152.	ET	Expansion Tank
153.	EU	European Union
154.	EWH	Electric Water Heater
155.	EWT	Entering Water Temperature

156.	EXH	Exhaust
	F	
157.	FA	Fire Alarm
158.	FACP	Fire Alarm Control Panel
159.	FAS	Fire Alarm System
160.	FAHU	Fresh Air Handling Unit
161.	FAT	Factory Acceptance Test
162.	FC	Flexible Connection
163.	FC	Fail Close
164.	FC	Forward Curved (Fan Blade)
165.	FCO	Floor Clean Out
166.	FCU	Fan Coil Unit
167.	FD	Floor Drain
168.	FD	Fire Damper
169.	FEC	Fire Extinguisher Cabinet
170.	FEED	Front End Engineering Design
171.	FF	Firefighting
172.	FFL	Finished Floor Level
173.	F&G	Fire and Gas
174.	FH	Fire Hydrant
175.	FHC	Fire Hose Cabinet
176.	FIM	Free Issued Material
177.	FM	Flow Meter
178.	FM	Facilities Management
179.	FMECA	Failure Mode, Effect and Criticality Analysis
180.	FMS	Facility Management System
181.	FO	Fail Open

182.	FPI	Fins per Inch
183.	FPM	Feet per Minute
184.	FPS	Feet per Second
185.	FPSO	Floating Production Storage and Offloading
186.	FRP	Fiberglass Reinforced Plastic
187.	FS	Flow Switch
188.	FSO	Floating Storage Offloading
189.	FU	Fixture Unit
190.	FW	Feed Water
	G	
191.	GA	General Arrangement
192.	GAD	General Arrangement Diagram
193.	GI	Galvanized Iron
194.	GIS	Gas Insulated Switchgear
195.	GMT	Greenwich Mean Time
196.	GPM	Gallon per Minute
197.	GS	Galvanized Steel
198.	GSS	Galvanized Steel Sheet
199.	GT	Gas Turbine
200.	GT	Gully Trap
201.	GUI	Graphical User Interface
202.	GV	Gate Valve
203.	GWP	Global Warming Potential
	H	
204.	HAP	Hourly Analysis Program
205.	HAT	Highest Astronomical Tide
206.	HAZID	Hazard Identification

207.	HAZOP	Hazard and Operability
208.	HB	Hose Bibb
209.	HC	Heating Coil
210.	HC	Hydrocarbon
211.	HCFC	Hydrochlorofluorocarbon
212.	HFO	Hydrofluoroolefins
213.	HDPE	High Density Poly Ethylene
214.	HEPA	High Efficiency Particulate Air
215.	HMI	Human Machine Interface
216.	HSE	Health, Safety and Environment
217.	HP	High Pressure
218.	HP	Heat Pump
219.	HP	Heat Pipe
220.	HRU	Heat Recovery Unit
221.	HRW	Heat Recovery Wheel
222.	HSEIA	Health, Safety and Environmental Impact Assessment
223.	HUET	Helicopter Underwater Escape Training
224.	HV	High Voltage
225.	HVAC	High Voltage Alternate Current
226.	HVCA	Heating and Ventilating Contractors' Association
227.	HVDC	High Voltage Direct Current
228.	HW	Hot Water
229.	HWR	Hot Water Return
230.	HWS	Hot Water Supply
231.	HWT	Hot Water Tank
	I	
232.	IAQ	Indoor Air Quality

233.	IACS	International Association of Classification Societies
234.	ICMS	Integrated Control and Monitoring Station
235.	ID	Inner (or Inside) Diameter
236.	IDC	Inter Discipline Check
237.	IEC	International Electrotechnical Commission
238.	IFA	Issued for Approval
239.	IFC	Issued for Construction
240.	IFI	Issued for Information
241.	IG	Inert Gas
242.	IL	Invert Level
243.	IMO	International Maritime Organization
244.	IOM	Installation, Operation and Maintenance (Manual)
245.	I/O	Input & Output
246.	IP	Internet Protocol
247.	IP	Ingress Protection
248.	IP	Institute of Petroleum
249.	I-P	Inch Pound
250.	ITP	Inspection and Test Plan
251.	ISA	International Society of Automation
252.	ISO	International Organization of Standardization
253.	ISHRAE	The Indian Society of Heating, Refrigerating and Air Conditioning Engineers
	J	
254.	JB	Junction Box
	K	
255.	KOM	Kick of Meeting
256.	kV	Kilo Volts
	L	

257.	LAN	Local Area Network
258.	LAT	Leaving Air Temperature
259.	LAT	Lowest Astronomical Tide
260.	LAT	Latitude
261.	LCP	Local Control Panel
262.	LCS	Local Control Station
263.	LD	Linear Diffuser
264.	LED	Light Emitting Diode
265.	LER	Local Equipment Room
266.	LL	Low Level
267.	LQ	Living Quarters
268.	LMTD	Log Mean Temperature Difference
269.	LOI	Letter of Intent
270.	LOLER	Lifting Operations and Lifting Equipment Regulations
271.	LP	Low Pressure
272.	LPS	Liter per Second
273.	LRA	Locked Rotor Amperage
274.	LS	Level Sensor
275.	LSD	Linear Slot Diffuser
276.	LTl	Lost Time Incident
277.	LU	Loading Unit
278.	LV	Low Voltage
279.	LVD	Low Voltage Directive
280.	LVR	Louver
281.	LWT	Leaving Water Temperature
	M	
282.	MA	Make-up Air

283.	MAT	Mixed Air Temperature
284.	MAU	Makeup Air Unit
285.	MAX	Maximum
286.	MC	Mechanical Completion
287.	MCB	Miniature Circuit Breaker
288.	MCC	Motor Control Center
289.	MCC	Maximum Continuous Current
290.	MCCB	Moulded Case Circuit Breaker
291.	MCT	Multi Cable Transit
292.	MD	Machinery Directive
293.	MDB	Main Distribution Board
294.	MEP	Mechanical, Electrical and Plumbing
295.	MERV	Mean Efficiency Reporting Value
296.	MFD	Motorized Fire Damper
297.	MH	Manhole
298.	MIN	Minimum
299.	MTBF	Mean Time Between Failure
300.	MTBO	Mean Time Between Overhaul
301.	MTTO	Mean Time to Overhaul
302.	MTTR	Mean Time To Repair
303.	MED	Marine Equipment Directive
304.	MEL	Master Equipment List
305.	MODU	Mobile Offshore Drilling Unit
306.	MOV	Motor Operated Valve
307.	MR	Material Requisition
308.	MS	Mild Steel
309.	MSL	Mean Seal Level

310.	MTO	Material Take Off
	N	
311.	N/A	Not Applicable
312.	NA	Not Available
313.	NACE	National Association of Corrosion Engineers
314.	NC	Noise Criteria
315.	NC	Normally Closed
316.	NDA	Non-Disclosure Agreement
317.	NDE	Non-Destructive Examination
318.	NEMA	National Electrical Manufacturers Association
319.	NEN	Dutch Norm
320.	NFPA	National Fire Protection Association
321.	NO	Normally Open
322.	NoBo	Notified Body
323.	NORSOK	Norwegian Offshore Standard
324.	NPL	Neutral Pressure Level
325.	NPS	Nominal Pipe Size
326.	NPSH	Net Positive Suction Head
327.	NRD	Non Return Damper
328.	NRV	Non Return Valve
329.	NTS	Not to Scale
	O	
330.	OA	Outside Air
331.	OAT	Outside Air Temperature
332.	OD	Outside (or Outer) Diameter
333.	ODP	Ozone Depletion Potential
334.	OF	Overflow

335.	OHT	Overhead Tank
336.	OPEX	OPERating EXpenditure
337.	OSS	Offshore Substation
338.	OS&Y	Outside Screw & Yoke
	P	
339.	PAC	Precision Air Conditioning
340.	PB	Push Button
341.	PCR	Pitch Circle Diameter
342.	PCHE	Printed Circuit Heat Exchanger
343.	PDAH	Pressure Differential Alarm High
344.	PDAL	Pressure Differential Alarm Low
345.	PDMS	Plant Design Management System
346.	PDP	Positive Displacement Pump
347.	PDS	Plant Design System
348.	PDS	Pressure Differential Switch
349.	PED	Pressure Equipment Directive
350.	PEM	Project Engineering Manager
351.	PHE	Plate Heat Exchanger
352.	P&ID	Piping and Instrumentation Diagram
353.	PID	Pre Insulated Duct
354.	PF	Pre Filter
355.	PF	Power Factor
356.	PFP	Passive Fire Protection
357.	PG	Pressure Gauge
358.	PL	Punch List
359.	PL	Packing List
360.	PM	Project Manager

361.	PO	Purchase Order
362.	PoB	Peron on Board
363.	PP	Process Platform
364.	PPM	Parts per Million
365.	PPR	Polypropylene Random Copolymer
366.	PR	Purchase Requisition
367.	PRD	Pressure Relief Damper
368.	PRV	Pressure Reducing Valve
369.	PSI	Pound per Square Inch
370.	PSV	Pressure Safety Valve
371.	PTM	Project Technical Manager
372.	PU	Package Unit
373.	PUF	Polyurethane Foam
374.	PUF	Power Utilization Factor
375.	PV	Plug Valve
376.	PVC	Poly Vinyl Chloride
	Q	
377.	QA	Quality Assurance
378.	QC	Quality Control
379.	QMS	Quality Management System
380.	QP	Quality Procedure
381.	QTY	Quantity
	R	
382.	RA	Return Air
383.	RAD	Return Air Duct
384.	RAD	Return Air Diffuser
385.	RAG	Return Air Grille

386.	RAM	Reliability, Availability, Maintainability
387.	RAM	Random Access Memory
388.	RC	Room Criteria
389.	RC	Reinforced Concrete
390.	RCP	Reflected Ceiling Plan
391.	RD	Roof Drain
392.	RFQ	Request for Quote
393.	RH	Relative Humidity
394.	RLA	Rated Load Amperage
395.	r.m.s.	Root Mean Square
396.	RP	Riser Platform
397.	r.p.m.	Revolutions per minutes
398.	R/S	Run/Stopped
399.	RSA	Rolled Steel Angle
400.	RTU	Roof Top Unit
401.	RV	Relief Valve
402.	RWP	Rain Water Pipe
	S	
403.	SA	Supply Air
404.	SAD	Supply Air Duct
405.	SAD	Supply Air Diffuser
406.	SAG	Supply Air Grille
407.	SAT	Site Acceptance Test
408.	SAT	Supply Air Temperature
409.	SCADA	Supervisory Control and Data Acquisition
410.	SCH	Schedule
411.	SCT	Saturated Condensing Temperature

412.	SD	Smoke Damper
413.	SD	Smoke Detector
414.	SDR	Supplier Document Register
415.	SDR	Standard Dimension Ratio
416.	SE	Smoke Exhaust (or Extract)
417.	SEER	Seasonal Energy Efficiency Ratio
418.	SEF	Smoke Exhaust(or Extract) Fan
419.	SF	Service Factor
420.	SF6	Sulfur Hexa Fluoride (Inert gas used in GIS equipment for insulation purpose)
421.	SG	Specific Gravity
422.	SHC	Sensible Heat Capacity
423.	SI	International System of Units
424.	SIL	Safety Integrity Level
425.	SMACNA	Sheet Metal & Air Conditioning Contractors' National Association
426.	SOD	Shut Off Damper
427.	SOLAS	Safety of Life at Sea
428.	SOS	Scope of Supply
429.	SOW	Scope of Work
430.	SPIR	Spare Parts and Interchangeability Record
431.	SP	Static Pressure
432.	SP	Soil Pipe
433.	SS	Stainless Steel
434.	SS	Substation
435.	STA	Supplier to Advise
436.	SWD	Storm Water Drain
437.	SWH	Significant Wave Height
438.	SWL	Safe Working Load

439.	SWP	Shallow Water Platform
440.	SWSI	Single Width Single Inlet
	T	
441.	TAB	Testing, Adjusting and Balancing
442.	TBC	To be Confirmed
443.	TBDL	To be Decided Later
444.	TBE	Technical Bid Evaluation
445.	TCP	Transmission Control Protocol
446.	TDR	Technical Document Register
447.	TEFC	Totally Enclosed Fan Cooled
448.	TEG	Tri-ethylene Glycol
449.	TEL	Telephone
450.	TEMP	Temperature
451.	TER	Telecom Equipment Room
452.	TERM	Terminal
453.	TEV/TXV	Thermostatic Expansion Valve
454.	TOS	Top of Steel
455.	TP	Test Port
456.	TP	Three Phase
457.	TPA	Third Party Agency
458.	TPN	Tripole & Neutral (Also Three Phase & Neutral)
459.	TQ	Technical Query
460.	TR	Ton of Refrigeration
461.	TR	Temporary Refuge
462.	TR	Transformer
463.	TS	Technical Specification
464.	TSP	Total Static Pressure

465.	TT	Temperature Transmitter
466.	TV	Television
467.	TYP	Typical
	U	
468.	UCP	Unit Control Panel
469.	UFD	Utility Flow Diagram
470.	UG	Under Ground
471.	UL	Underwriters' Laboratories
472.	ULPA	Ultra-Low Particulate Air
473.	UOM	Unit of Measurement
474.	uPVC	Unplasticized Polyvinyl Chloride
475.	UPS	Uninterrupted Power Supply
476.	UV	Ultra Violet
	V	
477.	VAV	Variable Air Volume
478.	VCD	Volume Control Damper
479.	VDT	Video (or Visual) Display Terminal
480.	VFC	Voltage Free Contact
481.	VFD	Variable Frequency Drive
482.	VP	Vent Pipe
483.	VRF	Variable Refrigerant Flow
484.	VRV	Variable Refrigerant Volume
485.	VSD	Variable Speed Drive
486.	VTa	Vendor to Advice
	W	
487.	WB	Wash Basin
488.	WBT	Wet Bulb Temperature

489.	WC	Water Column
490.	WC	Water Closet
491.	WCR	Weight Control Report
492.	WG	Water Gauge
493.	WHA	Water Hammer Arrestor
494.	WHP	Well Head Platform
495.	WP	Waste Pipe
496.	WP	Weather Proof
497.	WPO	Wind Park Owner
498.	WPQR	Welding Procedure Qualification Record
	X	
499.	XLPE	Cross-linked Polyethylene
	Z	
500.	ZCV	Zone Control Valve