

# COMMON ABBREVIATIONS AND ACRONYMS

<b>AC</b> —alternating current	<b>FFT</b> —fast Fourier transform	<b>OI</b> —operator interface
<b>A/D</b> —analog-to-digital	<b>FIA</b> —flow injection analysis	<b>OOD</b> —object oriented design
<b>AEC</b> —architect, engineer and constructor	<b>FID</b> —flame ionization detector	<b>OOP</b> —object oriented programming
<b>AI</b> —artificial intelligence	<b>FIP</b> —factory information protocol	<b>OSI</b> —open systems interconnection
<b>ANDF</b> —architecture neutral distribution format	<b>FMS</b> —flexible manufacturing system	<b>P&amp;ID</b> —piping and instrumentation diagram
<b>ASCI</b> —application specific integrated circuit	<b>FS</b> —full scale	<b>PB</b> —proportional band
<b>API</b> —application programming interface	<b>FTIR</b> —Fourier transform infrared	<b>PC</b> —personal computer or programmable controller
<b>ATG</b> —automatic tank gauge	<b>GC</b> —gas chromatograph	<b>PD</b> —positive displacement
<b>BCD</b> —binary coded decimal	<b>GPIB</b> —general purpose interface bus	<b>P/I</b> —pneumatic-to-current
<b>BPS</b> —bits per second	<b>GUI</b> —graphical user interface	<b>PI</b> —proportional-integral
<b>CAD</b> —computer-aided design	<b>HCFC</b> —hydrochlorofluorocarbon	<b>PID</b> —proportional-integral-derivative
<b>CAE</b> —computer-aided engineering	<b>HPLC</b> —high pressure liquid chromatography	<b>PLC</b> —programmable logic controller
<b>CAM</b> —computer-aided manufacturing	<b>HPV</b> —high performance vane	<b>PROM</b> —programmable logic controller
<b>CASE</b> —computer-aided software engineering	<b>HTG</b> —hydrostatic tank gauge	<b>PSA</b> —pressure sensitive adhesive
<b>C/C</b> —center-to-center	<b>IC</b> —integrated circuit	<b>PRV</b> —pressure reducing valve
<b>CFC</b> —chlorofluorocarbon	<b>I/O</b> —input/output	<b>PV</b> —process variable or process value
<b>CIE</b> —computer integrated enterprise	<b>ID</b> —inside diameter	<b>QC</b> —quality control
<b>CIM</b> —computer integrated manufacturing	<b>I/P</b> —current-to-pneumatic	<b>R&amp;D</b> —research and development
<b>CIP</b> —clean in place	<b>IR</b> —infrared	<b>RAM</b> —random access memory
<b>CJC</b> —cold junction compensation	<b>IS</b> —intrinsic safety	<b>RF</b> —radio frequency
<b>CMOS</b> —complementary metal oxide semi-conductor	<b>JIT</b> —just-in-time	<b>RFI</b> —radio frequency interference
<b>CNC</b> —computer numerical control	<b>LAN</b> —local area network	<b>RH</b> —relative humidity
<b>CPU</b> —central processing unit	<b>LC</b> —liquid chromatograph	<b>RMS</b> —root mean square
<b>CRC</b> —cyclic redundancy check	<b>LCD</b> —liquid crystal display	<b>ROM</b> —read-only memory
<b>CRT</b> —cathode ray tube	<b>LCL</b> —lower control unit	<b>RSS</b> —root sum squared
<b>CSA</b> —Canadian Standards Association	<b>LEDES</b> —linear discrimination expert system	<b>RTD</b> —resistance temperature detector
<b>CT</b> —current transformer	<b>LED</b> —light emitting diode	<b>RTU</b> —remote terminal unit
<b>D/A</b> —digital-to-analog	<b>LEL</b> —lower explosive limit	<b>RV</b> —relief valve
<b>DAS</b> —data acquisitions system	<b>LEMS</b> —laboratory information management system	<b>SCADA</b> —supervisory control and data acquisition
<b>DC</b> —direct current	<b>LP</b> —linear programming	<b>SCR</b> —silicon controlled rectifier
<b>DCE</b> —distributed computing environment	<b>MACT</b> —maximum achievable control technology	<b>SFC</b> —supercritical fluid chromatography
<b>DCS</b> —distributed control system	<b>MAP</b> —manufacturing automation protocol	<b>SNA</b> —systems networking architecture
<b>DES</b> —discrimination expert system	<b>MGO</b> —magnesium oxide	<b>SP</b> —set point
<b>DIN</b> —Deutsches Institute fur Normung	<b>MIPS</b> —millions instructions per second	<b>SPC</b> —statistical process control
<b>DMA</b> —direct memory access	<b>MIS</b> —management information services	<b>SPDT</b> —single pole, double throw
<b>DNC</b> —direct numerical control	<b>MMI</b> —man machine interface	<b>SQC</b> —statistical quality control
<b>DOS</b> —disk operating system	<b>MMS</b> —manufacturing message system	<b>SSR</b> —solid state relay
<b>DP</b> —differential pressure	<b>MTBF</b> —mean time between failures	<b>SSC</b> —single station controller
<b>DPDT</b> —double pole, double throw	<b>MTTD</b> —mean time to detect	<b>SV</b> —set point value
<b>DPM</b> —digital panel meter	<b>MTTF</b> —mean time to fail	<b>T/C</b> —thermocouple
<b>DRAM</b> —dynamic random access memory	<b>MODEM</b> —modulating/demodulating module	<b>TCD</b> —thermal conductivity detector
<b>EHL</b> —effective heated length	<b>MPCS</b> —manufacturing planning and control software	<b>THD</b> —total harmonic distortion
<b>EMI</b> —electro magnetic interference	<b>MRP</b> —material requirements planning	<b>TOP</b> —technical office protocol
<b>EMS</b> —expanded memory specification	<b>MRP II</b> —manufacturing resource planning	<b>TPM</b> —total predictive maintenance
<b>EPA</b> —enhanced performance architecture	<b>NC</b> —numerical control	<b>TQC</b> —total quality control
<b>EPROM</b> —erasable, programmable read-only memory	<b>NDC</b> —normally closed	<b>TVSS</b> —transient voltage surge suppressor
<b>ERP</b> —enterprise resource planning	<b>NDIR</b> —non-dispersive infrared	<b>UCL</b> —upper control limit
<b>ES</b> —expert system	<b>NIR</b> —near infrared	<b>UPS</b> —uninterruptible power supply
<b>EVOP</b> —evolutionary operations	<b>NO</b> —normally open	<b>UV</b> —ultraviolet
<b>EWMA</b> —exponentially weighted moving average	<b>OCR</b> —optical character recognition	<b>VDT</b> —video display terminal
<b>FCS</b> —field control station	<b>OD</b> —outside diameter	<b>VFD</b> —variable frequency drive
	<b>OEM</b> —original equipment manufacturer	<b>VME</b> —virtual memory executive system
		<b>WAN</b> —wide area network
		<b>WIP</b> —work-in-process