

 PVL CATEGORIES FOR ENGINEERING PROJECTS	QFM-DT-054 Page 1 of 13
---	-----------------------------------

1.0 MECHANICAL MATERIALS

1.1 Equipment Packages

1.1.1 Diesel Generator

1.1.2 Diesel Engine

1.1.3 Hydrocyclone

1.1.4 Chlorination

1.1.5 Desalination

1.1.5.1 Desalination - Gas Fired

1.1.6 Water Maker

1.1.7 Dehydration

1.1.8 Chemical Injection

1.1.8.1 Chemical

1.1.8.2 Methanol

1.1.9 Nitrogen Production

1.1.10 Separator / Coalescer

1.1.11 Filter

1.1.12 Fired Heater

1.1.13 Hot Oil

1.1.14 Burners

1.1.15 Electro-chlorination

1.1.16 Flare

1.1.17 Sewage Treatment

1.1.18 Process

1.1.19 Instrument Air Drier

1.1.20 Steam Desuperheater

1.1.21 Waterbath Heater

1.1.22 Fuel Treatment

1.1.23 Deaerator - Boiler Water (Ion Exchange-Type)

1.1.24 Produced Water Treatment Package

1.2 Vessels

1.2.1 Pressure Vessel and Column

1.2.2 Pressure Vessel and Column (Heavy Wall)

1.2.3 Heat Exchanger

1.2.3.1 Shell and Tube Heat Exchanger

1.2.3.2 Shell and Tube Condenser

1.2.3.3 High Pressure Heat Exchanger

1.2.3.4 Twisted-Tube Heat Exchanger

1.2.3.5 Brazed Aluminum Heat Exchanger

1.2.3.6 Air-Cooled Heat Exchanger (Air Fin Cooled)

1.2.3.7 Plate Frame Heat Exchanger

1.2.3.8 Printed Circuit Heat Exchanger

1.2.3.9 Slugcatcher

1.2.3.10 Separator (3-phase)

- 1.3 Air Coolers
- 1.4 Air Filter
- 1.5 Strainer
- 1.6 Silencer
- 1.7 Dampener
- 1.8 Vessel-Mounted Equipment
 - 1.8.1 Vessel Closure
 - 1.8.2 Gauge Hatch
 - 1.8.3 Tank Strapping
 - 1.8.4 Flame Arrestor
- 1.9 Tank
 - 1.9.1 Storage
 - 1.9.2 Double-Skinned, Bunded Tank
- 1.10 Tank Appurtenance
 - 1.10.1 Floating Roof Tank Roof Seal
 - 1.10.2 Floating Roof Tank Roof Drain
 - 1.10.3 Internal Floating Cover
 - 1.10.4 Geodesic Dome Tank Roof (Aluminum)
 - 1.10.5 Venting System
- 1.11 Vessel and Tank Plate
- 1.12 Loading Arm
 - 1.12.1 Marine
 - 1.12.2 Truck
- 1.13 Crane
 - 1.13.1 Overhead
 - 1.13.2 Electric Overhead Traveling (EOT)
 - 1.13.3 Pedestal
 - 1.13.4 Tower
 - 1.13.5 Goliath / Gantry / Jib
 - 1.13.6 Mobile
- 1.14 Hoist
 - 1.14.1 Manual / Pneumatic
 - 1.14.2 Electric
- 1.15 Forklift
- 1.16 Elevators
- 1.17 Blower
 - 1.17.1 Centrifugal
 - 1.17.2 Rotary Positive Displacement
- 1.18 Fan
- 2.0 PIPING MATERIALS
- 2.1 Valves
 - 2.1.1 Gate
 - 2.1.2 Globe
 - 2.1.3 Gate - API 6A
 - 2.1.4 Butterfly
 - 2.1.5 Butterfly - Double-Offset
 - 2.1.6 Butterfly - Triple-Offset
 - 2.1.7 Ball
 - 2.1.8 Check
 - 2.1.9 Plug

- 2.1.10 Angle and Extended Body
- 2.1.11 Stainless Steel
- 2.1.12 Through-Conduit
- 2.1.13 Anti-Surge
- 2.1.14 Integral Block-and-Bleed (for Fittings)
- 2.1.15 Tank Vent
- 2.2 Valve Interlocks - Mechanical
- 2.3 Pipe and Fittings - Incoloy
- 2.4 Pipe and Fittings - Cu-Ni
- 2.5 Fittings - Stainless Steel, Butt-weld
- 2.6 Nipples and Nippoflanges - Carbon Steel
- 2.7 Corrosion Coupons and Probes
- 2.8 Piping and Tubing
 - 2.8.1 Carbon Steel and Ferritic - 6" and Below
 - 2.8.2 Stainless Steel and Specialty Alloy - 6" and Below
 - 2.8.3 Carbon Steel and Ferritic - Greater than 6"
 - 2.8.4 Stainless Steel and Specialty Alloy - Greater than 6"
 - 2.8.5 Cement-Lined
- 2.9 Fittings - Butt-weld, Carbon Steel and Ferritic
- 2.10 Forged Flanges, Fittings & Reinforced Branch Connections - Carbon Steel & Ferritic
- 2.11 Forged Flanges, Fittings & Reinforced Branch Connections - Stainless Steel and Specialty Alloy
- 2.12 GRE / GRP Pipe and Fittings
- 2.13 UPVC Drainage System
- 2.14 Steam Traps and Strainer
- 2.15 Steam Eductor / Ejector
- 2.16 Rupture Disc
- 2.17 Gaskets and Packing
- 2.18 Insulation Gasket - GRE
- 2.19 Spring Hangers and Pipe Supports
- 2.20 Expansion Joints
- 2.21 Stud Bolts and Nuts
- 2.22 Spectacle Blinds
- 2.23 Thermal Insulation
- 2.24 Hub Connectors
- 3.0 Instrument Materials
- 3.1 Manual Call Point
- 3.2 Switch - Limit
- 3.3 Logic Instrument - Pneumatic
- 3.4 Pig Signal
- 3.5 Terminal - Wiring
- 3.6 Detector - High-Sensitivity, Smoke
- 3.7 Detector - Smoke / Heat
- 3.8 Plug - Fusible
- 3.9 Cable - Optical Fibre
- 3.10 Cable Ladder / Tray
- 3.11 Junction Box - (Foundation Fieldbus) with Field Barrier
- 3.12 Transmitter - Pressure / Differential Pressure, SMART
- 3.13 Transmitter - Pressure / Differential Pressure, Foundation Fieldbus

- 3.14 Gauge - Pressure / Differential Pressure
- 3.15 Pressure Switch - Electric
- 3.16 Pressure Switch - Pressure Pilot, Block and Bleed, Pneumatic
- 3.17 Pressure Regulator - Pneumatic
- 3.18 Pressure Regulator
- 3.19 Orifice Plate
- 3.20 Orifice Plate and Assembly
- 3.21 Meter
 - 3.21.1 Mass Flow - Coriolis
 - 3.21.2 Vortex Flow
 - 3.21.3 Magnetic Flow
 - 3.21.4 Ultrasonic Flow
 - 3.21.5 Turbine Flow
 - 3.21.6 Pitot Tube - Flow, Averaging
 - 3.21.7 Thermal Mass Flow
 - 3.21.8 Positive Displacement Flow
 - 3.21.9 Multiphase Flow - Non-Nuclear
 - 3.21.10 Multiphase Flow - Nuclear
 - 3.21.11 Variable Area Flow (Rotameter)
 - 3.21.12 Electromagnetic Flow
- 3.22 Metering (Custody or Fiscal Transfer) Package with Prover
- 3.23 Multi-Phase Metering Package
- 3.24 Flow Switch
- 3.25 Meter Prover Package
- 3.26 Transmitter - Temperature, SMART
- 3.27 Transmitter - Temperature, Foundation Fieldbus
- 3.28 Temperature Gauge
- 3.29 Thermowell
- 3.30 Temperature Element - Thermocouple / Resistance-Type Device (RTD)
- 3.31 Temperature Switch
- 3.32 Level Switch - Float-Type
- 3.33 Level Gauge - Magnetic, Glass
- 3.34 Level Gauge - Glasses & Cocks
- 3.35 Transmitter - Level, Displacer-Type
- 3.36 Tank Gauging System
- 3.37 Transmitter - Level, Radar
- 3.38 Transmitter - Level, Ultrasonic
- 3.39 Transmitter - Level, Capacitance
- 3.41 Distributed Control System (DCS) (inclusive of all associated, system-related software and hardware components (including telemetry subsystem, programmable logic controller (PLC))
- 3.42 Programmable Logic Controller (PLC) (inclusive of all associated, system-related software and hardware components)
- 3.43 Human-Machine Interface (HMI) Software Package
- 3.44 Telemetry System
- 3.45 Emergency Shutdown (ESD) / Fire & Gas (F&G) System, Triple-Module Redundant, SIL 3 (inclusive of all associated, system-related software and hardware components)

- 3.46 Analyzer Packages (inclusive of all associated, system-related software and hardware components, housings / enclosures, and sample runs / subsystems)
 - 3.46.1 Chromatograph
 - 3.46.2 Oxygen
 - 3.46.3 pH
 - 3.46.4 Moisture
 - 3.46.5 Density
 - 3.46.6 Chlorine
 - 3.46.7 Conductivity
 - 3.46.8 Water-in-Oil
 - 3.46.9 Basic Sediment and Water (BS&W)
 - 3.46.10 Oil-in-Water
 - 3.46.11 Turbidity
 - 3.46.12 Water Quality
 - 3.46.13 Emission Gas
 - 3.46.14 Air Quality
 - 3.46.15 Weather and Climate
 - 3.46.16 Hydrogen
 - 3.46.17 Radiation
- 3.47 Valve
 - 3.47.1 Safety / Relief
 - 3.47.2 Safety / Relief - Tank
 - 3.47.3 Control - Gate / Globe
 - 3.47.4 Control - Ball
 - 3.47.5 Control - Butterfly
 - 3.47.6 Control - Choke
 - 3.47.7 Valve - Control
 - 3.47.8 Valve - Shutdown
 - 3.47.9 Valve - Pressure Vent
 - 3.47.10 Valve - Safety Relief
 - 3.47.11 Valve - Level Transmitter Isolation (Ball)
 - 3.47.12 Solenoid
 - 3.47.13 Valve Vacuum Relief & Breathing
- 3.48 Rupture Disc
- 3.49 Flame Arrestor
- 3.50 Fire & Gas System
- 3.51 Burner Management System
- 3.52 Purge Control System
- 3.53 Anti-Surge Control System - Compressor
- 3.54 Vibration Monitoring System
- 3.55 Valve Actuator
 - 3.55.1 Pneumatic - Emergency Shutdown (ESD) / Blowdown
 - 3.55.2 Hydraulic - Emergency Shutdown (ESD) / Blowdown
- 3.56 Controller - Single Loop
- 3.57 Recorder - Strip Chart
- 3.58 Annunciator
- 3.59 Recorder - Electronic, Sequence of Events (SOE), non-ESD

- 3.60 Relay - Electromagnetic
 - 3.61 Positioner - Electro-Pneumatic
 - 3.62 Valve Positioner - Foundation Fieldbus
 - 3.63 Junction Box
 - 3.64 Enclosure - Instrument
 - 3.65 Control / Marshalling Panel - Pre-fabricated
 - 3.66 Cable - Instrument
 - 3.67 Cable - High Temperature, Instrument
 - 3.68 Tubing
 - 3.69 Sunshade - Field Instrument
 - 3.70 Cable Gland
 - 3.71 Manifold - Instrument Valve
 - 3.72 Regulator - Air Filter
 - 3.73 Tubing Fitting - Compression
 - 3.74 Barrier - Intrinsically Safe
 - 3.75 Noise Measurement System
 - 3.76 Detector - Flame
 - 3.77 Detector - Gas
 - 3.78 Beacon / Horn
 - 3.79 Process Control System (Programmable Logic Controller-based) (inclusive of all associated, system-related software and hardware components (including communication interfaces))
 - 3.80 Emergency Shutdown (ESD) / Fire & Gas (F&G) System (inclusive of all associated, system-related software and hardware components (including communication interfaces))
 - 3.81 Programmable Logic Controller - General Purpose (inclusive of all associated, system-related software and hardware components (including communication interfaces))
 - 3.82 Trip Amplifier
 - 3.83 Amplifier - Trip
 - 3.84 Panel - Marshalling, Safe Area
 - 3.85 Pressure Regulator
 - 3.86 High-Integrity Pressure Protection System (HIPPS)
- 4.0 Safety & Survival Equipment
 - 4.1 Tank - Firewater Storage
 - 4.2 Detectors
 - 4.2.1 Smoke
 - 4.2.2 Heat
 - 4.2.3 Flammable Gas
 - 4.2.4 Open Path
 - 4.2.5 Hydrogen Sulfide H₂S
 - 4.2.6 Flame
 - 4.3 Foam Concentrate
 - 4.4 Foam Monitor
 - 4.5 Pump - Fire Water, Diesel-Driven
 - 4.6 Pump - Firewater
 - 4.7 Fire Pump Controller
 - 4.8 Foam Proportioner
 - 4.8.1 Foam Proportioner - Unit
 - 4.8.2 Foam Proportioner - Skid-Mounted

- 4.9 Foam Pourer
 - 4.9.1 Foam Pourer - Low Expansion
 - 4.9.2 Foam Pourer - Medium Expansion
 - 4.9.3 Foam Pourer - High Expansion
 - 4.9.4 Foam Pourer - High Back Pressure
 - 4.9.5 Foam Pourer - Rim Seal
 - 4.10 Fire Extinguisher
 - 4.10.1 Fire Extinguisher - ABC Powder
 - 4.10.2 Fire Extinguisher - Carbon Dioxide
 - 4.10.3 Fire Extinguisher - Foam
 - 4.10.4 Fire Extinguisher - Water
 - 4.11 Fire Alarm, Manual (Call Point)
 - 4.12 Audible Alarm
 - 4.13 Visual Alarm
 - 4.14 Deluge Valve
 - 4.15 Sprinkler Valve
 - 4.16 Hydrant Valve
 - 4.17 Fire Hydrant Equipment
 - 4.18 Fire Monitor Jet / Spray
 - 4.19 Deluge System
 - 4.20 Deluge Skid - Sprinkler
 - 4.21 CO₂ Skid - Nozzle
 - 4.22 Safety & Survival Equipment
 - 4.22.1 Life Jacket
 - 4.22.2 Stretcher and Breathing Apparatus
 - 4.22.3 Life Buoy
 - 4.22.4 Fire Safety Equipment
 - 4.22.5 Life Raft
 - 4.22.6 Survival Craft / Escape Capsul Package
 - 4.22.7 Oil Spill Containment System
 - 4.23 Foam Branch Nozzle
 - 4.24 Foam Branch Nozzle - Self-Educting
 - 4.25 Fire Hydrant Hose
 - 4.26 Fire Hydrant Hose Box
 - 4.27 Fire Hydrant Hose Reel
 - 4.28 Fire Suppression System
 - 4.29 Fire Hydrant Equipment
 - 4.30 Water Mist System
 - 4.31 Deluge System - Skid-Mounted
 - 4.32 Deluge Nozzles
 - 4.33 Fusible Plug - Sprinkler
 - 4.34 Quartzoid Bulb - Sprinkler
 - 4.35 Aqueous Film-Forming Foam (AFFF) Package
- 6.0 Electrical Materials
- 6.1 Transformer
- 6.1.1 Power
- 6.1.2 Distribution

- 6.2 Switchgear
 - 6.2.1 High Voltage
 - 6.2.2 Medium Voltage
 - 6.2.3 Low Voltage and Motor Control Center
 - 6.3 Electrical Drive - Variable Speed, Medium Voltage
 - 6.4 Electrical Drive - Variable Speed, Low Voltage
 - 6.5 Electrical Motor - Medium and Low Voltage
 - 6.6 Protection Relay
 - 6.7 Overhead Transmission Line and Accessories
 - 6.8 Power Capacitors
 - 6.9 Frequency Converter
 - 6.10 Uninterruptable Power Supply (UPS) System
 - 6.11 Battery
 - 6.12 Neutral Earthing Resistor
 - 6.13 Distribution Board (Manufactured by Vendor)
 - 6.14 Electrical Network Management Control System
 - 6.15 Bus Duct
 - 6.16 Local Control Panel (Manufactured by Vendor)
 - 6.17 Lighting and Accessories - Hazardous Area
 - 6.18.1 Distribution Board (Manufactured by Vendor) - Hazardous Area
 - 6.18.2 Junction Boxes (Manufactured by Vendor) - Hazardous Area
 - 6.19 Ring Main Unit- Medium and Low Voltage
 - 6.20 Cable - Submarine
 - 6.21 Cable and Wire, High and Medium Voltage
 - 6.22 Cable and Wire Termination Accessories, High Voltage
 - 6.23 Cable and Wire Termination Accessories, Cold Shrink
 - 6.24 Cable and Wire - Low Voltage
 - 6.25 Cable - Heat Tracing System
 - 6.26 Cable - Heat Tracing
 - 6.27 Cable and Wire Accessories
 - 6.28 Cable Splicing
 - 6.29 Cable Tray and Ladder
 - 6.30 Lighting Fittings
 - 6.31 Lighting Junction Boxes
 - 6.32 Lighting Switch and Socket - Non-Hazardous
 - 6.33 Cable Wiring Termination Panel
 - 6.34 Earthing Material
 - 6.35 Lightning Protection System
 - 6.36 Cable / Wire Conduit, Duct, and Fittings
 - 6.37 Cable Trunking and Fittings
 - 6.38 Lighting Pole, Galvanized Steel
 - 6.39 Coating - Silicone-Based
 - 6.40 Cathodic Protection System
 - 6.41 Cable Transit
 - 6.42 Pressure Switch - Electric
 - 6.43 Temperature Switch
- 7.0 Building Services

- 7.1 Mechanical Services
 - 7.1.1 Air Handling Unit
 - 7.1.2 Direct Expansion Air Conditioning Unit
 - 7.1.3 Precision Air Conditioning Unit
 - 7.1.4 Natatorium Air Conditioning Unit
 - 7.1.5 Fan Coil Unit
 - 7.1.6 Extract Fan
 - 7.1.7 Humidifier
 - 7.1.8 Air Duct
 - 7.1.9 Variable Air Volume (VAV) / Constant Air Volume (CAV) Box
 - 7.1.10 Grille / Diffuser
 - 7.1.11 Damper / Louvre
 - 7.1.12 Fire / Smoke Damper
 - 7.1.13 Sound Attenuator
 - 7.1.14 Liquid Chiller
 - 7.1.15 Cooling Tower
 - 7.1.16 Circulating Pump
 - 7.1.17 Pipework - Chilled Water
 - 7.1.18 Pipework - Buried
 - 7.1.19 Fittings - Screwed
 - 7.1.20 Fittings - Welded
 - 7.1.21 Fittings - Grooved
 - 7.1.22 Valves - Chilled Water
 - 7.1.23 Water Treatment Package - Chilled Water
 - 7.1.24 Storage Tank - Water
 - 7.1.25 Booster Pump Package
 - 7.1.26 Circulating Pump Package
 - 7.1.27 Hot Water Generator Package
 - 7.1.28 Pipe and Fitting - Plumbing / Irrigation
 - 7.1.29 Valves - Plumbing
 - 7.1.30 Valves - Pressure Reducing
 - 7.1.31 Water Treatment Package - Plumbing
 - 7.1.32 Irrigation System
 - 7.1.33 Pump - Submersible, Drainage
 - 7.1.34 Pipe and Fitting - Vitrified Clay
 - 7.1.35 Pipe and Fitting - PVC
 - 7.1.36 Pipe and Fitting - Ductile Iron
 - 7.1.37 Pipe and Fitting - Cast Iron
 - 7.1.38 Pipe and Fitting - HDPE
 - 7.1.39 Pipe and Fitting - Polypropylene
 - 7.1.40 Gully
 - 7.1.41 Air Compressor - Rotary
 - 7.1.42 Insulation - Thermal
 - 7.1.43 Isolator - Vibration
- 7.2 Electrical Services
 - 7.2.1 Switchgear and MCC - Low Voltage
 - 7.2.2 Distribution Board - Low Voltage

- 7.2.3 Bus Duct - Medium and Low Voltage
- 7.2.4 Cable and Wire - High and Medium Voltage
- 7.2.5 Cable and Wire - Low Voltage
- 7.2.6 Cable - Electric, Fire- / Heat-resistant
- 7.2.7 Cable / Wire Accessory including Gland
- 7.2.8 Isolator / Switch Fuse
- 7.2.9 Cable Gland
- 7.2.10 Uninterruptable Power Supply (UPS) - DC
- 7.2.11 Luminaire
- 7.2.12 Flood / Street Light
- 7.2.13 Lighting Control
- 7.2.14 Lighting System - Emergency
- 7.2.15 Lighting System - Specialty
- 7.2.16 Motor Control Cabinet & Components - Vendor Manufactured
- 7.2.17 Power Factor Correction Package
- 7.2.18 Elevator / Escalator Package
- 7.2.19 Diesel Generator Package - Emergency
- 7.3 ELV and ICT System
 - 7.3.1 Cabling System - Structured
 - 7.3.2 Video Projector
 - 7.3.3 Audio Amplifier
 - 7.3.4 Loudspeaker
 - 7.3.5 Public Address / General Alarm System
 - 7.3.6 Closed-Circuit Television (CCTV) System
 - 7.3.7 Access Control System
 - 7.3.8 Building Management System
 - 7.3.9 Nurse Call System
 - 7.3.10 SMATV System
 - 7.3.11 Traffic Barrier System
 - 7.3.12 Parking Management System
 - 7.3.13 Simultaneous Interpretation System
 - 7.3.14 Master Clock System
 - 7.3.15 Flowmeter - Water (Electro-magnetic)
 - 7.3.16 Video Conferencing System
 - 7.3.17 Audio Conference System
 - 7.3.18 Network Router / Switch
 - 7.3.19 Signal Cable - Extra-Low Voltage
- 8.0 Pipeline & Umbilical Materials
 - 8.1 Riser Induction Bend
 - 8.2 Umbilical and Accessories
 - 8.3 Sub-sea Ball Valve
 - 8.4 Swivel Flange
 - 8.5 Mechanical Connector
 - 8.6 Piggy Back Strapping
 - 8.7 Pipe / Line Pipe - Carbon Steel
 - 8.8 Hot Induction Bend - Carbon Steel
 - 8.9 Flange - Carbon Steel

- 8.10 Barred Tee - Carbon Steel
- 8.11 Flow Tee - Carbon Steel
- 8.12 Insulating Joint
- 8.13 Ball Valve
- 8.14 Pig Launcher / Receiver
- 8.15 Pig Signal System
- 8.16 Pig Launcher / Reciever Interlock System
- 8.17 Epoxy Powder - Fusion Bonded
- 8.18 Anode - Sacrificial
- 9.0 Structural Materials
- 9.1 Anode - Sacrificial, Marine
- 9.2 Bridge Bearing
- 9.3 Boat Landing Rub Strip
- 9.4 Marine Bollard
- 9.5 Barge Bumper System
- 9.6 Marine Fender
- 10.0 Architectural
- 10.1 Door - Blast-Resistant
- 10.2 Door - Fire
- 10.3 Ceiling System - Suspended, Gypsum
- 10.4 Ceiling System - Suspended, Metal
- 10.5 Ceiling System - Suspended, Mineral Fibre
- 10.6 Cladding - Composite Metal
- 10.7 Curtain Wall System
- 10.8 Demountable Partition System
- 10.9 Glass / Glazing
- 11.0 Rotating Equipment
- 11.1 Turbine
- 11.2 Turbine Generator Package
- 11.3 Emergency Diesel Generator Package
- 11.4 Diesel Engine
- 11.5 Fire Water Pump Package
- 11.6 Pump Package
 - 11.6.1 Centrifugal - Horizontal, Process, API 610
 - 11.6.2 Centrifugal - Horizontal, General Utility
 - 11.6.3 Centrifugal - Horizontal / Vertical, Large Capacity (Water)
 - 11.6.4 Centrifugal - Package (High-Speed, Integrally Geared)
 - 11.6.5 Centrifugal - Self-Priming
 - 11.6.6 Centrifugal - Horizontal, API 610
 - 11.6.7 Centrifugal - Horizontal, Non-API, General Utility
 - 11.6.8 Centrifugal - Horizontal / Vertical, Non-API, Large Capacity
 - 11.6.9 Centrifugal - Vertical Turbine, API 610, Process
 - 11.6.10 Centrifugal - Vertical Line Shaft
 - 11.6.11 Centrifugal - Electric, Submersible
 - 11.6.12 Centrifugal - Vertical, Sump
 - 11.6.13 Centrifugal - Vertical, In-Line
 - 11.6.14 Centrifugal - Vertical, Submersible, API 610, Cryogenic

- 11.6.15 Centrifugal - Sealless (Glandless), Magnetic Drive
- 11.6.16 Centrifugal - Teflon-Lined
- 11.6.17 Positive Displacement - Reciprocating, API 674, Process
 - 11.6.17.1 Positive Displacement - Reciprocating, API 674, Process
 - 11.6.17.2 Positive Displacement - Reciprocating, API 674, Metering / Dosing
- 11.6.18 Positive Displacement - Diaphragm, API 675, Metering / Chemical Injection
- 11.6.19 Positive Displacement - Rotary Screw, API 676, Process
- 11.6.20 Vacuum - Liquid Ring, API 680, Process
- 11.6.21 Jet - Process / Water
- 11.6.22 Metering
- 11.6.23 Submersible
- 11.6.24 Fire Water
- 11.6.25 Water Pump Package
- 11.6.26 Eccentric Screw
- 11.7 Pump Shaft Sealing System - Process
- 11.8 Compressor - Centrifugal, API 617, Process
- 11.9 Compressor - Centrifugal, API 672, Air / Inert Gas
- 11.10 Turbo-Expander
- 11.11 Compressor - Reciprocating, API 618, Process
- 11.12 Compressor - Reciprocating, Instrument Air
- 11.13 Compressor - Reciprocating, API 11
- 11.14 Compressor - Rotary Screw, API 619, Process
- 11.15 Compressor - Rotary Screw, Instrument Air
- 11.16 Compressor Package - Instrument Air
- 11.17 Compressor Package - Breathing Air
- 11.18 Compressor - Rotary Vane, Process / Air
- 11.19 Compressor - Liquid Ring, Process / Air
- 11.20 Compressor - Diaphragm, Process / Air
- 11.21 Compressor Shaft Sealing System
 - 11.21.1 Compressor Shaft Sealing System - Mechanical
 - 11.21.2 Compressor Shaft Sealing System - Dry Gas
- 11.22 Mixer (Agitator) - Side Entry
- 11.23 Mixer (Agitator) - Top Entry
- 11.24 Mixer Shaft Sealing System
- 11.25 Gas Turbine - Mechanical Drive, Prime Mover
- 11.26 Steam Turbine - General Purpose, Prime Mover
- 11.27 Diesel Engine - Prime Mover
- 11.28 Gas Engine - Prime Mover
- 11.29 Machinery Drive - Mechanical Gear Box
- 11.30 Machinery Drive - Variable Speed, Fluid Coupling
- 11.31 Machinery Drive Coupling - Flexible Spacer
- 11.32 Machinery Drive Coupling - Magnetic
- 11.33 Gas Seal - Dry
- 11.34 Mechanical Seal - Wet
- 11.35 Coupling
- 11.36 Heater