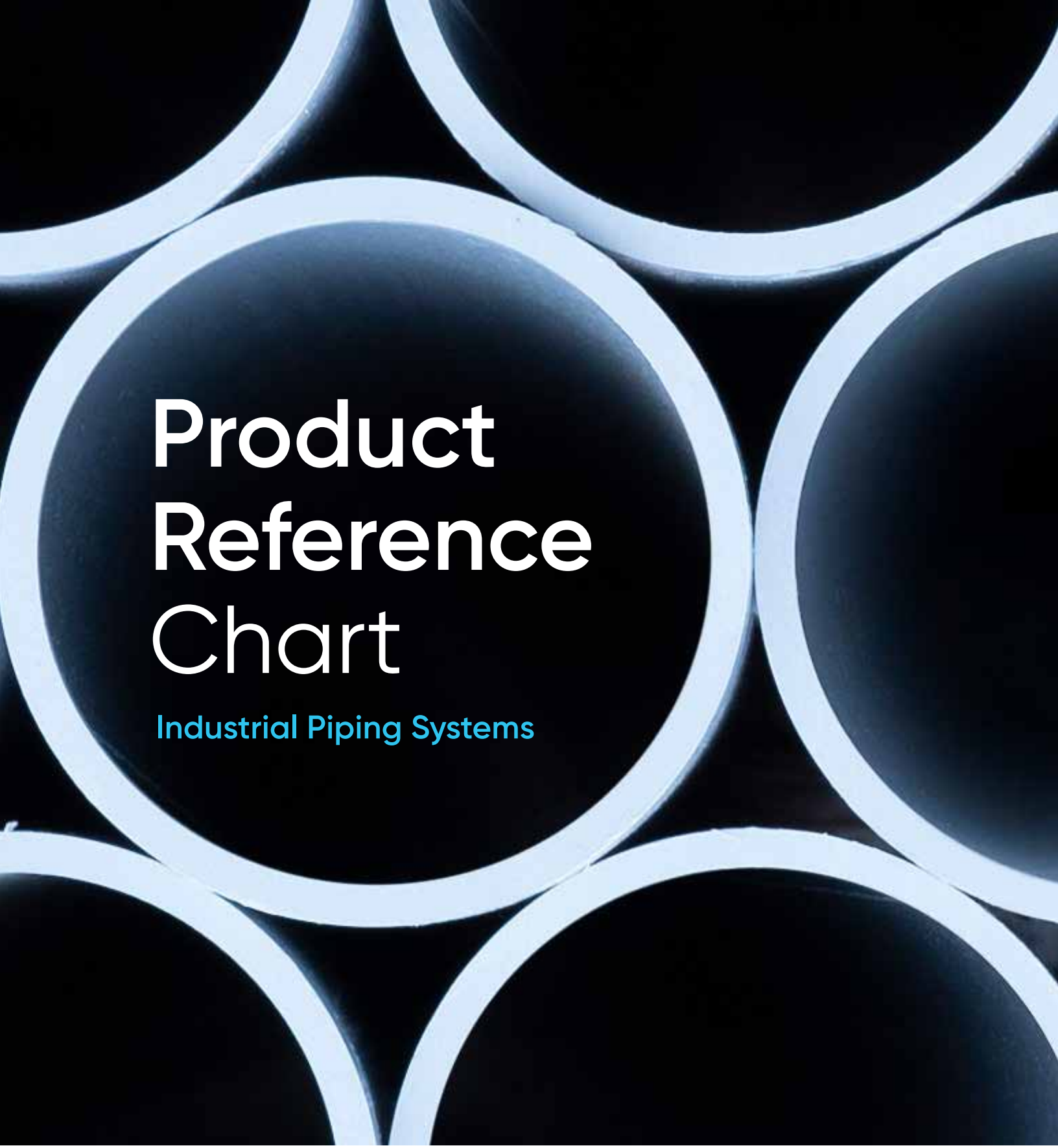

Product Reference Chart

Industrial Piping Systems

ipexna.com

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PROCESS PIPING SYSTEMS

PRODUCT	SIZE RANGE	STANDARDS	APPLICATIONS
Xirtec® PVC Schedule 40 & 80	1/4" – 24"		Designed to meet the temperature, pressure and flow requirements of piping systems used in chemical processes, and other industrial applications. Applications include: Plant chemical distribution lines, water and waste water, acid systems for refineries, pickling lines and plating shops, chlorine injections, chlorine dioxide and chloralkall plant piping, steel wire plant, irrigation systems, pharmaceutical, and waterworks etc.
Xirtec® CPVC made with Corzan® CPVC Schedule 40 & 80	1/2" – 16"		
Clear-Guard™ Clear PVC Schedule 40	1/2" – 8"		Clear-Guard clear PVC for high purity piping, leak detection, agricultural & aquacultural, chemical processing/ blending, healthcare/hospital use, laboratories, environmental, sight gauge assemblies, display/exhibits, and food and beverage processing.
Enpure™ High Purity PP Schedule 40 & 80	1/2" – 4"		Food processing, hospitals, laboratories, universities, biotechnology, research facilities, chemical manufacturing, photographic chemical processing, effluent treatment, water treatments, and pharmaceutical manufacturing.
Duraplus™ ABS Industrial	1/2" – 8"		Chilled water/HVAC, offshore applications, Mining and Secondary loop refrigeration.

Material Abbreviation

ABS:	Acrylonitrile Butadiene Styrene	**PE:**	Polyethylene	**PVC:**	Polyvinyl Chloride
CPVC:	Chlorinated Polyvinyl Chloride	**PP:**	Polypropylene	**PVDF:**	Polyvinylidene Fluoride
FRP:	Fiberglass Reinforced Plastic				

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DOUBLE CONTAINMENT SYSTEMS

PRODUCT		SIZE RANGE	STANDARDS	APPLICATIONS
	Guardian™ Vinyl PVC & CPVC	PVC Carrier: 1/2" – 12" Containment: 2" – 18" CPVC Carrier: 1/2" – 12" Containment: 2" – 16"	ASTM	Plant chemical distribution lines, water and wastewater, acid systems for refineries, pickling lines and plating shops, chlorine injection, chlorine dioxide and chloralkali plant piping, steel wire plants, battery manufacturing, bleach lines, alum and caustic handling systems, semiconductor, overhead piping for personnel/ property/ equipment protection, and hazardous waste systems. Xirtec PVC and Xirtec CPVC made with Corzan CPVC are the chosen single wall products for the Guardian systems.
	Drain-Guard™ PVC DWV	Carrier: 1-1/2" – 12" Containment: 4" – 16"	ASTM CSA	Healthcare/Hospital Use, laboratory applications, high-tech and data storage environments (network & server rooms etc.), museums and libraries, historical sites, theaters, restaurants (public areas), and residential buildings. Each contained piping system shall consist of a Drain-Guard PVC DWV primary piping system supported within a Drain-Guard PVC DWV secondary containment housing.
	Clear-Guard™ PVC	Clear PVC Containment: 2" – 8"	ASTM	Plant chemical distribution lines, pharmaceutical, semiconductor, water and wastewater, and overhead piping for personnel/ property/ equipment protection. Each containment piping system shall consist of Xirtec PVC or Xirtec CPVC primary piping system supported within a Clear-Guard Schedule 40 clear PVC secondary containment housing.
	CustomGuard® (Dissimilar Materials)	FRP/Metals/ Dissimilar: Carrier: 1/2" – 20" Containment: 2" – 26"		Plant chemical distribution lines, water and wastewater, acid systems for refineries, pickling lines and plating shops, battery manufacturing, alum and caustic handling systems, pharmaceutical, generator back-up, semiconductor, and hazardous waste systems. Custom-designed and fabricated double containment systems including dissimilar material.
	Encase™ Acid Waste PP	PP: Carrier: 1-1/2" - 8" Containment 4" - 12"	ASTM	Corrosive chemical waste for university laboratories, schools, hospitals and industrial plants, and pharmaceuticals facilities.
	Centra-Guard™ Low Point Leak Detection Monitoring System		UL NEMA	Above-ground suspended pipeline applications with sensors housed in a saddle type clamp, underground pipeline systems with drip leg assembly.

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ACID WASTE PIPING SYSTEMS

	PRODUCT	SIZE RANGE	STANDARDS	APPLICATIONS
	Enfield™ Electrofusion Joint PP	1-1/2″ – 12″		Corrosive chemical waste for university laboratories, schools, hospitals, industrial plants, and pharmaceuticals facilities.
	Labline® Mechanical Joint PP	1-1/2″ – 4″		
	Plenumline™ Mechanical Joint PVDF	1-1/2″ – 4″		Corrosive chemical waste for challenging conditions, highly restrictive return air plenum applications, and high-temperature corrosive chemical waste situations.
	Floway™ Floor Drains PP	2″ – 6″		For efficiently managing chemical spills; designed to feed into IPEX acid waste systems.
	Neutratank® PP or PE Neutralization Tanks	5 – 2,000 Gallons		Corrosive retention tank (with limestone) for the neutralization of chemical waste prior to discharge into the sewer.
	Neutrasystem2™ pH Monitoring System	110/120 VAC input 24V DC operating voltage		Monitoring pH discharge levels for Neutratank.

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COMPRESSED AIR SYSTEMS

PRODUCT		SIZE RANGE	STANDARDS	APPLICATIONS
	Duratec® Airline	1/2" – 1"		Plant air, inert gas distribution, manufacturing hand tool operatin, manual and automated welding operations, semi-conductor tool hook up, valve actuation – control systems, microbulk inert gas delivery, and robotic installations.
	Duraplus™ ABS Airline	1/2" – 4"		Plant air, ventilation, and valve actuation.

SPECIALTY PRODUCTS

PRODUCT		SIZE RANGE	STANDARDS	APPLICATIONS
	Ventilation Duct (PVC & CPVC)	PVC: 6" – 24" CPVC: 6" – 16"		Industrial venting systems.
	Roll Grooved PVC Pipe Schedule 40 & 80	2" – 12"		Can be used in any application where PVC pipe is acceptable and where it is desireable to have a quick assembly under adverse conditions.

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THERMOPLASTIC VALVES

BALL VALVES

PRODUCT	SIZE RANGE	UP TO PRESSURE	APPLICATIONS
VKD Series †	3/8" – 4"	232 psi @ 73°F (1,600 kPa @ 23°C)	Ball valves are generally used for on/off service, but can range from simple molded-in-place construction to high-end industrial designs with many features and benefits. Multi-port ball valves allow for mixing, diverting, and bypassing flow. Multi-port ball valves allow for mixing, diverting, and bypassing flow. Extensive material options provide for complete chemical compatibility in highly corrosive processes. Many ball valves feature full port flow, blocking true union ends, and compact ergonomic designs allowing for simple installation and maintenance.
EasyFit VXE Series †	1/2" – 6"		
EasyFit VEE Series	1/2" – 4"		
MP Series	1/2" – 2"	150 psi @ 73°F (1,034 kPa @ 23°C)	
TKD Series 3-Way †	1/2" – 2"	232 psi @ 73°F (1,600 kPa @ 23°C)	
VKR Series Regulating †	1/2" – 2"		
Vented VKD Series †	3/8" – 4"		
Vented Easyfit VXE Series †	1/2" – 6"		

BUTTERFLY VALVES

FK Series †	1-1/2" – 16"	232 psi @ 73°F (1,600 kPa @ 23°C) depending on size	These highly versatile valves can be used for simple on/off service but also for processes requiring throttling. End-of-line installation of the lugged version allows for downstream piping disassembly with the upstream system still under pressure. The extensive size range and material availability make them applicable in a wide range of applications. With simple, direct mounting for actuation, automated process control can be easily achieved.
FK Series Lugged †	2-1/2" – 12"		
FE Series †	1-1/2" – 12"		
FX Series †	1-1/2" – 12"	150 psi @ 73°F (1,034 kPa @ 23°C) depending on size	

DIAPHRAGM VALVES

DK Series	1/2" – 2-1/2"	150 psi @ 73°F (1034 kPa @ 23°C) depending on size	Diaphragm valves are ideal for processes requiring precise flow throttling. The weir style design – no dead space in the valve – is extremely good for abrasive slurries, high purity water and potentially off gassing chemicals such as sodium hypochlorite. Styles range from compact and direct acting to high end industrial design with many features and benefits. Diaphragm valves are available in both manual operation and pneumatic operators. These valves are widely used in high purity applications because their design prevents friction and subsequent particle creation when cycling. Many body and diaphragm material options are available as well as simple pneumatic actuation.
VM Series	3" – 4"		
DV Series	1/2" – 6"		
CM Series Compact	3/8" – 1/2"	90 psi @ 73°F (621 kPa @ 23°C)	
DKD Series	1/2" – 2"	120 psi @ 73°F (827 kPa @ 23°C) depending on available control pressure	

Consult IPEX literature for specific valve pressure ratings.

THERMOPLASTIC VALVES

CHECK & VENT VALVES

PRODUCT	SIZE RANGE	UP TO PRESSURE	APPLICATIONS
SXE Series Ball	1/2" – 4"	232 psi @ 73°F (1,600 kPa @ 23°C)	Check valves should be used whenever there is a need to prevent back-flow of process media. IPEX offers high efficiency ball and piston checks as well as heavy duty swing check valves. Many styles exist including: simple ball checks, heavy duty swing checks, and highly efficient piston checks. These valves are typically gravity operated and require very little back pressure to seal. Air release valves safely allow any entrapped air or gas to escape, avoiding damage to the piping system.
SSE Series Spring Assisted	1/2" – 4"		
VR Series Piston	1/2" – 4"	232 psi @ 73°F (1,600 kPa @ 23°C) depending on size	
SC Series Swing	3" – 8"	150 psi @ 73°F (1,034 kPa @ 23°C) depending on size	
VA Series Air Release	3/4", 1-1/4" & 2"	232 psi @ 73°F (1,600 kPa @ 23°C)	

SPECIALTY VALVES

RV Series Sediment Strainers	1/2" – 4"	232 psi @ 73°F (1,600 kPa @ 23°C) depending on size	Sediment strainers trap suspended particles flowing in the process line, ensuring that downstream components are protected. Solenoids are ideal for high-cycle applications where remote operation and precise control are important.
S12/22 Series 2-Way Solenoid	1/4" – 1/2"	90 psi @ 73°F (621 kPa @ 23°C)	
VV Angle Seat	1/2" – 2"	232 psi @ 73°F (1,600 kPa @ 23°C) depending on size	

VALVE ACTUATION

Automation is an ideal solution for precise control of many valves in a system.

When valves are remotely located, or the process requires constant monitoring and adjustment, actuation is the solution.

Pneumatic and electric actuators can be easily fitted on our ball, multi-port, and butterfly valves.

IPEX offers quarter turn automation solutions for valves from 3/8" to 16" with a variety of standard and optional accessories.

Consult IPEX literature for specific valve pressure ratings.

Centra-Guard™, Centra-Lok™, Clear-Guard™, CustomGuard®, Drain-Guard™, Duraplus®, Duratec®, Encase™, Enfield™, Enpure™, Floway™, Guardian™, Labline®, Neutratank®, Neutrasystem2™, Plenumline™ and Xirtec® are trademarks used under license.

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