TECHNO[™] | TOM WHEATLEY[®] | WHEATLEY[®] | DOUGLAS CHERO[™] THORNHILL CRAVER[®] | NAVCO[®] | AOP[™]

WKM[®] | DEMCO[®] | NEWCO[®] | NUTRON[®]



Standard Service | Critical Application | High Quality

VALVES-



–DISCOVER



Cameron brings together the expertise and technology of the world's premier brands into one single, industry-leading entity. Cameron's Valves & Measurement business segment is a leading provider of valve, valve automation, and measurement systems to the global oil and gas industry.



Cameron provides high-quality valves where you need them, when you need them.

Cameron's expanding network of strategic partners helps distribute high-quality, daily service valves into critical applications. With millions of valves manufactured by Cameron and delivered around the world, our portfolio is proudly led by flagship brands such as WKM[®], DEMCO[®], NEWCO[®], and NUTRON[®] valves as part of the Cameron family.

Cameron's Valves by Brand

Cameron's valve brands represent a history of reliability and innovation across a wide range of valve types, including gate, globe, and check valves; ball valves; butterfly valves; choke valves; and plug valves.



For more than nine decades, this high-quality line of ball and butterfly valves has delivered innovative and trusted solutions to oil, gas, and process control applications worldwide.

DEMCO[®] | Gate Valves, Butterfly Valves

Recognized across the industry for their quality design and rugged dependability, DEMCO resilient-seated gate and butterfly valves are designed for dependability.

NEWCO[®] | Gate, Globe, Check, and Ball Valves

range of sizes and classes. All are inspected and tested in

ready-to-ship inventories and competitive lead times.

Engineered specifically for the downstream market and backed

complete portfolio of cast, forged, and stainless products in a full

by 70 years of performance, Cameron's NEWCO line offers a

accordance with the most rigid quality standards and include

In-line, field repairableFlexible trim options

• Drop-tight, positive shutoff

- Engineered for long-lasting performance
- DynaSeal[™] 210/310 design proven in a myriad of applications
- DynaSeal 370D series trunnion design providing smooth, low-torque operation



- Inventoried valves from sizes 1/2" through 36", Classes 150 through 2500 lb
- Cast, forged, and stainless lines
- Competitive factory lead times



NUTRON[®] | Ball Valves

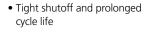
NUTRON ball valves are engineered for heavy-duty, reduced maintenance performance and can be manufactured in a broad spectrum of body and seal materials, compliant with numerous industry quality certifications.

- Dependable, forged-steel valves
- Three-piece construction
- Optional lip seal or metal-tometal seals



TECHNO[™] | Check Valves

Known for ease of maintenance and exceptional flow characteristics, Cameron's TECHNO line of check valves is the economical and dependable solution for use in a wide range of service conditions.



- Non-slam, quick-close feature
- Maximum flow with minimum pressure loss



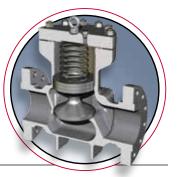
TOM WHEATLEY[®] | Piston Check Valves

The unique non-slam design of the TOM WHEATLEY piston check valve allows the valve to provide years of uninterrupted service downstream from reciprocating pumps and compressors, and in other applications where conventional check valve designs would be exposed to excessive wear.

WHEATLEY[®] | Check Valves

With proven design quality since 1936, and subsea expertise today, Cameron's WHEATLEY check valves continue to serve mainly North American clients in upstream and downstream markets, but the overall legacy of innovative solutions to customer needs carries on in the body design that provides maximum flow area, minimizes pressure loss and reduces required installation space and time.

- Metal-to-metal seats
- Quick-opening piston
- Minimal number of parts for ease of maintenance





- Full opening, throughconduit design
- Bubble-tight sealing
- NACE construction

DOUGLAS CHERO[™] | Gate, Globe, and Check Valves

The DOUGLAS CHERO brand complements the downstream offering of Cameron's NEWCO line of gate, globe, and check valves for markets in the Middle East, Europe, Asia, and the US.

- Forged downstream solution offering
- Specialty valves for urea service



THORNHILL CRAVER[®] | Choke Valves

A longtime standard for safety and reliability in the oil field, THORNHILL CRAVER adjustable and positive choke valves are designed for maximum performance under critical conditions.



- In-line, field repairable
- Heavy-duty roller bearings
- UNIBOLT[™] interlocking shelf design rather than conventional threads/flanges

NAVCO[®] | Ball Valves

NAVCO ball valves are engineered for various applications to provide turnkey solutions throughout the oil and gas industry.

- Easy installation of actuators and accessories with ISO actuator mounting pad
- Stainless steel trim standard



AOP[™] | Ball Valves, Gauge Valves, Needle Valves

Backed by Cameron's commitment to quality, customer service and product improvement, AOP valves deliver dependability at an affordable price to upstream North American and international markets.



- Wide range of trims available
- Customer-driven design
- Manufactured to some of the highest industry standards

CAMERON'S VALVES BY MARKET



PETROCHEMICAL & CHEMICAL

DEMCO[®], NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], TECHNO[™], WKM[®]



GAS PROCESSING

NAVCO®, NEWCO®, DOUGLAS CHERO™, NUTRON®, THORNHILL CRAVER®, TOM WHEATLEY®, WKM®, AOP™



NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], TECHNO[™], WKM[®]

REFINING OIL



LNG

NAVCO[®], NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], TOM WHEATLEY[®], WKM[®]



OFFSHORE DRILLING

DEMCO[®], WKM[®]



OFFSHORE PRODUCTION

DEMCO[®], NAVCO[®], NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], WHEATLEY[®]

Upstream to Downstream, Onshore to Offshore, Cameron's Valves are There.™

INDUSTRIAL

DEMCO[®], NAVCO[®], NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], TECHNO[™], WKM[®]



TRANSMISSION & STORAGE

NAVCO[®], NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], TOM WHEATLEY[®], WHEATLEY[®], WKM[®], AOP[™]



ONSHORE DRILLING

DEMCO[®], AOP™



UNCONVENTIONAL & SHALE

NAVCO[®], NEWCO[®], DEMCO[®], DOUGLAS CHERO[™], NUTRON[®], THORNHILL CRAVER[®], TOM WHEATLEY[®], WHEATLEY[®], WKM[®], AOP[™]



ONSHORE PRODUCTION

DEMCO[®], NAVCO[®], NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], WHEATLEY[®], WKM[®], AOP[™]



TOPSIDES PROCESSING

DEMCO[®], NAVCO[®], NEWCO[®], DOUGLAS CHERO[™], NUTRON[®], WHEATLEY[®], WKM[®]



	BRAND	MODEL/MATERIALS OF CONSTRU	CTION	SIZES	PRESSURE/TEMP.
FLOATING BALL VALVES	NEWCO	Two-piece body design with antistatic ground, locking device, a packing, and a blowout-proof stem; full port or reduced port; A		3/4" – 12" (20 mm – 300 mm)	Classes 150 – 600 -50° F – 450° F (-45° C – 235° C)
	WKM	DynaSeal 310: Deep-pocketed seat for longer life; many choices of trims and materials; wide range of operation; flanged, threaded and socket-weld end		1/4" – 6" (6 mm – 150 mm)	Classes 150 – 600 2000 – 5000 psi -50° F – 600° F (-45° C – 315° C)
		DynaSeal 210: Deep-pocketed seat for longer life; threaded end or grooved end; ductile iron construction		1" – 4" x 3" (25 mm – 100 mm x 75 mm)	Classes 750, 1000, 1500, 2000 psi -20° F – 180° F (-28° C – 82° C)
	NAVCO	S10: One-piece flanged end ball valve; reduced port; investment-cast body; fire tested and certified; positively retained stem design		1/2" – 6" x 4" (15 mm – 150 mm x 100 mm)	Classes 150 – 300 -20° F – 500° F (-28° C – 260° C)
		S20: Two-piece stainless steel seal-welded construction; threaded end; carbon steel non-seal welded; fire tested and certified		1/4" – 2" (6 mm – 50 mm)	2000 psi -20° F – 500° F (-28° C – 260° C)
		S30: Three-piece port ball valve; available in threaded or socket-weld end; investment-cast body; fire tested and certified		1/2" – 1" (15 mm – 25 mm)	2000 psi
				1-1/4" – 2" (30 mm – 50 mm)	1500 psi -20° F – 500° F (-28° C – 260° C)
	АОР	B Series: Economical; quality, threaded-end ball valves in a variety of styles and pressures; full port with Teflon [*] and PEEK seats		1/4" – 2" (6 mm – 50 mm)	2000 psi – 6000 psi
		FB: Pocketed seat for long life; flanged end configuration; Teflon, nylon and PEEK seat options		1" – 6" (25 mm – 150 mm)	Classes 150 – 900
		CB/DB/DT: Threaded-end valves; ductile iron or carbon steel; two-piece bolted or threaded design; Teflon or plastic seats		1" – 4" (25 mm – 100 mm)	750 psi – 3000 psi
	NUTRON	T3: Forged construction; pocketed seat; self-adjusting packing; wide operating range; flanged, threaded, socket-weld or butt-weld ends		1/4" – 4" x 3" (6 mm – 100 mm x 75 mm)	Classes 150 – 2500 1000 – 6000 psi -20° F – 180° F (-28° C – 82° C)
		B3: Forged construction; self-adjusting packing; wide operating range; flanged, threaded or butt-weld ends		1-1/2" – 6" x 4" (40 mm – 150 mm x 100 mm)	Classes 150 – 1500 2000 – 4000 psi -20° F – 500° F (-28° C – 260° C)
TED BALL VALVES	WKM	DynaSeal 370D4: Two-piece body is field repairable; integral actuator mounting flange; double block-and-bleed; automatic body pressure relief; sealant fittings with hidden check valves		2" – 16" (50 mm – 400 mm)	Classes 150 – 2500 -50° F – 400° F (-45° C – 204° C)
		DynaSeal 370D5: Three-piece body is field repairable; integral actuator mounting flange; double block-and-bleed; automatic body pressure relief; sealant fittings with hidden check valves		18" – 24" (450 mm – 600 mm)	Classes 150 – 600 -20° F – 250° F (-28° C – 121° C)
	NUTRON	TL: Forged body construction; polymeric seated; elastomeric-less, trunnion mounted ball valve; suited for acid gas and low-temperature applications		2″ – 16″ (50 mm – 400 mm)	Classes 150 – 900 ANSI Class 1500 -50° F – 500° F (-46° C – 260° C)
I MOUN		TM: Forged body construction; metal-seated valve for heavy oil, high-temperature steam and abrasive slurry applications in trunnion mounted ball design		2″ – 16″ (50 mm – 400 mm)	Classes 150 – 900 ANSI -50° F – 662° F (-46° C – 350° C)
TRUNNION MOUNTED		TT: Forged body construction; sealant fittings with hidden check valves; double block- and-bleed; integral actuator mounting pad		2" – 16" x 14" (50 mm – 400 mm x 355 mm)	Classes 150 – 2500 -50° F – 500° F (-45° C – 260° C)
TRI	AOP	D Series: Two-piece body is field repairable; sealant fittings; choice of Teflon, nylon or Viton [®] seat sealing		2" – 12" (50 mm – 300 mm)	Classes 150 – 2500
	NEWCO	Designed to API 602, 623 and ASME B16.34 standards; available in carbon and stainless steel; Y-pattern globe valves are also available	Cast Steel	2" – 16" (50 mm – 400 mm)	Classes 150 – 2500
GLOBE VALVES			Forged Steel	1/4" – 2" (6 mm – 50 mm)	Classes 150 – 4500
			Pressure Seal	2″ – 16″ (50 mm – 400 mm)	Classes 600 – 4500
	DOUGLAS CHERO	Bolted, welded or pressure seal construction; API 602, ISO 1576 or flanged; cryogenic, bellows-sealed and Y-pattern configuration		1/4" – 2" (6 mm – 50 mm)	Classes 150 – 4500

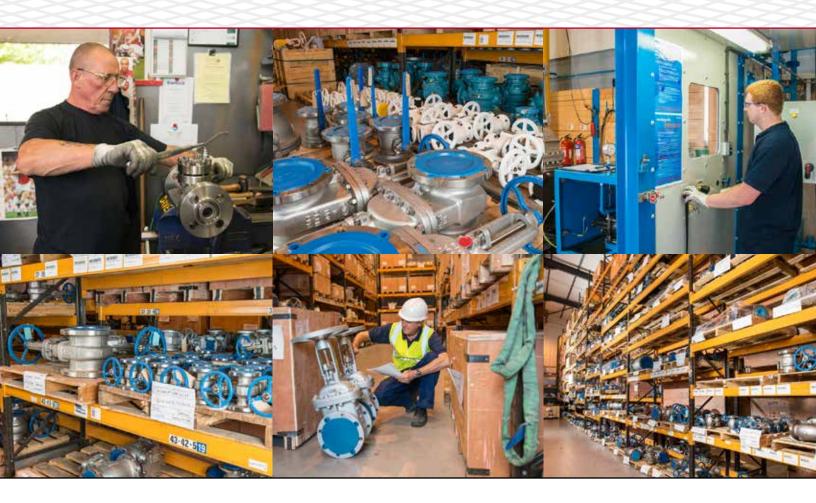
Pressure and temperature may be limited by trim options and/or valve size. Metric to standard conversion is approximate. For details, please reference product data sheets. For complete and complementary information, please reference the individual product brochures.

	BRAND	MODEL/MATERIALS OF CONS	STRUCTION	SIZES	PRESSURE/TEMP.
GATE VALVES	DEMCO	DM/DT/DB: In-line repairability; drop-tight positive shut-off seat design; flexible trim options		2" x 1-1/2" – 8" x 6" (50 mm x 40 mm – 200 mm x 150 mm)	Classes 400 – 1500 1000 – 7500 psi -20° F – 250° F (-28° C – 121° C)
	NEWCO	Designed to API 600, 602, 603 and ASME B16.34 standards; available in carbon and stainless steel	Cast Steel	2" – 54" (50 mm – 1350 mm)	Classes 150 – 2500
			Forged Steel	1/4" – 2" (6 mm – 50 mm)	Classes 150 – 4500
			Pressure Seal	2" – 36" (50 mm – 900 mm)	Classes 600 – 4500
	DOUGLAS CHERO	Bolted, welded or pressure seal construction; API 602, ISO 15761, SW, NPT or flanged; cryogenic and bellows-sealed configurations are also available		1/4" – 2" (6 mm – 50 mm)	Classes 150 – 4500
	NEWCO	Engineered to meet and exceed the standards universally used in the oil, petrochemical and chemical industries; designed to API 594, 602, and ASME B16.34 standards; available in carbon and stainless steel	Cast Steel	2" – 36" (50 mm – 900 mm)	Classes 150 – 2500
			Forged Steel	1/4" – 2" (6 mm – 50 mm)	Classes 150 – 4500
			Pressure Seal	2″ – 18″ (50 mm – 450 mm)	Classes 600 – 4500
	DOUGLAS CHERO	Bolted, welded or pressure seal construction; API 602, ISO 15761, BS 5352, SW, NPT or flanged		1/2" – 2" (15 mm – 50 mm)	Classes 150 – 4500
	WHEATLEY	API 6D Swing Check: Full opening through-conduit design; integral and removable seat; 316 stainless steel trim; fully machined cast on flanges; horizontal or vertical flow-up service; bubble-tight seal; NACE construction		2" – 12" (50 mm – 300 mm)	Classes 150 – 1500 -50° F – 400° F (-45° C – 204° C)
S		API Swing Check: Full opening through-conduit design; removable seat; 316 stainless steel trim; fully machined cast on flanges; horizontal or vertical flow-up service; bubble-tight seal; NACE construction; fire tested to API 6FD		2" – 4" (50 mm – 100 mm)	API 5000 -20° F – 400° F (-28° C – 204° C)
CHECK VALVES		Threaded-End Swing Check: Full opening integral seat; 316 stainless steel trim; compact design; horizontal or vertical flow-up service; bubble-tight seal; NACE construction		1/2" – 4" (15 mm – 100 mm)	275 WP – 3600 WP -50° F – 400° F (-45° C – 204° C)
		Short Pattern Wafer Check: Reduced port valve designed to fit between flanges; serrated O-ring face to eliminate the need for flange gaskets		2" – 12" (50 mm – 305 mm)	Classes 150 – 600 -50° F – 400° F (-45° C – 204° C)
		Dual-Plate Wafer Check: Exceptional flow characteristics, integral seat, 316 Stainless Steel internals, NACE construction. Ideal for close-quarter applications where a full body valve will not fit.		2" – 12" (50 mm – 300 mm)	Classes 150 – 1500 -50° F – 400° F (-45° C – 204° C)
	TOM WHEATLEY	Piston Check: Full open/top-mounted piston check		2" – 12" (50 mm – 300 mm)	Classes 150 – 1500 -50° F – 800° F (-45° C – 426° C)
		Distributed API 6D Swing Check: Full opening through-conduit design; integral and removable seat; 316 stainless steel trim; fully machined cast on flanges; horizontal or vertical flow-up service; bubble-tight seal; NACE construction.		2″ - 12″ (50 mm - 300 mm)	Classes 150 – 1500 -20° F – 400° F (-28° C – 204° C)
	TECHNO	Dual-Plate Metal-Hinged Check Valve: Ease of maintenance; exceptional flow characteristics; elimination of all body leakage; available in wafer		2" – 36" (50 mm – 900 mm)	Classes 125 – 600 -20° F – 800° F (-28° C – 426° C)
		Elastomer-Hinged Check Valve: Unrestricted full-port seatless design; elimination of metal-to-metal rotating parts; non-slam quick closure feature; tight shut-off feature; threaded, flanged, grooved end, plain end and deep well connections; can be mounted in almost any position		2" – 36" (50 mm – 900 mm)	Classes 125 – 150 -20° F – 500° F (-28° C – 260° C)
CHOKE VALVES	THORNHILL CRAVER	Positive and Adjustable Chokes: The UNIBOLT coupling between the body and yoke is a custom design feature that ensures superior reliability, safety and easy conversion between positive and adjustable configurations		1-13/16" – 4-1/16" (45 mm – 100 mm)	2000 – 15000 psi -20° F – 250° F (-28° C – 121° C)

Pressure and temperature may be limited by trim options and/or valve size. Metric to standard conversion is approximate. For details, please reference product data sheets. For complete and complementary information, please reference the individual product brochures.

	BRAND	MODEL/MATERIALS OF CONSTRUCTION	SIZES	PRESSURE/TEMP.
BUTTERFLY VALVES	DEMCO	NE-C/NF-C: Resilient seat; wafer and lug body styles for installation between Class 125/150 flanges; fully lined hard-backed cartridge seat; dry stem journal eliminates potential for leakage; bronze stem bearings are standard	2" – 12" (50 mm – 305 mm)	Throttling; 50 psi, 200 psi or 285 psi -30° F – 300° F (-34° C – 148° C)
			14" – 36" (355 mm – 915 mm)	Throttling; 50 psi, 150 psi -30° F – 300° F (-34° C – 148° C)
		NE-I: Short-neck version of NE-C available in wafer and lug body styles; for industrial, sanitary and other applications; dry stem journal eliminates potential for leakage; available with Teflon-lined seat; bronze stem bearings are standard	2" – 12" (50 mm – 305 mm)	Throttling; 50 psi, 200 psi or 285 psi -30° F – 300° F (-34° C – 148° C)
		NE-D: Short-neck valve available in wafer body with notched body; lightweight flange pattern; dry stem journal eliminates potential for leakage; bronze stem bearings are standard	2" – 12" (50 mm – 305 mm)	Throttling; 50 psi, 200 psi or 285 psi -30° F – 300° F (-34° C – 148° C)
	WKM	High-Performance Butterfly Valves: Double offset disc; available with soft seat, fire-tested seat or metal high-temperature seat	2-1/2" – 36" (65 mm – 915 mm)	Classes 150, 300, and 600 -50° F – 1000° F (-45° C – 537° C)

Pressure and temperature may be limited by trim options and/or valve size. Metric to standard conversion is approximate. For details, please reference product data sheets. For complete and complementary information, please reference the individual product brochures.



Cameron's Rapid Response Centre – Europe

Cameron's Rapid Response Centre – Europe offers a regional summary of valve product inventory – 24 hours a day – through a dynamic online portal, located at **www.c-a-m.com/rrce**. This service helps provide off-the-shelf, quick response for delivering valves and valve automation solutions directly to customers. With in-house testing and modification, we are confident in delivering quality products from Cameron.



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HSE Policy Statement

At Cameron, we are committed ethically, financially and personally to a working environment where no one gets hurt and nothing gets harmed.