



Vehicle Service Equipment Buyer's Guide

Fluid Handling Equipment for Industrial and Commercial Applications



Construction | Fleets and Transportation | Industrial | Mining | Energy | Agriculture

PROVEN QUALITY. LEADING TECHNOLOGY.



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About Graco

Established in 1926, Graco has built a worldwide reputation for high quality, reliable and technically advanced products, world-class manufacturing and outstanding customer service. Headquartered in Minneapolis, Minnesota, Graco works closely with distributors around the world to offer innovative products that set the quality standard for spray finishing, paint circulation, lubrication, sealant and adhesives dispensing, process application and contractor power equipment. These best-in-class products are manufactured in the U.S. and China and supplied through our distribution centers around the world. Every day, Graco's fluid-handling equipment and systems move, measure, mix, control, dispense and spray a variety of fluids and materials.



Lubrication Equipment Division

From the first air-powered grease gun to our industry-leading Fire-Ball pump, Graco's Lubrication Equipment Division is what started it all. We manufacture equipment to monitor, control, manage and dispense fluids. Offering innovative equipment for all your vehicle services, industrial and automatic lubrication needs. We offer a full range of high-quality pumps, meters, valves, hose reels and accessories to increase production and reduce waste and downtime.

Graco offers a full line of quality equipment to meet the varying needs of vehicle maintenance and repair. Streamline your workflow and move more lubricants through your shop. We offer reliable, high-quality equipment you can depend on for fuel, diesel, antifreeze, oil and grease. Our versatile fluid inventory control and management systems are designed to accurately track the use of oil, grease and other automotive fluids at vehicle maintenance facilities, and our lubrication equipment ensures you deliver fluids to the right spot in your shop. From light-duty applications to high-performance concepts designed for heavy-duty jobs, our equipment is known for its rugged, durable and long-life design.





More than **3,300**
distribution partners offer local
service and support in more than
100 countries all over the world

Machining is a core competency of Graco – it enables complete control of the component parts needed to ensure precise metering, reliable dispensing and fluid movement.

When it comes to **research and development**, Graco is one step ahead, ensuring we offer the best possible solutions. To guarantee superior quality and to meet the changing requirements of your markets, we prioritize investing resources in research and development. Innovative technologies and extensive field testing are a natural part of our process to develop new products. Also, every aspect of our production is subject to constant testing and evaluation. It's the foundation to deliver products with long service life and low cost of ownership. The insurance to help you grow your business.



We understand our customers. We build a partnership, working and striving towards new solutions, together. We are at the service of our distribution partners, supporting you along the way. Look at Graco not just as a manufacturer or supplier but as an extension of your business. Our dedicated and experienced teams offer unique capabilities to help you meet your specific goals and challenges.

- Innovative, high-quality products with unique features
- A professional warranty and high service rate
- Purchasing conditions aimed at profitable growth
- A committed sales and marketing team for tailor-made support of expanding sales opportunities
- Continuous technical, commercial and hands-on training

Our world-class distribution centers and unrivaled global distributor network give Graco a unique industry advantage that allows us to rapidly deliver our products to end users worldwide.

Exceeding customer expectations is our priority. Our multilingual team of customer service specialists and technical engineers are available to you. Graco offers instructor-lead training sessions in the United States, EMEA and Asia Pacific. These courses teach theory and hands-on practical applications, covering basic operational to advanced technical knowledge. Each training session can be adapted to your specific needs.

Offering more than just products, we are focused on building relationships, identifying and developing business opportunities with you. Our sales team is available to collaborate, define strategies to assist in navigating through our product offering and provide advice on promotional activities.

Graco's marketing specialists investigate ways to expand the market and develop the right technologies for any application, in close cooperation with distributors and field users. We offer tailor-made

promotional and communication support, from defining strategic requirements to developing marketing campaigns, organizing events and creating digital or printed material.



Did You Know?

Graco also manufactures and sells a complete line of automatic lubrication systems and accessories!



Keep your equipment running at peak performance. Graco automatic lubrication solutions give you the ultimate machine performance by lubricating key wear points – the right amount of lubricant, at the right time, in the right location. Graco has automatic lubrication solutions for the industrial, on-road mobile, off-road mobile, energy industries and more.



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Graco University is an e-learning module that can be accessed online, anytime, and contains assets that help educate you on Graco products.

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Ordering Information

Air Filter-Regulator

	Part Number	Inlet	Flow Range	Drain Type	Maximum Working Pressure
	133215	1/4 in NPT(MBE)	20 cfm (550 lpm)	Semi-automatic	140 psi (9.65 bar)
	133216	1/4 in NPT(MBE)	63 cfm (1,800 lpm)	Automatic	
	133217	3/8 in NPT(MBE)	77 cfm (2,200 lpm)	Automatic	

FRL Combination Units


Each includes filter, regulator, pressure gauge, lubricator and connection fittings.

	Part Number	Inlet
	110149	1/4 in NPT(FBE)
	110150	3/8 in NPT(FBE)
	217072	1/2 in NPT(FBE)
217073	3/4 in NPT(FBE)	


Bleed-Type Air Shut-Off Valves

Closes air inlet to pump and relieves trapped air pressure down line from valve. Recommended for each pump drop line.

Note: Be certain to install correctly. If installed backwards air will constantly escape from the valve. Maximum pressure of 250 psi (17 bar).

	Thread	1/4 in	3/8 in	1/2 in	3/4 in
	NPT(FBE)	110223	110224	110225	110226
	NPT(MXF) inlet x outlet	—	—	107142	107141


Ball Valve-Type Air Shut-Off Valve – Non-Pressure Relieving

	Part Number	Inlet	Maximum Working Pressure
	208390	1/4 in NPT(MBE)	500 psi
	208393	3/8 in NPT(MBE)	500 psi
	208630	1/2 in NPT(M) x 3/8 in NPT(F)	500 psi
	109077	3/4 in NPT(FBE)	600 psi
	118464	1 NPT(FBE)	600 psi

Ordering Information


Air Needle Valve

Controls pump speed by restricting air flow to pump or other air-operated equipment.

	Part Number	Inlet	Outlet
	205090	1/4 in NPSM(M)	1/4 in NPSM(F)
	206264	1/4 in NPT(M)	1/8 in NPT(F)


Air Pressure Relief Valve

Prevents pump from operating beyond recommended working pressure by opening at a pre-set maximum air pressure.

	Part Number	Maximum Pressure Rating	Thread
	110065	60 psi (4 bar)	1/4 in NPT(M)
	103347	100 psi (6.9 bar)	1/4 in NPT(M)


Air Pressure Gauge

Allows visual check of air pressure being supplied to the pump. Rated to 200 psi (14 bar)

	Part Number	Inlet	Color
	110319	1/8 in NPT(M)	Black
	100960	1/4 in NPT(M)	Black
	101180	1/4 in NPT(M)	Chrome


Air Manifold

Supply several pumps from one supply line. Larger port delivery ensures adequate air flow to all pumps.

	Part Number	Inlet Ports	Inlet Thread	Outlet Thread	Maximum Pressure Rating
	158990	2	1/2 in NPT(F)	3/8 in NPT(F)	5,000 psi

Runaway Valve


Prevents pump damage by automatically closing the air line to stop the pump when a runaway pump condition occurs.

	Part Number	Inlet
	224040	3/4 in NPT(FBE)




Ordering Information

Blow Guns

Safety Blow Gun tip swivels freely and cannot be removed. Tip pressure will not exceed 30 psi (2 bar), adequate for cleaning. Maximum working pressure 150 psi (10 bar). Use with coupler 208536.


	Part Number	Description	Inlet
	236211	Air blow gun	1/4 in NPT(F)

Tire Inflators

	Part Number	Description	Includes			
			12 in Hose	Swivel Dual-Foot Chuck	Straight-On Chuck	Pop-Out Gauge
	236205	Heavy-Duty Tire-Inflator	Yes	Yes	–	Yes
	236206	Passenger Car Tire Inflator	Yes	–	Yes	Yes
	218545	Tire Chuck with 1/4 in NPT(F) inlet	–	–	–	–

Water Valve

Water/Antifreeze Bib is a durable, full-volume dispense nozzle for water, antifreeze and windshield washer fluid. Nitrile rubber seals.

	Part Number	Inlet	Pressure Rating
	180685	1/4 in NPT(F)	100 psi (7 bar)

Ordering Information

Heavy-Duty Reinforced Lubrication Hoses

For use with grease, oil and undercoating material. Hoses are black, male connections at both ends. Lubrication hoses listed are grounded for static electrical discharge.


	ID Inch (mm)	Max PSI (bar)	Hose Length	Fitting		Part Number
				End 1 Thread NPT(M)	End 2 Thread NPT(M)	
	1/4 (6.44)	5,000 (345)	12 in (0.3 m)	1/8	1/8	109145
			30 in (0.8 m)			109148
			24 in (0.8 m)	3/8	3/8	109147
			48 in (1.2 m)			1/4
			72 in (1.8 m)	109150		
			12 ft (3.6 m)	109151		
			15 ft (4.6 m)	109152		
			20 ft (6.1 m)	1/4	3/8	109153
			25 ft (7.6 m)		1/4	109154
			35 ft (10.6 m)	3/8	109156	
	40 ft (12.2 m)	109157				
	50 ft (15.3 m)	109158				
	3/8 (9.5)	4,000 (276)	12 in (0.3 m)	1/4	1/2	109160
			24 in (0.62 m)			109161
			48 in (1.2 m)	3/8	3/8	109162
			72 in (1.8 m)			109163
			15 ft (4.6 m)	1/4	1/4	109165
			40 ft (12.2 m)		3/8	109169
			50 ft (15.3 m)		109170	
1/2 (12.7)	3,000 (207)	15 in (0.4 m)	1/2	1/2	110069	
		18 in (0.5 m)			220598	
		54 in (1.4 m)			220600	
		72 in (1.8 m)			220591	
		10 ft (3.1 m)			220590	
		16 ft (4.9 m)			220592	
		20 ft (6.1 m)			220593	
		25 ft (7.6 m)			220608	
		40 ft (12.2 m)			221092	
		50 ft (15.3 m)			221093	
		75 ft (22.9 m)			3/4	237861
3/4 (19.1)	2,250 (155)	18 in (0.4 m)	3/4	3/4	109108	
		72 in (1.8 m)			109105	
		10 ft (3.0 m)			111010	

Accessories

Ordering Information

Air/Water Hoses

For use with low pressure air and water. Hoses are male NPT at both ends.


	ID Inch (mm)	Max PSI (bar)	Hose Length	Fitting		Part Number
				End 1 Thread NPT(M)	End 2 Thread NPT(M)	
	Fabric-Reinforced 1/4 (6.44)	180 (12.4)	18 in (0.5 m)	1/4	1/4	109123
			4 ft (1.2 m)			109124
			6 ft (1.8 m)			109125
			10 ft (3.1 m)			109126
			25 ft (7.6 m)			109127
			40 ft (12.2 m)			109128
			40 ft (12.2 m)	3/8	1/4	218491
	3/8 (9.5)	180 (12.4)	18 in (0.5 m)	3/8	3/8	204560
			4 ft (1.2 m)			109130
			6 ft (1.8 m)			203320
			10 ft (3.1 m)			109131
			16 ft (4.9 m)	1/4	3/8	110326
			25 ft (7.6 m)	3/8	1/2	109132
			40 ft (12.2 m)			109134
	60 ft (18.3 m)			109135		
	1/2 (12.7)	180 (12.4)	22 in (0.56 m)	1/2	1/2	218093
			4 ft (1.2 m)			110046
			6 ft (1.8 m)			205418
			10 ft (3.1 m)			214656
	1/2 (12.7)	300 (20.7)	25 ft (7.6 m)	1/2	1/2	248312
			50 ft (15.2 m)			248313
3/4 (19.1)	180 (12.4)	18 in (0.5 m)	3/4	3/4	110047	
		4 ft (1.2 m)			110048	
		6 ft (1.8 m)			208610	
		10 ft (3.1 m)			214955	
		25 ft (7.6 m)			208611	



Ordering Information


Quick-Connect Coupler

Permits quick, convenient attachment of air supply hoses.

	Part Number	Inlet	Body Size
	208536	1/4 in NPT(F)	1/4 in
	110198	3/8 in NPT(F)	1/4 in
	110199	1/2 in NPT(F)	3/8 in
	110200	3/4 in NPT(F)	1/2 in

Quick-Connect Nipple

Allows quick attachment of air supply hoses to pump motor.

	Part Number	Inlet	Body Size
	169967	1/4 in NPT(F)	1/4 in
	169970	1/4 in NPT(M)	1/4 in
	169971	3/8 in NPT(M)	1/4 in
	110196	1/2 in NPT(M)	3/8 in
	110197	3/4 in NPT(M)	1/2 in

INDUSTRIAL

Ordering Information

Bushings and Pipe Adapters – Reducing, Standard and Expanding

	Outlet	Inlet					
		1/8 in NPT	1/4 in NPT	3/8 in NPT	1/2 in NPT	3/4 in NPT	1 in NPT
	1/8 in NPT	150171	159840	156580	–	–	–
	1/4 in NPT	100030	–	150287	159842	–	–
	3/8 in NPT	–	159841	150286	156022	–	–
	1/2 in NPT	–	100206	100081	–	168595	–
	3/4 in NPT	–	100615	100505	100896	–	–
	1 in NPT	–	–	–	100380	158586	–

Street Elbows

	Part Number	Inlet/Outlet
	100840	1/4 in NPT
	155699	3/8 in NPT
	158683	1/2 in NPT
	176393	3/4 in NPT

Coupling – Standard


	Part Number	Inlet
	100451	1/8 in NPT
	113093	1/4 in NPT
	162024	3/8 in NPT
	158581	1/2 in NPT
	100385	3/4 in NPT
	100474	1 in NPT

Hex Nipples – Standard and Reducing

	Male End 2	Male End 1				
		1/4 in NPT	3/8 in NPT	1/2 in NPT	3/4 in NPT	1 in NPT
	1/8 in NPT	151519	156296	159239	–	–
	1/4 in NPT	156971	165198	162449	–	–
	3/8 in NPT	–	156849	–	194048	–
	1/2 in NPT	–	–	158491	157191	–
	3/4 in NPT	–	–	–	175013	158555

Ordering Information

Square Head Plug

	Part Number	Inlet
	111697	1/4 in NPT
	100040	3/8 in NPT
	100737	1/2 in NPT
	104663	3/4 in NPT

Swivel Adapters*









Rigid End	Swivel End	Straight Swivel Adapter (m x f)	Straight Swivel Adapter (f x f)	90° Swivel Adapter (f x f)	90° Swivel Adapter (m x f)	45° Swivel Adapter (m x f)
1/8 in	1/4 in	208434	–	–	–	–
1/4 in	1/4 in	156823	155570	157676	155541	–
	3/8 in	157705	–	–	–	–
3/8 in	1/4 in	–	159153	–	155495	–
	3/8 in	155665	156173	155677	155494	161889
	1/2 in	162505	–	159801	217430	–
1/2 in	1/4 in	–	155653	–	–	–
	3/8 in	158256-257	161077	–	161037	–
	1/2 in	156684	155865	157416	155470	–
3/4 in	3/4 in	157785	156172	156589	160327	105281
1 in	3/4 in	202965	–	–	–	–
	1 in	160022	158383	–	–	–

*Not a "live" swivel, position is stationary after tightened.

Tube Fittings

Maximum pressure rating of 3,000 psi (207 bar) with appropriate tubing wall thickness.

	Description	Inlet	Tube OD	
			5/8 in	7/8 in
	Tube Union Flow 90° Elbow	–	101012	101376
	Straight Tube Union	–	101009	101340
	Male Connector	3/4 in NPT	–	101339
	Straight Female Connector	1/2 in NPT	101008	–
	Tube Tee with Female Branch	5/8 in NPT	101013	–

Standard Graco Warranty

1-Year Warranty Policy

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended or limited warranty published by Graco, Graco will, for a period of twelve (12) months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective.

This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations. This warranty does not cover, and Graco shall not be liable for, general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser, transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which may include the costs of parts, labor and transportation.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including but not limited to incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold but not manufactured by Graco (such as electric motors, switches, hoses, etc.) are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco or otherwise.

Graco Vehicle Service Equipment Group Extended Warranty

Graco warrants all equipment referenced in this document that is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the distributor. Graco will, for a period as defined in the table on the opposite page from the date of sale, repair or replace equipment covered by this warranty and determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for, general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser, transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which may include the costs of parts, labor and transportation.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including but not limited to incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within one (1) year post the warranty period.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ANY ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO.

These items sold but not manufactured by Graco (such as electric motors, switches, etc.) are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco or otherwise.

FOR GRACO CANADA CUSTOMERS

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Vehicle Service Equipment Group Extended Warranty (cont.)

	Warranty Period		
Oil King, Coolant King, and Oil Ace	5 Years		
Pulse Fluid Management Hubs, TLMs, PACs and Extenders	2 Years		
REELS	Cord and Light Reels	2 Years	
	Electrical Components	1 Year	
	LD Series Hose Reels	5 Years	
	Wear Parts, including but not limited to hose, seals, swivel seats and roller guides	1 Year	
	SDX Series Hose Reels	7 Years	
	Power Springs	3 Years	
	Wear Parts, including but not limited to hose, seals, swivel seats and roller guides	1 Year	
	XD Series Hose Reels	7 Years	
	Power Springs	3 Years	
	Wear Parts, including but not limited to hose, seals, swivel seats, roller guides and motors	1 Year	
	METERS	Mechanical Meters	5 years
		Wear parts, including but not limited to o-rings, seals and valves	1 Year
LD Preset Meters		5 years	
Electronics		2 Years	
Wear parts, including but not limited to o-rings, seals and valves		1 Year	
SD Meters and Valves		5 Years	
Electronics		3 Years	
Wear parts, including but not limited to o-rings, seals and valves		1 Year	
EM Meters and Valves / Pulse Meters and Valves		5 Years	
Electronics		3 Years	
Wear parts, including but not limited to o-rings, seals, valves and trigger locks		1 Year	
PUMPS		LD Oil/Grease Pumps	5 Years
	Wear Parts, including but not limited to o-rings, packings and seals	1 Year	
	Hoses with pump packages	1 Year	
	AODD Pumps	5 Years	
	Wear Parts, including but not limited to o-rings, packings and seals	1 Year	
	Hoses with pump packages	1 Year	
	Mini Fire-Ball 225 and Fire-Ball 300 Oil and Grease Pumps	7 Years	
	Wear Parts, including but not limited to o-rings, packings and seals	1 Year	
	Hoses with pump packages	1 Year	
	Fire-Ball 425 Oil and Grease Pumps	10 Years	
	Wear Parts, including but not limited to o-rings, packings and seals	1 Year	
	Hoses with pump packages	1 Year	
Fast-Ball and Fast-Flo Oil Pumps	5 Years		
LD Blue and SD Blue Diesel Exhaust Fluid Pumps	2 Years		

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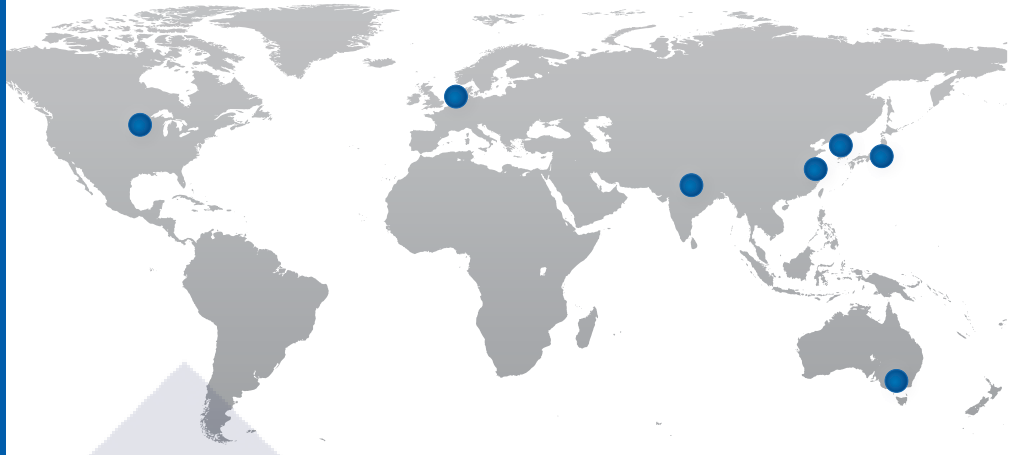
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