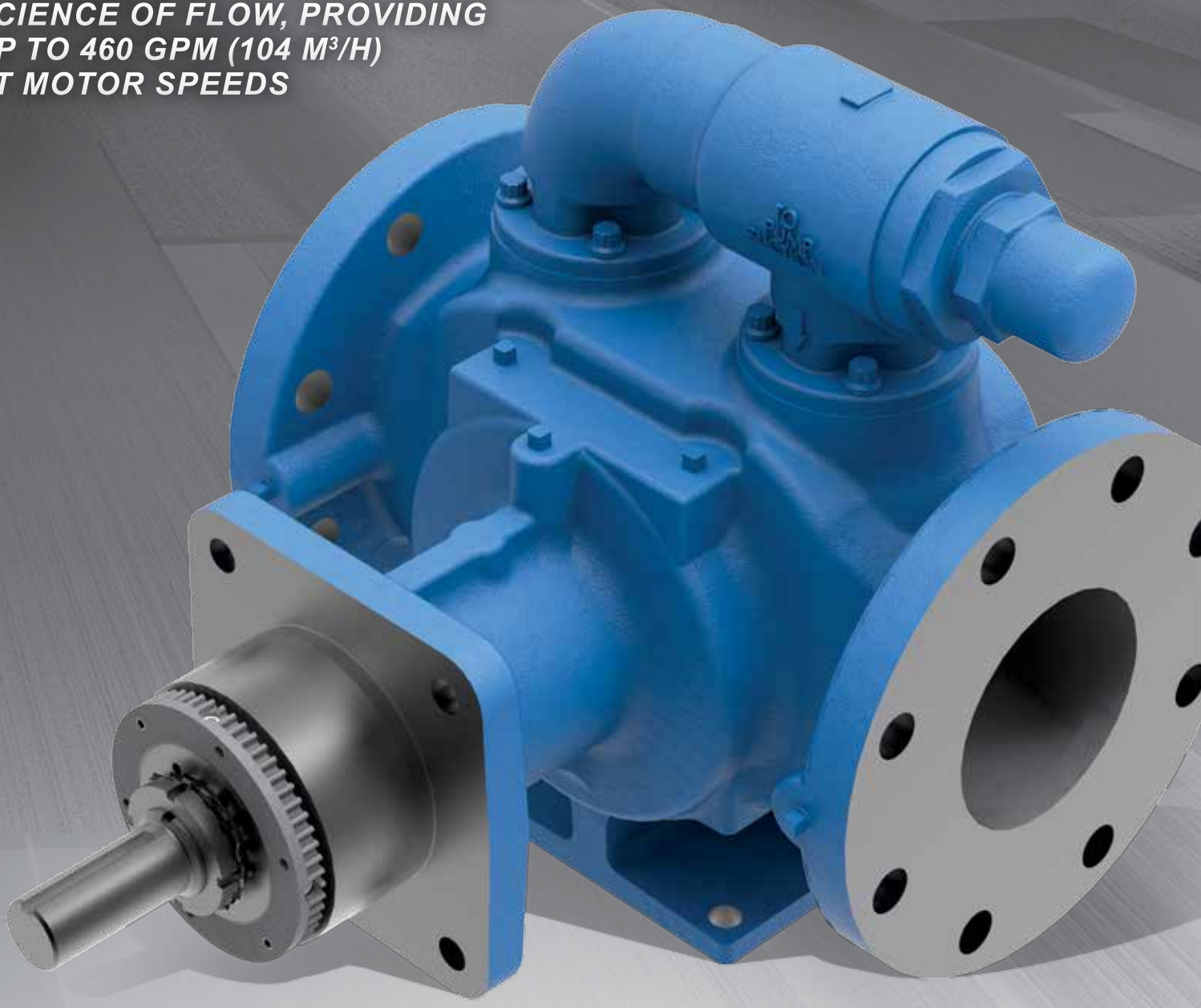
MOTOR SPEED

SMALLER. FASTER. EASIER.

TECHNOLOGICAL ADVANCES IN THE SCIENCE OF FLOW, PROVIDING UP TO 460 GPM (104 M³/H) AT MOTOR SPEEDS



Capacity
to 580 GPM (132 m³/h)

Pressure
to 250 PSI (17 BAR)

Viscosity
28 to 25,000 SSU (5,500 cSt)

Temperature
-40°F to +350°F (-40°C to +180°C)

VIKING PUMP
A Unit of IDEX Corporation

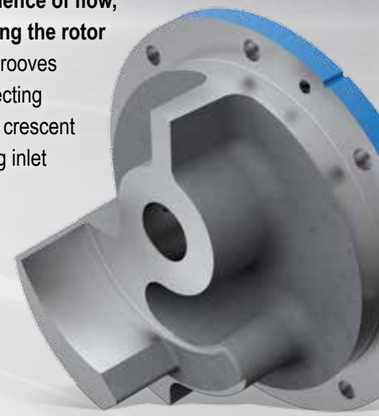
VIKING PUMP

Industry & Application Experts

- Application experience spanning more than 100 years
- Viking invented the internal gear pump
- Reliability, quality and performance
- Global service and support

GLOBAL
LEADER
IN POSITIVE DISPLACEMENT
PUMPING
SOLUTIONS

Technological advances in the science of flow, featuring new techniques of feeding the rotor and idler. Idler and rotor root feed grooves promote axial feeding; the liquid directing step reduces turbulence; a modified crescent boosts radial feeding, and the casing inlet port geometry has been optimized.



Advanced Head Design KE – QS

Benefits:

- Maximum flow of 580 GPM (132 m^3/h) provides greater flow than similar sized pumps
- Reduced footprint for space constrained applications
- Motor speed operation to 460 GPM (104 m^3/h) provides higher value per GPM (m^3/h)
- Ability to operate 50 or 60 Hz synchronous motor speeds eliminates the need for gear reducers or gearmotors, reducing the overall cost

MOTOR
SPEED
SMALLER. FASTER. EASIER.

G-GG	H-HJ-HL	AS-AK-AL	KE-KKE	LQE-LSE	Q	QS
to 10 GPM (2.3 m^3/h) @ 1750 RPM	to 30 GPM (6.8 m^3/h) @ 1750 RPM	to 115 GPM (27 m^3/h) @ 1750 RPM	to 205 GPM (47 m^3/h) @ 1750 RPM	to 350 GPM (80 m^3/h) @ 1150 RPM	to 460 GPM (104 m^3/h) @ 750 RPM	to 580 GPM (132 m^3/h) @ 640 RPM

MOTOR SPEED ADVANTAGES

FLANGE FOR MOTOR MOUNTING BRACKET
Eliminates the need for drive equipment and provides better unit alignment. *(Mounts available for NEMA & IEC motors)*

BEHIND THE ROTOR SEAL
Shaft and bearings not exposed to media.

ANSI OR DIN FLANGES
KE – QS sizes are available with ANSI or DIN flanges. Enables easy in-line mounting to almost any piping system.

THREADED ONE-PIECE BEARING HOUSING
Allows for end clearance adjustment.

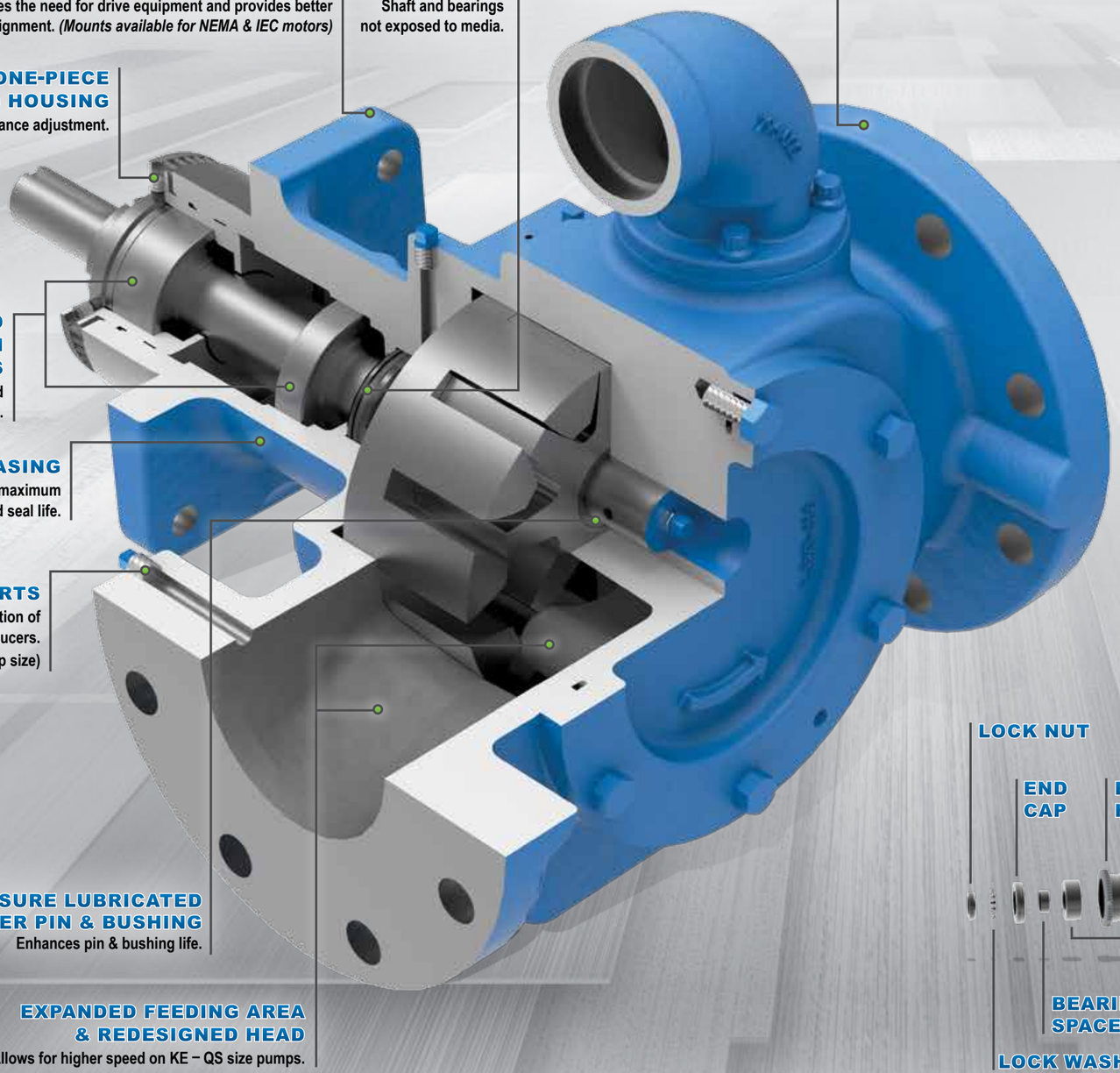
SEALED ANTI-FRICTION BEARINGS
Eliminates the need for relubrication.

ONE-PIECE CASING
Ensures alignment for maximum bearing and seal life.

GAUGE PORTS
For easy application of gauges or transducers. (location varies by pump size)

PRESSURE LUBRICATED IDLER PIN & BUSHING
Enhances pin & bushing life.

EXPANDED FEEDING AREA & REDESIGNED HEAD
Allows for higher speed on KE – QS size pumps.



MOTOR SPEED

Drive Options

CLOSE-COUPLED

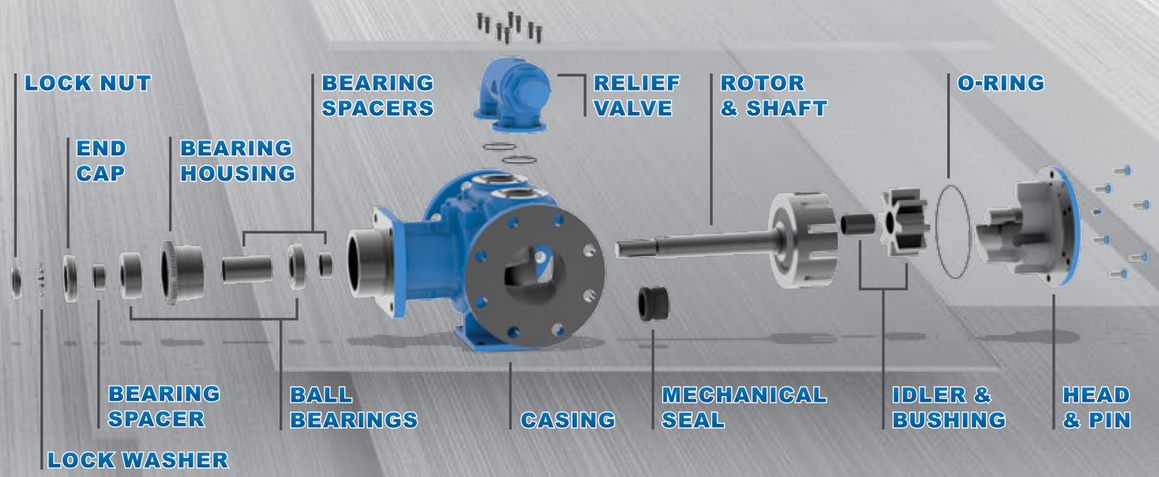
(Vertical mounting capability with close-coupled drive)

LONG-COUPLED

REDUCED SPEED

GEARMOTOR DRIVE

REDUCER DRIVE



GLOBAL LEADER IN POSITIVE DISPLACEMENT PUMPING SOLUTIONS

SPECIFICATIONS & CONSTRUCTION

MODEL		SPECIFICATIONS																	
			Flange Ports ③		Nominal Pump Rating (100 SSU and Below)						Maximum Differential Pressure ④		Maximum Hydrostatic Pressure		Maximum Temperature		Approximate Shipping Weight	
Footed Model	Footless Model ①	NPT Ports	Class 125 ②	DIN PN-16	60 Hz			50 Hz										
		Inches	IN	mm	RPM	GPM	m^3/h	RPM	GPM	m^3/h	PSI	BAR	PSI	BAR	°F	°C	Lbs	Kg.
G4195	G495	1	--	--	1750	8	1.8	1450	7	1.5	250	17	400	28	350	180	20	9
GG4195	GG495	1	--	--	1750	10	2.3	1450	8	1.9	250	17	400	28	350	180	20	9
H4195	H495	1.5	--	--	1750	15	3.4	1450	12	2.8	250	17	400	28	350	180	44	20
HJ4195	HJ495	1.5	--	--	1750	20	4.5	1450	17	3.8	250	17	400	28	350	180	44	20
HL4195	HL495	1.5	--	--	1750	30	6.8	1450	25	5.6	250	17	400	28	350	180	44	20
AS4195	AS495	2.5	--	--	1750	55	12	1450	45	10	250	17	400	28	350	180	85	39
AK4195	AK495	2.5	--	--	1750	85	20	1450	70	16	250	17	400	28	350	180	85	39
AL4195	AL495	3	--	--	1750	115	27	1450	95	22	250	17	400	28	350	180	86	39
KE4195⑤	①	--	4	100	1750	150	34	1450	125	28	150	10	300	21	225	107	132	60
KKE4195⑤	①	--	4	100	1750	205	47	1450	170	39	150	10	300	21	225	107	133	60
LQE4195⑤	①	--	4	100	1150	235	53	960	195	44	150	10	300	21	225	107	220	100
LSE4195⑤	①	--	4	100	1150	350	80	960	290	67	150	10	300	21	225	107	222	101
Q4195	--	--	6	150	750	460	104	750	460	104	150	10	300	21	225	107	443	201
QS4195	--	--	6	150	640	580	132	640	580	132	150	10	300	21	225	107	450	204

① 495 models require motor mount bracket, do not have mounting foot.
KE, KKE, LQE, LSE 4195 models have both mounting flange for motor bracket and a mounting foot.

② Flange ports are suitable for use with Class 125 ANSI cast iron companion flanges or flanged fittings.

③ Optional Class 250 or DIN PN-25/40.

④ If suction pressures exceed 100 PSI (7 BAR), consult factory.

⑤ These sizes can only operate in one direction (clockwise only).

NOTE: Steel rotor recommended on sizes GG, HJ & Q above 7,500 SSU / 1,600 cSt viscosity.

NOTE: Nominal flow rates taken at 100 SSU and 25 PSI..

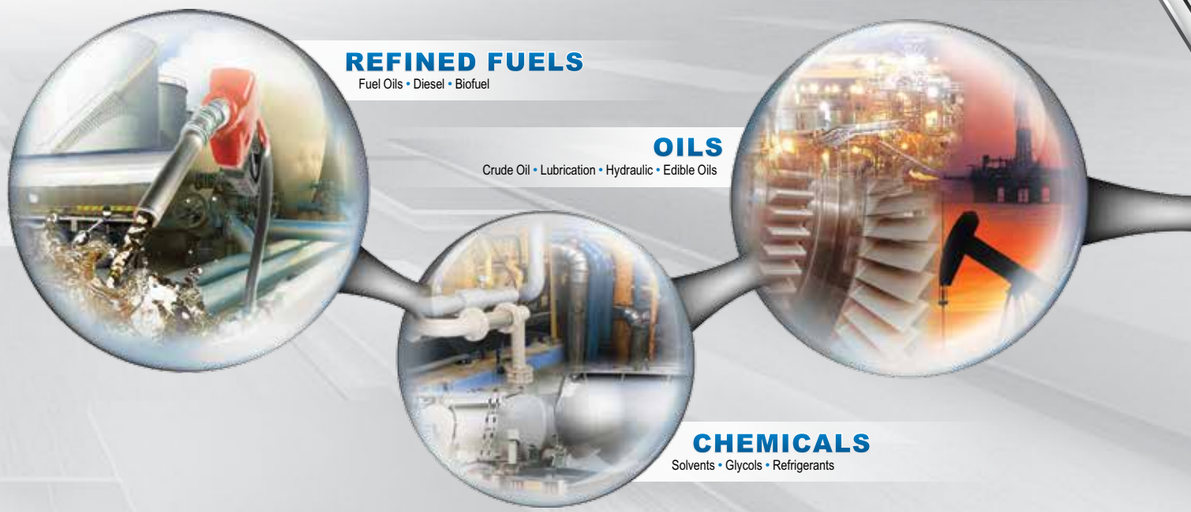
MATERIALS OF CONSTRUCTION

Component	Standard Material
Bracket/Casing	Cast Iron, ASTM A48, Class 35B
Head	Cast Iron, ASTM A48, Class 35B
Pressure Relief Valve	Cast Iron, ASTM A48, Class 35B
Rotor Shaft	Steel, ASTM A108, Grade 1045
Rotor	Cast Iron, ASTM A48, Class 35B (G, GG, H, HJ, KE, LQE, Q) Ductile Iron, ASTM A536 Grade 60-40-18 (HL, AS, AK, AL, KKE, LSE, QS)
Idler	Powdered Metal: MPIF 35, FC-0208-50 (G, GG) Powdered Metal: MPIF 35, FC-0208-45 (H, HJ, HL) Ductile Iron, ASTM A536 Grade 60-40-18 (AS, AK, AL) Hardened Steel, ASTM A148, Grade 80-50 (KE, KKE, LQE, Q, QS) Hardened Steel, ASTM A148, Grade 80-40 (LSE)
Idler Pin	Hardened Steel, ASTM A108, Grade 1045
Idler Bushing	Carbon Graphite
Mechanical Seal Faces	Carbon vs. Silicon Carbide
Elastomers	Viton®
Antifriction Bearings	Steel with Buna Seals

Viton® is a registered trademark of E.I. du Pont de Nemours and Company.

MARKETS & APPLICATIONS

MOTOR SPEED
SMALLER. FASTER. EASIER.



Global Installed Base

G – AL size pumps have been sold **successfully** for over 50 years with installations worldwide.
The new KE – QS size pumps have been sold to a variety of **customers**, in **locations** across the globe.

Some examples include:

CANADA:

- Railcar unloading of diesel fuel, displacing vane pump that was being continually repaired

MIDWESTERN USA:

- Truck tank unloading of base oils into storage tanks, displacing centrifugal pump that couldn't maintain flow on a new, more viscous oil

SOUTHERN USA:

- Oil tank transfer, displacing centrifugal pump that was unable to maintain a constant flow at varying pressures

CHINA:

- Vegetable oil transfer, beating out competing gear pump company

UAE:

- Filtering turbine oil, displacing centrifugal pump that could not maintain flow as filter became filled
- Lube oil blending plant, beating out centrifugal pump because they could not maintain constant flow with varying oil viscosities

CONTRACTING COMPANY:

- Duplex fuel skids for generator fuel supply

OEMS:

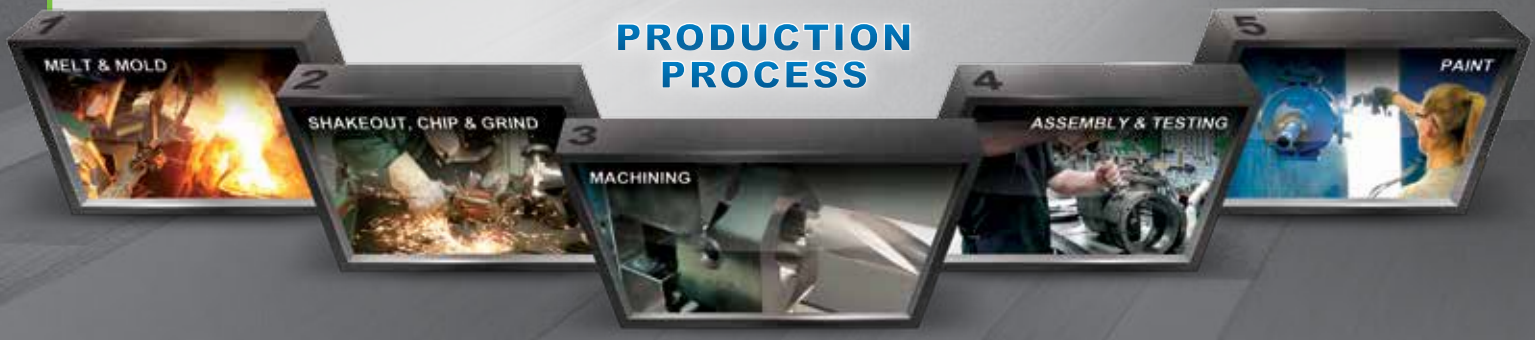
- Oil filtration systems, oil and fuel purification equipment

VIKING PUMP ADVANTAGE

MOTOR SPEED
SMALLER. FASTER. EASIER.

Viking Pump has been a global leader in positive displacement pumping solutions since 1911. With a vertically integrated manufacturing process, we have the tools, processes and systems to produce our products in-house; from the initial engineering analysis, through design layout, foundry casting, machining, final assembly, testing and shipping. Viking pumps are uniquely designed for the task at hand, from simple solutions to your most advanced and demanding needs.

PRODUCTION PROCESS



WATCH THE VIDEO

Learn more about Viking Pump's extended line of Motor Speed pumps.

Scan this QR code or visit
VIKINGPUMP.COM/MOTORSPEED-VIDEO

VIKING PUMP

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