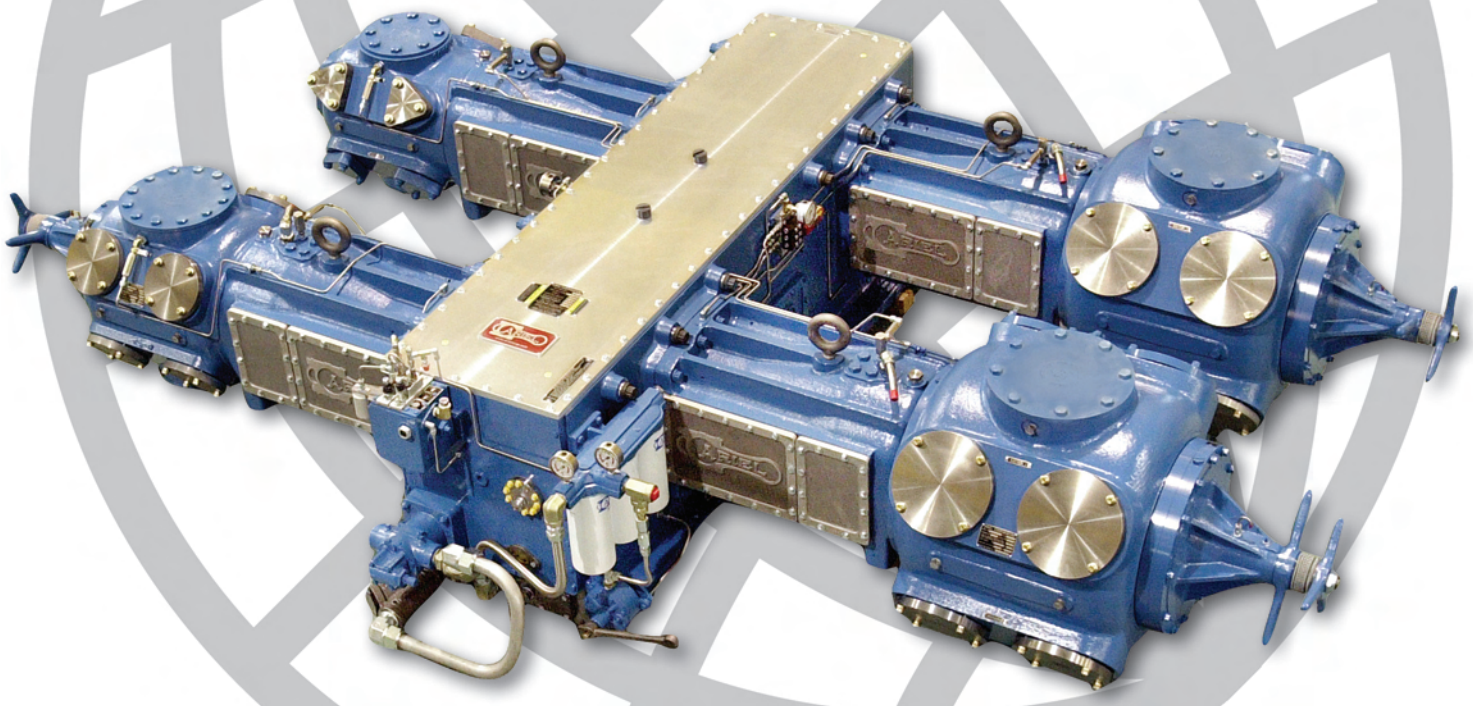


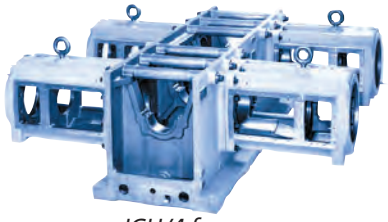
ARIEL JGH and JGE COMPRESSORS

Frame	JGH/2	JGH/4	JGE/2	JGE/4	JGE/6
Number of throws	2	4	2	4	6
Rated Power, BHP	680	1360	1070	2140	3210
Rated Power, kW	507	1014	798	1596	2394
Stroke, inches	4.5	4.5	4.5	4.5	4.5
Stroke, mm	114	114	114	114	114
RPM, maximum	1200	1200	1500	1500	1500
Piston speed, FPM	900	900	1125	1125	1125
Piston speed, m/s	4.57	4.57	5.72	5.72	5.72
Total Rod Load, lbs	48000	48000	60000	60000	60000
Total Rod Load, N	213515	213515	266893	266893	266893
Tension, lbs	24000	24000	30000	30000	30000
Tension, N	106757	106757	133447	133447	133447
Compression, lbs	30000	30000	32000	32000	32000
Compression, N	133447	133447	142343	142343	142343
Average Weight with cylinders, lbs	7000	14000	7000	14000	22000
Average Weight with cylinders, kg	3175	6350	3175	6350	9980
Maximum Length, inches	50	96	51	97	141
Maximum Length, mm	1270	2438	1295	2464	3581
Nominal Width, inches	139	139	139	139	139
Nominal Width, mm	3531	3531	3531	3531	3531
Crankshaft ℄ (from bottom), inches	17	17	17	17	17
Crankshaft ℄ (from bottom), mm	432	432	432	432	432

FEATURES

The JGH and JGE are medium- to large-size, separable, reciprocating, gas gathering compressors. They are found by the thousands in gas fields throughout the world. Driver rated, they pair well with modern, high-speed engines and work year after year as one of the most cost-effective choices for rental fleets.

- **Serviceability** - Entire unit is designed for ease of repair. All components are readily accessible.
- **Standardization** - Many components are interchangeable throughout the various lines.
- **Full Pressure Lubrication** - A frame-driven lube oil pump provides pressurized, cooled oil through a full flow oil filter to all moving parts in the frame. A divider block distribution system supplies metered oil to cylinder bores and rod packing. Stainless steel tubing is used throughout the cylinder lubrication system.
- **Unloading Devices** - Manual head-end variable volume clearance pockets, pneumatic fixed volume clearance pockets and pneumatic suction valve unloaders are available on a limited optional basis.
- **Heavy Duty Crankshaft** - Forged steel precision machined with integral counterweights.
- **Rugged Crankcase** - Heavily ribbed (with spacer bars for stiffening), high-strength cast iron base with removable, lightweight aluminum top cover and removable end covers for ease of access.
- **Precision Bearing Shells** - Precision-machined, tri-metal main and connecting rod bearings.
- **Rugged Crossheads and Guides** - Cast iron crosshead guides, external ribbing and removable side covers. One piece, long life crossheads with direct full pressure lubrication at top and bottom for minimum wear. Hardened and ground steel crosshead pins.
- **Rigid Connecting Rods** - Forged steel four bolt, heavy duty "H" section.
- **Quiet Auxiliary Drive** - Fully enclosed and continuously lubricated chain drive adjusted by positive positioning eccentric vernier.
- **Oil and Dust Seal** - Foolproof, non-contacting crankshaft oil seal plus reliable non-wearing dust seal.
- **Proven Cylinder Design** - Non-cooled compressor cylinders with ample nozzles and large gas passages. Cylinder bodies are ion-nitride hardened and drilled for indicator ports.
- **High Strength Bolting** - Grade 8 bolts or B-7 studs on all pressurized components. All bolting designed for accessibility.
- **Efficient Valving** - Ariel uses plate-type valves designed for modern speeds utilizing non-metallic sealing elements as standard. Selected to adhere to established, low valve velocity standards.
- **Durable Pistons** - Wear-resistant ductile or gray iron with wear bands.
- **Stout Piston Rods** - Short, stiff, precision-ground alloy steel piston rods with locking crosshead nut. Rolled threads are 1/4" under rod diameter for easy installation through packing.



JGH/4 frame



Forged steel connecting rod used for JGE (Ductile iron connecting rod used for JGH)



JGE/4 forged steel crankshaft



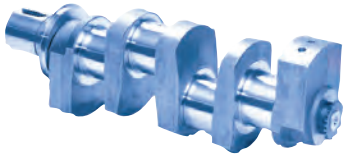
Ductile iron (JGE) crossheads, babbitted shoe surface, full-floating crosshead pin with "through-bolt" and end caps



Head-end variable volume pocket unloader



Full array of JGE crossheads and nuts for precise balancing of pistons



JGH/2 ductile iron crankshaft

CYLINDERS A COMPLETE LIST OF CYLINDERS IS AVAILABLE IN THE ARIEL COMPRESSOR PERFORMANCE PROGRAM

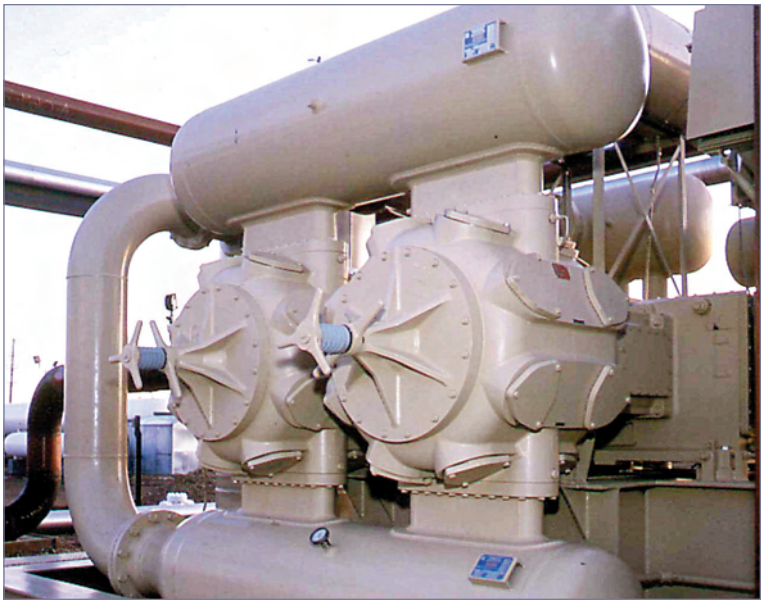
	Class*	BORE inches	BORE mm	MAWP psi	MAWP bar	Material
Double-Acting	4-5/8ET	4.250, 4.625	108, 117	2600	179	Ductile Iron
	5-1/2ET	5.125, 5.500	130, 140	1725	119	Ductile Iron
	6-3/8ET	6.000, 6.375	152, 162	1270	88	Ductile Iron
	6-3/8ET	6.000, 6.375	152, 162	1650	114	Ductile Iron
	7-3/8ET	7.000, 7.375	178, 187	845	58	Ductile Iron
	7-3/8ET	7.000, 7.375	178, 187	1135	78	Ductile Iron
	7-3/8ET	7.000, 7.375	178, 187	1440	99	Ductile Iron
	8-3/8ET	8.000, 8.375	203, 213	635	44	Ductile Iron
	8-3/8ET	8.000, 8.375	203, 213	800	55	Ductile Iron
	9-3/4ET	9.250, 9.750	235, 248	635	44	Ductile Iron
	11-1/2ET	11.000, 11.500	279, 292	635	44	Ductile Iron
	12 1/4 ET	11.750, 12.250	298, 311	635	44	Ductile Iron
	13-1/2ET	13.000, 13.500	330, 343	300	21	Ductile Iron
	15-3/4ET	15.250, 15.750	387, 400	200	14	Ductile Iron
	17-1/4ET	16.750, 17.250	425, 438	230	16	Ductile Iron
	19-1/2ET	19.000, 19.500	483, 495	200	14	Ductile Iron
	22-1/2ET	22.500	572	205	14	Ductile Iron
Tandem	5-1/2ET-HE	5.125, 5.500	130, 140	1800	124	Ductile Iron
	9-3/4ET-CE	9.250, 9.750	235, 248	635	44	Ductile Iron

NOTE: JGT cylinders also can be mounted on these frames
* HE=Head End, CE=Crank End

More than 35 years ago, Ariel introduced an innovative cylinder design that eliminated water cooling from the cylinder jacket. This proven design yields significant advantages over water-cooled cylinders:

- higher efficiency
- larger gas passages
- reduced pressure-drop losses
- lower maintenance (no scaling or corrosion)

Today, Ariel is the only manufacturer to use an ion-nitride furnace to increase surface hardness of all cylinders. This extra step reduces cylinder bore wear to an absolute minimum. And, to ensure complete reliability in the field, Ariel pressure-tests each cylinder to 150% of maximum allowable working pressure (MAWP) during manufacture.



22-1/2E cylinders, 205 psig, with head-end variable volume clearance pocket unloaders.

THE ARIEL NETWORK

Ariel's success is based on strong relationships built on mutual respect and trust. Employees, vendors, distributors, and end users are all part of the Ariel Network.

Ariel Compressors are marketed and packaged through a long-established network of elite compression system engineering companies. Ariel's Authorized Distributors integrate the compressor with a structural skid, a prime mover, piping, pulsation control, cooling systems, process valving, and control systems.

- All Ariel distributors adhere to Ariel's strict packaging standards.
- Ariel's large network offers the most complete service and parts coverage available in the world.



Model JGH/4, electric motor driven, for offshore Nigeria

CUSTOMER SERVICE

We are committed to supporting our compressors for life. If there is a problem with an Ariel compressor, we'll help you solve it — now.

- The Ariel Network is composed of more than 1000 Ariel-trained field servicemen and technicians, worldwide.
- Ariel's policy has always been to routinely ship standard parts within 24 hours of receiving an order.
- Ariel gas compressors are backed by more than 100 parts and service outlets close to every major natural gas field.
- Ariel's Service and Technical Schools are held frequently, free of charge, for engineers and field servicemen. These courses are taught by Ariel engineers and technicians directly involved in the subject material.
- The availability of Ariel manufactured parts at competitive prices will ensure your Ariel compressor's maximum reliability and productivity.
- Ariel's goal is to offer the best customer care and service. Our warranty and our treatment of warranty issues clearly show our commitment to this goal.

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