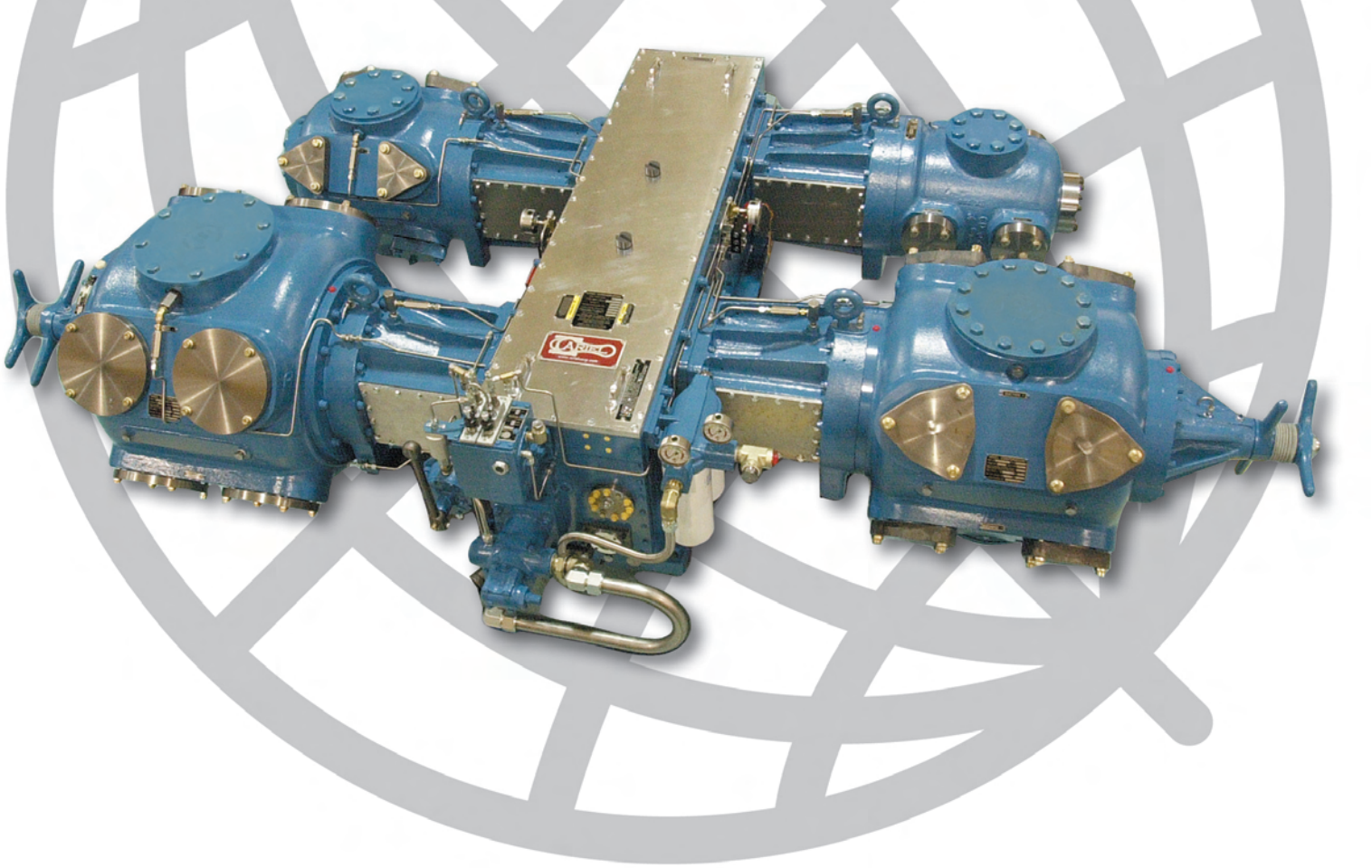


ARIEL JGR and JGJ COMPRESSORS

Frame	JGR/2	JGR/4	JGJ/2	JGJ/4	JGJ/6
Number of throws	2	4	2	4	6
Rated Power, BHP	430	860	620	1240	1860
Rated Power, kW	321	641	462	925	1387
Stroke, inches	4.25	4.25	3.5	3.5	3.5
Stroke, mm	108	108	89	89	89
RPM, maximum	1200	1200	1800	1800	1800
Piston speed, FPM	850	850	1050	1050	1050
Piston speed, m/s	4.32	4.32	5.33	5.33	5.33
Total Rod Load, lbs	32000	32000	42000	42000	42000
Total Rod Load, N	142343	142343	186825	186825	186825
Tension, lbs	16000	16000	21000	21000	21000
Tension, N	71172	71172	93413	93413	93413
Compression, lbs	20000	20000	23000	23000	23000
Compression, kg	88964	88964	102309	102309	102309
Average Weight with cylinders, lbs	3700	7400	3700	7400	11100
Average Weight with cylinders, kg	1680	3355	1680	3355	5035
Maximum Length, inches	41	78	41	78	108
Maximum Length, mm	1041	1981	1041	1981	2743
Nominal Width, inches	104	104	104	104	104
Nominal Width, mm	2642	2642	2642	2642	2642
Crankshaft Centerline, from bottom, inches	12	12	12	12	12
Crankshaft Centerline, from bottom, mm	305	305	305	305	305

FEATURES

The JGR and JGJ are medium-sized, driver-rated, separable, reciprocating compressors and are well-suited for gas gathering in moderate-sized wells. They have proven particularly effective for fuel-gas boost (co-gen) applications and are often paired with electric motor drive as well as natural gas engines.

- **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.



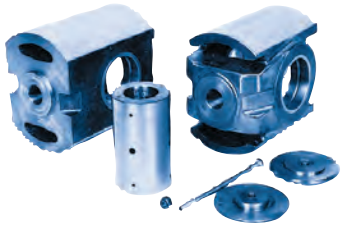
JGR/4 forged steel crankshaft



Forged steel JGJ connecting rod (Ductile iron connecting rod used for JGR)



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



Ductile iron crossheads, babbited shoe surface, full-floating crosshead pin with "through-bolt" and end caps



Head end variable volume pocket unloader

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

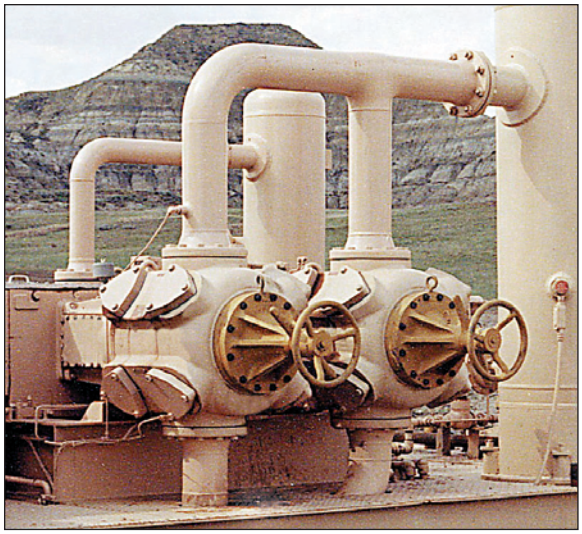
	Class*	BORE inches	BORE mm	MAWP psig	MAWP bar	Material
Double-Acting	3-3/8RJ-FS	3.125, 3.250, 3.375	79, 83, 86	4500	310	Forged Alloy Steel
	3-7/8RJ:R	3.625, 3.875	92, 98	2200	152	Ductile Iron
	4-5/8R	4.250, 4.625	108, 117	1900	131	Ductile Iron
	4-5/8HJ	4.250, 4.625	108, 117	2600	179	Ductile Iron
	5-1/2RJ:R	5.125, 5.500	130, 140	1725	119	Ductile Iron
	6-3/8RJ:R	6.000, 6.375	152, 162	1270	88	Ductile Iron
	7-3/8RJ:R	7.000, 7.375	178, 187	845	58	Ductile Iron
	7-3/8RJ	7.000, 7.375	178, 187	1135	78	Ductile Iron
	8-3/8RJ:R	8.000, 8.375	203, 213	635	44	Ductile Iron
	8-3/8RJ	8.000, 8.375	203, 213	800	55	Ductile Iron
	9-3/4RJ:R	9.250, 9.750	235, 248	635	44	Ductile Iron
	11-1/2RJ	11.000, 11.500	279, 292	500	34	Ductile Iron
	13-1/2RJ:R	13.000, 13.500	330, 343,	300	21	Ductile Iron
	15-3/4RJ:R	15.250, 15.750	387, 400	200	14	Ductile Iron
	17-1/4RJ:R	16.750, 17.250	425, 438	230	16	Ductile Iron
	19-1/2RJ:R	19.000, 19.500	483, 495	200	14	Ductile Iron
Tandem	2RJ:R-FS-HE	1.750, 2.000	44, 51	5280	364	Forged Alloy Steel
	2RJ:R-FS-HE	1.750, 2.000	44, 51	6100	421	Forged Alloy Steel
	3-7/8RJ:R-CE	3.625, 3.875	92, 98	2200	152	Ductile Iron
	3-7/8RJ:R-HE	3.625, 3.875	92, 98	2200	152	Ductile Iron
	6-3/8RJ:R-CE	6.000, 6.375	152, 162	1270	88	Ductile Iron
	7-3/8RJ:R-CE	7.000, 7.375	178, 187	845	58	Ductile Iron
	4-5/8R-HE	4.250, 4.625	108, 117	1900	131	Ductile Iron
	8-3/8R-CE	8.000, 8.375	203, 213	635	44	Ductile Iron
	5-1/2RJ:R-HE	5.125, 5.500	130, 140	1800	124	Ductile Iron
	9-3/4RJ:R-CE	9.250, 9.750	235, 248	635	44	Ductile Iron

* 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.



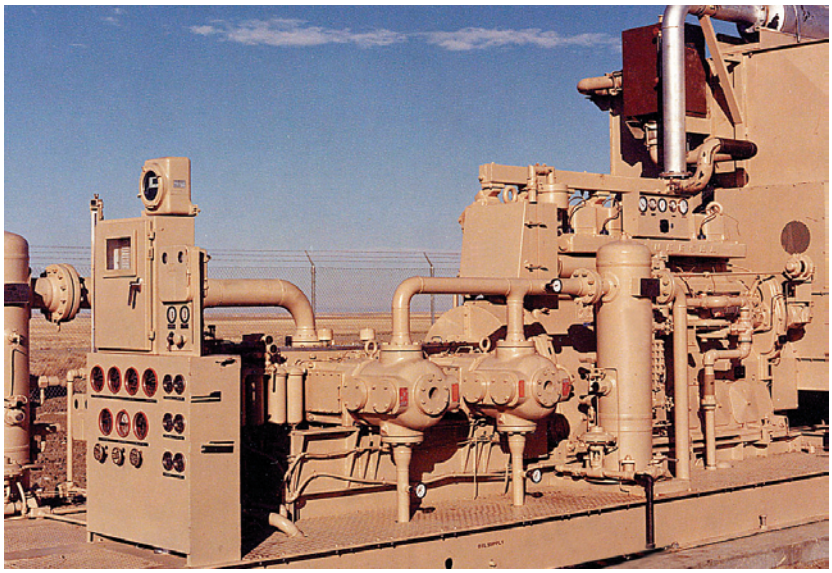
Ariel 11-1/2R Cylinders

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 JGW/4, 2-stage, 415 BHP, engine driven, gas lift unit, Rudyard, Montana, USA

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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