



## Frame Class Equipment

### JGM:JGP Frames

ARIEL balanced/opposed, multi cylinder, gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame.
- Forged steel crankshaft
- Precision insert tri-metal bearings.
- Strong, H-beam design ductile iron connecting rods.
- Short close coupled guide is standard and integral with the compressor frame.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. (See [Frame Lube Oil System](#))
- Manual lube oil priming pump is available as an option
- Frame mounted full-flow lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. (See [Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format
- Mechanical running test with cylinders mounted

For cylinder information refer to [M, P, SP, JG Cylinders](#).

### JGN:JGQ Frames

ARIEL balanced/opposed, multi cylinder, gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame.
- Forged steel crankshaft.
- Precision insert tri-metal bearings.
- Strong, H-beam design forged steel connecting rods.
- Short close coupled guide is standard and integral with the compressor frame.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. (See [Frame Lube Oil System](#) )
- Manual lube oil priming pump is available as an option
- Frame mounted full-flow lube oil filter with inlet and outlet pressure gauges

- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. (See [Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format
- Mechanical running test with cylinders mounted

For cylinder information refer to [M, P, SP, JG Cylinders](#).

## JG:JGA Frames

ARIEL balanced/opposed, multi cylinder, gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame.
- Forged steel crankshaft
- Precision insert tri-metal bearings.
- Strong, H-beam design forged steel connecting rods
- Short close coupled guide standard. Short two compartment and long two compartment distance piece are available as an option
- Built-in crank end cylinder support
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. (See [Frame Lube Oil System](#) )
- Manual lube oil priming pump is available as an option
- Frame mounted full-flow lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing.(See [Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format
- Mechanical run test with cylinders mounted

For cylinder information refer to [M, P, SP, JG Cylinders](#).

## JGM:JG:JGSP Cylinders

- Horizontal single or double acting, non-cooled compressor cylinders.
- Plugged indicator cock connections on the head-end and crank-end of most cylinders
- SAE series 4100 steel piston rods, ion-nitrided with rolled threads. 17-4PH stainless steel piston rods available as an option

- Pistons of scuff-resistant gray iron or ductile iron
- Non-metallic piston rings
- Pistons with piston/rider rings standard for 13-1/2JG and 1-3/4M-FS cylinders, and available as an option on all other M, P and JG cylinders. (See [Piston Rings, Piston/Rider Rings & Wear Bands](#) )
- Full floating, vented rod and wiper packings
- Profiled plate type valves with non-metallic valve plates.

## JGR:JGJ Frames

ARIEL balanced/opposed, multi cylinder, gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame
- Forged steel crankshaft
- Precision insert tri-metal bearings
- Strong, H-beam design forged steel connecting rods
- Short close coupled guide standard. Short two compartment distance piece is available as an option. Long two compartment (Ariel design) distance piece, is available for JGW frames with 8-7/8W or R cylinders.
- Full floating, vented rod and wiper packings
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. (See [Frame Lube Oil System](#) )
- Manual lube oil priming pump is available as an option
- Frame mounted full-flow lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. (See [Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format
- Mechanical run test with cylinders mounted

For cylinder information refer to [R, RJ Cylinders](#).

## JGR:JGJ:JGE Cylinders

- Horizontal single or double acting, ion-nitrided, non-cooled compressor cylinders.
- Plugged indicator cock connections on the head-end and crank-end of most cylinders.
- SAE series 4100 steel piston rods, ion-nitrided with rolled threads. 17-4PH stainless steel piston rods available as an option
- Pistons of scuff-resistant gray iron or ductile iron
- Non-metallic piston/rider rings ([Piston Rings, Piston/Rider Rings & Wear Bands](#))
- Full floating, vented rod and wiper packings
- Profiled plate type valves with non-metallic valve plates.

## JGH Frame

ARIEL balanced/opposed, multi cylinder, air or gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame
- Forged steel crankshaft
- Precision insert tri-metal bearings
- Strong, H-beam design ductile iron connecting rods
- Long single compartment distance piece standard. short two compartment and long, two compartment (API-618 Type C) distance pieces are available as options.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. ([Frame Lube Oil System](#))
- Manual lube oil priming pump is available as an option
- Frame mounted full-flow lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. ([Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format
- Mechanical run test with cylinders mounted

For cylinder information refer to [ET Cylinders](#).

## JGE:JGT:JGK Frames

ARIEL balanced/opposed, multi cylinder, air or gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame
- Forged steel crankshaft
- Precision insert tri-metal bearings
- Strong, H-beam design forged steel connecting rods
- Long single compartment distance piece standard. short two compartment and long, two compartment (API-618 Type C) distance pieces are available as options.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. ([Frame Lube Oil System](#))
- Manual lube oil priming pump is available as an option
- Frame mounted full-flow lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass

- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. ([Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format.
- Mechanical run test with cylinders mounted

For cylinder information refer to [ET Cylinders](#) and [T, K Cylinders](#).

## KBK:KBT Frames

ARIEL balanced/opposed, multi cylinder, air or gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame
- Forged steel crankshaft
- Precision insert tri-metal bearings
- Strong, H-beam design forged steel connecting rods
- Long single compartment distance piece standard. Long, two compartment (API-618 Type C) distance piece is available as an option.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. ([Frame Lube Oil System](#))
- Frame mounted full-flow lube oil filter with inlet and outlet pressure gauges
- Lube oil thermostatic valve integrally mounted to frame oil filter header
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. ([Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format.
- Mechanical run test with cylinders mounted

For cylinder information refer to [T, K Cylinders](#).

## JGK:T:C:D:F:Z:U:B:V Cylinders

- Horizontal single or double acting, ion-nitrided, non-cooled compressor cylinders.
- Plugged indicator cock connections on the head-end and crank-end of most cylinders.
- Standard and pipeline cylinders available.
- SAE series 4100 steel piston rods, ion-nitrided with rolled threads. 17-4PH stainless steel piston rods available as an option
- Pistons of scuff-resistant gray iron or ductile iron
- Non-metallic piston rings
- One-piece, angle cut, non-metallic wear bands. ([Piston Rings, Piston/Rider Rings & Wear Bands](#))

- Full floating, vented rod and wiper packings
- Profiled plate type valves with non-metallic valve plates.

## JGC:JGD:JGF Frames

ARIEL balanced/opposed, multi cylinder, gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame
- Forged steel crankshaft
- Precision insert tri-metal bearings
- Strong, H-beam design forged steel connecting rods
- Long single compartment distance piece standard. Short two compartment and long, two compartment (API-618 Type C) distance pieces are available as options.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. ([Frame Lube Oil System](#))
- Frame lube oil priming pump, electric motor driven, supplied by Packager
- Frame mounted lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. ([Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools
- Instruction manual and parts lists in electronic format
- Mechanical run test with cylinders mounted

For cylinder information refer to [C, D, F Cylinders](#).

## KBZ:KBU Frames

ARIEL balanced/opposed, multi cylinder, gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with appropriate engine, electric motor, turbine or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame
- Forged steel crankshaft
- Precision insert tri-metal bearings
- Main bearing temperature devices
- Strong, H-beam design forged steel connecting rods
- Long single compartment distance piece standard. Long two compartment (API-618 Type C) distance pieces are available as an option.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. ([Frame Lube Oil System](#))
- Frame lube oil priming pump, electric motor driven, supplied by Packager

- Frame mounted lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. ([Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools (Hydraulic tools and pumps are required and priced separately)
- Instruction manual and parts lists in electronic format
- Mechanical run test with cylinders mounted

For cylinder information refer to [Z, U Cylinders](#).

## KBB:KBV Frames

ARIEL balanced/opposed, multi cylinder, gas compressor arranged for clockwise rotation when facing the drive end of the compressor (standing on the driver looking at the compressor). Designed for operation with the appropriate engine, electric motor, turbine, or other prime mover. Includes the following standard equipment:

- Heavy-duty, horizontal balanced/opposed, moisture and dust-proof compressor frame
- Forged steel crankshaft with integral flanged crankshaft hub
- Precision insert tri-metal bearings
- Main bearing temperature devices
- Strong, H-beam design forged steel connecting rods
- Long single compartment distance piece standard. Long two compartment (API-618 Type C) distance pieces are available as an option.
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crossheads. ([Frame Lube Oil System](#))
- Frame lube oil priming pump, electric motor driven, supplied by Packager
- Frame mounted lube oil filter with inlet and outlet pressure gauges
- Lube oil strainer and carbon steel lube oil piping with steel flanges
- Crankcase oil breather
- Oil level sightglass
- Force-feed lubricator pump(s) with block distribution system, cycle indicator / and no-flow shutdown(s), and [stainless steel tubing with plated steel fittings](#) for cylinders and packing. ([Compressor Cylinder Lube Oil System](#))
- Special wrenches and tools (Hydraulic tensioning tools and pumps are required and priced separately)
- Instruction manual and parts lists in electronic format
- Mechanical run test with cylinders mounted

For cylinder information refer to [B, V Cylinders](#).

## JGI Frame

Ariel, vertical single throw air or gas compressor arranged for counter-clockwise rotation when facing the drive end of the compressor (looking at the compressor crankshaft stub) and designed for operation with appropriate engine, motor, belt drive arrangement, with standard equipment including:

- Heavy duty, vertical, moisture and dust proof compressor frame

- Gray Iron crankshaft
- Strong, H-beam design connecting rods
- Vertical, single or double acting non-cooled compressor cylinders
- Short, close coupled distance piece
- Lubricating oil pump with system relief valve for full pressure lubrication to bearings and crosshead
- Manual lube oil priming pump is available as an option
- Frame mounted full-flow lubricating oil filter with in and out pressure gages
- Lube oil strainer and [stainless steel lube oil tubing with plated steel fittings](#)
- Crankcase oil breather
- Oil level sight glass
- Force feed lubricator with distribution block system, cycle indicator/electric no-flow shutdown switch, and [stainless steel tubing with plated steel fittings](#) for cylinders and packing
- Special wrenches and tools
- Instruction manual and parts lists in electronic format
- Mechanical running test with cylinder mounted

## JGI Unbalanced Forces and Moments

Based upon 800 rpm operation, largest available cylinder bore:

	Primary	Secondary
Horizontal force, lbs	260	0
Horizontal couple, lbs	0	0
Vertical force, lbs	1520	380
Vertical couple, lb-ft	0	0

## Tools

Ariel compressors are provided with special tools, and have a number of optional tools available. All available tools are listed in the Ariel performance software to allow separate purchase. Details on the special tools, and what is included or recommended for each frame or tool option, can be found on the Ariel website within the Maintenance and Repair Manuals.

Ariel compressors are built with some special tool requirements. Special tools that are not available through standard tool suppliers are provided by Ariel with each compressor.

Some compressor frames require (or recommend) the use of hydraulic tensioning devices. As these may be needed for each site, rather than each compressor frame, they are provided as an optional purchase.

Ariel compressors are built using SAE fasteners. As SAE tools are not readily available in all installation locations, an option to provide SAE tools is available in the Ariel performance software.

Further information on Special Tools can be found on the Ariel website within the Maintenance and Repair Manuals.