Project Experience

LNG Support
Module Line Blowing, Drying & Pneumatic Testing
Specialists in LNG Support

Airpac Bukom’s rental fleet comprises of a wide range of equipment suitable for LNG and pipeline projects, including those located in remote and challenging areas around the world.

Airpac Bukom supply high quality, reliable equipment with experienced personnel who are qualified to operate and maintain the rental packages on all phases of LNG and pipeline projects.

Equipment includes:
- Low Pressure Air Compressors
  (70 - 2100 cfm / 100 - 200 psi)
- High Pressure Air Compressors
  (900 - 1920 cfm / 350 - 508 psi)
- Multi Pressure Desiccant Dryers
  (Minimum dewpoint capabilities of -40°C and oil content of 0.01mgs/m³)
- Air Receivers
  (Nominal pressure range is to 365 psi, although higher pressures can be accommodated)
- Booster Compressors
  (1900 - 3800 cfm / 2248 - 3000 psi)

Line Blowing/Drying

Low Pressure Air Compressors coupled with Desiccant Dryer packages are utilised for line blowing/drying operations. Air Receivers can also be incorporated into the packages to accommodate larger volumes to enhance the effectiveness and reduce the overall time of operations.

Superior quality of compressed clean dry air is provided by way of cooling, water separation, filtration and absorption to allow LNG process pipework to be cleaned effectively free of debris and adequately dried to the required dewpoint.

Typical Airpac Bukom Spread for Line Blowing/Drying:

Pneumatic Pressure Testing

High Pressure Air Compressors coupled with Desiccant Dryers are packages utilised for pneumatic pressure testing operations up to 365 psi. Booster Compressors combined with after filtration can also be incorporated into the packages to provide pressures up to 3,000 psi.

Superior quality of compressed clean dry air is provided by way of cooling, water separation, filtration and absorption to allow successful pneumatic pressure testing, which can be carried out from the smallest of volumes up to extremely large volumes.

Typical Airpac Bukom Spread for Pneumatic Pressure Testing:
Airpac Bukom has recently provided a range of temporary compressed air equipment packages for the following major development and expansion projects:

- **North West Shelf Train V - Construction Project** - Western Australia
- **Chevron Wheatstone LNG - Module Build** - Batam, Indonesia
- **Chevron Wheatstone LNG - Construction Project** - Western Australia
- **APLNG - Module Build** - Batam, Indonesia
- **APLNG Curtis Island - Construction Project** - Queensland, Australia
- **QCLNG Curtis Island - Construction Project** - Queensland, Australia
- **GLNG Curtis Island - Construction Project** - Queensland, Australia
- **Woodside Pluto LNG - Module Build** - Thailand
- **Woodside Pluto LNG - Construction Project** - Western Australia
- **Inpex LNG - Module Build** - Thailand
- **Inpex LNG - Construction Project** - Northern Territory, Australia

Each contract covered the supply, operation and maintenance of high and low pressure Booster Compressors, Air Compressors and Air Treatment equipment for air blowing, drying and pressure testing of the various LNG module and pipework systems.

Project Experience

**Module Line Blowing and Pneumatic Testing**

**Wheatstone LNG**

**Construction & Commissioning Phase**

**Location:** Onslow, Western Australia  
**Client:** Chevron  
**EPC:** Bechtel

**Scope:** To support the blowing and testing section of the Wheatstone LNG project.

**Project Details:** Airpac Bukom worked on site of the Wheatstone LNG project to provide support to the blowing, drying and testing section of the project. Airpac Bukom started providing rental services to the project since December 2015 and are recognised by Bechtel as the first point of call for compressed air packages and support services. All our equipment was operated and maintained by our Airpac Bukom Mechanic Operators.

Equipment supplied on a rental basis included:

- **Pneumatic testing:** Booster Compressors, High Pressure Air Compressors, Desiccant Dryers, oil filtration, oil/water separation and removal equipment.
- **Line blowing:** Low Pressure Air Compressors, Desiccant Dryers, water separation and removal equipment, Air Receivers and filtration kits.
**Inpex LNG**

**Fabrication Phase**

*Location:* Thailand  
*Client:* CR Asia  
*EPC:* JKC

**Scope:** Provision of temporary air compression with operation and maintenance.

**Project Details:** Airpac Bukom provided fully trained and experienced mechanic operators who managed equipment operation and provided training and instruction to local employees.

Equipment supplied on a rental basis included:

- **Pneumatic testing**  
  High Pressure Air Compressors, High Pressure Heatless Desiccant Dryers, VHP final oil removal filtration, oil/water separation and removal equipment.

- **Line blowing**  
  Low Pressure Air Compressors, Low Pressure Heatless Desiccant Dryers, oil/water separation and removal equipment and 5m³ Air Receivers.

**Inpex LNG**

**Construction & Commissioning Phase**

*Location:* Darwin, Northern Territory, Australia  
*Client:* Inpex  
*EPC:* JKC

**Scope:** Provision of compressed air packages and support services with qualified and experienced Mechanic Operators.

**Project Details:** Airpac Bukom were on site at the Ichthys (Inpex) LNG project from April 2016, based within the client team to increase performance and productivity.

Equipment supplied on a rental basis included:

- **Pneumatic testing:**  
  Booster Compressors, High Pressure Air Compressors, Desiccant Dryers, oil filtration, oil/water separation and removal equipment.

- **Line blowing:**  
  Low Pressure Air Compressors, Desiccant Dryers, Air Receivers and filtration kits.

All Airpac Bukom equipment was operated and maintained by our fully trained Airpac Bukom Mechanic Operators.
APLNG
Fabrication Phase

**Location:** Batam, Indonesia  
**Client:** APLNG  
**EPC:** Bechtel

**Scope:** Provision of a fully maintained temporary compressed air package supported by experienced and qualified operators.

**Project Details:** Provision of operating personnel on a twelve week rotation to operate and maintain our high and low pressure compressed air spreads.

Our Operators also provided assistance and advice to the Bechtel pneumatic testing team during the fabrication and testing process of the LNG modules.

Equipment supplied on a rental basis included:

- **Pneumatic testing**
  Booster Compressors, High Pressure Air Compressors, VHP Heatless Air Dryers, VHP final oil removal filtration, oil/water separation and removal equipment.

- **Line blowing**
  Low Pressure Air Compressors, VHP Heatless Desiccant Dryers, water separation and removal equipment, Air Receivers and Silencers.

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APLNG
Construction & Commissioning Phase

**Location:** Queensland, Australia  
**Client:** ConocoPhillips and Origin Energy JV  
**EPC:** Bechtel

**Scope:** Provision of temporary air compression with operation and maintenance.

**Project Details:** Airpac Bukom provided skilled personnel to operate and maintain our high and low pressure compressed air spreads. Training, assistance and advice was also provided to the Bechtel pneumatic testing team during the construction and commissioning phases of the APLNG process plant. The equipment was used for the testing process of the LNG modules during construction and commissioning of the process plant.

Equipment supplied on a rental basis included:

- **Pneumatic testing**
  Booster Compressors, High Pressure Air Compressors, VHP Heatless Air Dryers, VHP final oil removal filtration, oil/water separation and removal equipment.

- **Line blowing**
  Low Pressure Air Compressors, VHP Heatless Air Dryers, water separation and removal equipment, Air Receivers and Silencers.
**Pluto**

**Fabrication Phase**

**Location:** Thailand  
**Client:** Woodside - CR Asia  
**EPC:** Foster Wheeler Worley Parsons

**Scope:** Provision of temporary air compression package with support provided by our qualified and experienced Mechanic Operators.

**Project Details:** Provision of three operating personnel on an eight week rotation during the fabrication and testing process of the LNG modules for the Pluto LNG project in Dampier, Australia.

Equipment supplied on a rental basis included:

- **Pneumatic testing**  
  Booster Compressors, High Pressure Air Compressors, High Pressure Heatless Air Dryers, VHP final oil removal filtration, oil/water separation and removal equipment.

- **Line blowing**  
  Low pressure Air Compressors, Low Pressure Heatless Air Dryers, oil/water separation and removal equipment and 5m³ Air Receivers.

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**Pluto**

**Construction & Commissioning Phase**

**Location:** Dampier, Australia  
**Client:** Woodside  
**EPC:** Foster Wheeler Worley Parsons

**Scope:** Provision of compressed air packages and support services with qualified and experienced Mechanic Operators.

**Project Details:** Provision of four operating personnel and one HSE Supervisor per shift on a four week rotation.

Equipment supplied on a rental basis included:

- **Pneumatic testing**  
  Booster Compressors, High Pressure Air Compressors, High Pressure Heatless Desiccant Dryers, VHP final oil removal filtration, oil/water separation and removal equipment.

- **Line blowing**  
  Low Pressure Air Compressors, Low Pressure Heatless Air Dryers, oil/water separation and removal equipment, 25m³ Air Receivers, 15m³ Air Receivers and 5m³ Air Receivers.

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**During the project the equipment supplied was operated without interruption to the process and to specification. The team worked professionally, safely and integrated seamlessly into our testing organisation.**

Mark Potter  
Fabrication Manager  
Pluto LNG
Location: Queensland, Australia  
Client: QGC  
EPC: Bechtel

Scope: Provision of temporary air compression with operation and maintenance.

Project Details: Airpac Bukom provided experienced personnel to operate and maintain our high and low pressure compressed air spreads. We also provided training, assistance and advice to the Bechtel pneumatic testing team during the construction and commissioning phases of the QCLNG process plant. The equipment was used for the testing process of the LNG modules during construction and commissioning of the process plant.

Equipment supplied on a rental basis included:

- **Pneumatic testing**  
  Booster Compressors, High Pressure Air Compressors, VHP Heatless Air Dryers, VHP final oil removal filtration, oil/water separation and removal equipment.

- **Line blowing**  
  Low Pressure Air Compressors, VHP Heatless Air Dryers, water separation and removal equipment, Air Receivers and Silencers.

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I would gladly recommend the services of Airpac Bukom for any compressor and dryer requirements on any level of work. We look forward to working with Airpac again on the next exciting project.

Adam Mastor  
Testing & Air Blowing Superintendent  
QCLNG, Bechtel

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Why Choose Airpac Bukom?

LNG Support Specialists

- Proven LNG track record
- Commitment to Q.H.S.E
- Tailored solutions
- Partnership approach
- Safety first
- Global service and locations
- Quality assured organisation
- Vast LNG project experience
- Wide equipment range and fleet size
- 24/7 coverage
- Experienced Mechanic Operators
- Service and maintenance included within the cost of our Operators
- Customer training
- Flexible approach to each project
- Work closely within project and testing teams
- Cost effective individual packages
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