



ARCTIC SERIES

BOP SYSTEMS

20 to 40 Metric Tons Capacity

TAME THE ICE

ULTRA LOW AMBIANT TEMPERATURE APPLICATIONS

Extreme conditions are never a barrier for Ingersoll Rand®. Our engineers have designed very specific hydraulic BOP Handling Systems able to operate at -45°C ambient temperature.

We're proud of our legacy for developing ruggedly reliable, class-leading industrial technologies and outstanding customer service and technical support.

The robust, all-steel design and corrosion-resistant components thrive in the harsh environments of the arctic oilfields. This new design uses steel, modern alloys and other advanced materials to operate safely in freezing climates. ARCTIC BOP handling systems are designed for operation at -45°C and storage at -60°C . The standard system is spark proof and delivered with ATEX Zone 2 certificate (ATEX Zone 1 optional) as well as CE certification and marking.



SAFETY

By offering a CE and ATEX certification, and using high quality materials that are fully tested for these extreme conditions.

PLUG AND PLAY

Easy to operate by providing a **100% hydraulic** solution, easy to connect, ready to operate. A fully integrated preheating system uses the HPU hydraulic fluid to prepare the hoist for low temperature operation.

RELIABLE

Design and components based on long experience in oil fields around the world. The mechanisms are classified 1 Bm according to FEM rules.

VERSATILE

The system can operate from -45°C to 60°C without modifications*.

** below -20°C , operation requires low temperature hydraulic fluid.*



BS ARCTIC BOP HANDLING SYSTEMS

Ingersoll Rand® specialists work in conjunction with the oil rig designers and users to provide the best solution for any specific situation. With our broad assortment of products and 100+ years of experience, we can be your source for material handling needs in any situation.

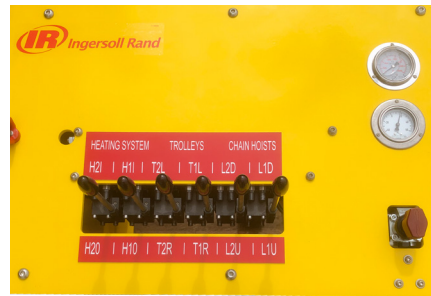
OPERATION

BS Arctic series Hydraulic BOP Handling Systems have been designed to operate from -45°C to + 60°C to meet the wide range of ambient temperature that may be encountered in certain regions of the world.



CONTROL

The 2 hoists are operated by a remote control console which is fully hydraulic and allows the operator to control the hoists motions. Specific instrumentation has been developed for these unusual conditions.



SAFETY

All major load bearing components have a 5:1 safety factor. High resilience steel parts are validated by a Charpy impact test at -60°C and are delivered with certified 3.1 Material Traceability.

An emergency shut-off valve is mounted on the control console, and an overload limiter ensures total safety.

ATEX Marking of Standard Unit:

- II 3G Ex h IIB T4Gb X (Gas)
- II 3D Ex IIIC T135°C Db X (Dust)



Specifications as per European standard EN14492-2 - Group of Mechanism FEM 1Bm / ISO M3

BS ARCTIC HYDRAULIC MOTOR SERIES - HOIST SUB-ASSEMBLY

MODEL	System Capacity (T)	Falls of Load Chain Per Hoist	Min. Headroom (mm)	Lifting Speed at Rated Load (m/min)	Lifting Speed at No Load (m/min)	Lowering Speed at Rated Load (m/min)	Working Pressure (bar)	Calibration Pressure (bar)	Nominal Flow (l/min)	System Weight ⁽¹⁾ (kg)	Chain Size (mm)
BS20LC2H2**VLM	20	2	995	1.9	1.9	1.9	125	170	40	1050	16x45
BS30LC2H3**VLM	30	3	1195	1.25	1.25	1.25	145	175	40	1750	16x45
BS40LC2H4**VLM	40	4	1240	0.95	0.95	0.95	145	175	40	1900	16x45

BS ARCTIC HYDRAULIC MOTOR SERIES - TROLLEY SUB-ASSEMBLY

MODEL	Number of Wheels per Hoist	Standard Flange Adjustment (mm)	Max Beam Bottom Flange Thickness (mm)	Wheel Tread Diameter (mm)	Wheel Loading per Pair (kg)	Trolley Assy Length (mm)	Number of Motors per Trolley	Max Traveling Speed at Rated Load ⁽²⁾ (m/min)
BS20LC2H2**VLM	4	130-314	40	160	5000	622	1	12
BS30LC2H3**VLM	4	140-314	40	225	7500	782	1	12
BS40LC2H4**VLM	4	140-314	40	225	10000	782	1	12

(1) Weight of the complete system (2 hoists) with standard height of lift and length of control (9m). Does not include control console weight which is 150kg.

(2) In Rack & Pinion version, the trolley speed is divided by 2.

A FULL RANGE OF ACCESSORY SOLUTIONS



OPTIONS

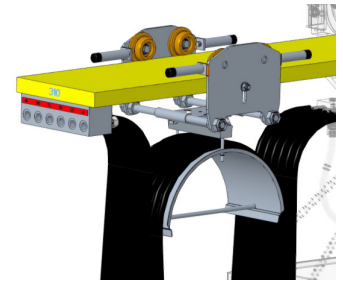
ATEX

- Zone 1 option will consist of trolley bronze wheels and bronze coated bottom block and hook. Marking would be as following:
- II 2G Ex h IIB T4Gb X (Gas)
- II 2D Ex IIIC T135°C Db X (Dust)



Hydraulic Supply

- A complete hydraulic supply kit including festooning trolleys, hoses and connectors can also be supplied to provide you with a key-on-hands solution



Rack & Pinion

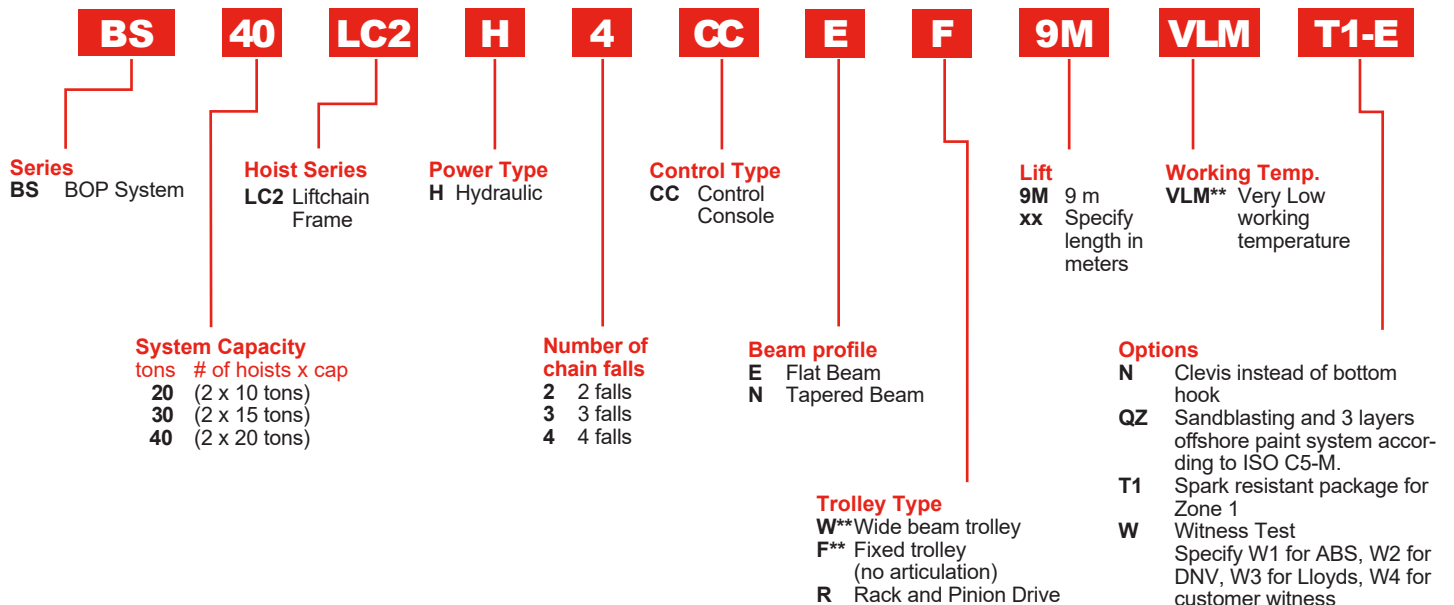
- Our trolleys can be equipped with a rack & pinion drive system to ensure motion in any harsh condition



Clevis Attachment

- A bottom Clevis can be supplied as load attachment instead of standard hook

HOW TO ORDER



* : For articulated trolley, please consult us.
 ** : Option VLM includes 3.1 material traceability certificates on main load bearing parts.
 *** : includes Overload Protection, Emergency Sop, CE and ATEX certificates.



Learn more at www.ingersollrand.com

Ingersoll Rand (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency.