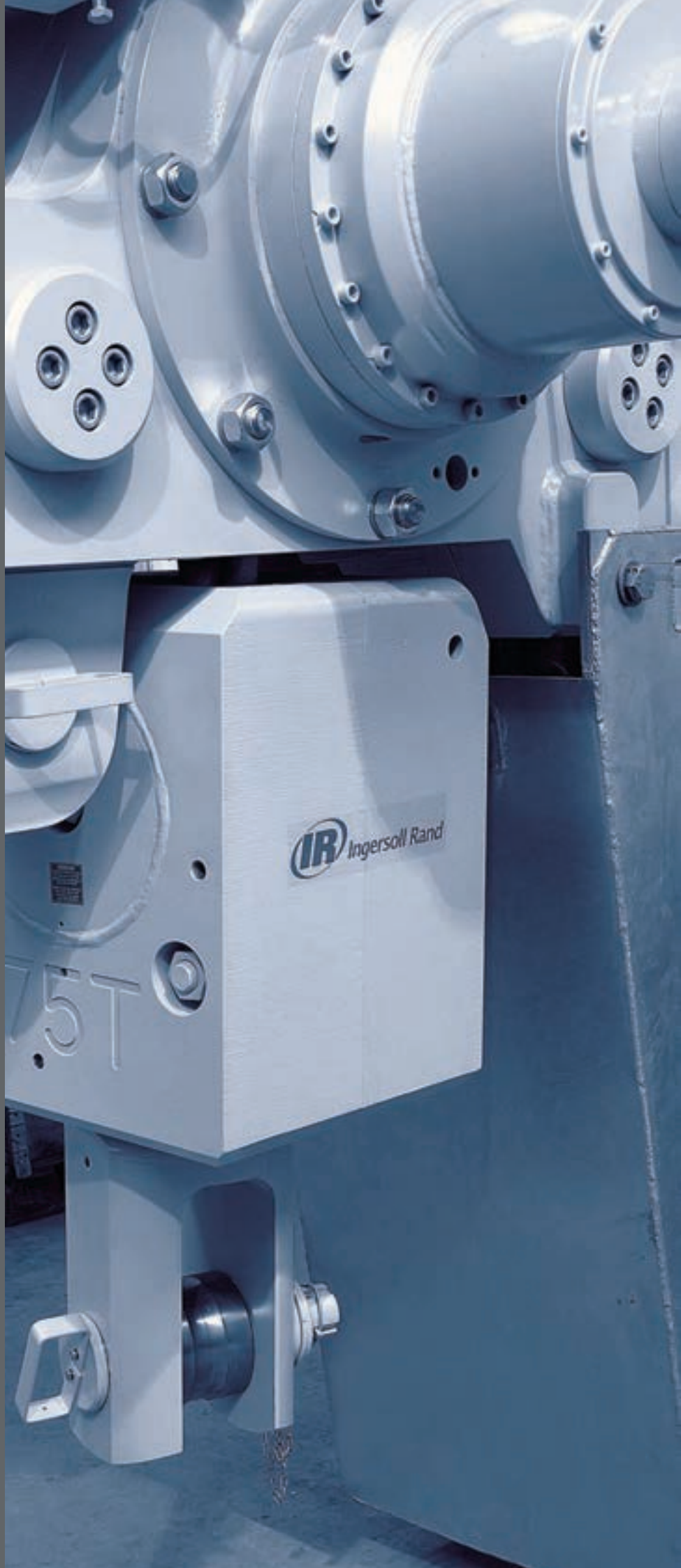


# *BOP Handling Systems*

For over 30 years Ingersoll Rand has designed, manufactured and serviced hundreds of blowout preventer handling systems for all the major drilling contractors and oil companies in the industry.

Our experience with this complex and critical lifting application enables us to provide the type of equipment, engineering support, and certifications that these projects require.

Our commitment to safety and quality combined with our long experience with difficult lifting applications allows us to provide our clients with the safest and most cost-effective solutions possible.



# BOP Handling Systems

## 25 - 200 t Load Capacity

Our BOP Handling Systems are designed to meet or exceed the specifications of one or more of the following regulatory bodies; the Norwegian Petroleum Directorate (NPD), UK HSE, Lloyds Register of Shipping (LRS), Det Norske Veritas (DNV), and American Bureau of Shipping (ABS) for the oilwell drilling industry.

All Ingersoll Rand BOP handling systems are designed and built in ISO9001 certified factories. They are comprised of two trolley-mounted hoists; each of which is rated at one-half the complete system capacity.

### Features

- 5:1 design factor combined with all steel and cast iron construction to withstand the brutal environmental and mechanical challenges of the job.
- Automatic multi-disc brakes that engage instantly the moment the controls are released.
- High efficiency planetary gear boxes that are fully sealed to exclude contaminants.
- Space saving modular designs require no deck space, offer low headroom and improved end approach. Ultra-low headroom models are available for applications with severe envelope restrictions.
- Choice between two types of pneumatic motor, including compact gear type motor (**BS Series** BOP handling systems) and high-torque radial piston motor (**BHS Series** BOP handling systems). Air motors provide built-in overload protection since they will stall without damaging hoist.
- Smooth, precise and safe load control with variable speed pendent control.
- Rugged corrosion-resistant load chain in 16, 22 and 32 mm sizes with greater elongation and therefore, with more resistance to shock loading. The large links provide for easier external inspection, excellent resistance to abrasion, and will last indefinitely when properly maintained.
- True vertical lift which enhances load control characteristics and safety.
- Articulated trolleys accommodate limited side pulling as BOP stack is being lifted.

### Engineered options

- Rack and pinion trolley drive option for positive traction and improved horizontal load control.
- Severe duty packages available for cold weather, marine and explosion-proof environments, including ATEX.
- Remote control pendants and consoles.
- Spark and corrosion resistant components.
- Festooning systems.
- Trolleys for custom fabricated beams.
- Clevis and shackle bottom block assemblies.
- Low pressure 4 bar (57 psi) applications.



Certificate No. FM53539



Certificate No. QUAL/1991/309e



CE marked models are compliant with the latest European machinery directive No 2006/42/EC and the European standard for Power Driven Hoists EN 14492-2.

These models include as standard an emergency stop on pendent and main air shut-off valve as per EN 418 standard, an overload protection and a CE declaration of conformity.



The BS and BHS BOP handling systems are particularly suitable for use in potentially explosive atmospheres.

In their standard design, they are classified as equipment category 3 for applications in zone 2 as per ATEX 94/9/CE Directive (ATEX marking **Ex II 3 GD c IIB 135°C X**).

For more hazardous areas such as zone 1, they are offered with a special spark resistant package (ATEX marking **Ex II 2 GD c IIB 135°C X**).

# BOP Handling Systems

## 25 - 200 t Load Capacity



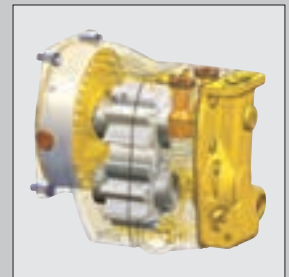
BS150LC3P3  
(one 75 t hoist shown)

### BS Series

#### Specific Features

All models meet the requirements of the European standards FEM 9.511 and FEM 1001 for lifting as well the U.S. standard ASME/ANSI B30.7.

- Gear type air motor – hoist and trolley.
- 5:1 design factor.
- Standard design temperature TD = -20°C for BS25LC2A2 to BS50LC2A4. TD = -10°C for other models.
- All steel/cast iron construction.
- Automatic fail safe multi disc, motor brake on hoist and trolley
- Articulated trolley allows limited side pulling operations
- Fully enclosed planetary gear box
- Compact modular design
- Corrosion resistant load chain
- 9 m height of lift standard on all models
- Bottom block mounted on bearing with external lubrication point and water drain
- PHS progressive piloted pendent control - 9 m length as standard.
- Limit switch for upper and lower over-travel protection.
- Lifting lugs for easy installation.
- Filter-lubricator-regulator air preparation package mounted on unit.
- Corrosion resistant marine 812 finish paint.
- Galvanised steel chain container.
- Trolley guide rollers, rubber bumpers, and rail sweeps.
- Manufacturer test certificate and maintenance manual.
- Exhaust mufflers.



#### **Ingersoll Rand gear air motor is characterised by:**

- A unique design with only two moving parts, making it ideal for severe applications in hot, cold, dusty, dirty, explosive and wet conditions.
- A reduced sensitivity to long storage period or long period with no use.
- A low air consumption.
- A variable speed control offering a precision spotting control at slow speeds.

**WARNING:** Standard hoist / trolley combinations purchased for BOP handling will void the warranty. They are not designed for this type of application.



# BOP Handling Systems

## 25 - 200 t Load Capacity

### BS Series Specifications

BS BOP handling systems are comprised of two trolley-mounted hoists. The total system capacity corresponds to the addition of the rated capacity of both hoists.



BS75LC2A3P3  
(one 37.5 t hoist shown)

See dimensions on  
pages 54 and 55.

**Specifications** at 6.3 bar dynamic pressure (when BOB handling system is running) — Working pressure 5 to 7 bar.  
**As per European standard EN range 14492-2** – Group of mechanism as per FEM 1Bm / ISO M3.

System model number	System capacity (t)	Falls of chain per hoist	Min. headroom (mm)	Lifting speed at rated load (m/min)	Lowering speed at rated load (m/min)	Motor power per hoist (hp)	Air cons. per hoist (m <sup>3</sup> /min)	Sound level <sup>(1)</sup> (dBa)	System weight <sup>(2)</sup> (kg)	Chain size (mm)	Chain weight/ 1m extra lift (kg)
<b>BS Series BOP Handling Systems – HOIST Sub-Assembly</b>											
BS25LC2A2...	25	2	1125	1.1	1.3	5.5	5.0	79	800	16 x 45	11.4
BS30LC2A3...	30	3	1195	0.8	1.0	5.5	5.2	79	970	16 x 45	17.1
BS36LC2A3...	36	3	1195	0.7	0.9	5.5	5.2	79	970	16 x 45	17.1
BS40LC2A4...	40	4	1240	0.5	0.6	5.5	5.0	79	1040	16 x 45	23.0
BS50LC2A4...	50	4	1240	0.5	0.6	5.5	5.0	79	1040	16 x 45	23.0
BS50LC2A2...	50	2	1048	1.6	2.5	10	12	93	1130	22 x 66	21.4
BS75LC2A3...	75	3	1190	1.1	2.0	10	12	93	4000	22 x 66	32.1
BS100LC2A4...	100	4	1156	0.8	1.5	10	12	93	4400	22 x 66	42.8
BS150LC2A3...	150	3	1880	0.4	0.7	10	12	93	9440	32 x 90	73.5
BS200LC2A4...	200	4	1960	0.3	0.5	10	12	93	9990	32 x 90	98.0

System model number	Number of wheels per hoist	Flange adjustment (mm)	Wheel tread diameter (mm)	Wheel loading per pair (kg)	Min. inside curve radius (m)	Number of motors per trolley	Trolley air consumption per hoist (m <sup>3</sup> /min)	Max. travelling speed at rated load <sup>(3)</sup> (m/min)
<b>BS Series BOP Handling Systems – TROLLEY Sub-Assembly</b>								
BS25LC2A2...	4	131 - 310	160	6250	3	1	1.9	12
BS30LC2A3...	4	131 - 310	225	7500	5	1	1.9	12
BS36LC2A3...	4	131 - 310	225	9000	5	1	1.9	12
BS40LC2A4...	4	131 - 310	225	12500	5	1	1.9	12
BS50LC2A4...	4	131 - 310	225	12500	5	1	1.9	12
BS50LC2A2...	8	160 - 310	160	6250	105	2	3.8	12
BS75LC2A3...	8	160 - 310	225	9375	105	2	3.8	12
BS100LC2A4...	8	160 - 310	225	12500	105	2	3.8	12
BS150LC2A3...	16	160 - 310	225	9375	130	4	7.6	12
BS200LC2A4...	16	160 - 310	225	12500	130	4	7.6	12

(1) Sound pressure levels are measured per European standard EN 14492-2.

(2) Weight of the complete system (2 hoists) with standard height of lift (9 m) and standard length of control (9 m).

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

# BOP Handling Systems

## 25 - 200 t Load Capacity

### BS Series - Standard Equipment & Options

**In standard version, BS Series BOP handling systems are fitted with the following equipment:**

- Articulated trolley hoist allows limited side pulling operations.
- 2 motor PHS piloted pendants (one per combined hoist/trolley).
- Corrosion resistant load chain with 9 m height of lift as standard.
- Limit switch for upper and lower over-travel protection.
- Corrosion resistant Marine 812 finish paint.
- Galvanised steel chain container.
- Filter-Lubricator air preparation package mounted on unit.
- Trolley guide rollers, rubber bumpers and rail sweeps.
- Exhaust mufflers.
- Manufacturer test certificate and maintenance manual.

**In CE compliant version, BS Series BOP handling systems are fitted with the additional following equipment:**

- Built-in overload protection.
- Emergency stop button on pendant, acting on main air shut off valve.
- CE declaration of conformity.



Articulated trolley hoist



Integrated limit switches



Galvanised steel container



Air preparation package



Rubber bumpers & rail sweeps



PHS pendant with emergency stop

### Overview of some available options

#### Rack & pinion drive

For positive traction. On BS series with rack & pinion configuration, the standard trolley speed is divided by 2. The racks have to be ordered separately and have to be welded on the beam by the customer.

#### Clevis and shackle attachment

Fitted in lieu of the bottom hook. The clevis can be configured according to specific criteria on request.

#### Spark resistant package, option T1, for ATEX zone 1

The T1 spark resistant option is designed for applications in zone 1 as per ATEX 94/9/CE Directive. It includes as standard:

- **On the trolleys**, solid bronze wheels and pinion drive in solid bronze or stainless steel. Stainless steel pins and fasteners (10 mm and smaller) and 20µ zinc plated fasteners (11 mm and larger).
- **On the hoists**, bronze coated bottom hook assembly and cast iron pendent (for control of both hoist and trolley). Stainless steel pins and fasteners (10 mm and smaller) and 20µ zinc plated fasteners (11 mm and larger).



Rack & pinion drive



Clevis & shackle attachment



Bronze coated bottom hook assembly



Solid bronze wheels on trolley

# BOP Handling Systems

## 25 - 200 t Load Capacity

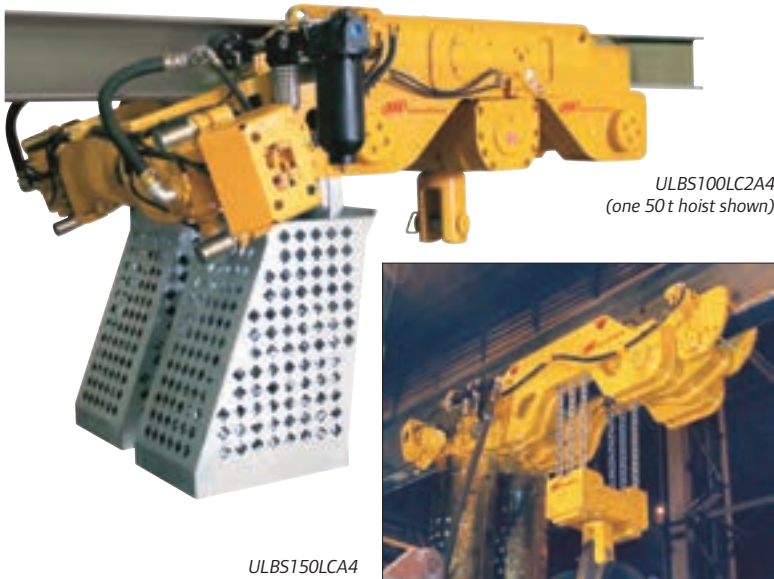
### BS Series Ordering Menu

To order your BOP handling system, specify complete model number code as shown below. Also specify beam size, type and flange width.

Series / Load capacity		Chain falls	Control	Beam type	Lift & control	Options
<b>BS</b>	<b>100LC2A</b>	<b>4</b>	<b>P3</b>	<b>ER</b>	<b>9M9</b>	<b>T1-E</b>
<b>BS25LC2A</b>	2 x 12.5 t	<b>2</b> 2 falls per hoist (available for 25 and 50 t models)	<b>P3</b> 2 motor PHS pendent	<b>E</b> Flat beam* <b>N</b> Tapered beam* * Add the letter "R" for Rack & Pinion configuration (e.g. ER)	<b>9M9</b> Standard: 9 m height of lift and 9 m of control <b>XM9</b> Specify heights in meters	<b>LM</b> Low temperature design (TD = -20°C). Includes 3.1 material traceability certificates. <b>M</b> 3.1 material traceability certificates (1) <b>N</b> Clevis instead of bottom hook <b>QZ</b> Offshore paint including sandblast <b>T1</b> Spark resistant package for zone 1 (see details on previous page) <b>W1</b> ABS witness test <b>W2</b> DNV witness test <b>W3</b> LRS witness test <b>W4</b> Client witness of load test  -E Compliance with the European machinery directive.
<b>BS30LC2A</b>	2 x 15 t					
<b>BS36LC2A</b>	2 x 18 t					
<b>BS40LC2A</b>	2 x 20 t	<b>3</b> 3 falls per hoist (available for 30, 36, 75 and 150 t models)				
<b>BS50LC2A</b>	2 x 25 t					
<b>BS75LC2A</b>	2 x 37.5 t					
<b>BS100LC2A</b>	2 x 50 t	<b>4</b> 4 falls per hoist (available for 40, 50, 100 and 200 t models)				
<b>BS150LCA</b>	2 x 75 t					
<b>BS200LCA</b>	2 x 100 t					

(1) Material traceability certificates according to EN 10204 (Ex DIN 50049) 3.1 on load bearing parts.

### Ultra-Low Headroom Versions



The BS Series BOP handling systems can be designed in ultra-low headroom version for applications requiring a very limited working height — range of capacities from 50 to 200 t.

The minimum headroom of these products is only slightly greater than the size of the bottom hook assembly !

Please consult us for further details on description and specifications.

Note: the design of the ULBS Series does not allow an articulated connection between the trolley and hoist.

See dimensions on page 55.

**Specifications** at 6.3 bar dynamic pressure (when BOB handling system is running) — Working pressure 5 to 7 bar.

Model number	System capacity (t)	Falls of chain per hoist	Min. headroom (mm)	Lifting speed at rated load (m/min)	Lowering speed at rated load (m/min)	Air cons. per hoist (m³/min)	Travelling speed at rated load (m/min)	Air cons. per trolley (m³/min)	Trolley flange adjustment (mm)
<b>ULBS Series - Ultra-Low Headroom BOP Handling systems</b>									
<b>ULBS50LC2A2...</b>	50	2	—	Consult us			Consult us		—
<b>ULBS100LC2A4...</b>	100	4	545	1.40	1.65	20	12	3.8	270-310
<b>ULBS150LCA3...</b>	150	6	733	0.90	1.10	20	12	7.6	270-310
<b>ULBS200LCA4...</b>	200	8	—	Consult us			Consult us		—

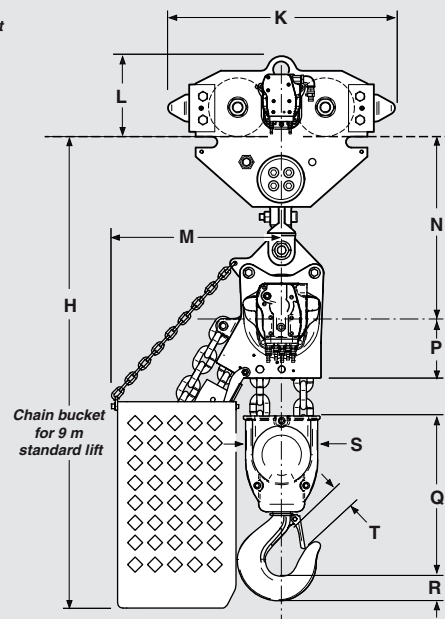
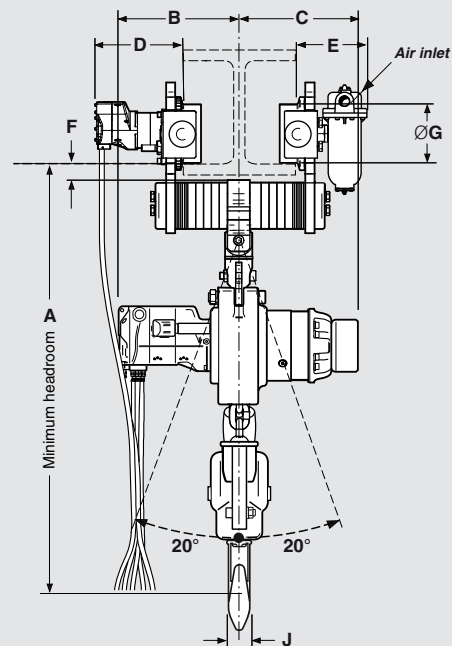
# BOP Handling Systems

## 25 - 200 t Load Capacity

### BS Series 25 t to 50 t

BS25LC2A2...  
BS30LC2A3...  
BS36LC2A3...  
BS50LC2A4...

Dimensions are subject  
to change without notice.  
Please contact Client Services  
for certified prints.



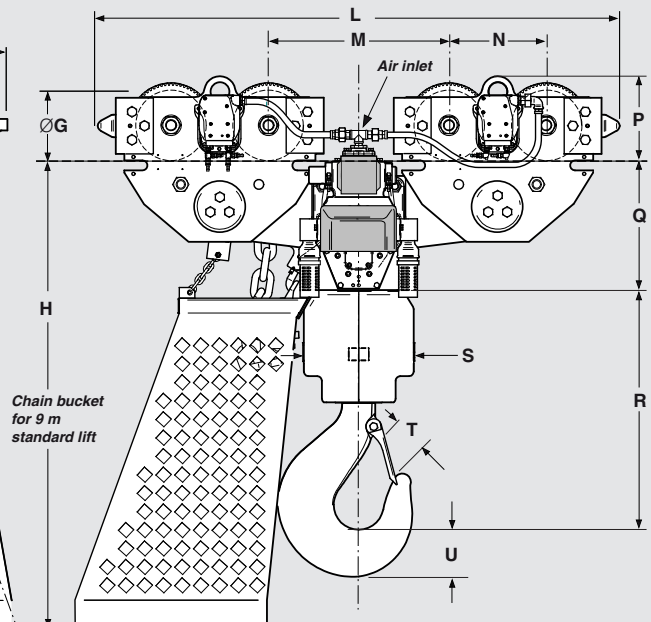
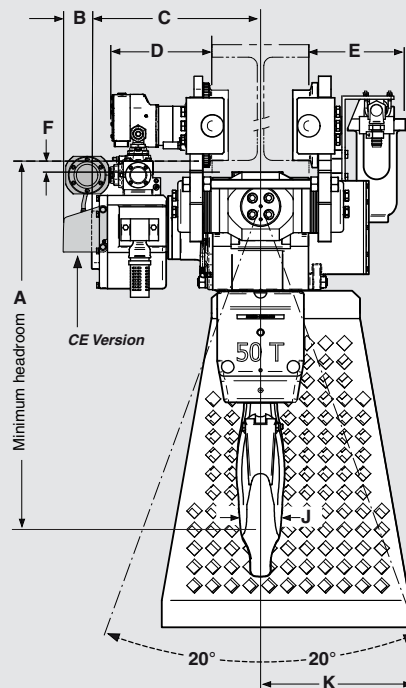
#### Dimensions in mm

Model number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	Air Inlet Ø
BS25LC2A2...	1125	357	310	292	242	40	160	1135	52	622	220	538	420	152	424	67	203	58	1 1/4" BSP
BS30LC2A3...	1195	396	390	303	279	50	225	1273	65	790	270	557	558	152	484	80	206	78	1 1/4" BSP
BS36LC2A3.....	1195	396	390	303	279	50	225	1273	65	790	270	557	558	152	484	80	206	78	1 1/4" BSP
BS50LC2A4...	1240	430	370	303	279	50	225	1273	79	790	270	529	558	152	530	96	200	87	1 1/4" BSP

### BS Series, 50 t to 100 t

BS50LC2A2...  
BS75LC2A3...  
BS100LC2A4...

Dimensions are subject  
to change without notice.  
Please contact Client Services  
for certified prints.



#### Dimensions in mm

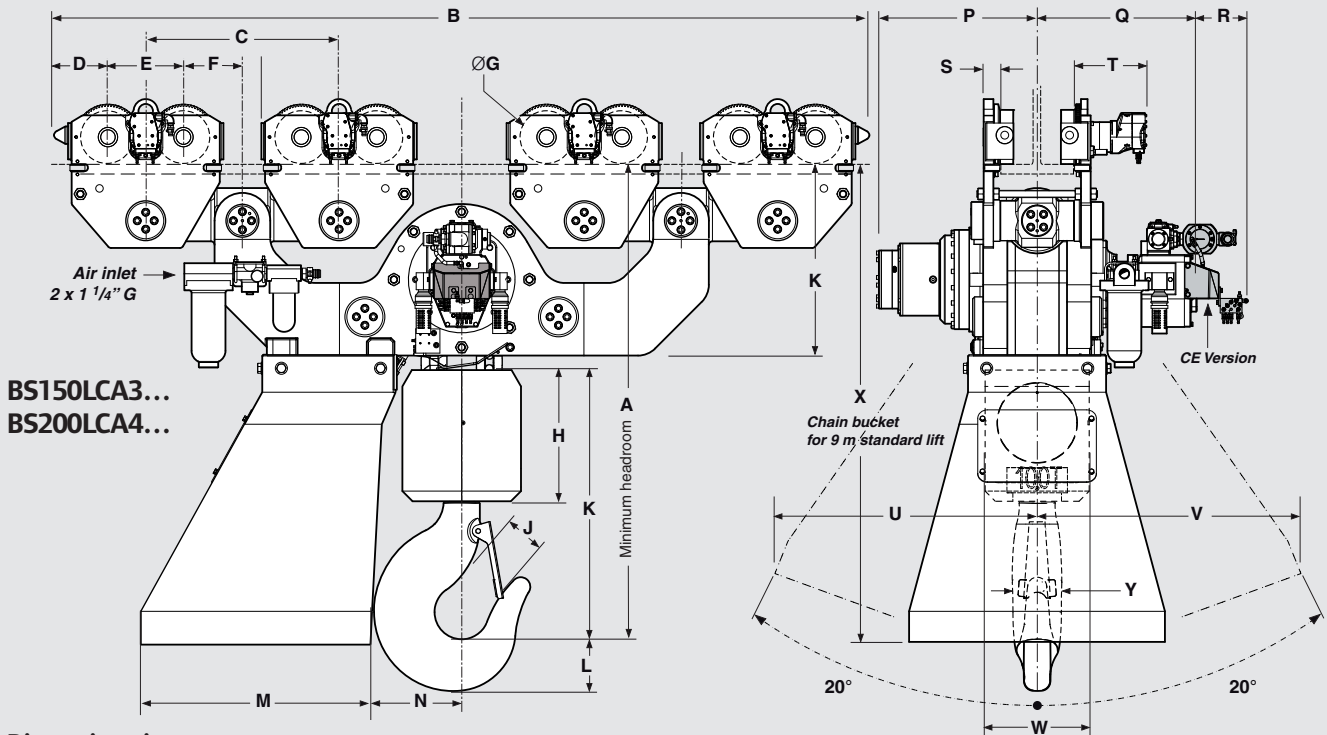
Model number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	Air Inlet Ø
BS50LC2A2...	1048	92	460	297	311	40	200	1330	80	240	1406	550	240	220	461	576	276	87	120	1 1/4" BSP
BS75LC2A3...	1190	92	605	300	323	40	225	1340	119	346	1668	598	312	310	429	714	298	103	140	1 1/4" BSP
BS100LC2A4...	1156	92	632	302	120	40	225	1549	140	481	1700	598	312	270	483	763	352	118	160	1 1/4" BSP



# BOP Handling Systems

## 25 - 200 t Load Capacity

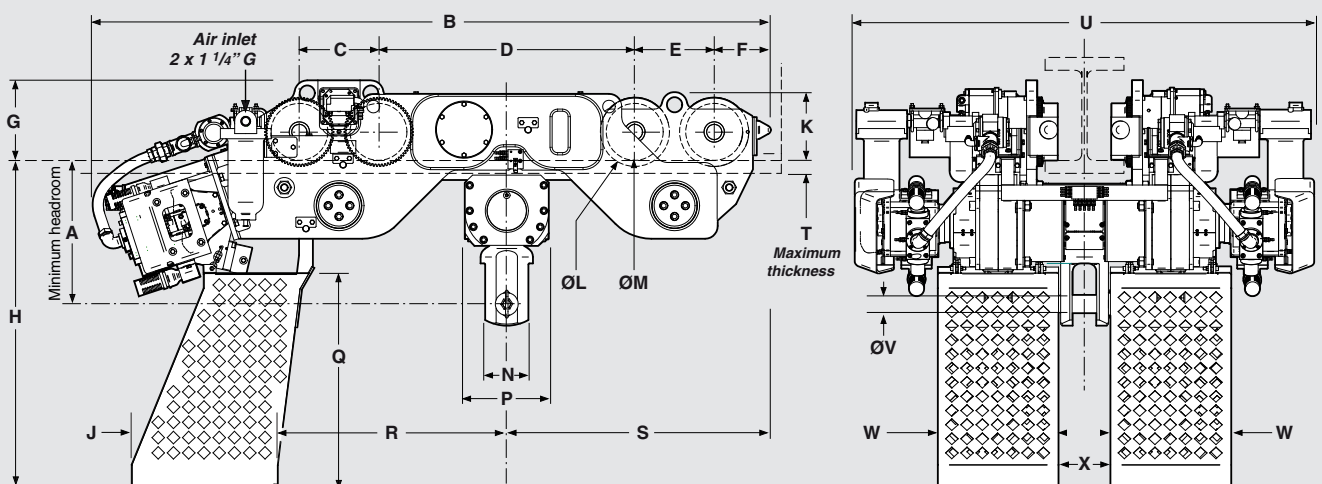
### BS Series – 150t and 200t — Dimensions are subject to change without notice. Please contact Client Services for certified prints.



Dimensions in mm

Model number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y
BS150LCA3...	1880	3370	799	223	312	243	225	542	152	1090	190	950	408	664	749	123	40	300	1130	1060	430	1980	150
BS200LCA4...	1960	3370	799	223	312	243	225	542	165	1112	212	950	408	664	749	123	40	300	1092	1092	430	1980	170

### ULBS Series – 50t to 200t — Dimensions are subject to change without notice. Please contact Client Services for certified prints.



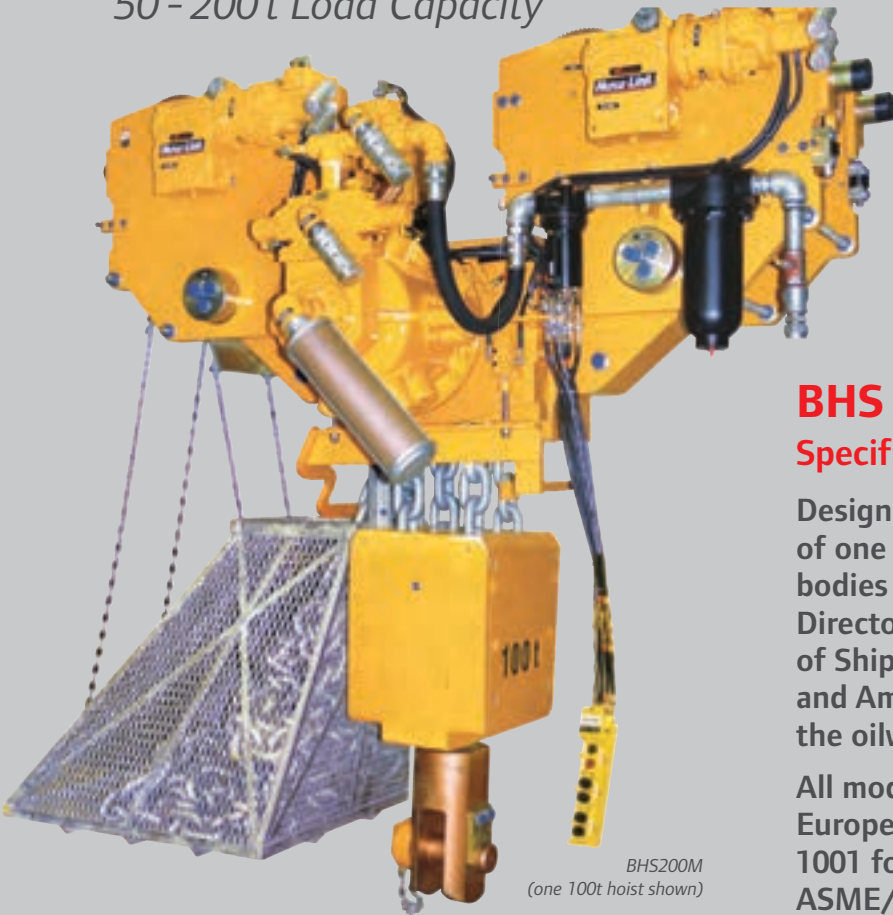
Dimensions in mm

Model number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
ULBS100LC2A4...	545	2670	312	1008	312	223	316	1286	578	270	272	225	170	330	843	899	1039	80	1807	72	475	188
ULBS150LCA3...	733	3578	312	2100	312	223	325	1694	606	325	272	225	221	421	1202	1096	1585	80	1769	85	606	23



# BOP Handling Systems

## 50 - 200 t Load Capacity



BHS200M  
(one 100t hoist shown)

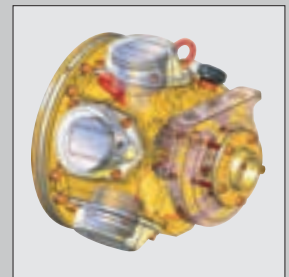
### BHS Series

#### Specific Features

Designed to meet or exceed specifications of one or more of the following regulatory bodies - the Norwegian Petroleum Directorate (NPD), UK HSE, Lloyds Register of Shipping (LRS), Det Norske Veritas (DNV), and American Bureau of Shipping (ABS) for the oilwell drilling industry

All models meet the requirements of the European standards FEM 9.511 and FEM 1001 for lifting as well the U.S. standard ASME/ANSI B30.7.

- Radial piston air motor – hoist and trolley.
- 5:1 design factor.
- Standard design temperature TD = 0°C.
- All steel construction.
- Automatic fail safe, multi disc, motor brake on hoist.
- Articulated trolley allows limited side pulling operations (standard on all models – not available for BHS200M).
- Fully enclosed planetary gear box.
- Compact modular design.
- Corrosion resistant load chain.
- 9m height of lift standard on all models.
- Bottom block mounted on bearing with external lubrication point and water drain.
- Accu-Trol™ pendent with "emergency stop/start" feature and 9 m pendent hose.
- Limit switch for upper and lower over-travel protection.
- Lifting lugs for easy installation.
- Filter-Lubricator air preparation package mounted on unit.
- Corrosion resistant Marine 812 finish paint.
- Galvanised steel chain container.
- Trolley guide rollers, rubber bumpers, and rail sweeps.
- Manufacturer test certificate and maintenance manual.
- Exhaust mufflers.



#### **Ingersoll Rand radial piston air motor is characterised by:**

- A positive starting torque.
- A variable speed control offering a precision spotting control at slow speeds.
- A superior reliability in harsh environments.
- Features an internal splash lubrication.

#### **WARNING:**

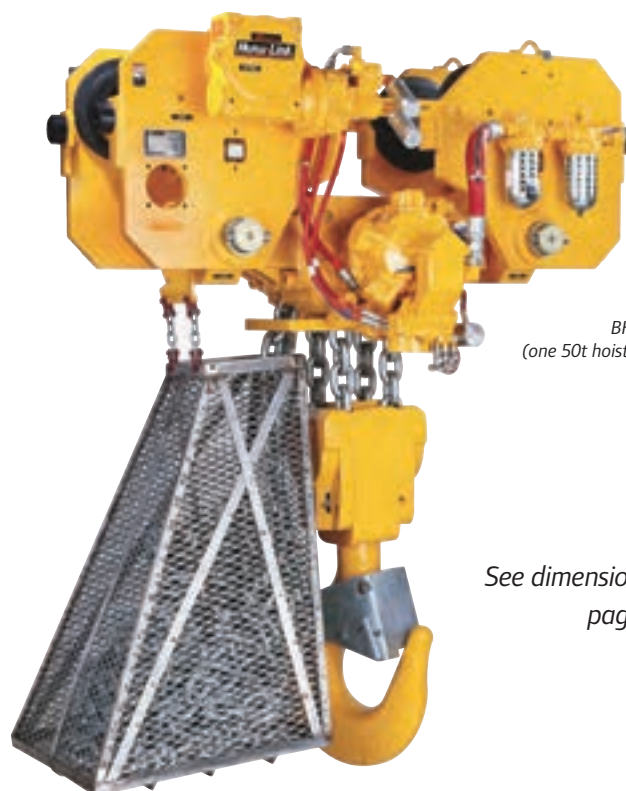
Standard hoist / trolley combinations purchased for BOP handling will void the warranty. They are not designed for this type of application.

# BOP Handling Systems

## 50 - 200 t Load Capacity

### BHS Series Specifications

BHS BOP handling systems are comprised of two trolley-mounted hoists. The total system capacity corresponds to the addition of the rated capacity of both hoists.



BHS100M  
(one 50t hoist shown)

See dimensions on  
pages 60

**Specifications** at 6.3 bar dynamic pressure (when BOB handling system is running) — Working pressure 5 to 7 bar.

**As per European standard EN range 14492-2** – Group of mechanism as per FEM 1Bm / ISO M3.

System model number	System capacity (t)	Falls of chain per hoist	Min. headroom (mm)	Lifting speed at rated load (m/min)	Lowering speed at rated load (m/min)	Motor power per hoist (hp)	Air cons. per hoist (m <sup>3</sup> /min)	Sound level <sup>(1)</sup> (dBa)	System weight <sup>(2)</sup> (kg)	Chain size (mm)	Chain weight/ 1m extra lift (kg)
<b>BHS Series BOP Handling Systems – HOIST Sub-Assembly</b>											
BHS50M...	50	2	1040	1.2	1.8	9.4	8.0	105	2616	22 x 66	21
BHS75M...	75	3	1243	0.80	1.10	9.4	8.0	105	2844	22 x 66	32
BHS100M...	100	4	1346	0.60	0.90	9.4	8.0	105	4527	22 x 66	43
BHS150M22...	150	6	1523	0.40	0.60	9.4	8.0	105	6770	22 x 66	63
BHS200M...	200	4	1745	0.45	0.70	23.0	14.2	115	14000	32 x 90	91

System model number	Number of wheels per hoist	Flange adjustment (mm)	Wheel tread diameter (mm)	Wheel loading per pair (kg)	Min. inside curve radius (m)	Number of motors per trolley	Air consumption per trolley (m <sup>3</sup> /min)	Max. travelling speed at rated load (m/min)
<b>BHS Series BOP Handling Systems – TROLLEY Sub-Assembly</b>								
BHS50M...	8	152 - 203	175	6552	NR	1	1.4	12.
BHS75M...	8	203 - 254	229	9896	NR	1	1.4	12
BHS100M...	8	203 - 254	229	13104	NR	1	1.4	12
BHS150M22...	8	203 - 254	229	19100	NR	1	1.4	4.0
BHS200M...	8	203 - 254	330	25500	NR	2	2.8	3.9

(1) Sound pressure levels per hoist – measured per European standard EN 14492-2.

(2) Weight of the complete system (2 hoists) with standard height of lift (9 m) and standard length of control (9 m).

# BOP Handling Systems

## 50 - 200 t Load Capacity

### BHS Series - Standard Equipment & Options

**In standard version, BHS Series BOP handling systems are fitted with the following equipment:**

- Articulated trolley hoist allows limited side pulling operations (except for BHS200M)
- Accu-Trol pendent with start / stop button.
- Corrosion resistant load chain with 9 m height of lift as standard.
- Limit switch for upper and lower over-travel protection.
- Corrosion resistant Marine 812 finish paint.
- Galvanised steel chain container.
- Filter-Lubricator air preparation package mounted on unit.
- Trolley guide rollers, rubber bumpers, and rail sweeps.
- Exhaust mufflers.
- Manufacturer test certificate and maintenance manual.



Articulated trolley hoist



Accu-Trol™ pendent handle



Corrosion resistant load chain



Limit switches



Air preparation package



Trolley guide rollers, rubber bumpers & rail sweeps



Exhaust mufflers.

**In CE version, BHS Series BOP handling systems are fitted with the additional following equipment:**

- Built-in overload protection.
- Emergency stop button on pendent, acting on main air shut off valve.
- CE declaration of conformity.

### Options

- Variable lengths of lift and pendent control hose.
- Rack and pinion trolley drive for positive traction.
- Clevis and shackle attachment in lieu of bottom hook.
- Corrosion resistant Marine 812-X paint system.
- Sandblast and carbozinc (primer only).
- 4 bar (57 psi) application models.
- Festooning systems.
- Trolleys for shipyard fabricated beams.
- Custom paint coating systems per owners specifications.

- Spark and corrosion resistant (S·COR·E) package. The S.COR.E spark resistant option for BHS Series is designed for applications in zone 1 as per ATEX 94/9/CE Directive.

It includes as standard:

**R option:** The product will be equipped with copper plated load hook(s) and trolley wheels. Zinc plated load and hand chain if applicable.



Copper plated load hook



# BOP Handling Systems

## 50 - 200 t Load Capacity

### BHS Series Ordering Menu

To order your BOP handling system, specify complete model number code as shown below. Also specify beam size, type and flange width.

Series/Load capacity		Trolley Type	Flange adjust.	Control	Lift in feet	Control Drop	Options
<b>BHS50</b>	2 x 25 t	<b>M*</b> Piston motor trolley.	<b>A</b> Standard.	<b>5</b> 1 motor pendent (2 buttons with on-off).	<b>30</b> Standard height of lift 30 ft (9 m).	<b>30</b> Standard drop and/or hand chain drop in feet.	<b>C1M3</b> ABS minus 20 degree C design temperature (tD).
<b>BHS75</b>	2 x 37.5 t	<b>RT*</b> Rack and pinion trolley drive for tapered beam flange.	<b>B</b> 50 mm extension.				<b>C2M3</b> DNV minus 20 degree C design temperature (tD).
<b>BHS100</b>	2 x 50 t		<b>C</b> 100 mm extension.	<b>6</b> 2 motor pendent (4 buttons with on-off).	<b>XX</b> Specify height in feet.	<b>XX</b> Specify control drop in feet.	<b>K</b> Clevis (in place of bottom hook).
<b>BHS150</b>	2 x 75 t	<b>RF*</b> Rack and pinion trolley drive for flat beam flange.	<b>D</b> 150 mm extension.	<b>7</b> 3 motor pendent (6 buttons with on-off).			<b>M1</b> Per DIN 50049/EN10204 Para 2.2 "typicals" (1).
<b>BHS200</b>	2 x 100 t	* Add the number "22" only for model BHS150 (e.g. BHS150M22...)					<b>M2</b> Per DIN 50049/EN10204 Para 3.1 actual per product as purchased (2).
							<b>M3</b> Per DIN 50049/EN10204 Para 3.1 actual per product as delivered in final condition (1).
							<b>N4</b> American Bureau of Shipping "Certification of Drilling Systems".
							<b>N5</b> Det Norske Veritas "DNV-OS-E101 Drilling Plant".
							<b>P1</b> Marine 812-X paint system.
							<b>P2</b> Marine 812-X Paint System (isocyanate free paint system).
							<b>R</b> Copper plated (S-COR-E package). The product will be equipped with copper plated load hook(s) and trolley wheels.
							<b>W1</b> ABS witness test.
							<b>W2</b> DNV witness test.
							<b>W3</b> LRS witness test.
							<b>W4</b> Customer witness test.
							<b>-CE</b> Compliance with the European machinery directive.

#### (1) NOTES:

**M1** – Material traceability certificates according to EN 10204 (Ex DIN 50049) 2.2 on load bearing parts. This conformity document affirms (by the manufacturer) that parts are in compliance with the requirements of the order based on non-specific inspection and testing (i.e. results are typical material properties for these parts).

**M2** – Material traceability certificates according to EN 10204 (Ex DIN 50049) 3.1 on load bearing parts. These documents affirm (by a department independent of the manufacturing department) that the actual parts used in the product are in compliance with the order based on specific inspection and testing (i.e. results are actual material properties for those parts).

**M3** – Material traceability certificates according to EN 10204 (Ex DIN 50049) 3.1 on load bearing parts. These documents affirm (by a department independent of the manufacturing department) that the actual parts used in the product are in compliance with the order based on specific inspection and testing (i.e. results are actual material properties for those parts in a finished, as delivered condition).



BHS150RF22



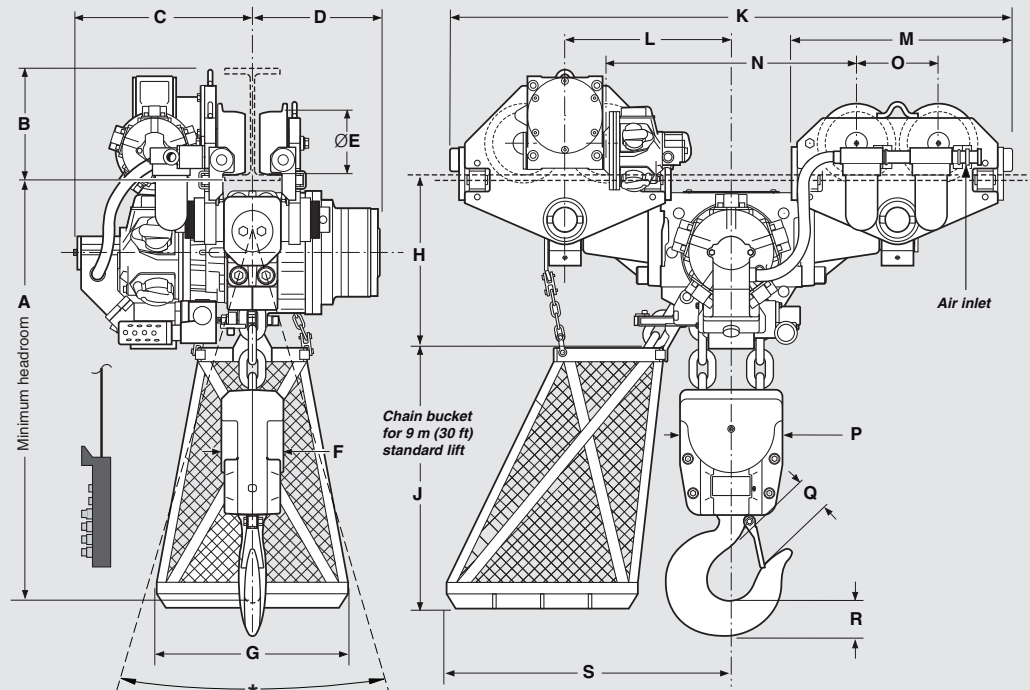
# BOP Handling Systems

## 50 - 200 t Load Capacity

### BHS Series 50 t to 100 t

**BHS50M**  
**BHS75M**  
**BHS100M**

*Dimensions are subject  
to change without notice.  
Please contact Client Services  
for certified prints.*



#### Dimensions in mm

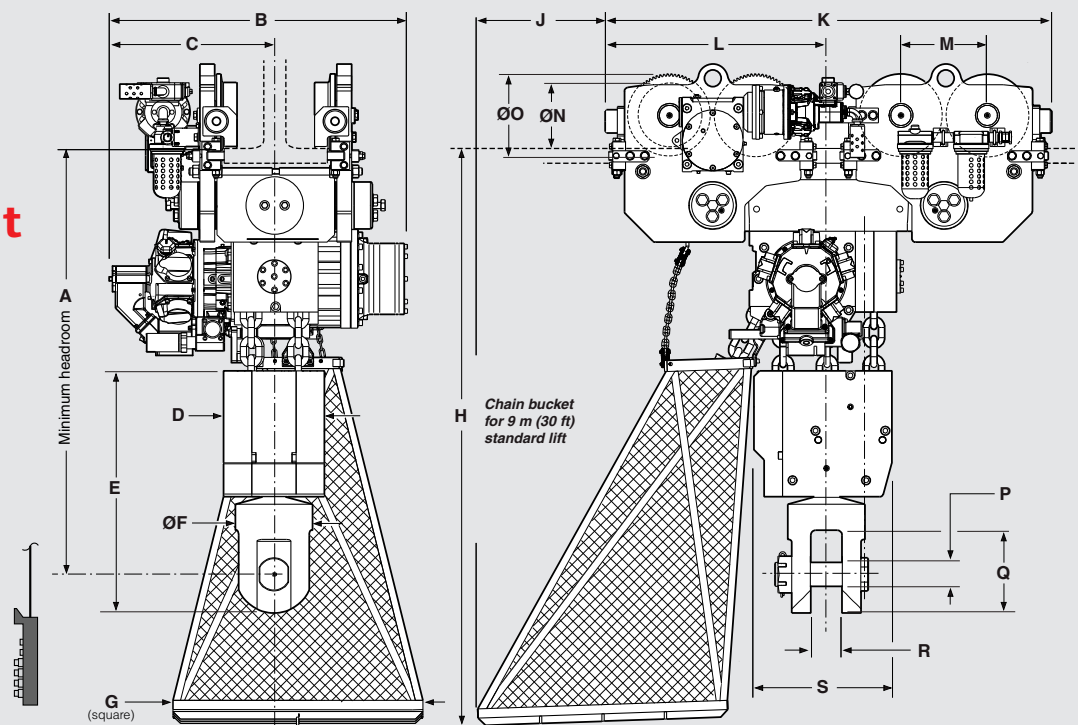
Model number	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	Air Inlet Ø
<b>BHS50M...</b>	1040	291	495	362	175	175	533	484	706	1568	578	616	699	229	286	102	92	795	1" NPT
<b>BHS75M...</b>	1243	330	572	438	229	283	610	487	859	1648	610	673	622	298	286	121	129	886	1" NPT
<b>BHS100M...</b>	1346	330	572	438	229	321	635	487	935	1648	610	673	622	298	286	165	165	922	1" NPT

(\*) Contact client services for specifications.

### BHS Series 150 t & 200 t

**BHS150M22**  
**BHS200M**

*Dimensions are subject  
to change without notice.  
Please contact Client  
Services for certified prints.*



#### Dimensions in mm

Model number	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	Air Inlet Ø
<b>BHS150M22...</b>	1493	1031	570	345	834	267	864	1994	440	1543	772	298	229	289	82	286	108	475	1" NPT
<b>BHS200M...</b>	1745	1694	989	508	1028	279	1016	1991	384	2405	1191	432	330	397	89	286	108	438	1 1/2" NPT