

## WH SS-L5 QP (Quad Pawl) Lever Hoist

The Hackett SS-L5 QP meets and exceeds the requirements of international standards:

**British Standard BS EN13157:2004+ A1:2009**

**American Standard ASME B30.21-2014**

**Australian Standard AS 1418.2-1997**

**South African Standard SANS 1594:2007**

**NORSOK R-002:2017**

The William Hackett SS-L5 QP lever hoist incorporates the four pawl mechanical engagement functionality. The unique and patented pawl design enhances the capabilities of the hoist allowing all four pawls to engage with the ratchet gear in an offset configuration allowing finer adjustment and tensioning capability while maintaining pawl/ratchet engagement.

### SINGLE AND MULTI-IMMERSION

William Hackett verifies that the SS-L5 QP can be safely used over a 21-day single immersion and a 31-day multi immersion period which offers operators considerable financial advantages.

The design features, manufacture, verification testing and guidance for use, maintenance and storage of the SS-L5 QP has also been developed in line with:

**BP Document DEV-AAD-SS-SD-BP-0545**

*'Specification and compliance requirements for lever hoists used subsea on BP projects'*

The design and specification of the William Hackett SS-L5 QP lever hoist includes

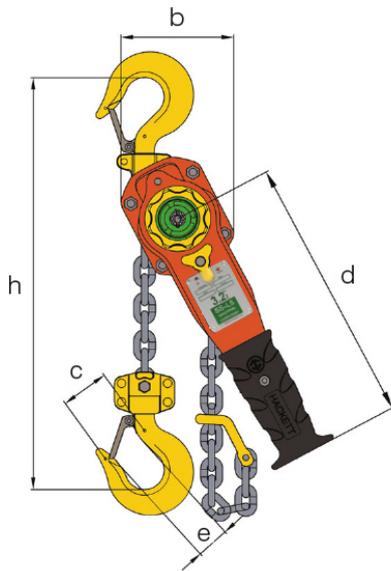
- **WORKING LOAD LIMIT RANGE:** 800kg to 15 tonnes.
- **LIGHT LOAD CAPABILITY:** the SS-L5 QP is tested and certified at 2% of the lever hoist rated capacity.
- **QUAD PAWL (QP):**
  - enhanced resilience to failure
  - finer tolerance adjustment
  - endurance tested to twice the industry norm
- **SAFETY FACTOR:** 4:1
- **DABS (DUAL ANTI-LOCK BRAKE SYSTEM):** allows the load chain to be adjusted in freewheel mode without locking the brake.
- **CONSTRUCTION AND DESIGN:** minimises the ingress of contaminants to the internal brake mechanism surfaces.
- **STAINLESS STEEL PAWL SPRINGS:** specially designed to work with the William Hackett patented quad pawls. The stainless steel springs are captivated in the brake chamber protecting them against damage.
- **STAINLESS STEEL FIXINGS:** all Internal springs, circ clips securing the pawls onto the pawl stands, nyloc nuts and socket head cap screws are stainless steel.
- **CORROSION PROTECTION:** the complete brake mechanism of the SS-L5 QP is corrosion protected including the pinion shaft, disc hub, change gear, ratchet gear, pawls, pawl stands and load sheave. In addition the load chain guide, stay bolts and chain stripper are also corrosion protected.
- **SAFETY LATCHES:** hooks are fitted with heavy duty cast steel latches. The latch and hook tip integrated creating a strong and robust hook closure.
- **HOOK OVERLOAD AND TRACEABILITY MARKS:** hooks have overload indicator marks either side of the throat (800kg to 10t). Both top and bottom hooks are embossed with a batch code, manufacturer's mark and the working load limit for full traceability and compliance to international standards.
- **HOOK HOUSING:** secured with socket head cap screws/hex head bolts and nyloc insert locking nuts to allow full inspection.
- **FLEETING/CROSS HAULING:** independently tested (test report 2550-7615) for fleeting or cross hauling applications up to 45° from the vertical without deration of the WLL.
- **SINTERED/FUSED FRICTION MATERIAL:** the brake material is fused directly onto the ratchet gear. This reduces the number of mating faces where there is a potential for ingress of contaminants that could affect the brake performance. Grooves cut into the brake material allow water to be displaced from the friction surface.
- **LOAD CHAIN:** the SS-L5 QP (Quad Pawl) lever hoists are fitted with IGrade T (8) load chain that fully complies with international standard BS EN818-7 Grade T (8).



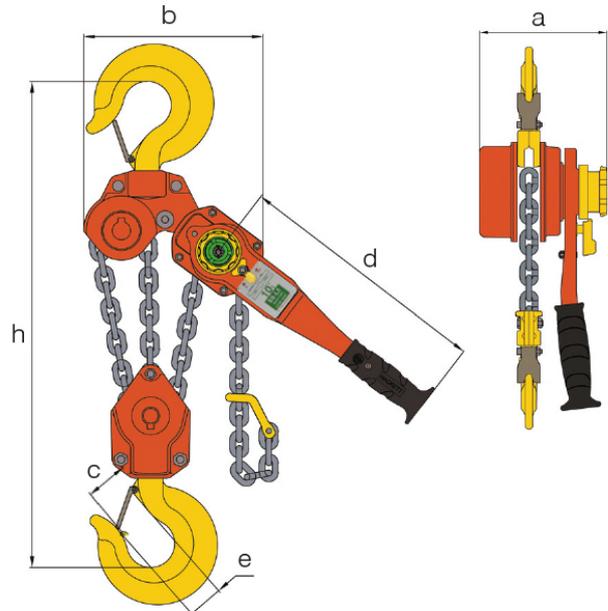
- **TEMPERATURE RANGE:** -40°C to +120°C.
- **MARINE PAINT:**
  - ISO12944 Category C5 - very high corrosive environments
  - AkzoNobel Interpon Redox Triplex 3-layer paint system
  - Paint system design life: 7-15 years.
- **PROOF TESTED:** 800kg to 10 tonne hoists are proof tested to 1.5 times the Working Load Limit. 15 tonne hoists are proof tested to 1.25 times the Working Load Limit.
- **HIGH PERFORMANCE WATERPROOF GREASE:** used throughout the SS-L5 QP lever hoist enhancing the corrosion protection.
- **ADJUSTABLE TRAVELLING END STOP:** the uniquely designed travelling end stop of the SS-L5 QP lever hoist allows the operator to position the end stop at any point of the slack section of the Grade 8 load chain. When the lever hoist is in a final rigged position the travelling end stop can be positioned adjacent to the body of the SS-L5 QP. This has the function of preventing the payout of the chain for whatever reason when the next time the lever hoist is operated.
- **OVERLOAD LIMITER:** available as an option upon request.
- **MANUFACTURED AND PROOF TESTED IN THE UK.**

## Specifications

Single Fall



Multi Fall



Part Code	WLL tonnes	No. of Falls	Load Chain mm	Standard Lift m	a mm	b mm	c mm	d mm	e mm	h mm	Nett Weight kg	Extra Weight per m kg
035.SS.080	0.80	1	5.6 x 17	1.5	146	119	42.0	245	27.0	280	5.90	0.70
035.SS.160	1.60	1	7.1 x 21	1.5	164	126	54.5	265	36.0	335	7.40	1.10
035.SS.320	3.20	1	10 x 30	1.5	196	159	60.5	415	42.0	395	13.70	2.20
035.SS.630	6.30	2	10 x 30	1.5	196	218	85.5	415	52.5	540	26.40	4.40
035.SS.1000	10.00	3	10 x 30	1.5	196	298	86.0	415	59.0	680	40.10	6.60
035.SS.1500	15.00	6	10 x 30	1.5	196	420	-	415	80.0	1000	70.20	13.20