QUICK DESCENT™ ROLLER LATCH™ HEAD ASSEMBLY

Product Overview
1 **MKII™ SPEARHEAD**
MKII™ Spearhead assembly provides added strength and safety, features self-lubricating nylon to reduce wear, self-centering spearpoint with multiple detent positions and an innovative design to eliminate pinch points. A new heavy duty spring provides a 30% increase in detent positioning strength and is treated for consistent, extended performance.

2 **ROLLER LATCH™ TECHNOLOGY**
Ultra-reliable Roller technology eliminates the low strength, play and jamming associated with traditional ‘swing-out’ latch mechanisms. Roller latches detent into retracted position to eliminate latch drag for increased tripping speed, particularly in V-Wall™ Rods. Roller latches overcome the detent upon landing, or alternatively can be positively driven to deployed position with fluid pressure, or with drill rotation centrifugal force. Under drilling rotation, roller latches self-lock into the locking coupling integrated latch seat to drive the head assembly, eliminating adapter couplings and locking coupling tangs.

3 **LATCH INDICATION**
Redesigned fluid control valve provides positive latch indication signal, and also provides patented ‘Dry Hole Valve’ functionality for lost circulation conditions in deep holes, when used with optional ‘Fluid Retention’ valve springs and bushings.

4 **FREE FLOW DESIGN**
Patented design with hollow spindle, latch body integrated check valve, axial grooves and tapered profile is optimized for fluid flow directly from the inner tube through the head assembly, offering dramatically reduced fluid drag for increased tripping speed. Up to 50% faster tripping when combined with enlarged V-Wall rod midbodies.

5 **DOUBLE THRUST BEARINGS**
A new spindle bushing provides direct lubrication and full enclosure of double thrust bearings, for increased load capacity and maximum bearing life at high rpm, ensuring reliable performance when pushing through difficult drilling conditions.

**ESSENTIAL OPTIONS**
Available ‘Fluid Retention’ valve kits and ‘Dry Hole Lowering’ overshot kits are ideal for lost circulation drilling conditions. When used with the Quick Descent™ Roller Latch™ head, patented ‘Dry Hole Valve’ functionality drains the retained column of fluid allowing wireline retraction in deep holes.
QUICK DESCENT™ ROLLER LATCH™ BARREL TECHNICAL OVERVIEW

**PERFORMANCE**

*Using Quick Descent Roller Latch Core Barrel and V-Wall Coring Rod

UP TO 50% FASTER*

**AVAILABILITY**

<table>
<thead>
<tr>
<th>Feature</th>
<th>BQ/BQTK</th>
<th>NQ/NQTK</th>
<th>HQ</th>
<th>PQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roller Latch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latch Indication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hollow Spindle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Thrust Bearings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluid Retention**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Parts List**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5007740</td>
<td>HEAD ASM, BQ R/L Q/D</td>
</tr>
<tr>
<td>5007745</td>
<td>HEAD ASM, BQTK R/L Q/D</td>
</tr>
<tr>
<td>5007750</td>
<td>HEAD ASM, NQ R/L Q/D</td>
</tr>
<tr>
<td>5007755</td>
<td>HEAD ASM, NQTK R/L Q/D</td>
</tr>
<tr>
<td>5007760</td>
<td>HEAD ASM, HQ R/L Q/D</td>
</tr>
<tr>
<td>5007770</td>
<td>HEAD ASM, PQ R/L Q/D</td>
</tr>
<tr>
<td>5007902</td>
<td>L/CPLG, BQ F/H R/L Q/D</td>
</tr>
<tr>
<td>5007901</td>
<td>L/CPLG, BRQ F/H R/L Q/D</td>
</tr>
<tr>
<td>5007900</td>
<td>L/CPLG, BRQTK F/H R/L Q/D</td>
</tr>
<tr>
<td>5007897</td>
<td>L/CPLG, NQ F/H R/L Q/D</td>
</tr>
<tr>
<td>5007896</td>
<td>L/CPLG, NRQ F/H R/L Q/D</td>
</tr>
<tr>
<td>5007899</td>
<td>L/CPLG, HQ F/H R/L Q/D</td>
</tr>
<tr>
<td>5007898</td>
<td>L/CPLG, HRQ F/H R/L Q/D</td>
</tr>
<tr>
<td>5007910</td>
<td>L/CPLG, BQ STAB R/L Q/D</td>
</tr>
<tr>
<td>5007909</td>
<td>L/CPLG, BRQ STAB R/L Q/D</td>
</tr>
<tr>
<td>5007908</td>
<td>L/CPLG, BRQTK STAB R/L Q/D</td>
</tr>
<tr>
<td>5007905</td>
<td>L/CPLG, NQ STAB R/L Q/D</td>
</tr>
<tr>
<td>5007904</td>
<td>L/CPLG, NRQ STAB R/L Q/D</td>
</tr>
<tr>
<td>5007907</td>
<td>L/CPLG, HQ STAB R/L Q/D</td>
</tr>
<tr>
<td>5007906</td>
<td>L/CPLG, HRQ STAB R/L Q/D</td>
</tr>
<tr>
<td>5007799</td>
<td>L/CPLG, PHD STAB R/L Q/D</td>
</tr>
</tbody>
</table>

*Other Manufacturer’s In-hole Tooling

**LEGACY OF INNOVATION**

The Quick Descent™ Roller Latch™ head assembly continues to build on Boart Longyear’s legacy of innovative drilling technology and offers precise compatibility with all genuine Q wireline systems.
Global Headquarters
Boart Longyear
10808 South River Front Parkway
Suite 600
South Jordan, Utah 84095
United States of America
info@boartlongyear.com
Tel: +1 801 972 6430
Fax: +1 801 977 3374

Canada
Boart Longyear
2442 South Sheridan Way
Mississauga, Ontario
Canada L5J 2M7
info@boartlongyear.com
Tel: +1 905 822-7922
Fax: +1 905 822-7232

Asia Pacific
Boart Longyear
26 Butler Boulevard
Adelaide, 5950
Australia
infoAP@boartlongyear.com
Tel: +61 8 8375 8375
Fax: +61 8 8375 8497

Latin America
Boart Longyear
Portal Riesco
Av. El Salto 4001, Huechuraba
Santiago, Chile 858 0641
infochile@boartlongyear.com
Tel: +56 2 595 3300
Fax: +51 242 671

Europe
Boart Longyear
12 Avenue des Morgines
CH1213 Petit-Lancy,
Geneva, Switzerland
infoEU@boartlongyear.com
Tel: +41 22 709 0800
Fax: +41 22 709 0801

Sub-Saharan Africa
Boart Longyear
Cycad House, Constantia Office Park
Cnr 14th Avenue and Hendrik Potgieter
Weltevreden Park, 1709
Gauteng, South Africa
infoSA@boartlongyear.com
Tel: +27 11 767 9300
Fax: +27 11 767 9301

MINING AND EXPLORATION DRILLING PRODUCTS

Diamond Coring Rigs
Diamond Coring Bits
Rods and Casing

www.BoartLongyear.com • ASX: BLY