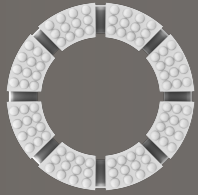




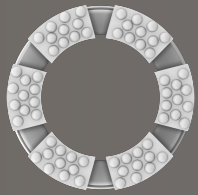
LONGYEAR™ BIT SELECTION CHART

WATERWAY CONFIGURATIONS



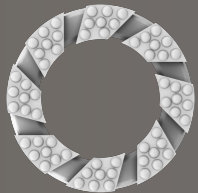
STANDARD

Recommended for general purpose use in competent, fine-grained formations. Longest life of non-stage bits.



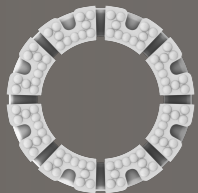
TAPERED

Recommended for general purpose in areas that can encounter broken ground. Pushes cuttings to the OD and reduces pressure across bit face.



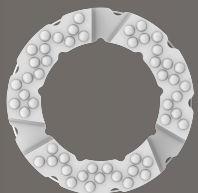
TAPERED SWIRL

Recommended for fast penetration in competent ground with the ability to push cuttings from broken ground easily to OD.



EXPRESS

Recommended for fast cutting in competent formations. Offers faster penetration and lower weight.

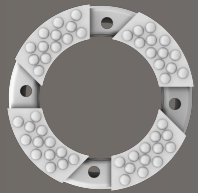


STAGE

Recommended for the longest maximum life circumstances. Wide waterways offering better flushing and penetration.

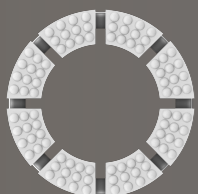
WATER CONTROL FEATURES

(available in all waterway configurations)



FACE DISCHARGE

Recommended for broken and soft formations. Reduces water pressure on core and redirects fluid to the bit face.



DEEP ID

Recommended for lost circulation by preventing lifter case from pulling into the bit and shutting off water.

SOFTER

HARDER

TALC

GYPSUM

COAL

LIMESTONE

SANDSTONE

DIORITE

PEGMATITE

GRANITE

QUARTZITE

CHERT

BANDED IRON

CORUNDUM

DIAMOND

1

2

3

4

5

6

7

8

9



PURPLE



BLUE



GREEN



YELLOW



ORANGE



RED

DURABLE MATRIX
ABRASIVE / BROKEN GROUND
HIGH POWERED DRILLS

FREE CUTTING MATRIX
COMPETENT GROUND
LOW POWERED DRILLS

LARGE DIAMOND LONGYEAR™ BITS*



GRAY



BLACK



SHADOW

*Driller adaptation is required for High Torque Longyear™ Bits, ask your regional Boart Longyear representative for more information.