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# UMX™ DIAMOND BIT SERIES

Ultramatrix™ Product Overview

# UMX™ DIAMOND BIT SERIES

## Extreme Performance

Our customers demand extreme performance. An exploration driller's success depends upon his productivity and the performance of his drilling equipment. To meet this demand for extreme performance, Boart Longyear has developed the UMX™ (Ultramatrix™) diamond bit series.

## UMX™

Boart Longyear presents UMX, innovative diamond bit technology using advanced metallurgy and scientific research, resulting from more than 80 years of field experience. UMX diamond bits have revolutionized mineral exploration. UMX bits drill faster, last longer, and perform in a wider range of drilling conditions and formations. The extended range and versatility of the UMX diamond bits means less tripping out rods and more core in the box.

## Ultramatrix™

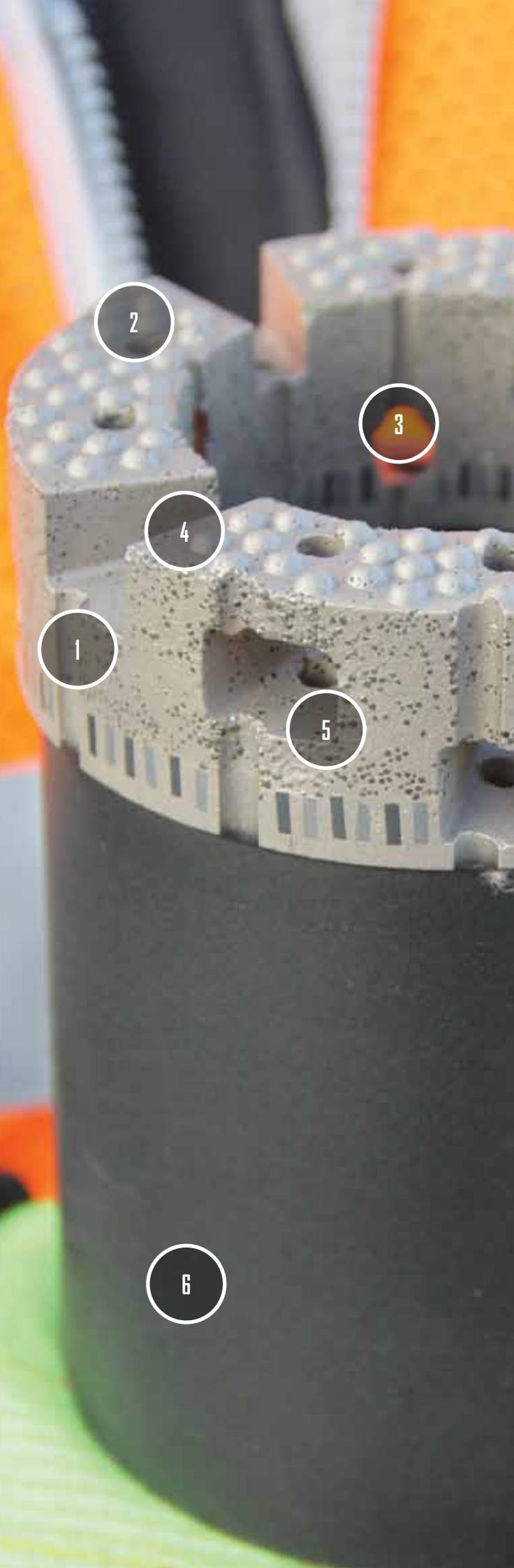
The UMX diamond bits feature Boart Longyear's patented Ultramatrix. Ultramatrix technology enables the use of large synthetic diamonds with an innovative formula, increasing penetration through various ground formations while providing longer bit life.

## Genuine Q™ Wireline System

The UMX advanced diamond coring bits are an integrated part of the industry trusted Boart Longyear™ genuine Q™ wireline system.



For more information on the UMX™ Diamond Bit Series scan with a QR code reader on your smart phone.



## 1 UMX™ CROWN

Patented technology enables the use of large, synthetic diamonds, increasing penetration through changing ground conditions and provides longer bit life

## 2 RAZORCUT™ FACE DESIGN

Patented design is ready to cut right “out of the box” and improves tracking and balance in the hole

## 3 STAGE™ DESIGN

Stage waterway design allows the tallest crown height in the industry, enabling time savings and increased productivity

## 4 TWIN-TAPER™ WINDOW

Dramatically improves flushing, forcing debris through the windows while keeping the bit face clear and reinforcing the inner-diameter

## 5 WINDOW LAYOUT

Window distribution and shape have been redesigned for optimum performance in any ground condition

## 6 GENUINE Q™ WIRELINE SYSTEM

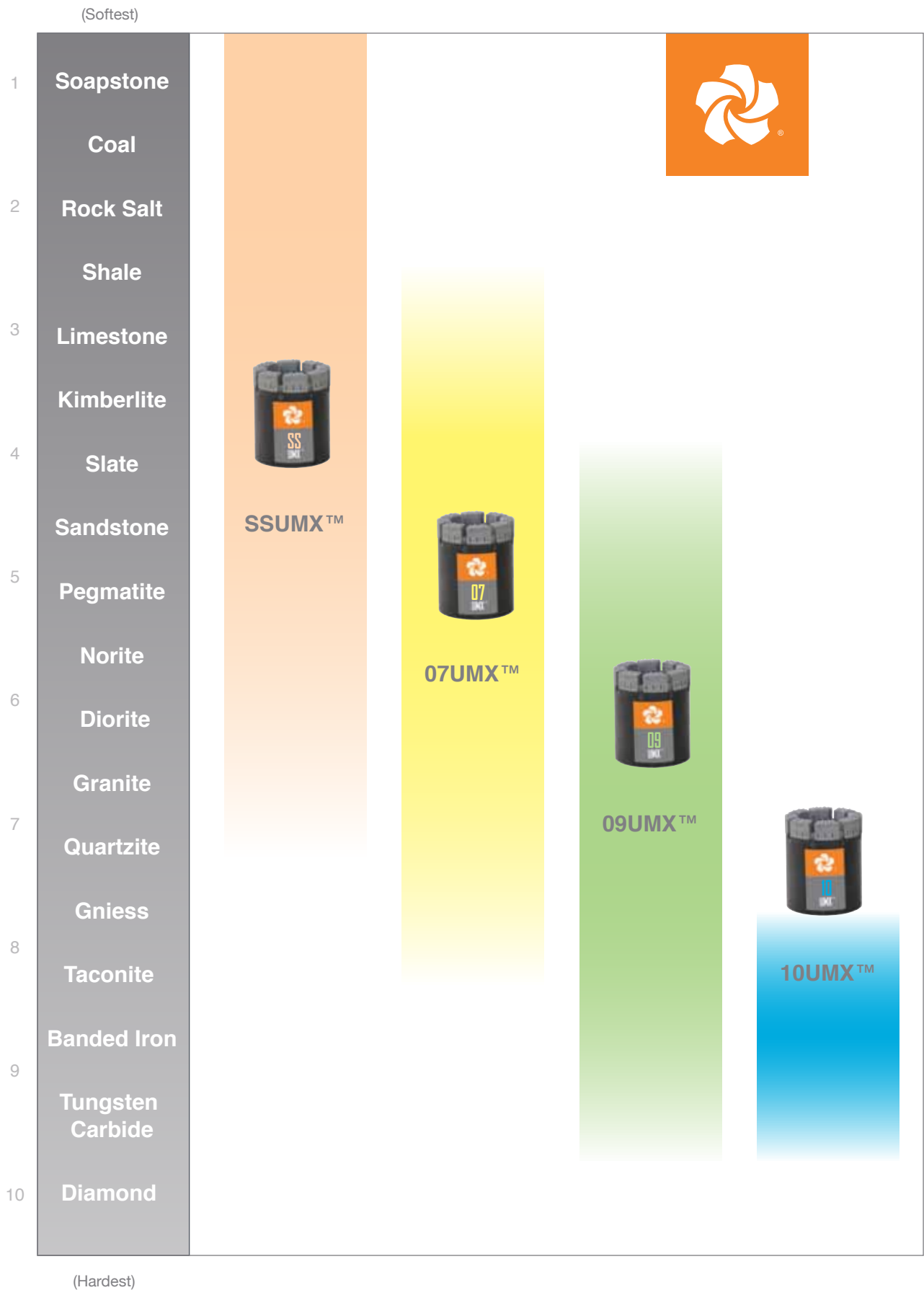
UMX Bits are an integrated part of the genuine Q wireline system and are available in all standard sizes

## OPTIONS

- Crown Height
- Waterways
- Diameter

# UMX™ DIAMOND BIT SERIES

## MOHS SCALE OF HARDNESS







## FORMULA FOR SUCCESS

Boart Longyear's extensive drilling experience is the primary driver behind the incredibly innovative UMX™ diamond bit series. By combining patented technologies with customer collaboration, Boart Longyear's engineers have designed the highest performing diamond bits available anywhere on the market today.

UMX Diamond Bits are highly versatile, capable of adjusting from one ground formation to another. They are also very durable, able to resist the wear and punishment of extreme ground conditions. They are our most productive bits ever with increased output, efficiency and performance, tested and proven at sites throughout the world.

### SSUMX™ BIT

SSUMX is the original Ultramatrix™ bit. Boart Longyear developed an impregnated bit; with large synthetic diamonds, that exceeds the performance and reliability of traditional surface-set diamond bits. Many drillers around the world have reported up to a 200% increase in life over their traditional surface set bits, and profess that the SSUMX is now their only choice for surface-set drilling.

### 07UMX™ BIT

07UMX is extreme durability. With a durable, resilient matrix designed for use in highly variable ground conditions ranging from surface-set to medium-hard, the 07UMX optimizes the ratio of bit life to drilling production.

### 09UMX™ BIT

09UMX is extreme penetration. Featuring advanced technology for a free-cutting matrix ideal for use in medium to the hardest ground formations, the 09UMX is our fastest penetrating bit available today.

**NEW!**

### 10UMX™ BIT

10UMX is free cutting. Our latest addition to the UMX family of bits is a high performance diamond bit with the freest cutting matrix made. It will quickly penetrate the very hardest rock formations.

# CROWN HEIGHT OPTIONS

12 MM



16 MM - Stage™ 2



25 MM - Stage™ 3

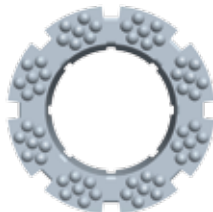


# WATER WAY OPTIONS

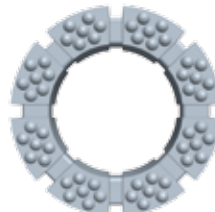
Stage



Tapered



Standard



Face Discharge



# DIAMETER OPTIONS

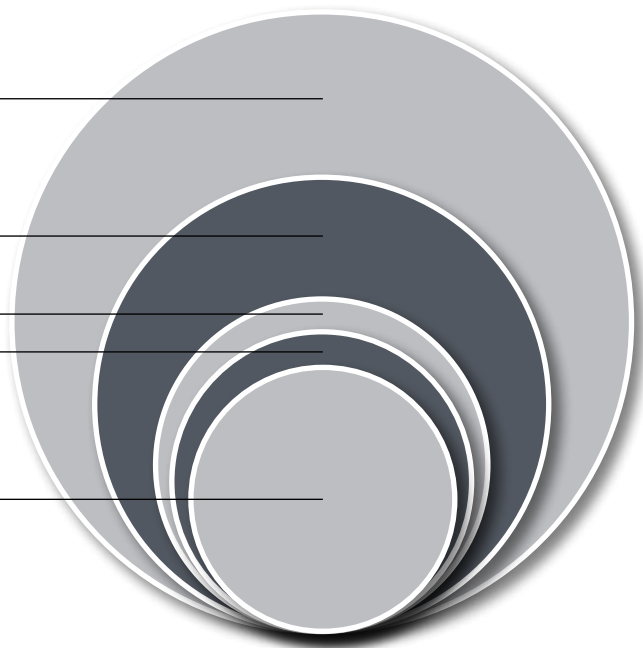
PQ/PQ3

HQ/HQ3

NQ/NQTK/NQ3

BQ/BQTK

AQ/AQTK





## LEGACY OF INNOVATION

Boart Longyear's global drilling services and applied product development have forged industry-changing products and practices. For over 120 years, we have led the industry in productivity and safety.

Boart Longyear boasts a history of leading technology and product innovation. Our diamond products were originally developed in the 1930s by Boart Products and used to explore for copper and gold in Africa. Shortly after, Longyear contract drilling began using cast set diamond bits. The early success of these bits led to widespread adoption of the technology within the industry. During the 1970s Boart Longyear engineers secured a reliable source of high-performance synthetic diamonds which launched the development of the revolutionary impregnated diamond bit.

In addition to developing industry-changing coring bit technologies, Boart Longyear developed the original wireline core retrieval technology in 1958 and released the genuine Q™ wireline system in 1966, which has become the most trusted system in the industry for over 50 years and incorporates continually advancing bit, rod and core retrieval technologies for maximum productivity.

Today, Boart Longyear remains dedicated to the development of diamond bit technology and maintaining a culture of innovation. Our engineers and design team bear that legacy of innovation and are dedicated to inventing the next technology that will enable our customers and drillers around the world to achieve extreme performance.





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## MINING AND EXPLORATION DRILLING PRODUCTS



Diamond Coring Rigs



Genuine Q™ Wireline  
Tooling



Rods and Casing