



GLINIK
DRILLING TOOLS



MINERALS & MINING

Since its inception, NiUW Glinik has strongly supported the development of mining. In order to meet the client's expectations, Glinik is working on the implementation of new solutions supporting the exploration of minerals.

The offer includes ready-made solutions for underground drilling of various types of pilot holes and inter-level ventilation and technological holes. Additionally, continuous technological development allows for the development of air-flushing bits, which are ideal for making blast holes in opencast mines.



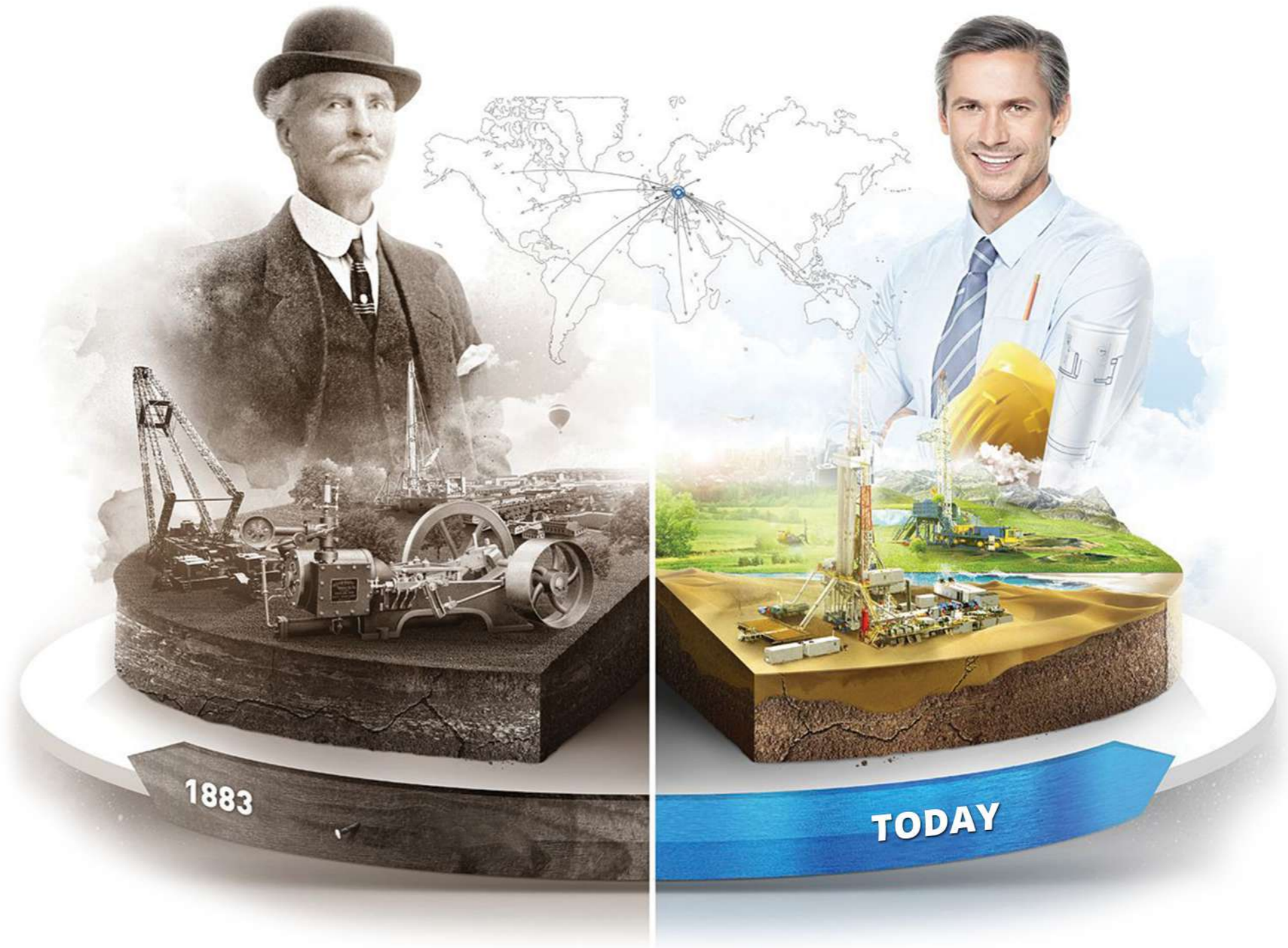


Glinik core business is the production of Drilling Tools and Equipment

For 140 years in the drilling market, Glinik has produced innovative solutions, superior products and services. Our success is attributed to their quality, which has earned the respect of our customers helping establish long-term business relationships. As an International Manufacturer, we remain a sought-after contributor of top-quality products for the oil and gas, mining, geothermal, geotechnical, HDD and water-well drilling sectors.

Our People are our most valuable asset. They provide extensive knowledge, experience and passion to stay ahead of a continuously changing industry.

We have gradually increased our presence within the international marketplace through continuous innovative advancements. Glinik's development strategy is based on its expertise in engineering (including R&D), product manufacturing and launching of new solutions globally, with our own brand or in partnership with leading global Customers.



We make changes....
Determining the future.

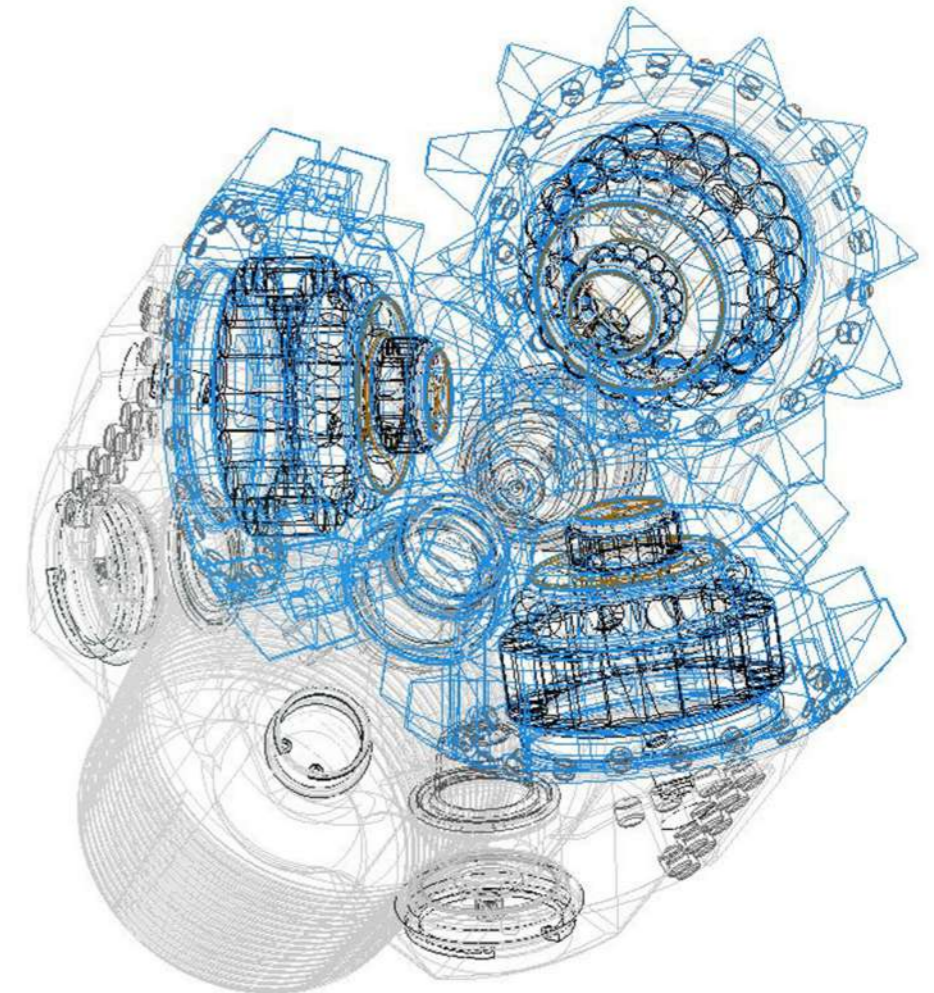
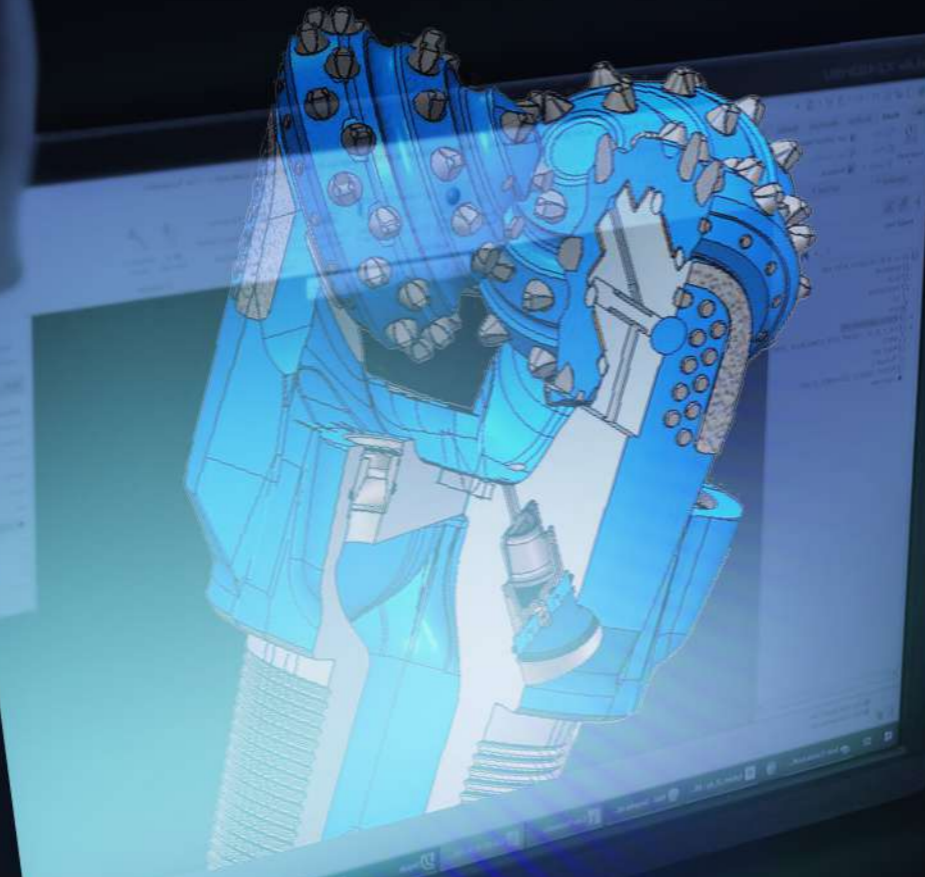


TECHNICAL INNOVATION

Glinik's Professional Design and Engineering Team is responsible for innovative solutions in the design of broadly defined drilling tools, optimization of the production process to achieve the highest quality of the final product.

Dedicated engineering personnel is involved in advanced research and development projects, enabling continuous product innovation in the areas of design and implementation of the latest technological solutions.

Experienced experts at Glinik Engineering **provide professional support** to select the most effective tools and drilling parameters for Customer defined applications

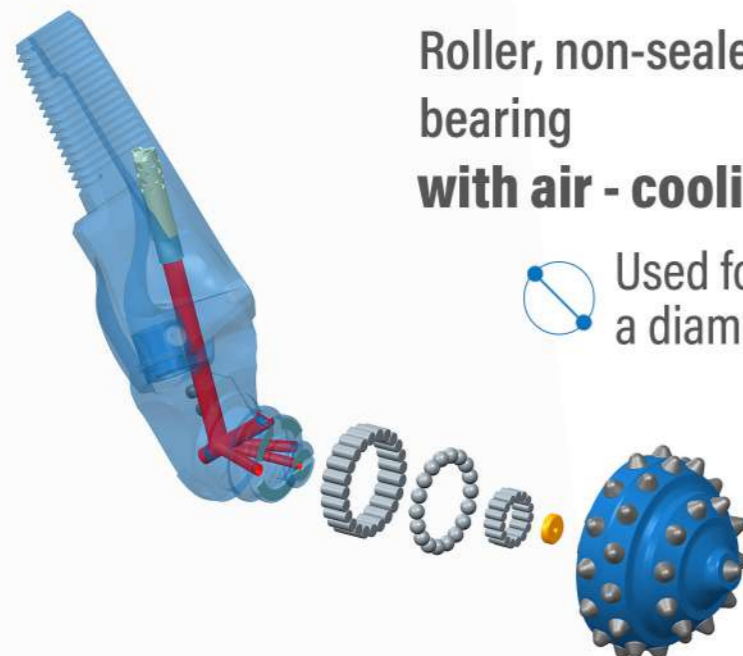


FLUSHING SYSTEM

Size of the drill bit		Nozzle dimensions			
mm	inch	D	h	d	
mm	inch	mm	mm	mm	inch (1/32)
139,7÷187,3	5-1/2÷7-3/8	20	15,1	4,0; 4,8; 6,4; 7,9; 8,7; 9,5; 11,1; 12,7; 14,3	5; 6; 8; 10; 11; 12; 14; 16; 18
190÷1066,8	7-1/2÷42	33	27	11,1; 11,9; 12,7; 14,3; 15,9; 17,5; 19,0; 20,6; 22,2; 23,8; 25,4	14; 15; 16; 18; 20; 22; 24; 26; 28; 30; 32

INNOVATIVE BEARING SYSTEMS

It is an ideal solution for blast hole applications in opencast mines.

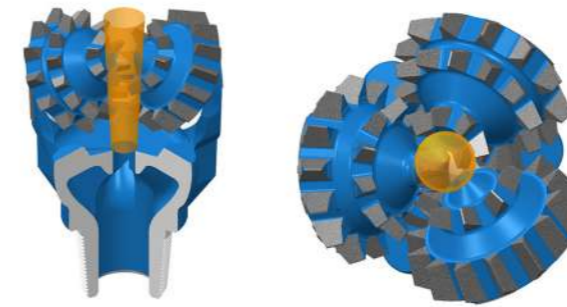


Roller, non-sealed bearing with air - cooling

Used for bits with a diameter of **6" - 12-1/4"**

Center flushing

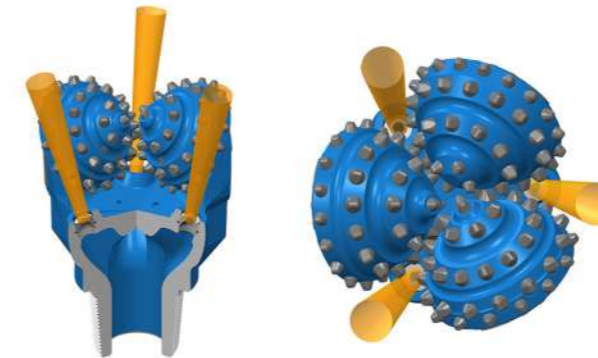
Used for bits with a diameter of **2-3/8" - 42"**



Central flushing is used for bits designed for hydrogeological and geoenvironmental drilling. For bits intended for drilling with reverse flush circulation, the design provides for the use of a central hole with the maximum diameter for a given threaded connection.

3-jet flushing

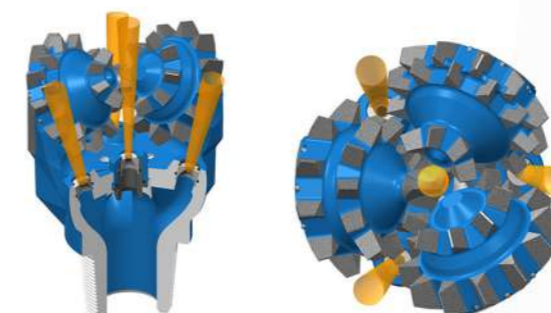
Used for bits with a diameter of **3-7/8" - 36"**



The arrangement of the nozzles and the direction of the flushing outflow allows for effective cleaning of the drill cutting structure and the bottom of the hole. This solution is designed to achieve maximum drilling progress.

Multi-jet flushing system

Used for bits with a diameter of **5-1/2" - 42"**



The advanced flushing system extended by additional nozzles in relation to the 3-jet flushing system allows for more effective cleaning of the cutting structure and the bottom of the hole, and thus maintaining high drilling progress.

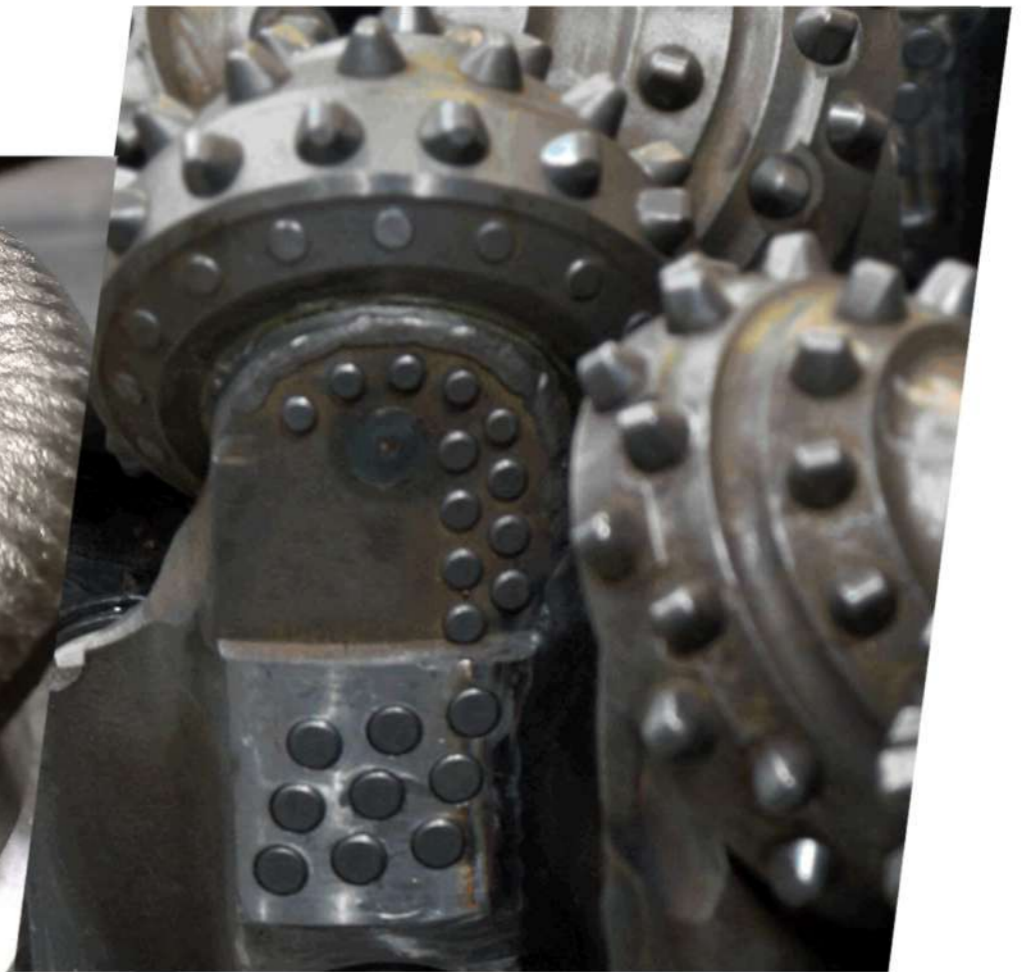


PROTECTION OF DIAMETER AND CUTTING STRUCTURE



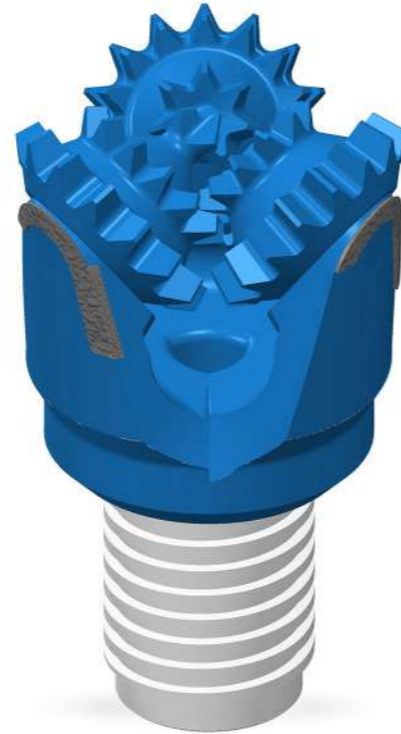
The protection of drill bits is accomplished using materials with the highest abrasion resistance. The protection is applied using various methods, depending on the surface material.

Plasma Transferred Arc Welding (PTAW) technology allows for repeatable and high quality adhesion and wear resistance.



MINERALS AND MINING

3-1/2"
IADC 211



Diameter inch _____ 3-1/2"
Diameter mm _____ 88,9mm
Drill designation _____ S1
IADC code _____ 2-1-1

CUTTING STRUCTURE:

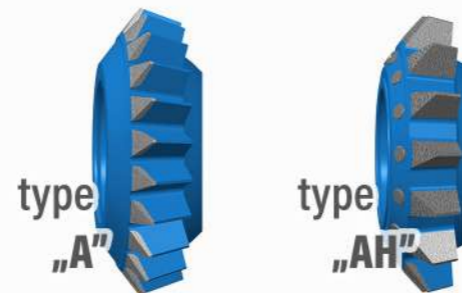
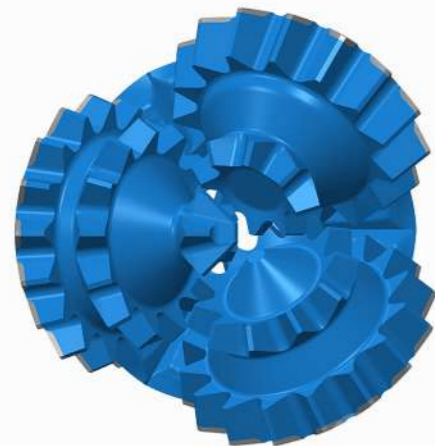
Medium sized teeth that allow drilling through formations of variable hardness rock formations.

Specially prepared design allows the use of one type of drill bit for efficient engineering works. It is an ideal solution for drilling in unknown rock formations.

Drills designed for all kinds of applications related to the extraction of solid minerals.

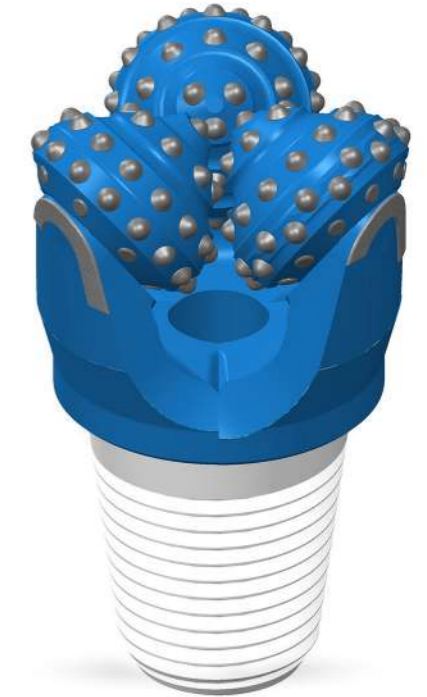
The drill is offered in a wide range of diameters from:

 **2-1/2"** (63,5mm)
to **36"** (914,4mm)



 We offer the possibility of customized product designs for individual client needs.

3-3/4"
IADC 733



Diameter inch _____ 3-3/4"
Diameter mm _____ 95,2mm
Drill designation _____ T3GY
IADC code _____ 7-3-3

BACK LEG TYPES:

As standard, we offer TYPE "2" reinforcement with hardfacing on the outer surface of the segment.

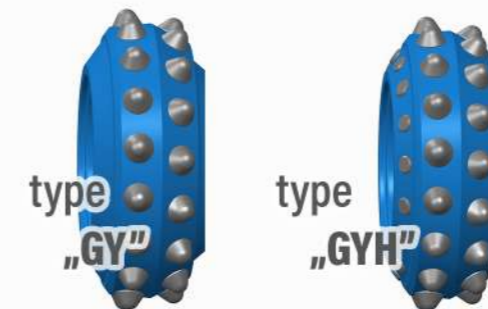


CUTTING STRUCTURE:

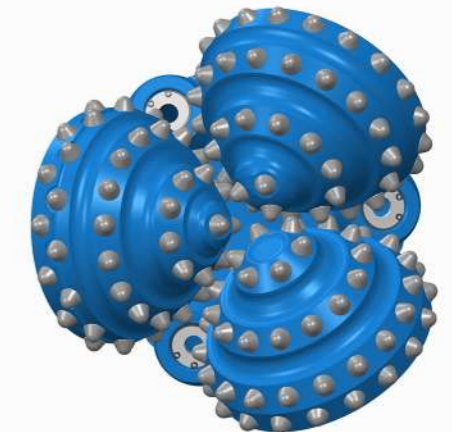
Optimally selected size and shape of the inserts enables effective drilling through variable hardness rock formations.

Specially prepared design allows to use one type of drill bit to achieve the targeted diameter and depth of the hole.

This is an ideal solution for drilling in unknown rock formations.

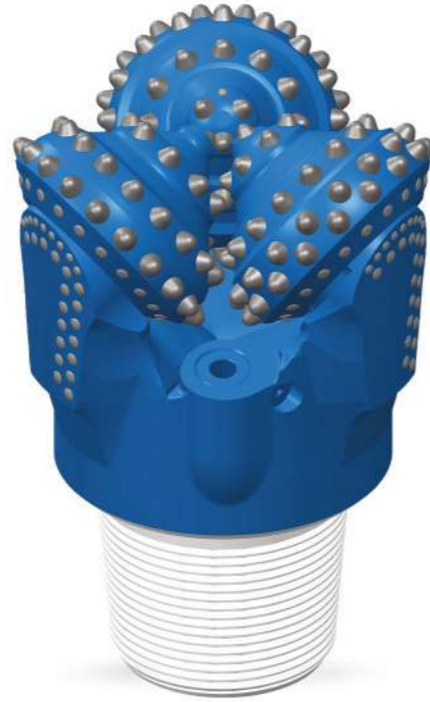


 We offer engineering consultancy in order to select the best possible solutions.



BLASTING DRILL

9-7/8"
IADC 642

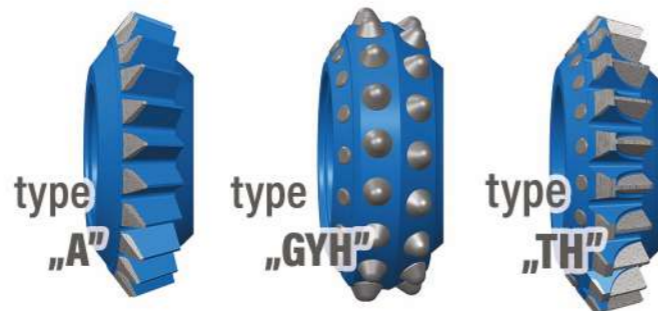
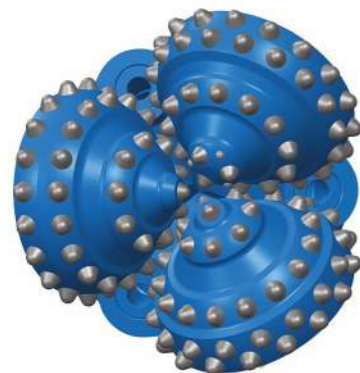
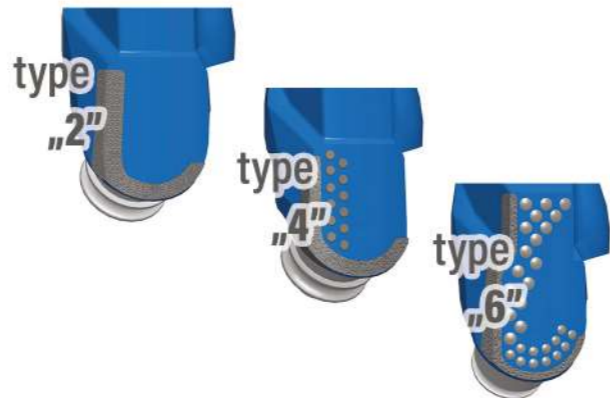


Diameter inch 9-7/8"
Diameter mm 250,8mm
Drill designation S4GY-P
IADC code 6-4-2

CUTTING STRUCTURE:

Using uniquely designed channels inside the drill bit, bearings receive additional cooling, supporting increased tool life. The unique design of the bearing, through the use of compressed air supply channels, allows cooling of rolling components and prevents drilled materials from entering the bit, ensuring trouble-free drilling operations while optimizing the performance of the drill rig. Optimal cutting structures and the highest quality outside surface wear protection of the tool, minimizes the need of drill bit changes and increases drilling performance.

BACK LEG TYPES:

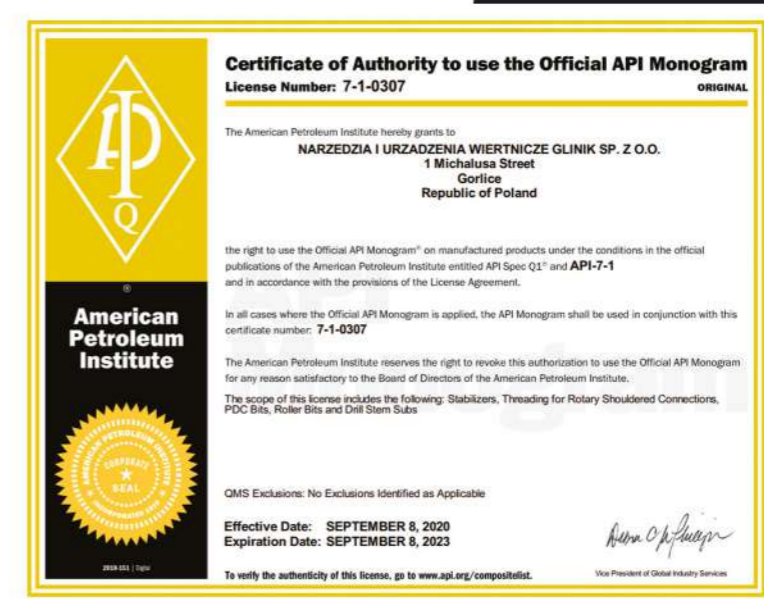


CERTIFICATES

Glinik's API Q1 and ISO 9001 certification ensures our company operates under the most rigorous standards of a quality management system for the design, manufacturing, repair and refurbishment of drilling tools.

Glinik is licensed to apply the API monogram registered mark to its stabilisers, threaded rotary connections, PDC bits, 3-cutter bits and connectors meeting the API Q1 spec 1-7 requirements.

Continuous improvement of processes, inherent to our Quality Management System, ensures meeting the most stringent requirements of our Customers.





**NARZĘDZIA I URZĄDZENIA
WIERTNICZE GLINIK SP. Z O.O.**

www.glinikdrillingtools.pl



e: niuw@glinik.com.pl

SALES DEPARTMENT:

e: sales@glinik.com.pl

t: + 48 18 35 49 706

t: + 48 18 35 49 704



**ul. Józefa Michalusa 1
38-320 Gorlice**

POLAND