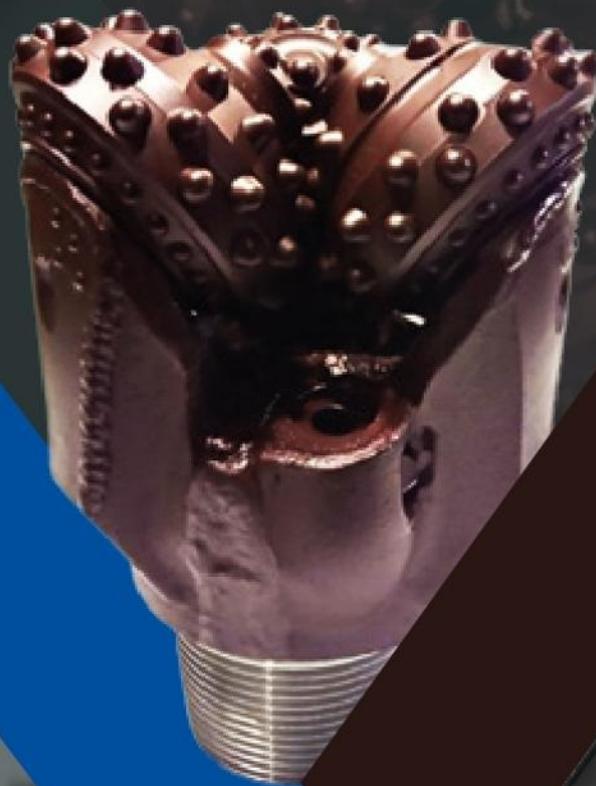


A pioneer of bit production in Russia  
90 years involvement in the industry



# PRODUCT CATALOGUE



Uralburmash



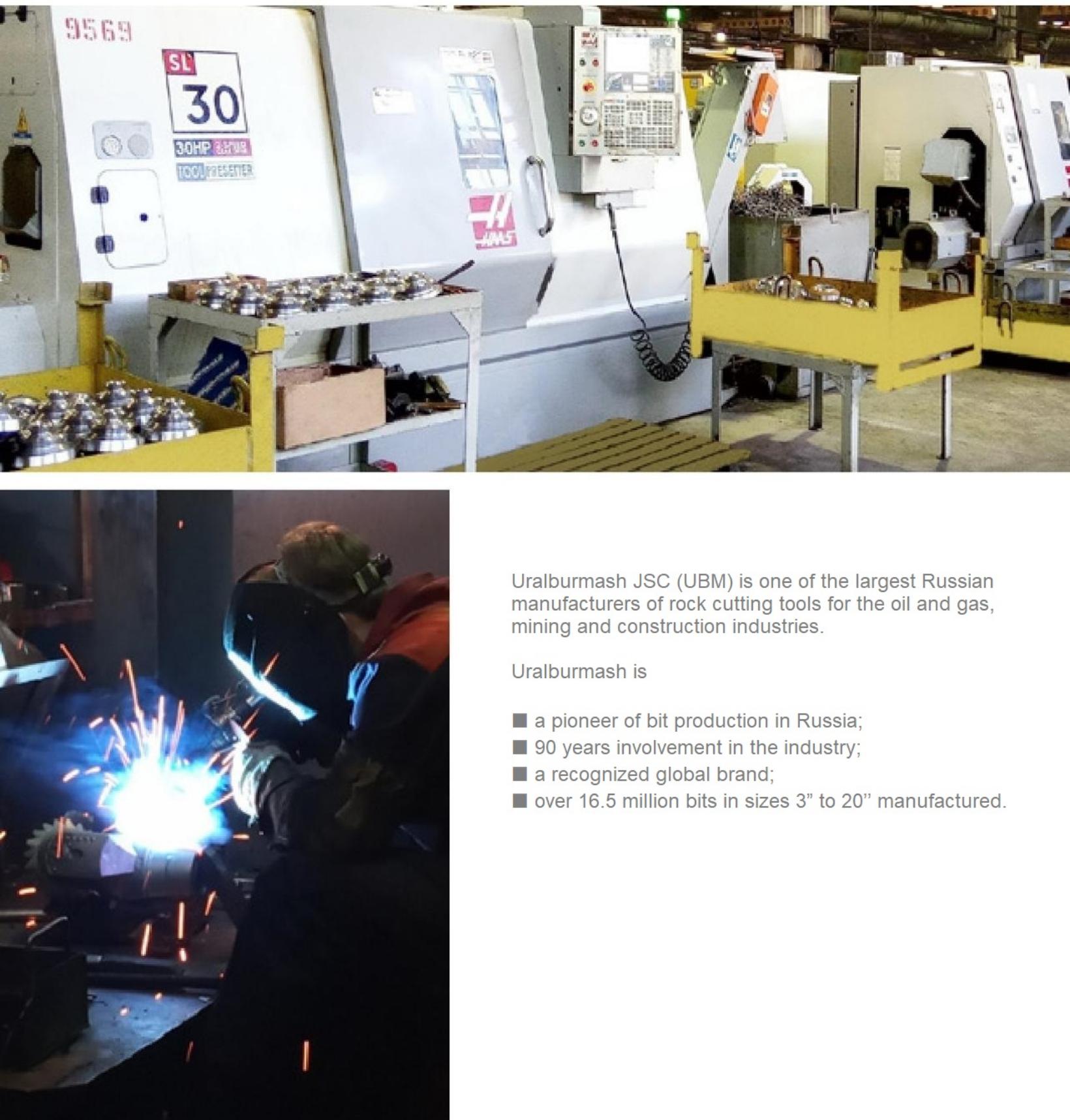


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## ABOUT THE COMPANY



Uralburmash JSC (UBM) is one of the largest Russian manufacturers of rock cutting tools for the oil and gas, mining and construction industries.

Uralburmash is

- a pioneer of bit production in Russia;
- 90 years involvement in the industry;
- a recognized global brand;
- over 16.5 million bits in sizes 3" to 20" manufactured.

## ABOUT THE COMPANY



Geography of deliveries of drill bits of Uralburmash OJSC: Russia, Kazakhstan, Uzbekistan, Moldova, Georgia, Armenia, Kyrgyzstan, Italy, France, Belgium, USA and others.

Consumers of chisels:

National Non-metallic Company JSC, Apatit JSC, MMK PJSC, First Non-metallic Company JSC, Southern Kuzbass PJSC, Mikhailovsky GOK JSC, Susumanzoloto JSC, Lenzoloto JSC, SUEK-Kuzbass JSC, Vostsibugol Company LLC, Kremniy JSC, Polyus Verninskoye JSC, Polyus Aldan JSC, Gorevsky GOK JSC, Mikheevsky GOK JSC, Vysochaishy PJSC, Mezhdurechye JSC, Korshunovskiy GOK PJSC, Yakutugol JSC HC, Poisk Gold JSC, Lebedinsky GOK JSC, CJSC Artel Prospectors "Vitim", Inaglinsky GOK JSC and others.

Republic of Uzbekistan - Navoi MMC JSC, Almalyk MMC JSC.  
Republic of Kazakhstan - Volkovgeologia JSC, ERG and others



We are professionals.

Customers trust us and build long-term relationships.

Our customers value a responsible approach throughout the entire product lifecycle.  
Development, testing, production, continuous improvement.

## A MULTI-YEAR PATH TO SUCCESS



**1743** — the foundation of the ironworks. The plant had a metallurgical profile for two centuries, it produced pig iron, strip and tire iron, forged nails. In addition, the plant produced wire and wire products, made stone crushers and road-trailed rollers.

**1931** — the first domestic drill bit was manufactured, designed according to proven specifications; first 807 bits were produced.

**1941** — the press-forging shop was put into operation, and the first drill head was produced.

**1956** — the first millionth drill bit was manufactured.

**1957** — the in-house heat treatment plant was inaugurated.

**1960** — start of production of geological exploration bits.

**1970** — new block of main production bays was put into operation.

**1979** — the largest number of bits per year was produced — 500,000 pieces, and such production volumes in a year have never been achieved by any other bit plant in the world at the time.

**1981** — a drill head 2V-K212/6-TKZ was used when drilling the super-deep Kola well at a depth of 12 km.

**1987** — Verkhneserginsky bit plant was renamed as Ural Drilling Machine-building Plant.

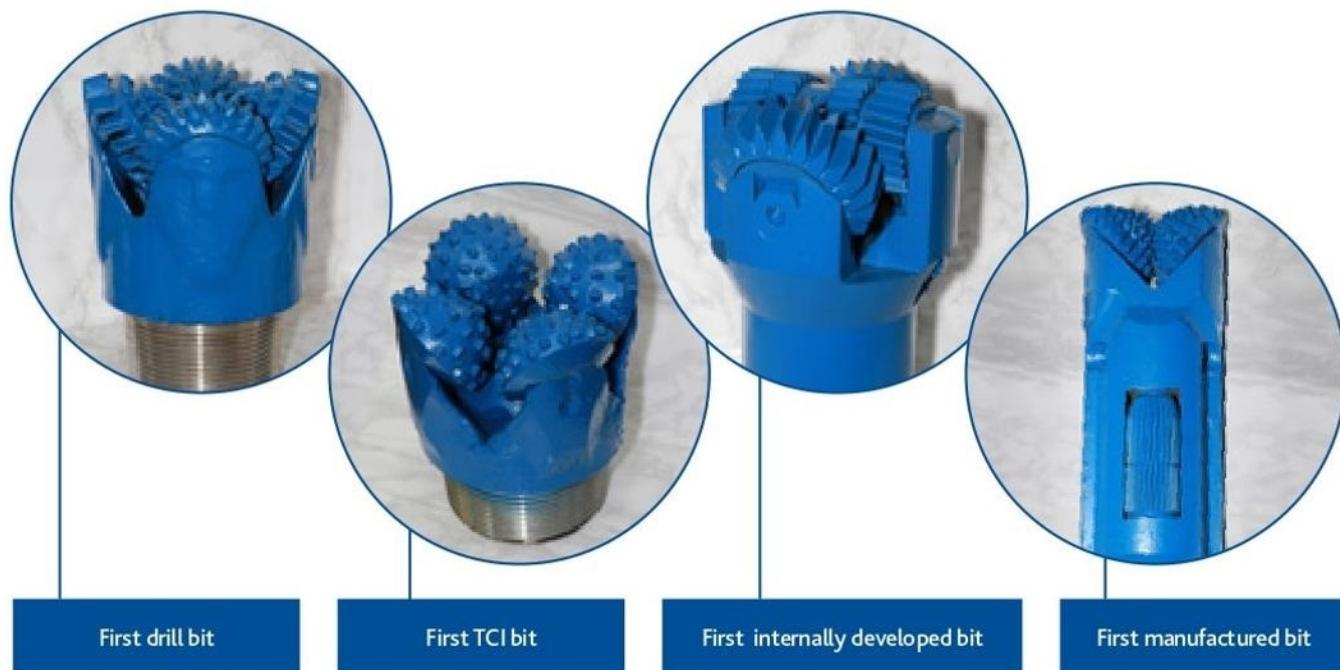
**1990** — the plant trademark was registered in the State Register of Trademarks of the USSR.

**1993** — the state enterprise Ural Drilling Machine-building Plant was transformed into Uralburmash joint-stock company of the open type.

**1996** — Uralburmash joint-stock company of the open type was renamed into Uralburmash OJSC.

## A MULTI-YEAR PATH TO SUCCESS

- 2007** — Uralburmash OJSC becomes part of VBM-group. Implementation of the technical re-equipment plan.
- 2007** — continuous updating of manufacturing equipment till 2020.
- 2008** — Uralburmash switches to a new system for marking bits and adopts dark cherry company livery. The new designation system contains complete information about the bit design, which makes it easier to select bits for specific geological and technical drilling conditions.
- 2012** — launch of a new in-house heat treatment plant.
- 2014** — modernization of press-forging production.
- 2017** — production of pneumatic DTH bits was introduced.
- 2019** — introduction of a new technology for the production of bits using state of the art equipment.
- 2019-2022** — production of chisels with a diameter of 349.2-490 mm has been mastered.  
— production of chisels with a sealed support has been mastered.



During years of operations, the Uralburmash plant has manufactured more than 16.5 million roller cone bits and now it is a modern and dynamically developing specialized high-tech enterprise with a complete production cycle of drilling tools, complete production infrastructure and employing highly qualified personnel.

## QUALITY MANAGEMENT



Since 1999, the Quality Management System (QMS) has been effectively functioning at Uralburmash. Currently, the UBM QMS has passed certification, thereby confirming the compliance of GOST R ISO 9001-2015.



### ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель** ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО "УРАЛБУРМАШ"  
**Место нахождения** (адрес юридического лица) и адрес места осуществления деятельности: 623070, Россия, Свердловская область, Нижнесергинский район, поселок городского типа Верхние Серги, улица Володарского, дом 10  
**Основной государственный регистрационный номер** 1026602051717.  
**Телефон:** 73439824221 **Адрес электронной почты:** reception.ubm@vbm.ru  
**В лице** Генерального директора Слесарева Александра Владимировича  
**заявляет, что** Оборудование нефтегорюческое, буровое геологоразведочное: долота шарошечные Ø 59-490 мм с опорами шарошечными N, V, A, VU, AU с промывочными или продувочными каналами C, A, AC, J.  
**Изготовитель** ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО "УРАЛБУРМАШ"  
**Место нахождения** (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: 623070, Россия, Свердловская область, Нижнесергинский район, поселок городского типа Верхние Серги, улица Володарского, дом 10  
**Продукция** изготовлена в соответствии с ТУ 3664-082-00217550-2009 "ДОЛОТА ШАРОШЕЧНЫЕ", ГОСТ 20692-2003 "ДОЛОТА ШАРОШЕЧНЫЕ. Технические условия".  
**Код (коды)** ТН ВЭД ЕАЭС: 8207199001  
**Серийный выпуск**  
**соответствует требованиям**  
**Технического регламента Таможенного союза "О безопасности машин и оборудования" (ТР ТС 010/2011)**  
**Декларация о соответствии** принята на основании  
**Протокола испытаний № 013-02-20/12-ИТ от 04.02.2020 года, выданного испытательной лабораторией "Научно-исследовательский испытательный центр "Циркон-тест" (регистрационный номер аттестата акредитации РОСС RU.31485.04ИДЮ.007)**  
**обоснования безопасности; руководства по эксплуатации; паспорта**  
**Схема декларирования соответствия: 1д**  
**Дополнительная информация**  
**ГОСТ 20692-2003 "Долота шарошечные. Технические условия" раздел 4. Условия хранения продукции в соответствии с требованиями ГОСТ 15150-69. Срок хранения (службы, годности) указан в прилагаемой к продукции эксплуатационной документации.**  
**Декларация о соответствии действительна с даты регистрации по 11.02.2025 включительно.**

  
 Слесарев Александр Владимирович  
 (Ф.И.О. заявителя)

Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-RU.АД07.В.02234/20  
 Дата регистрации декларации о соответствии: 12.02.2020



## QUALITY MANAGEMENT

QMS covers the entire life cycle of drill tools production, starting with the receipt of the order and bits designing and ending with its branded packaging. The QMS ensures traceability of products at all stages of manufacturing, control and assembling of the drilling bits, including materials and components used.

UBM drill tools are certified in compliance with the Technical Regulations of the Customs Union 'On safety of machines and equipment' (TP TC 010/2011), and meet the State Standards GOST 20692-2003 'Roller cone bits. Specifications'.

The current UBM quality management system is an effective tool for improvement of drilling tool performance. Due to the integrated approach to quality, UBM drilling equipment fully complies with international quality as well as customer's requirements and expectations.



## DRILLING TOOLS

We manufacture drilling tools for the mining, oil & gas and construction industries.



### AirStandart (AIRS)

roller cone bits  
with air flush

### AirVector (AIRV)

roller cone bits  
with air flush

### Standart (STD)

roller cone bits  
with mud flush

Uralburmash OJSC offers more than 400 types of chisels with a diameter from 59 mm to 490 mm (2 5/16" - 19 19/64"), elaborated for mining and blasting operations, oil drilling, gas and water wells, geological exploration, road construction.

We are ready:

- provide technical advice on the selection of rock-breaking tools in relation to certain mining and geological drilling conditions,
- guarantee the quality and high performance of the chisels,
- to inform about our new developments and modifications of existing types of ball bits.

## BIT STAMPING

This information is marked at the pin/box face of UBM drill bit:

- bit notation key
- serial number

## NOTATION KEY

**215,9****(8 1/2)****AIRV****632**

Bit size, mm

Bit size, inch

Product line

IADC code

- AirStandart (AIRS)
- AirVector (AIRV)
- Standart (STD)

## IADC CLASSIFICATION SYSTEM FOR ROLLER CONE BITS

The IADC classification system is used to choose the best roller cone bit for the appropriate geological conditions. It's based on the 4-character code describing both a bit design and a formation/rock type which can be drilled through by a suitable bit.

Groups	Drill bit application in different formations			GOST 20692	3 <sup>rd</sup> IADC character											
	1 <sup>st</sup> IADC character	2 <sup>nd</sup> IADC character	COST 20692		1	2	3	4	5	6	7					
					Bearing				Sealed bearing							
Milled teeth bits	1	1	M	Soft formations			Roller bearing without TCI on the cones gage (does not apply in mining industry)	Open roller bearing with air flush	Journal bearing without TCI on the cones gage (does not apply in mining industry)	Roller bearing with TCI on the cones gage	Journal bearing without TCI on the cones gage (does not apply in mining industry)					
		2														
		3	MC	Soft formations with medium interlayers												
		4														
	2	1	C	Medium formations												
		2														
		3	CT	Medium formations with hard interlayers												
		4														
Tungsten carbide insert bits	3	1	T	Hard formations												
		2														
		3														
		4														
	4	1	M3	Soft abrasive formations												
		2														
		3	MC3	Soft abrasive formations with medium interlayers												
		4	C3	Medium abrasive formations												
8	5	1	T3	Hard abrasive formations												
		2														
		3	TK3	Hard abrasive formations with extra-hard interlayers												
		4														
	6	1	K	Very hard formations												
		2														
		3														
		4														
7	1		OK	Extra-hard formations												
	2															
	3															

## IADC CLASSIFICATION SYSTEM FOR ROLLER CONE BITS

- 1<sup>st</sup> IADC numeric character refers to cutting structure series.

Series 1-3 refer to milled teeth bits. Series 4-8 refer to tungsten carbide insert bits. Within steel teeth and insert bit groups formations become harder and more abrasive as the series numbers increase.

- 2<sup>nd</sup> IADC numeric character refers to the bit's cutting structure type.

Each series is divided into types depending on formation hardness: 1 refers to bits designed for the softest formation within the series; 4 — for the hardest one.

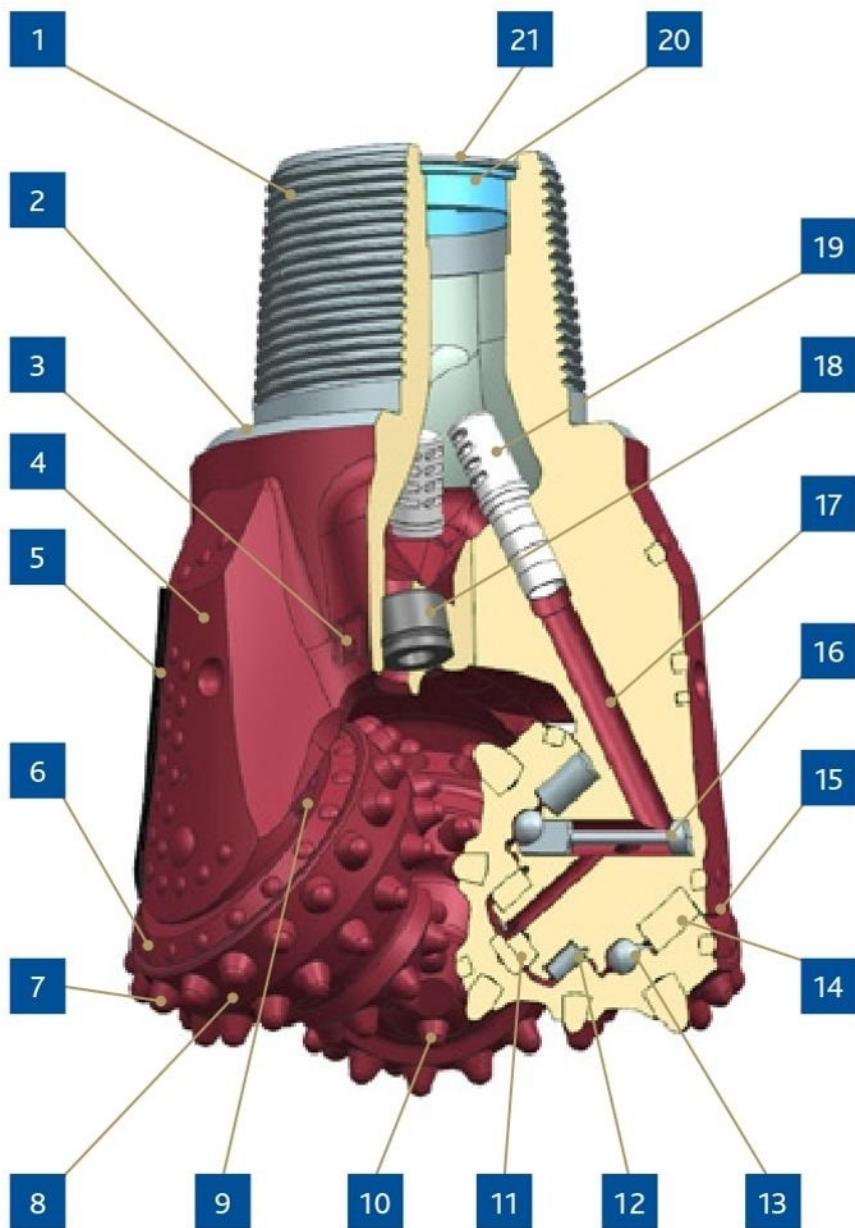
- 3<sup>rd</sup> IADC numeric character means bearing design and availability of tungsten carbide inserts on the cone.
- 4<sup>th</sup> IADC alphabetic character refers to available features.

16 alphabetic characters are used to indicate special cutting structures, bearings, nozzle configurations and bit body protection. Some bit designs may have more than one of optional features, then the most critical feature is indicated.

4 <sup>th</sup> IADC alphabetic character Available features	
A	air flush
B	sealed bearing, special seal design for higher RPM
C	central nozzle
D	special cutting structure minimizing borehole deviation
E	extended nozzles
G	enhanced shirttail protection with hardfacing or TCI
H	bits for horizontal or directional drilling
J	jet bits for drilling tangent sections
L	leg pads with TCI
M	motor application
S	standard steel teeth bits
T	two-cone bits
W	improved cutting structure
X	mostly chisel inserts
Y	conical inserts
Z	other shape inserts

## ROLLER CONE BITS WITH AIR FLUSH

Tricone roller bits **AirStandart (AIRS)** and **AirVector (AIRV)** manufactured by Uralburmash are used for rotary blast hole drilling with air flush.



1. Pin connection
2. Pin shoulder
3. Nozzle nail lock
4. Lug
5. Shirttail insert
6. Gage insert
7. Gage row insert
8. Cutter cone
9. Air exit slot
10. Nose inserts
11. Thrust plain bearing
12. Inner roller bearing
13. Ball bearing
14. Outer roller bearing
15. Shirttail hardfacing
16. Ball retaining plug
17. Air passage to bearing
18. Nozzle
19. Air tube
20. Back flow valve
21. Retaining ring



Uralburnmash

## AIRSTANDARD (AIRS)

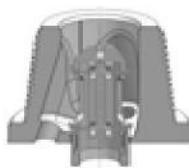
### AIRSTANDARD



Central jet

Standard open  
roller bearing  
with air flush

Spring-loaded  
back flow valve



Bit identification	Bit size, inch	IADC code	Connecting thread (API)	Gross weight, kg	Shipping dimensions, mm
1	2	3	4	5	6
75,0 (2 61/64) AIRS542	3	542X	Pin N-Rod	3,8	210 x 210 x 200
98,4 (3 7/8) AIRS522	3 7/8	522X	Pin 2 3/8 Reg	4,8	210 x 210 x 200
104,8 (4 1/8) AIRS522	4 1/8	522X	Pin 2 3/8 Reg	5,3	210 x 210 x 200
114,3 (4 1/2) AIRS332	4 1/2	332	Pin 2 3/8 Reg	6,9	170 x 170 x 260
114,3 (4 1/2) AIRS522	4 1/2	522X	Pin 2 3/8 Reg	7	170 x 170 x 260
120,6 (4 3/4) AIRS332	4 3/4	332	Pin 2 7/8 Reg	8,5	170 x 170 x 260
120,6 (4 3/4) AIRS522	4 3/4	522	Pin 2 7/8 Reg	8,8	170 x 170 x 260
120,6 (4 3/4) AIRS542	4 3/4	542X	Pin 2 7/8 Reg	8,8	170 x 170 x 260
120,6 (4 3/4) AIRS622	4 3/4	622X	Pin 2 7/8 Reg	8,9	170 x 170 x 260
123,8 (4 7/8) AIRS522	4 7/8	522	Pin 2 7/8 Reg	8,9	170 x 170 x 260
133,4 (5 1/4) AIRS542	5 1/4	542X	Pin 2 7/8 Reg	11,2	190 x 190 x 330
139,7 (5 1/2) AIRS522	5 1/2	522X	Pin 3 1/2 Reg	12,3	190 x 190 x 330
139,7 (5 1/2) AIRS542	5 1/2	542X	Pin 3 1/2 Reg	12,3	190 x 190 x 330
139,7 (5 1/2) AIRS622	5 1/2	622X	Pin 3 1/2 Reg	12,4	190 x 190 x 330
142,9 (5 5/8) AIRS522	5 5/8	522X	Pin 3 1/2 Reg	12,6	190 x 190 x 330
142,9 (5 5/8) AIRS542	5 5/8	542X	Pin 3 1/2 Reg	12,6	190 x 190 x 330
142,9 (5 5/8) AIRS622	5 5/8	622X	Pin 3 1/2 Reg	12,7	190 x 190 x 330
146,0 (5 3/4) AIRS322	5 3/4	322	Pin 3 1/2 Reg	11	190 x 190 x 330
146,0 (5 3/4) AIRS622	5 3/4	622X	Pin 3 1/2 Reg	12	190 x 190 x 330
146,0 (5 3/4) AIRS832	5 3/4	832Y	Pin 3 1/2 Reg	12	190 x 190 x 330
149,2 (5 7/8) AIRS522	5 7/8	522X	Pin 3 1/2 Reg	13,3	190 x 190 x 330
149,2 (5 7/8) AIRS732	5 7/8	732Y	Pin 3 1/2 Reg	13,8	190 x 190 x 330
152,4 (6) AIRS332	6	332	Pin 3 1/2 Reg	13,4	190 x 190 x 330
152,4 (6) AIRS522	6	522X	Pin 3 1/2 Reg	13,4	190 x 190 x 330
158,7 (6 1/4) AIRS122	6 1/4	122	Pin 3 1/2 Reg	13,8	190 x 190 x 330
161,0 (6 11/32) AIRS322	6 1/3	322	Pin 3 1/2 Reg	13,4	190 x 190 x 330
161,0 (6 11/32) AIRS742	6 1/3	742Y	Pin 3 1/2 Reg	13,6	190 x 190 x 330
165,1 (6 1/2) AIRS322	6 1/2	322	Pin 3 1/2 Reg	13,8	190 x 190 x 330
165,1 (6 1/2) AIRS522	6 1/2	522X	Pin 3 1/2 Reg	13,8	190 x 190 x 330
165,1 (6 1/2) AIRS622	6 1/2	622X	Pin 3 1/2 Reg	14	190 x 190 x 330

1	2	3	4	5	6
171,4 (6 3/4) AIRS632	6 3/4	632X	Pin 3 1/2 Reg	15,5	190 x 190 x 330
190,5 (7 1/2) AIRS332	7 1/2	332	Pin 4 1/2 Reg	25,3	250 x 250 x 390
190,5 (7 1/2) AIRS632	7 1/2	632X	Pin 4 1/2 Reg	25,3	250 x 250 x 390
190,5 (7 1/2) AIRS732	7 1/2	732Y	Pin 4 1/2 Reg	25,5	250 x 250 x 390
190,5 (7 1/2) AIRS832	7 1/2	832Y	Pin 4 1/2 Reg	25,5	250 x 250 x 390
215,9 (8 1/2) AIRS322	8 1/2	322	Pin 4 1/2 Reg	31,8	250 x 250 x 390
215,9 (8 1/2) AIRS622	8 1/2	622X	Pin 4 1/2 Reg	32,4	250 x 250 x 390
215,9 (8 1/2) AIRS632	8 1/2	632Y	Pin 4 1/2 Reg	33,6	250 x 250 x 390
215,9 (8 1/2) AIRS642	8 1/2	642Y	Pin 4 1/2 Reg	34,3	250 x 250 x 390
215,9 (8 1/2) AIRS742	8 1/2	742Y	Pin 4 1/2 Reg	34,3	250 x 250 x 390
215,9 (8 1/2) AIRS832	8 1/2	832Y	Pin 4 1/2 Reg	34	250 x 250 x 390
228,6 (9) AIRS312	9	312	Pin 4 1/2 Reg	33,9	280 x 280 x 390
228,6 (9) AIRS322	9	322	Pin 4 1/2 Reg	33,9	280 x 280 x 390
228,6 (9) AIRS642	9	642Y	Pin 4 1/2 Reg	41,7	280 x 280 x 390
228,6 (9) AIRS742	9	742Y	Pin 4 1/2 Reg	41,7	280 x 280 x 390
228,6 (9) AIRS832	9	832Y	Pin 4 1/2 Reg	41,7	280 x 280 x 390
233,0 (9 3/16) AIRS312	9 1/5	312	Pin 4 1/2 FH	33,9	280 x 280 x 390
233,0 (9 3/16) AIRS322	9 1/5	322	Pin 4 1/2 FH	33,9	280 x 280 x 390
233,0 (9 3/16) AIRS642	9 1/5	642Y	Pin 4 1/2 FH	41,7	280 x 280 x 390
233,0 (9 3/16) AIRS742	9 1/5	742Y	Pin 4 1/2 FH	41,7	280 x 280 x 390
233,0 (9 3/16) AIRS832	9 1/5	832Y	Pin 4 1/2 FH	41,7	280 x 280 x 390
244,5 (9 5/8) AIRS322	9 5/8	322	Pin 4 1/2 FH	40,7	280 x 280 x 390
244,5 (9 5/8) AIRS612	9 5/8	612X	Pin 4 1/2 FH	43,7	280 x 280 x 390
244,5 (9 5/8) AIRS622	9 5/8	622X	Pin 4 1/2 FH	50,3	280 x 280 x 390
244,5 (9 5/8) AIRS632	9 5/8	632Y	Pin 4 1/2 FH	43,7	280 x 280 x 390
244,5 (9 5/8) AIRS642	9 5/8	642Y	Pin 4 1/2 FH	43,7	280 x 280 x 390
244,5 (9 5/8) AIRS742	9 5/8	742Y	Pin 4 1/2 FH	42,7	280 x 280 x 390
244,5 (9 5/8) AIRS822	9 5/8	822Y	Pin 4 1/2 FH	43,7	280 x 280 x 390
244,5 (9 5/8) AIRS832	9 5/8	832Y	Pin 4 1/2 FH	43,7	280 x 280 x 390
250,8 (9 7/8) AIRS612	9 7/8	612X	Pin 4 1/2 FH	50,1	280 x 280 x 390
250,8 (9 7/8) AIRS622	9 7/8	622X	Pin 4 1/2 FH	50,3	280 x 280 x 390
250,8 (9 7/8) AIRS632	9 7/8	632Y	Pin 4 1/2 FH	50,7	280 x 280 x 390
250,8 (9 7/8) AIRS632	9 7/8	632Y	Pin 6 5/8 Reg	50,3	280 x 280 x 390
250,8 (9 7/8) AIRS642	9 7/8	642Y	Pin 4 1/2 FH	49,7	280 x 280 x 390
250,8 (9 7/8) AIRS722	9 7/8	722Y	Pin 4 1/2 FH	50,7	280 x 280 x 390
250,8 (9 7/8) AIRS712	9 7/8	712Y	Pin 4 1/2 FH	49,7	280 x 280 x 390
269,9 (10 5/8) AIRS622	10 5/8	622X	Pin 6 5/8 Reg	57,3	280 x 280 x 390
269,9 (10 5/8) AIRS642	10 5/8	642Y	Pin 6 5/8 Reg	57,3	280 x 280 x 390
269,9 (10 5/8) AIRS742	10 5/8	742Y	Pin 6 5/8 Reg	57,3	280 x 280 x 390
269,9 (10 5/8) AIRS832	10 5/8	832Y	Pin 6 5/8 Reg	58,9	280 x 280 x 390
311,1 (12 1/4) AIRS632	12 1/4	632Y	Pin 6 5/8 Reg	99,3	Palleted
311,1 (12 1/4) AIRS742	12 1/4	742Y	Pin 6 5/8 Reg	99,3	Palleted

## AIRVECTOR (AIRV)

### AIRVECTOR



- Improved design
- Side jet
- Standard open roller bearing with air flush
- Leaf-type back flow valve



Bit identification	Bit size, inch	IADC code	Connecting thread (API)	Gross weight, kg	Shipping dimensions, mm
1	2	3	4	5	6
171,4 (6 3/4) AIRV122	6 3/4	122	Pin 3 1/2 Reg	14,5	190 x 190 x 330
171,4 (6 3/4) AIRV222	6 3/4	222	Pin 3 1/2 Reg	14,5	190 x 190 x 330
171,4 (6 3/4) AIRV522	6 3/4	522X	Pin 3 1/2 Reg	15,1	190 x 190 x 330
171,4 (6 3/4) AIRV542	6 3/4	542X	Pin 3 1/2 Reg	15,1	190 x 190 x 330
171,4 (6 3/4) AIRV632	6 3/4	632X	Pin 3 1/2 Reg	15,5	190 x 190 x 330
171,4 (6 3/4) AIRV642	6 3/4	642X	Pin 3 1/2 Reg	15,7	190 x 190 x 330
171,4 (6 3/4) AIRV732	6 3/4	732Y	Pin 3 1/2 Reg	15,5	190 x 190 x 330
171,4 (6 3/4) AIRV832	6 3/4	832Y	Pin 3 1/2 Reg	15,7	190 x 190 x 330
200,0 (7 7/8) AIRV532	7 7/8	532X	Pin 4 1/2 Reg	36	250 x 250 x 390
200,0 (7 7/8) AIRV622	7 7/8	622X	Pin 4 1/2 Reg	36	250 x 250 x 390
200,0 (7 7/8) AIRV622	7 7/8	622Y	Pin 4 1/2 Reg	36,1	250 x 250 x 390
200,0 (7 7/8) AIRV632	7 7/8	632Y	Pin 4 1/2 Reg	36,1	250 x 250 x 390
200,0 (7 7/8) AIRV722	7 7/8	722Y	Pin 4 1/2 Reg	36	250 x 250 x 390
200,0 (7 7/8) AIRV832	7 7/8	832Y	Pin 4 1/2 Reg	36,1	250 x 250 x 390
215,9 (8 1/2) AIRV122	8 1/2	122	Pin 4 1/2 Reg	33,3	250 x 250 x 390
215,9 (8 1/2) AIRV542	8 1/2	542Y	Pin 4 1/2 Reg	37,2	250 x 250 x 390
215,9 (8 1/2) AIRV612	8 1/2	612X	Pin 4 1/2 Reg	38	250 x 250 x 390
215,9 (8 1/2) AIRV622	8 1/2	622Y	Pin 4 1/2 Reg	38	250 x 250 x 390
215,9 (8 1/2) AIRV632	8 1/2	632Y	Pin 4 1/2 Reg	38	250 x 250 x 390
215,9 (8 1/2) AIRV642	8 1/2	642Y	Pin 4 1/2 Reg	38	250 x 250 x 390
228,6 (9) AIRV522	9	522X	Pin 4 1/2 Reg	41,2	280 x 280 x 390
228,6 (9) AIRV612	9	612Y	Pin 4 1/2 Reg	41,2	280 x 280 x 390
228,6 (9) AIRV642	9	642Y	Pin 4 1/2 Reg	41,2	280 x 280 x 390
228,6 (9) AIRV742	9	742Y	Pin 4 1/2 Reg	41,2	280 x 280 x 390
233,0 (9 3/16) AIRV612	9 1/5	612Y	Pin 4 1/2 FH	41,2	280 x 280 x 390
233,0 (9 3/16) AIRV522	9 1/5	522X	Pin 4 1/2 FH	42,7	280 x 280 x 390
233,0 (9 3/16) AIRV642	9 1/5	642Y	Pin 4 1/2 FH	41,2	280 x 280 x 390
233,0 (9 3/16) AIRV742	9 1/5	742Y	Pin 4 1/2 FH	41,2	280 x 280 x 390
244,5 (9 5/8) AIRV632	9 5/8	632Y	Pin 4 1/2 FH	47,7	280 x 280 x 390
244,5 (9 5/8) AIRV642	9 5/8	642Y	Pin 4 1/2 FH	51,7	280 x 280 x 390

1	2	3	4	5	6
244,5 (9 5/8) AIRV732	9 5/8	732Y	Pin 4 1/2 FH	46,7	280 x 280 x 390
244,5 (9 5/8) AIRV742	9 5/8	742Y	Pin 4 1/2 FH	46,7	280 x 280 x 390
244,5 (9 5/8) AIRV832	9 5/8	832Y	Pin 4 1/2 FH	47,7	280 x 280 x 390
250,8 (9 7/8) AIRV422	9 7/8	422Y	Pin 6 5/8 Reg	49	280 x 280 x 390
250,8 (9 7/8) AIRV542	9 7/8	542Y	Pin 6 5/8 Reg	49,2	280 x 280 x 390
250,8 (9 7/8) AIRV622	9 7/8	622Y	Pin 6 5/8 Reg	49,2	280 x 280 x 390
250,8 (9 7/8) AIRV632	9 7/8	632Y	Pin 4 1/2 FH	51,7	280 x 280 x 390
250,8 (9 7/8) AIRV632	9 7/8	632Y	Pin 6 5/8 Reg	52	280 x 280 x 390
250,8 (9 7/8) AIRV742	9 7/8	742Y	Pin 4 1/2 FH	52,3	280 x 280 x 390
250,8 (9 7/8) AIRV722	9 7/8	722Y	Pin 6 5/8 Reg	52	280 x 280 x 390

## ROLLER CONE BITS WITH MUD FLASH

**Standart (STD)** roller cone bits are designed for a wide range of drilling applications featuring bottom hole cleaning with mud flush, as well as for additional well operations. They are successfully used for water well drilling, well drilling in construction, exploration drilling and gold mining.

### STANDARD (STD)

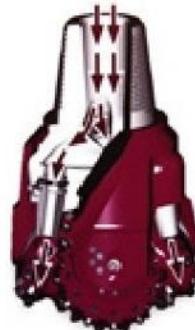
#### STANDARD



Central or side jet

Standard open  
roller bearing  
with mud flush

Replaceable nozzles



Bit identification	Bit size, inch	IADC code	Connecting thread (API)	Gross weight, kg	Shipping dimensions, mm
1	2	3	4	5	6
II 59,0 (2 21/64) STD613**	2 1/3	613Y	-	3,5	210x210x200
75,0 (2 61/64) STD131	3	131	N-Rod	2,6	210x210x200
75,0 (2 15/16) STD211	2 8/9	211	N-Rod	2,6	210x210x200
75,0 (2 15/16) STD321	2 8/9	321	N-Rod	2,6	210x210x200
75,0 (2 61/64) STD321	3	321	N-Rod	2,6	210x210x200
76,0 (2 63/64) STD321	3	321	-	2,7	210x210x200
76,0 (2 63/64) STD741	3	741Y	-	2,6	210x210x200
82,6 (3 1/4) STD221	3 1/4	221	-	5,7	210x210x200
92,1 (3 5/8) STD511	3 5/8	511X	-	4,1	210x210x200
93,0 (3 21/32) STD321	3 2/3	321	-	3,6	210x210x200
93,0 (3 21/32) STD621	3 2/3	621Y	-	4,1	210x210x200
93,0 (3 21/32) STD741	3 2/3	741Y	-	4	210x210x200
95,0 (3 47/64) STD511	3 3/4	511X	-	4,3	210x210x200
95,3 (3 3/4) STD321	3 3/4	321	-	4,7	210x210x200
98,4 (3 7/8) STD211	3 7/8	211	Pin 2 3/8 Reg	4,7	210x210x200
98,4 (3 7/8) STD221	3 7/8	221	Pin 2 3/8 Reg	4,7	210x210x200
98,4 (3 7/8) STD231	3 7/8	231	Pin 2 3/8 Reg	4,7	210x210x200
98,4 (3 7/8) STD321	3 7/8	321	Pin 2 3/8 Reg	4,7	210x210x200
98,4 (3 7/8) STD521	3 7/8	521X	Pin 2 3/8 Reg	5,1	210x210x200
98,4 (3 7/8) STD621	3 7/8	621X	Pin 2 3/8 Reg	5,3	210x210x200
98,4 (3 7/8) STD831	3 7/8	831Y	Pin 2 3/8 Reg	5	210x210x200
101,6 (4) STD321	4	321	Pin 2 3/8 Reg	4,8	210x210x200
101,6 (4) STD521	4	521X	Pin 2 3/8 Reg	5,2	210x210x200
104,8 (4 1/8) STD221	4 1/8	221	Pin 2 3/8 Reg	5,6	210x210x200
104,8 (4 1/8) STD521	4 1/8	521X	Pin 2 3/8 Reg	5,8	210x210x200

1	2	3	4	5	6
II 112,0 (4 13/32) STD121**	4 2/5	121	-	6,3	170x170x260
II 112,0 (4 13/32) STD221**	4 2/5	221	-	6	170x170x260
112,0 (4 13/32) STD321	4 2/5	321	-	5,9	170x170x260
112,0 (4 13/32) STD621	4 2/5	623X	-	6,2	170x170x260
112,0 (4 13/32) STD741	4 2/5	741Y	-	6,2	170x170x260
114,3 (4 1/2) STD111	4 1/2	111	Pin 2 3/8 Reg	6,9	170x170x260
114,3 (4 1/2) STD221	4 1/2	221	Pin 2 3/8 Reg	5,9	170x170x260
114,3 (4 1/2) STD231	4 1/2	231	Pin 2 3/8 Reg	5,9	170x170x260
114,3 (4 1/2) STD321	4 1/2	321	Pin 2 3/8 Reg	6,9	170x170x260
114,3 (4 1/2) STD521	4 1/2	521X	Pin 2 3/8 Reg	6	170x170x260
118,0 (4 41/64) STD221	4 5/8	221	Pin 2 7/8 Reg	6,9	170x170x260
120,6 (4 3/4) STD121	4 3/4	121	Pin 2 7/8 Reg	7,6	170x170x260
120,6 (4 3/4) STD211	4 3/4	211	Pin 2 7/8 Reg	7,6	170x170x260
120,6 (4 3/4) STD221	4 3/4	221	Pin 2 7/8 Reg	7,6	170x170x260
120,6 (4 3/4) STD231	4 3/4	231	Pin 2 7/8 Reg	7,4	170x170x260
120,6 (4 3/4) STD241	4 3/4	241	Pin 2 7/8 Reg	7,4	170x170x260
120,6 (4 3/4) STD321	4 3/4	321	Pin 2 7/8 Reg	8,4	170x170x260
120,6 (4 3/4) STD331	4 3/4	331	Pin 2 7/8 Reg	7,5	170x170x260
120,6 (4 3/4) STD523	4 3/4	523X	Pin 2 7/8 Reg	8,8	170x170x260
120,6 (4 3/4) STD543	4 3/4	543X	Pin 2 7/8 Reg	8,8	170x170x260
120,6 (4 3/4) STD621	4 3/4	621Y	Pin 2 7/8 Reg	7,7	170x170x260
120,6 (4 3/4) STD833	4 3/4	833Y	Pin 2 7/8 Reg	7,7	170x170x260
122,0 (4 51/64) STD621	4 4/5	621Y	Pin 2 7/8 Reg	8,9	170x170x260
123,8 (4 7/8) STD221	4 7/8	221	Pin 2 7/8 Reg	7,9	170x170x260
123,8 (4 7/8) STD231	4 7/8	231	Pin 2 7/8 Reg	7,9	170x170x260
123,8 (4 7/8) STD523	4 7/8	523X	Pin 2 7/8 Reg	8,9	170x170x260
123,8 (4 7/8) STD543	4 7/8	543X	Pin 2 7/8 Reg	8,9	170x170x260
125,0 (4 59/64) STD231	4 8/9	231	Pin 2 7/8 Reg	8	170x170x260
125,0 (4 59/64) STD241	4 8/9	241	Pin 2 7/8 Reg	8,1	170x170x260
125,0 (4 59/64) STD623	4 8/9	623X	Pin 2 7/8 Reg	7,9	170x170x260
127,0 (5) STD121	5	121	Pin 2 7/8 Reg	7,5	170x170x260
127,0 (5) STD231	5	231	Pin 2 7/8 Reg	7,5	170x170x260
127,0 (5) STD523	5	523X	Pin 2 7/8 Reg	10,7	170x170x260
130,2 (5 1/8) STD121	5 1/8	121	Pin 2 7/8 Reg	9,4	170x170x260
130,2 (5 1/8) STD141	5 1/8	141	Pin 2 7/8 Reg	8,6	170x170x260
130,2 (5 1/8) STD523	5 1/8	523X	Pin 2 7/8 Reg	11,9	170x170x260
II 132,0 (5 13/64) STD121**	5 1/5	121	-	7,2	170x170x260
132,0 (5 13/64) STD221	5 1/5	221	-	7,6	170x170x260
132,0 (5 13/64) STD321	5 1/5	321	-	7,6	170x170x260
132,0 (5 13/64) STD743	5 1/5	743Y	-	8,6	170x170x260
133,4 (5 1/4) STD121	5 1/4	121	Pin 2 7/8 Reg	9,7	190x190x330
133,4 (5 1/4) STD141	5 1/4	141	Pin 2 7/8 Reg	8,9	190x190x330
133,4 (5 1/4) STD543	5 1/4	543X	Pin 2 7/8 Reg	11,2	190x190x330
139,7 (5 1/2) STD221	5 1/2	221	Pin 3 1/2 Reg	12	190x190x330
139,7 (5 1/2) STD221	5 1/2	221	Pin 2 7/8 Reg	11,6	190x190x330
139,7 (5 1/2) STD231	5 1/2	231	Pin 3 1/2 Reg	12	190x190x330
139,7 (5 1/2) STD241	5 1/2	241	Pin 3 1/2 Reg	12	190x190x330
139,7 (5 1/2) STD321	5 1/2	321	Pin 3 1/2 Reg	13,1	190x190x330
139,7 (5 1/2) STD523	5 1/2	523X	Pin 2 7/8 Reg	11,9	190x190x330

1	2	3	4	5	6
139,7 (5 1/2) STD523	5 1/2	523X	Pin 3 1/2 Reg	12,3	190x190x330
I 139,7 (5 1/2) STD547*	5 1/2	547X	Pin 3 1/2 Reg	19	190x190x330
142,0 (5 19/32) STD141	5 3/5	141	Pin 3 1/2 Reg	12,4	190x190x330
142,9 (5 5/8) STD221	5 5/8	221	Pin 2 7/8 Reg	11,5	190x190x330
142,9 (5 5/8) STD523	5 5/8	523X	Pin 2 7/8 Reg	12,1	190x190x330
146,0 (5 3/4) STD221	5 3/4	221	Pin 3 1/2 Reg	11	190x190x330
146,0 (5 3/4) STD321	5 3/4	321	Pin 3 1/2 Reg	11	190x190x330
146,0 (5 3/4) STD543	5 3/4	543X	Pin 3 1/2 Reg	14	190x190x330
146,0 (5 3/4) STD623	5 3/4	623X	Pin 3 1/2 Reg	11,8	190x190x330
146,0 (5 3/4) STD833	5 3/4	833Y	Pin 3 1/2 Reg	11,8	190x190x330
149,2 (5 7/8) STD111	5 7/8	111	Pin 3 1/2 Reg	14,5	190x190x330
149,2 (5 7/8) STD121	5 7/8	121	Pin 3 1/2 Reg	14,5	190x190x330
149,2 (5 7/8) STD141	5 7/8	141	Pin 3 1/2 Reg	13,5	190x190x330
149,2 (5 7/8) STD221	5 7/8	221	Pin 3 1/2 Reg	12,5	190x190x330
149,2 (5 7/8) STD231	5 7/8	231	Pin 3 1/2 Reg	12,5	190x190x330
149,2 (5 7/8) STD321	5 7/8	321	Pin 3 1/2 Reg	12,5	190x190x330
151,0 (5 15/16) STD221	5 8/9	221	Pin 3 1/2 Reg	12,5	190x190x330
151,0 (5 15/16) STD321	5 8/9	321	Pin 3 1/2 Reg	12,5	190x190x330
151,0 (5 15/16) STD743	5 8/9	743Y	Pin 3 1/2 Reg	12,5	190x190x330
152,4 (6) STD121	6	121	Pin 3 1/2 Reg	14	190x190x330
152,4 (6) STD141	6	141	Pin 3 1/2 Reg	14	190x190x330
152,4 (6) STD221	6	221	Pin 3 1/2 Reg	14	190x190x330
152,4 (6) STD231	6	231	Pin 3 1/2 Reg	14	190x190x330
152,4 (6) STD321	6	321	Pin 3 1/2 Reg	13,9	190x190x330
152,4 (6) STD523	6	523X	Pin 3 1/2 Reg	13,7	190x190x330
155,6 (6 1/8) STD321	6 1/8	321	Pin 3 1/2 Reg	14,2	190x190x330
155,6 (6 1/8) STD523	6 1/8	523X	Pin 3 1/2 Reg	14	190x190x330
158,7 (6 1/4) STD121	6 1/4	121	Pin 3 1/2 Reg	15	190x190x330
158,7 (6 1/4) STD221	6 1/4	221	Pin 3 1/2 Reg	14,5	190x190x330
161,0 (6 11/32) STD221	6 1/3	221	Pin 3 1/2 Reg	13,5	190x190x330
161,0 (6 11/32) STD321	6 1/3	321	Pin 3 1/2 Reg	14,5	190x190x330
161,0 (6 11/32) STD523	6 1/3	523X	Pin 3 1/2 Reg	14,7	190x190x330
161,0 (6 11/32) STD743	6 1/3	743Y	Pin 3 1/2 Reg	14,9	190x190x330
165,1 (6 1/2) STD111	6 1/2	111	Pin 3 1/2 Reg	15,5	190x190x330
165,1 (6 1/2) STD121	6 1/2	121	Pin 3 1/2 Reg	15,5	190x190x330
165,1 (6 1/2) STD211	6 1/2	211	Pin 3 1/2 Reg	14,6	190x190x330
165,1 (6 1/2) STD221	6 1/2	221	Pin 3 1/2 Reg	14,6	190x190x330
165,1 (6 1/2) STD523	6 1/2	523X	Pin 3 1/2 Reg	16,5	190x190x330
171,4 (6 3/4) STD121	6 3/4	121	Pin 3 1/2 Reg	18,5	190x190x330
171,4 (6 3/4) STD523	6 3/4	523X	Pin 3 1/2 Reg	18,5	190x190x330
171,4 (6 3/4) STD523	6 3/4	523X	Pin 3 1/2 Reg	18,5	190x190x330
190,5 (7 1/2) STD121	7 1/2	121	Pin 4 1/2 Reg	27,4	250x250x390
190,5 (7 1/2) STD221	7 1/2	221	Pin 4 1/2 Reg	27,3	250x250x390
190,5 (7 1/2) STD221	7 1/2	221	Pin 4 1/2 Reg	27,3	250x250x390
190,5 (7 1/2) STD321	7 1/2	321	Pin 4 1/2 Reg	28,3	250x250x390
190,5 (7 1/2) STD543	7 1/2	543X	Pin 4 1/2 Reg	37,3	250x250x390
190,5 (7 1/2) STD633	7 1/2	633Y	Pin 4 1/2 Reg	28,3	250x250x390
190,5 (7 1/2) STD833	7 1/2	833Y	Pin 4 1/2 Reg	25,5	250x250x390
215,9 (8 1/2) STD121	8 1/2	121	Pin 4 1/2 Reg	33,3	250x250x390

1	2	3	4	5	6
215,9 (8 1/2) STD221	8 1/2	221	Pin 4 1/2 Reg	33,3	250x250x390
215,9 (8 1/2) STD523	8 1/2	523X	Pin 4 1/2 Reg	32,3	250x250x390
244,5 (9 5/8) STD221	9 5/8	221	Pin 4 1/2 FH	40,9	280x280x390
269,9 (10 5/8) STD221	10 5/8	221	Pin 6 5/8 Reg	57,6	Palleted
269,9 (10 5/8) STD543	10 5/8	543X	Pin 6 5/8 Reg	64	Palleted
295,3 (11 5/8) STD221	11 5/8	221	Pin 6 5/8 Reg	77,6	Palleted
295,3 (11 5/8) STD633	11 5/8	633Y	Pin 6 5/8 Reg	87,6	Palleted
311,1 (12 1/4) STD211	12 1/4	211	Pin 6 5/8 Reg	97,3	Palleted
311,1 (12 1/4) STD543	12 1/4	543X	Pin 6 5/8 Reg	97,3	Palleted
349,2 (13 3/4) STD211	13 3/4	211	Pin 6 5/8 Reg	104	Palleted
349,2 (13 3/4) STD311	13 3/4	311	Pin 6 5/8 Reg	104	Palleted
349,2 (13 3/4) STD543	13 3/4	543X	Pin 6 5/8 Reg	104	Palleted
393,7 (15 1/2) STD221	15 1/2	221	Box 6 5/8 FH	253	Palleted
393,7 (15 1/2) STD543	15 1/2	543X	Box 6 5/8 FH	254	Palleted
490,0 (19 19/64) STD221	19 2/7	221	Box 6 5/8 FH	310	Palleted
490,0 (19 19/64) STD543	19 2/7	543X	Box 6 5/8 FH	320	Palleted

Note:

\* 4 drill bits are packed in a box

\*\* One-cone bit

\*\*\* Double-cone bit

## BIT OPERATION GUIDE

A full version of UBM Bit Operation Guide can be downloaded from the corporate site <https://ubm.ru>, or ask for its delivery by e-mail or through the official dealers or Uralburmash representatives.



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## NOTES

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## NOTES

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