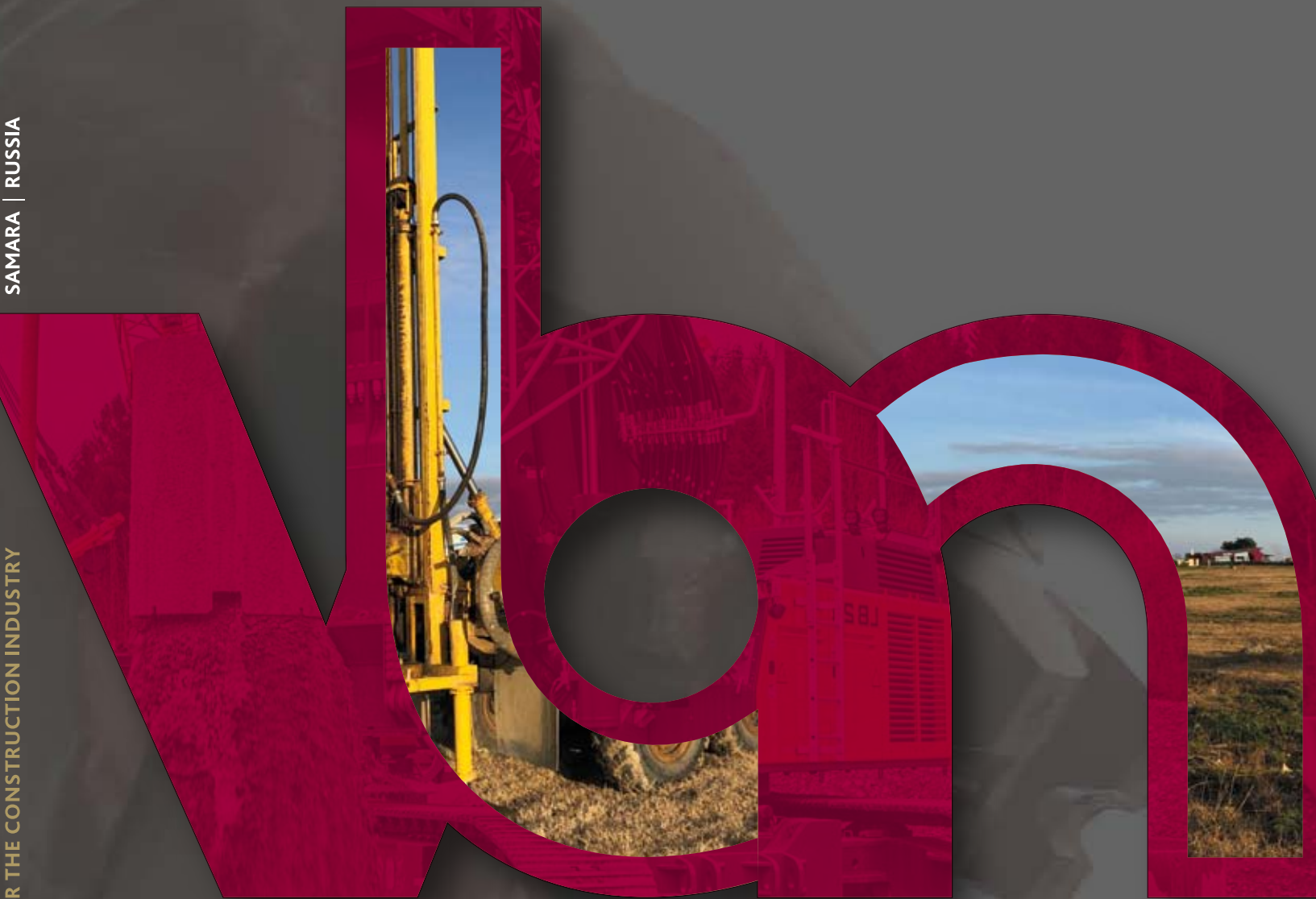


DRILL BITS FOR THE CONSTRUCTION INDUSTRY



OUR MISSION

WE ENGINEER QUALITY COST-EFFECTIVE PRODUCTS AND PROVIDE INDUSTRY LEADING RELIABILITY OF SUPPLY.

OUR VISION

WE AIM TO PROVIDE OUR PARTNERS **ALL OVER THE WORLD** WITH SUPERIOR **INNOVATIONS** — RELIABLE PRODUCTS AND ENGINEERING COMPETENCE, MEETING SPECIFIC REQUIREMENTS FOR **GREAT RESULTS**.

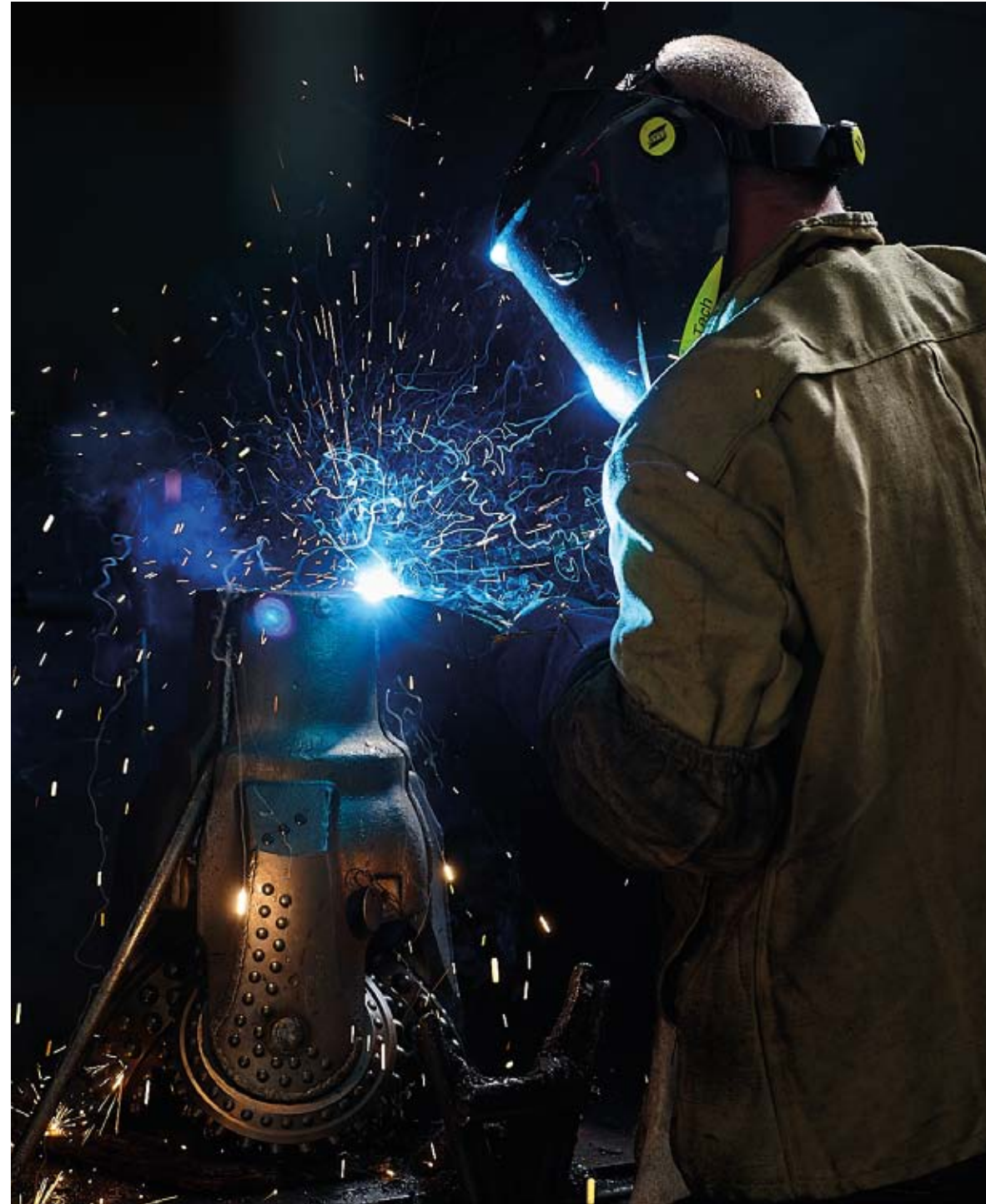
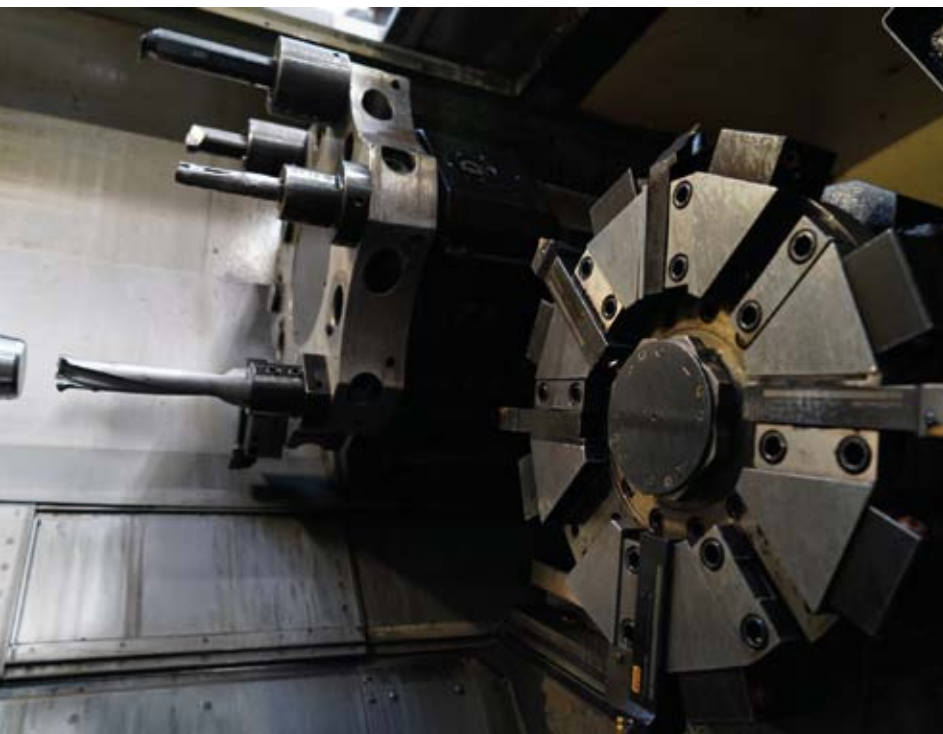
We successfully transform our expertise, manufacturing capacities and skills into your achievements:

- VBM drill bits are used in 75+ countries and across continents;
- VBM is ranked among the TOP-10 of world producers of drilling tools in terms of production quality and turnover;
- VBM factory produces drill bits for the oil and gas, mining, water well and construction industries;
- VBM offers customized bit design and manufacturing;
- VBM's highly qualified personnel and the most up to date production digitization techniques enable continuously improving drill bit development and ensure production quality compliance with the highest world standards.

CONTENT

◆ About the company	4
◆ Quality	10
◆ Drill tools for the construction industry	13
◆ Roller cone bits	14
■ Roller cone bits TechnoPro (TCNP)	16
■ Roller cone bits HorizontalDirectionalDrilling (HDD)	19
■ Roller cone bits Standard (STD)	20
◆ PDC bits	22
■ PDC bits WaterDrill (WD)	24
■ PDC bits ReverseCirculationBit (RCB)	26
◆ Segments and sets of segments	28

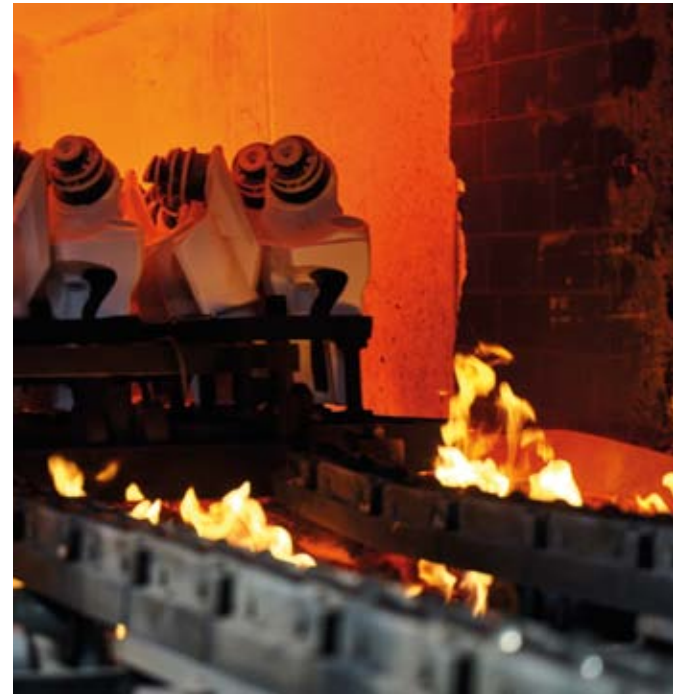
ABOUT THE COMPANY



Volgaburmash JSC (VBM) is the largest manufacturer in Russia of high-quality rock cutting tools for the oil and gas, mining, water well and construction industries.

It specializes in the production of an extensive range of drill bits which are successfully exported and utilized in over 75 countries.

ABOUT THE COMPANY



VOLGABURMASH PRODUCES:

- over 600 roller cone bit designs from 3 3/4" up to 26" (95.3 - 660.4 mm) in diameter with milled tooth and tungsten carbide inserts (TCI) for drilling boreholes in different geological conditions;
- over 350 PDC bit designs from 3" to 17 1/2" (76 - 444.5 mm) in diameter with matrix or steel bodies;
- DTH bits, core bits and other rock cutting tools.

ABOUT THE COMPANY



VBM was established in the industrial, but picturesque Volga region, where all seasons are full of colors and natural beauty.

We actively encourage visits to our factory to inspect the industry leading manufacturing practices and of course to take advantage of the local Samara countryside.

**WELCOME TO SAMARA
AND VOLGABURMASH JSC!**



QUALITY



Volgaburmash JSC has a long history of Quality Management System (QMS) certification for compliance with ISO 9001 and API Spec. Q1.

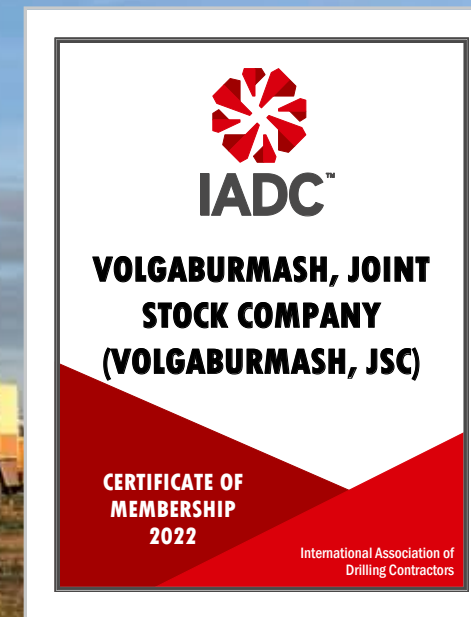
In May 2023 VBM successfully passed the QMS certification audit in accordance with:

- GOST R ISO 9001-2015 (ISO 9001:2015)
- INTI S.QS.1-2020 (it's a QMS standard developed by the Russian Institute of Oil and Gas Technological Initiatives as an alternative to API Q1 9th Edition).

VBM products comply with the requirements of the Technical regulations of the Customs Union, as well as the state standards GOST 20692 and GOST 26474. In addition to that, all of the API Spec. 7-1 requirements are built into our design, development and manufacturing processes.

According to the Quality Policy, our organization's priority is to 'Meet customer's requirements and expectations'. Key aspects of the Policy implementation are:

- maintaining an advanced communication system as well as establishing long-term and mutually beneficial cooperation with our business-partners;
- improving the design solutions;
- monitoring the quality of manufacturing processes;
- ensuring a high level of competence of employees;
- continuous improvement of the quality management system effectiveness;
- compliance with legal requirements, the requirements of national and international standards and specifications, customer requirements, as well as the internal requirements of the organization.



QUALITY



VBM drill tools are certified in compliance with the Technical Regulations of the Customs Union, and meet the State Standards GOST 20692 and GOST 26474.

VBM's certified Quality Management System regulates all aspects from contracts analysis to shipment of finished goods to the Customer. Special attention is paid to Customer's satisfaction evaluation and continuous improvement.

Quality control is deeply embedded into processes throughout the entire manufacturing cycle to guarantee uncompromised output quality.

All raw materials and components are subject to thorough incoming inspection in the Central Plant Laboratory. Conformance to all the requirements is mandatory for release into production.

Prior to the final assembly a multistage inspection is performed with respect to the relevant design and engineering specifications requirements. Finished goods are admitted to the warehouse upon successful completion of special control performed by highly qualified inspectors.

Measuring and control instruments are calibrated initially and periodically to ensure the uniformity and required accuracy of measurements.

Due to the integrated approach to quality, VBM drilling equipment fully complies with international and local standards as well as customer's requirements and expectations.



DRILLING TOOLS FOR THE CONSTRUCTION INDUSTRY

Advanced technologies and software applied for the hi-tech oil and gas industry are also used for designing and manufacturing special bits utilized for the construction, HDD and water well industries. This allows us to offer our customers excellent tools, which proved their high efficiency in various projects all over the world.

Volgaburmash produces for the construction industry:



Roller cone bits

- TechnoPro (TCNP)
- HorizontalDirectionalDrilling (HDD)
- Standard (STD)

PDC bits

- WaterDrill (WD)
- ReverseCirculationBit (RCB)

Segments and sets of segments

BIT STAMPING

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

- company trade mark (vbm)
- bit notation key
- serial number
- thread type
- inspection stamp



ROLLER CONE BITS

Three product lines of VBM roller cone bits are suitable for construction, HDD and water well drilling:

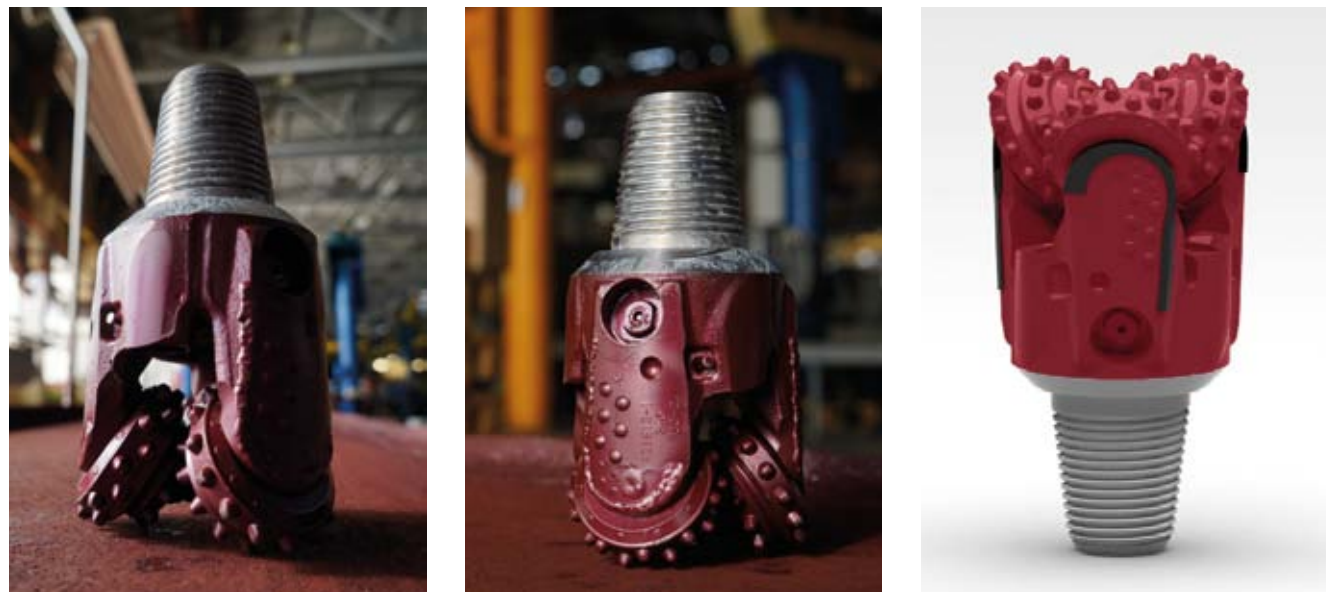
TechnoPro (TCNP)	used for directional drilling, water well drilling and well drilling in construction
HorizontalDirectionalDrilling (HDD)	designed for horizontal directional drilling (HDD)
Standard (STD)	used for water well drilling, service well drilling and well drilling in construction



TechnoPro	HorizontalDirectionalDrilling	Standard
<ul style="list-style-type: none"> • improved design • roller bearing • sealed roller bearing made of high quality materials • side jet or four jets (for bit size of 295.3 mm or over) 	<ul style="list-style-type: none"> • resource-intensive design • journal bearing • sealed journal bearing made of wear-resistant materials • side jet • hardfaced shirttail for safe and reliable performance while horizontal directional drilling 	<ul style="list-style-type: none"> • simple design • open roller bearing • central jet, side jet or four jets • steel teeth or tungsten carbide inserts



ROLLER CONE BITS TECHNPRO (TCNP)



NOTATION KEY



139,7

Bit size, mm

(5 1/2)

Bit size, inch

TCNP

Product line

535

IADC code

K

Additional suffix
(used in case of non-
standard thread)

PRODUCT RANGE

Bit identification	Bit size		IADC code	Connecting thread	Gross weight, kg	Shipping dimensions, mm
	mm	inch		API		
1	2	3	4	5	7	8
139,7 (5 1/2) TCNP115K	139,7	5 1/2	115	Pin 2 7/8 Reg	12,5	170x170x290
139,7 (5 1/2) TCNP214K	139,7	5 1/2	214	Pin 2 7/8 Reg	13,5	170x170x290
139,7 (5 1/2) TCNP425K	139,7	5 1/2	425X	Pin 2 7/8 Reg	12,5	170x170x290
139,7 (5 1/2) TCNP525K	139,7	5 1/2	525X	Pin 2 7/8 Reg	13	170x170x290
139,7 (5 1/2) TCNP535K	139,7	5 1/2	535X	Pin 2 7/8 Reg	13,5	170x170x290
139,7 (5 1/2) TCNP635K	139,7	5 1/2	635Y	Pin 2 7/8 Reg	13,5	170x170x290
139,7 (5 1/2) TCNP735K	139,7	5 1/2	735Y	Pin 2 7/8 Reg	13,5	170x170x290
142,9 (5 5/8) TCNP545	142,9	5 5/8	545X	Pin 3 1/2 Reg	13,5	170x170x290
142,9 (5 5/8) TCNP545K	142,9	5 5/8	545X	Pin 2 7/8 Reg	13,5	170x170x290
146,0 (5 3/4) TCNP535	146,0	5 3/4	535X	Pin 3 1/2 Reg	13,5	170x170x290
149,2 (5 7/8) TCNP215	149,2	5 7/8	215	Pin 3 1/2 Reg	14,5	170x170x290
149,2 (5 7/8) TCNP325	149,2	5 7/8	325	Pin 3 1/2 Reg	14,5	170x170x290
149,2 (5 7/8) TCNP515	149,2	5 7/8	515X	Pin 3 1/2 Reg	14,5	170x170x290
149,2 (5 7/8) TCNP525K	149,2	5 7/8	525X	Pin 2 7/8 Reg	13,5	170x170x290
152,4 (6) TCNP115	152,4	6	115	Pin 3 1/2 Reg	14,8	195x195x310
152,4 (6) TCNP515	152,4	6	515X	Pin 3 1/2 Reg	15,8	195x195x310
152,4 (6) TCNP525K	152,4	6	525X	Pin 2 7/8 Reg	13,8	195x195x310
155,6 (6 1/8) TCNP515	155,6	6 1/8	515X	Pin 3 1/2 Reg	17,8	195x195x310
155,6 (6 1/8) TCNP545	155,6	6 1/8	545X	Pin 3 1/2 Reg	17,8	195x195x310
158,7 (6 1/4) TCNP515	158,7	6 1/4	515X	Pin 3 1/2 Reg	17,8	195x195x310
165,1 (6 1/2) TCNP125	165,1	6 1/2	125	Pin 3 1/2 Reg	18,8	195x195x310
165,1 (6 1/2) TCNP425	165,1	6 1/2	425X	Pin 3 1/2 Reg	18,8	195x195x310
165,1 (6 1/2) TCNP525	165,1	6 1/2	525X	Pin 3 1/2 Reg	18,8	195x195x310
165,1 (6 1/2) TCNP545	165,1	6 1/2	545X	Pin 3 1/2 Reg	18,8	195x195x310
165,1 (6 1/2) TCNP625	165,1	6 1/2	625Y	Pin 3 1/2 Reg	19,8	195x195x310
171,4 (6 3/4) TCNP115	171,4	6 3/4	115	Pin 3 1/2 Reg	18,8	195x195x310
171,4 (6 3/4) TCNP515	171,4	6 3/4	515X	Pin 3 1/2 Reg	19,8	195x195x310
190,5 (7 1/2) TCNP115	190,5	7 1/2	115	Pin 4 1/2 Reg	28,3	255x255x389
190,5 (7 1/2) TCNP215	190,5	7 1/2	215	Pin 4 1/2 Reg	29,3	255x255x389
190,5 (7 1/2) TCNP535	190,5	7 1/2	535X	Pin 4 1/2 Reg	30,3	255x255x389
200,0 (7 7/8) TCNP525	200,0	7 7/8	525X	Pin 4 1/2 Reg	33,3	255x255x389
200,0 (7 7/8) TCNP625	200,0	7 7/8	625Y	Pin 4 1/2 Reg	33,3	255x255x389
200,0 (7 7/8) TCNP635X	200,0	7 7/8	635X	Pin 4 1/2 Reg	32,3	255x255x389

PRODUCT RANGE

Bit identification	Bit size		IADC code	Connecting thread	Gross weight, kg	Shipping dimensions, mm
	mm	inch		API		
1	2	3	4	5	7	8
203,2 (8) TCNP635X	203,2	8	635X	Pin 4 1/2 Reg	32,3	255x255x389
215,9 (8 1/2) TCNP525	215,9	8 1/2	525X	Pin 4 1/2 Reg	37,3	255x255x389
222,3 (8 3/4) TCNP525	222,3	8 3/4	525X	Pin 4 1/2 Reg	39,3	255x255x389
222,3 (8 3/4) TCNP625	222,3	8 3/4	625Y	Pin 4 1/2 Reg	40,3	255x255x389
241,3 (9 1/2) TCNP115	241,3	9 1/2	115	Pin 6 5/8 Reg	53,9	295x295x439
241,3 (9 1/2) TCNP215	241,3	9 1/2	215	Pin 6 5/8 Reg	55,9	295x295x439
241,3 (9 1/2) TCNP535	241,3	9 1/2	535X	Pin 6 5/8 Reg	58,9	295x295x439
244,5 (9 5/8) TCNP115	244,5	9 5/8	115	Pin 6 5/8 Reg	54,9	295x295x439
244,5 (9 5/8) TCNP215	244,5	9 5/8	215	Pin 6 5/8 Reg	56,9	295x295x439
244,5 (9 5/8) TCNP545	244,5	9 5/8	545X	Pin 6 5/8 Reg	57,9	295x295x439
250,8 (9 7/8) TCNP115	250,8	9 7/8	115	Pin 6 5/8 Reg	55,9	295x295x439
250,8 (9 7/8) TCNP215	250,8	9 7/8	215	Pin 6 5/8 Reg	57,9	295x295x439
250,8 (9 7/8) TCNP525	250,8	9 7/8	525X	Pin 6 5/8 Reg	58,9	295x295x439
250,8 (9 7/8) TCNP625	250,8	9 7/8	625Y	Pin 6 5/8 Reg	59,9	295x295x439
250,8 (9 7/8) TCNP635	250,8	9 7/8	635Y	Pin 6 5/8 Reg	61,9	295x295x439
269,9 (10 5/8) TCNP535	269,9	10 5/8	535X	Pin 6 5/8 Reg	69,9	295x295x439
295,3 (11 5/8) TCNP215	295,3	11 5/8	215	Pin 6 5/8 Reg	88,9	340x340x524
295,3 (11 5/8) TCNP535	295,3	11 5/8	535X	Pin 6 5/8 Reg	86,9	340x340x524
295,3 (11 5/8) TCNP625	295,3	11 5/8	625Y	Pin 6 5/8 Reg	91,9	340x340x524
311,1 (12 1/4) TCNP115	311,1	12 1/4	115	Pin 6 5/8 Reg	89,9	340x340x524
311,1 (12 1/4) TCNP135	311,1	12 1/4	135	Pin 6 5/8 Reg	92,9	340x340x524
311,1 (12 1/4) TCNP215	311,1	12 1/4	215	Pin 6 5/8 Reg	93,9	340x340x524
311,1 (12 1/4) TCNP235	311,1	12 1/4	235	Pin 6 5/8 Reg	90,9	340x340x524
311,1 (12 1/4) TCNP315	311,1	12 1/4	315	Pin 6 5/8 Reg	91,9	340x340x524
311,1 (12 1/4) TCNP335	311,1	12 1/4	335	Pin 6 5/8 Reg	93,9	340x340x524
311,1 (12 1/4) TCNP425	311,1	12 1/4	425X	Pin 6 5/8 Reg	91,9	340x340x524
311,1 (12 1/4) TCNP515	311,1	12 1/4	515X	Pin 6 5/8 Reg	93,9	340x340x524
311,1 (12 1/4) TCNP535	311,1	12 1/4	535X	Pin 6 5/8 Reg	95,9	340x340x524
311,1 (12 1/4) TCNP625	311,1	12 1/4	625Y	Pin 6 5/8 Reg	93,9	340x340x524
311,1 (12 1/4) TCNP635	311,1	12 1/4	635Y	Pin 6 5/8 Reg	94,9	340x340x524
311,1 (12 1/4) TCNP715	311,1	12 1/4	715Y	Pin 6 5/8 Reg	94,9	340x340x524

ROLLER CONE BITS HORIZONTAL DIRECTIONAL DRILLING (HDD)



NOTATION KEY

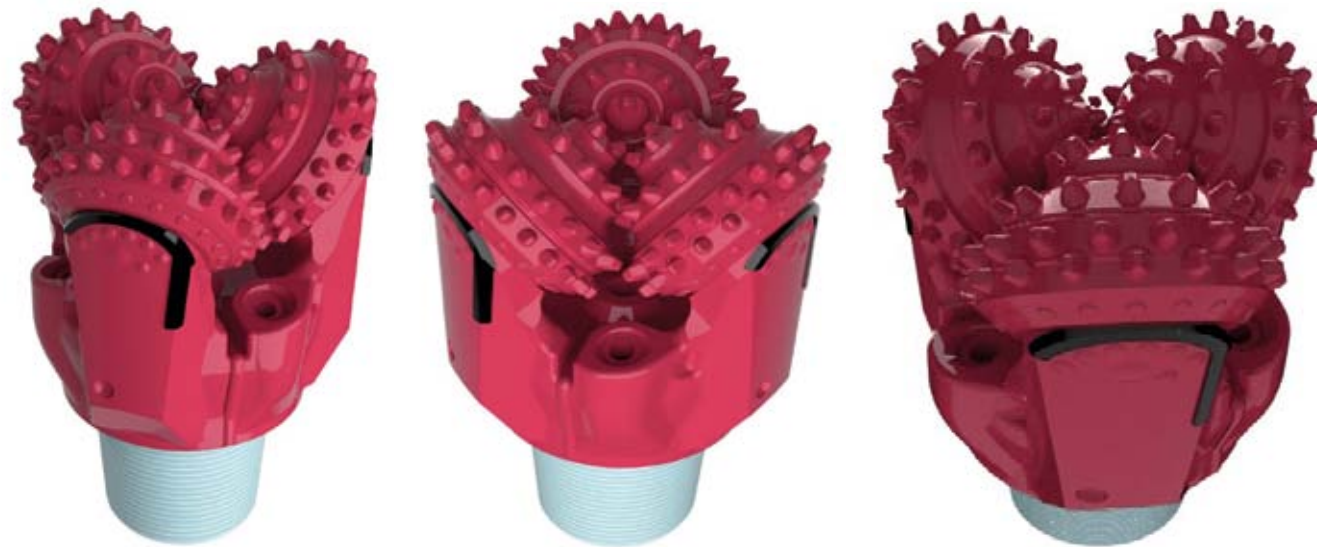


139,7	(5 1/2)	HDD	50	K	S
Bit size, mm	Bit size, inch	Product line	Drill bit series	Additional suffix (used in case of non-standard thread)	Additional suffix (for sealed bits)
			<ul style="list-style-type: none"> 40 — for IADC 417-447 50 — for IADC 517-527 55 — for IADC 537-547 60 — for IADC 617-647 70 — for IADC 717-747 		

PRODUCT RANGE

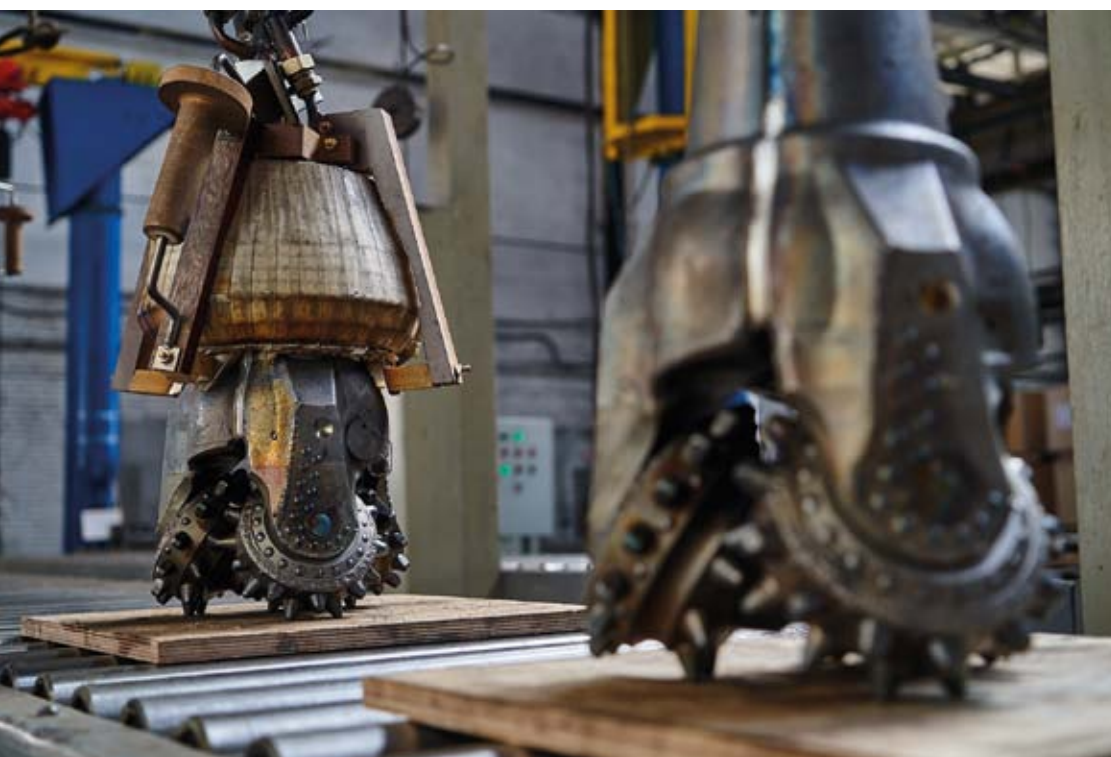
Bit identification	Bit size		IADC code	Connecting thread	Gross weight, kg	Shipping dimensions, mm
	mm	inch		API		
1	2	3	4	5	7	8
139,7 (5 1/2) HDD50Ks	139,7	5 1/2	527X	Pin 2 7/8 Reg	13,5	170x170x290
139,7 (5 1/2) HDD55Ks	139,7	5 1/2	547X	Pin 2 7/8 Reg	13,5	170x170x290
139,7 (5 1/2) HDD60Ks	139,7	5 1/2	627Y	Pin 2 7/8 Reg	13,5	170x170x290
139,7 (5 1/2) HDD70Ks	139,7	5 1/2	737Y	Pin 2 7/8 Reg	13,5	170x170x290
165,1 (6 1/2) HDD50s	165,1	6 1/2	517X	Pin 3 1/2 Reg	18,8	195x195x310
165,1 (6 1/2) HDD55s	165,1	6 1/2	547X	Pin 3 1/2 Reg	19,8	195x195x310

ROLLER CONE BITS STANDARD (STD)



NOTATION KEY

295,3	(11 5/8)	STD	543
Bit size, mm	Bit size, inch	Product line	IADC code



PRODUCT RANGE

Bit identification	Bit size		IADC code	Connecting thread	Gross weight, kg	Shipping dimensions, mm
	mm	inch		API		
1	2	3	4	5	7	8
295,3 (11 5/8) STD543	295,3	11 5/8	543X	Pin 6 5/8 Reg	94,9	340x340x524
349,2 (13 3/4) STD633	349,2	13 3/4	633Y	Pin 6 5/8 Reg	137,9	430x430x676
393,7 (15 1/2) STD311	393,7	15 1/2	311	Pin 7 5/8 Reg	182,9	430x430x676
393,7 (15 1/2) STD543	393,7	15 1/2	543X	Pin 7 5/8 Reg	192,9	430x430x676
444,5 (17 1/2) STD111	444,5	17 1/2	111	Pin 7 5/8 Reg	207,6	475x475x702
444,5 (17 1/2) STD211	444,5	17 1/2	211	Pin 7 5/8 Reg	221,6	475x475x702
444,5 (17 1/2) STD311	444,5	17 1/2	311	Pin 7 5/8 Reg	213,6	475x475x702
444,5 (17 1/2) STD423	444,5	17 1/2	423X	Pin 7 5/8 Reg	221,6	475x475x702
444,5 (17 1/2) STD523	444,5	17 1/2	523X	Pin 7 5/8 Reg	227,6	475x475x702
444,5 (17 1/2) STD623	444,5	17 1/2	623Y	Pin 7 5/8 Reg	227,6	475x475x702
444,5 (17 1/2) STD713	444,5	17 1/2	713Y	Pin 7 5/8 Reg	224,6	475x475x702
490,0 (19 19/64) STD111	490,0	19 19/64	111	Pin 7 5/8 Reg	261,8	690x690x807
490,0 (19 19/64) STD213	490,0	19 19/64	213	Pin 7 5/8 Reg	286	690x690x807
490,0 (19 19/64) STD311	490,0	19 19/64	311	Pin 7 5/8 Reg	286,8	690x690x807
490,0 (19 19/64) STD423	490,0	19 19/64	423X	Pin 7 5/8 Reg	275,8	690x690x807
490,0 (19 19/64) STD523	490,0	19 19/64	523X	Pin 7 5/8 Reg	287,8	690x690x807
490,0 (19 19/64) STD623	490,0	19 19/64	623Y	Pin 7 5/8 Reg	286,8	690x690x807
490,0 (19 19/64) STD713	490,0	19 19/64	713Y	Pin 7 5/8 Reg	281,8	690x690x807
508,0 (20) STD111	508,0	20	111	Pin 7 5/8 Reg	264,8	690x690x807
508,0 (20) STD211	508,0	20	211	Pin 7 5/8 Reg	288,8	690x690x807
508,0 (20) STD311	508,0	20	311	Pin 7 5/8 Reg	283,8	690x690x807
508,0 (20) STD423	508,0	20	423X	Pin 7 5/8 Reg	296,8	690x690x807
508,0 (20) STD523	508,0	20	523X	Pin 7 5/8 Reg	300,8	690x690x807
508,0 (20) STD623	508,0	20	623Y	Pin 7 5/8 Reg	303,8	690x690x807
508,0 (20) STD713	508,0	20	713Y	Pin 7 5/8 Reg	303,8	690x690x807
660,4 (26) STD111	660,4	26	111	Pin 7 5/8 Reg	582,8	690x690x807
660,4 (26) STD211	660,4	26	211	Pin 7 5/8 Reg	584,8	690x690x807
660,4 (26) STD311	660,4	26	311	Pin 7 5/8 Reg	559,8	690x690x807
660,4 (26) STD423	660,4	26	423X	Pin 7 5/8 Reg	583,8	690x690x807
660,4 (26) STD523	660,4	26	523X	Pin 7 5/8 Reg	585,8	690x690x807
660,4 (26) STD623	660,4	26	623Y	Pin 7 5/8 Reg	595,8	690x690x807
660,4 (26) STD713	660,4	26	713Y	Pin 7 5/8 Reg	603,8	690x690x807



PDC BITS

Two product lines of bits with polycrystalline diamond cutters (PDC) are offered by VBM for construction needs and water well drilling:

WaterDrill (WD)

- designed especially for the construction industry
- utilized in the complicated geological conditions
- used for construction drilling and water well drilling
- suitable for geothermal drilling

ReverseCirculationBit (RCB)

- applied for reverse circulation drilling in different formations



WaterDrill (WD)

- simple design, low cost, high capacity
- steel body, wear-resistant PDC inserts
- cut-out ports or stationary/replaceable nozzles are used for water flush
- flushing through ports directed towards the well bottom efficiently cleans the hole and cools the bit

ReverseCirculationBit (RCB)

- steel body, wear-resistant PDC inserts
- large flushing ports which allow more cuttings to pass easily into the drill string

PDC BITS WATERDRILL (WD)



NOTATION KEY

139,7	(5 1/2)	WD	5	13	S	K	E	C
--------------	----------------	-----------	----------	-----------	----------	----------	----------	----------

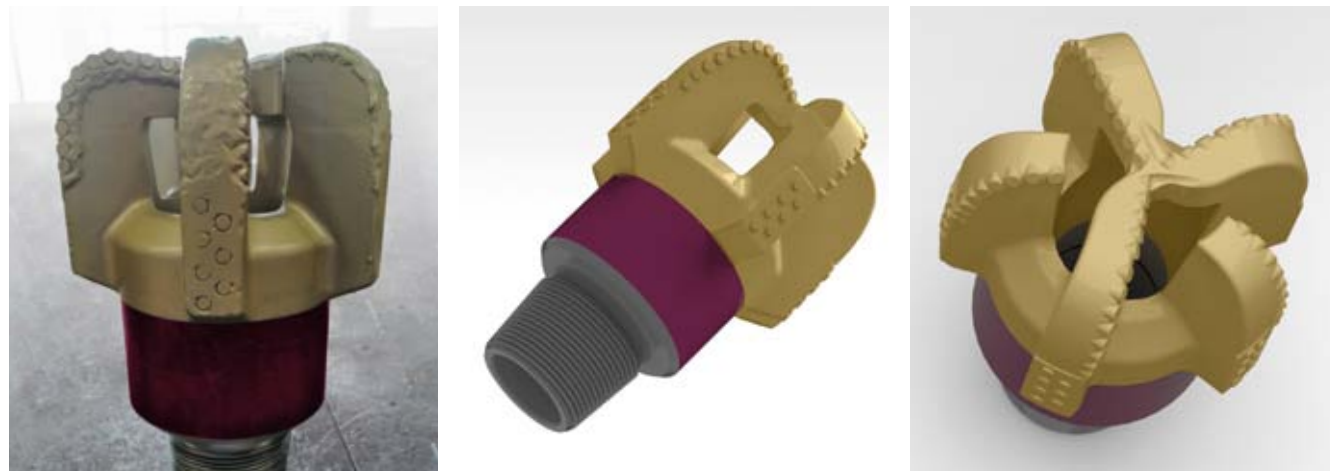
Bit size, mm	Bit size, inch	Product line	Number of blades, pcs	Insert size, mm	Formation category • S - soft • SM - soft with medium interlayers • M - medium	Additional suffix (used in case of non-standard thread)	Additional suffix (used in case of extended flush holes)	Additional suffix (used in case of replaceable nozzles)
--------------	----------------	--------------	-----------------------	-----------------	---	---	--	---



PRODUCT RANGE

Bit identification	Bit size		Connecting thread	Gross weight, kg	Shipping dimensions, mm
	mm	inch	API		
1	2	3	4	6	7
101,6 (4) WD313SE	101,6	4	Pin 2 3/8 Reg	6,3	150x150x254
101,6 (4) WD313SKE	101,6	4	Pin 2 7/8 Reg	7,4	150x150x254
114,3 (4 1/2) WD313SE	114,3	4 1/2	Pin 2 3/8 Reg	7,2	150x150x254
114,3 (4 1/2) WD413SM	114,3	4 1/2	Pin 2 3/8 Reg	7,5	150x150x254
127,0 (5) WD313S	127,0	5	Pin NC31	10,3	150x150x254
127,0 (5) WD313SKE	127,0	5	Pin 2 7/8 Reg	8,7	150x150x254
127,0 (5) WD413SM	127,0	5	Pin 2 7/8 Reg	10,1	150x150x254
127,0 (5) WD513SE	127,0	5	Pin NC31	10,4	150x150x254
127,0 (5) WD513SKE	127,0	5	Pin 3 1/2 Reg	10,3	150x150x254
130,2 (5 1/8) WD513SKE	130,2	5 1/8	Pin 2 7/8 Reg	10,8	220x220x334
134,0 (5 9/32) WD313S	134,0	5 9/32	Pin NC31	11,1	220x220x334
139,7 (5 1/2) WD413SM	139,7	5 1/2	Pin 2 7/8 Reg	12,9	220x220x334
139,7 (5 1/2) WD513SC	139,7	5 1/2	Pin 2 7/8 Reg	13,8	170x170x290
139,7 (5 1/2) WD513SE	139,7	5 1/2	Pin 3 1/2 Reg	12,6	220x220x334
139,7 (5 1/2) WD513SM	139,7	5 1/2	Pin 2 7/8 Reg	12,8	220x220x334
139,7 (5 1/2) WD513SKE	139,7	5 1/2	Pin 2 7/8 Reg	11,76	220x220x334
139,7 (5 1/2) WD513SMC	139,7	5 1/2	Pin 2 7/8 Reg	12,46	R22873C5-01
142,9 (5 5/8) WD413SM	142,9	5 5/8	Pin 2 7/8 Reg	12,5	220x220x334
142,9 (5 5/8) WD513SM	142,9	5 5/8	Pin 2 7/8 Reg	12,9	220x220x334
152,4 (6) WD313S	152,4	6	Pin 3 1/2 Reg	13,8	220x220x334
152,4 (6) WD513SE	152,4	6	Pin 3 1/2 Reg	13,5	220x220x334
165,1 (6 1/2) WD413SM	165,1	6 1/2	Pin 3 1/2 Reg	17	220x220x334
165,1 (6 1/2) WD513S	165,1	6 1/2	Pin 3 1/2 Reg	16,3	220x220x334
165,1 (6 1/2) WD513SC	165,1	6 1/2	Pin 3 1/2 Reg	20,4	195x195x310
165,1 (6 1/2) WD513SM	165,1	6 1/2	Pin 3 1/2 Reg	18,2	220x220x334
165,1 (6 1/2) WD513SE	165,1	6 1/2	Pin 3 1/2 Reg	18,8	220x220x334
165,1 (6 1/2) WD513SMC	165,1	6 1/2	Pin 3 1/2 Reg	18,9	195x195x310
171,4 (6 3/4) WD513SE	171,4	6 3/4	Pin 3 1/2 Reg	17,8	220x220x334
175,0 (6 7/8) WD413S	175,0	6 7/8	Pin 3 1/2 Reg	18,76	220x220x334
190,5 (7 1/2) WD513S	190,5	7 1/2	Pin 4 1/2 Reg	26,8	255x255x389
190,5 (7 1/2) WD513SC	190,5	7 1/2	Pin 4 1/2 Reg	29,8	255x255x389
190,5 (7 1/2) WD513SKE	190,5	7 1/2	Pin 3 1/2 Reg	21,3	255x255x389
190,5 (7 1/2) WD513SE	190,5	7 1/2	Pin 4 1/2 Reg	29,1	255x255x389
215,9 (8 1/2) WD513SC	215,9	8 1/2	Pin 4 1/2 Reg	34,3	255x255x389
285,0 (11 7/32) WD516S	285,0	11 7/32	Pin 6 5/8 Reg	74,4	340x340x524

PDC BITS REVERSE CIRCULATION BIT (RCB)



NOTATION KEY

250,8	(9 7/8)	RCB	5	13
Bit size, mm	Bit size, inch	Product line	Number of blades, pcs	Insert size, mm

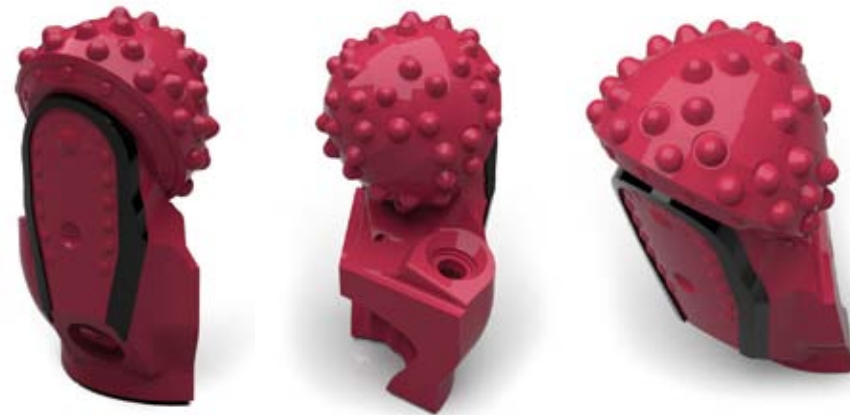
PRODUCT RANGE

Bit identification	Bit size		Connecting thread	Gross weight, kg	Shipping dimensions, mm
	mm	inch	API		
1	2	3	4	6	7
190,5 (7 1/2) RCB513	190,5	7 1/2	Pin 4 1/2 Reg	33,3	255x255x389
250,8 (9 7/8) RCB513	250,8	9 7/8	Pin 6 5/8 Reg	63,9	340x340x524
290,0 (11 13/32) RCB513	290,0	11 13/32	Pin 6 5/8 Reg	74,4	340x340x524
311,1 (12 1/4) RCB513	311,1	12 1/4	Pin 6 5/8 Reg	83	340x340x524
330,0 (13) RCB613	330,0	13	Pin 6 5/8 Reg	101,4	430x430x676
381,0 (15) RCB613	381,0	15	Pin 6 5/8 Reg	127,4	430x430x676
444,5 (17 1/2) RCB613	444,5	17 1/2	Pin 7 5/8 Reg	213,4	475x475x702
600,0 (23 5/8) RCB613	600,0	23 5/8	Pin 7 5/8 Reg	406	690x390x807



SEGMENTS AND SETS OF SEGMENTS

Drill bit segments or sets of segments are used for manufacturing different types of well reamers for operations in any strata with water or mud flush.



BIT SEGMENTS



SETS OF SEGMENTS WITH FULL SHANK

SETS OF SEGMENTS WITH SHORT SHANK

NOTATION KEY

Set of segments	165,1	(6 1/2)	TCNP	545
Set of segments/segment	Bit size, which segments are used, mm	Bit size, which segments are used, inch	Product line of a drill bit, which segments are used	IADC code of a bit, which segments are used

PRODUCT RANGE

Bit identification	Bit size		IADC code	Shank type	Gross weight, kg	Shipping dimensions*, mm
	mm	inch				
1	2	3	4	5	6	7
Set of segments 139,7 (5 1/2) TCNP525K	139,7	5 1/2	525X	Full	14,5	170x170x290
Set of segments 142,9 (5 5/8) TCNP545K	142,9	5 5/8	545X	Full	15,5	170x170x290
Set of segments 165,1 (6 1/2) TCNP115	165,1	6 1/2	115	Short	16,8	195x195x310
Set of segments 165,1 (6 1/2) TCNP545	165,1	6 1/2	545X	Full	20,8	195x195x310
Set of segments 165,1 (6 1/2) TCNP625	165,1	6 1/2	625Y	Short	17,8	195x195x310
Set of segments 200,0 (7 7/8) MTR117	200,0	7 7/8	117	Short	28,3	255x255x389
Set of segments 200,0 (7 7/8) MTR517	200,0	7 7/8	517X	Short	29,3	255x255x389
Set of segments 200,0 (7 7/8) TCNP115	200,0	7 7/8	115	Short	26,3	255x255x389
Set of segments 200,0 (7 7/8) TCNP525	200,0	7 7/8	525X	Short	28,3	255x255x389
Set of segments 215,9 (8 1/2) MTR537	215,9	8 1/2	537X	Full	40,3	255x255x389
Set of segments 222,3 (8 3/4) MTR527	222,3	8 3/4	527X	Full	40,3	255x255x389
Set of segments 222,3 (8 3/4) TCNP115	222,3	8 3/4	115	Short	33,3	255x255x389
Set of segments 222,3 (8 3/4) TCNP525	222,3	8 3/4	525X	Full	40,3	255x255x389
Set of segments 222,3 (8 3/4) TCNP525	222,3	8 3/4	525X	Short	35,3	255x255x389
Set of segments 250,8 (9 7/8) TCNP535	250,8	9 7/8	535X	Full	66,9	295x295x439
Set of segments 295,3 (11 5/8) TCNP535	295,3	11 5/8	535X	Full	100	500x698x264
Set of segments 311,1 (12 1/4) MTR537	311,1	12 1/4	537X	Full	108	500x698x264
Set of segments 311,1 (12 1/4) TCNP115	311,1	12 1/4	115	Short	87	500x698x264
Set of segments 311,1 (12 1/4) TCNP535	311,1	12 1/4	535X	Short	91	500x698x264
Set of segments 311,1 (12 1/4) TCNP535	311,1	12 1/4	535X	Full	105	500x698x264
Set of segments 393,7 (15 1/2) GRDP215	393,7	15 1/2	215	Full	202	600x782x334
Set of segments 444,5 (17 1/2) GRDP115	444,5	17 1/2	115	Full	214	600x782x334
Set of segments 444,5 (17 1/2) GRDP635	444,5	17 1/2	635Y	Full	225	600x782x334
Set of segments 490,0 (19 19/64) GRDP545	490,0	19 19/64	545X	Full	282	653x983x344
Set of segments 660,4 (26) GRDP615	660,4	26	615Y	Full	580	770x1178x414

PRODUCT RANGE

Bit identification	Bit size		IADC code	Shank type	Gross weight, kg	Shipping dimensions*, mm
	mm	inch				
1	2	3	4	5	6	7
Bit segment 139,7 (5 1/2) TCNP525K	139,7	5 1/2	525X	Full	5	-
Bit segment 139,7 (5 1/2) TCNP525K	139,7	5 1/2	525X	Full	5	-
Bit segment 139,7 (5 1/2) TCNP525K	139,7	5 1/2	525X	Full	5	-
Bit segment 142,9 (5 5/8) TCNP545K	142,9	5 5/8	545X	Full	5	-
Bit segment 142,9 (5 5/8) TCNP545K	142,9	5 5/8	545X	Full	5	-
Bit segment 142,9 (5 5/8) TCNP545K	142,9	5 5/8	545X	Full	5	-
Bit segment 165,1 (6 1/2) RS615	165,1	6 1/2	615Y	Short	6	-
Bit segment 165,1 (6 1/2) TCNP525	165,1	6 1/2	525X	Full	7	-
Bit segment 165,1 (6 1/2) TCNP525	165,1	6 1/2	525X	Full	7	-
Bit segment 165,1 (6 1/2) TCNP525	165,1	6 1/2	525X	Full	7	-
Bit segment 200,0 (7 7/8) MTR537	200,0	7 7/8	537X	Full	12	-
Bit segment 200,0 (7 7/8) MTR537	200,0	7 7/8	537X	Full	12	-
Bit segment 200,0 (7 7/8) MTR537	200,0	7 7/8	537X	Full	12	-
Bit segment 200,0 (7 7/8) RS617	200,0	7 7/8	617Y	Short	10	-
Bit segment 222,3 (8 3/4) RS615	222,3	8 3/4	615Y	Short	11	-
Bit segment 222,3 (8 3/4) RS627	222,3	8 3/4	627Y	Short	12	-
Bit segment 311,1 (12 1/4) RS615	311,1	12 1/4	615Y	Short	27	-
Bit segment 311,1 (12 1/4) TCNP215	311,1	12 1/4	215	Full	31	-
Bit segment 311,1 (12 1/4) TCNP215	311,1	12 1/4	215	Full	31	-
Bit segment 311,1 (12 1/4) TCNP215	311,1	12 1/4	215	Full	31	-
Bit segment 311,1 (12 1/4) TCNP535	311,1	12 1/4	535X	Full	32	-
Bit segment 444,5 (17 1/2) GRDP535	444,5	17 1/2	535Y	Full	77	-
Bit segment 444,5 (17 1/2) GRDP535	444,5	17 1/2	535Y	Full	76	-

* If there are no shipping dimensions, net weight is indicated. Shipping dimensions depend upon the quantity.



Trust
VBM experts!



Volgaburmash JSC

+ 7 (846) 300 8000

mail@vbm.ru

www.vbm.ru