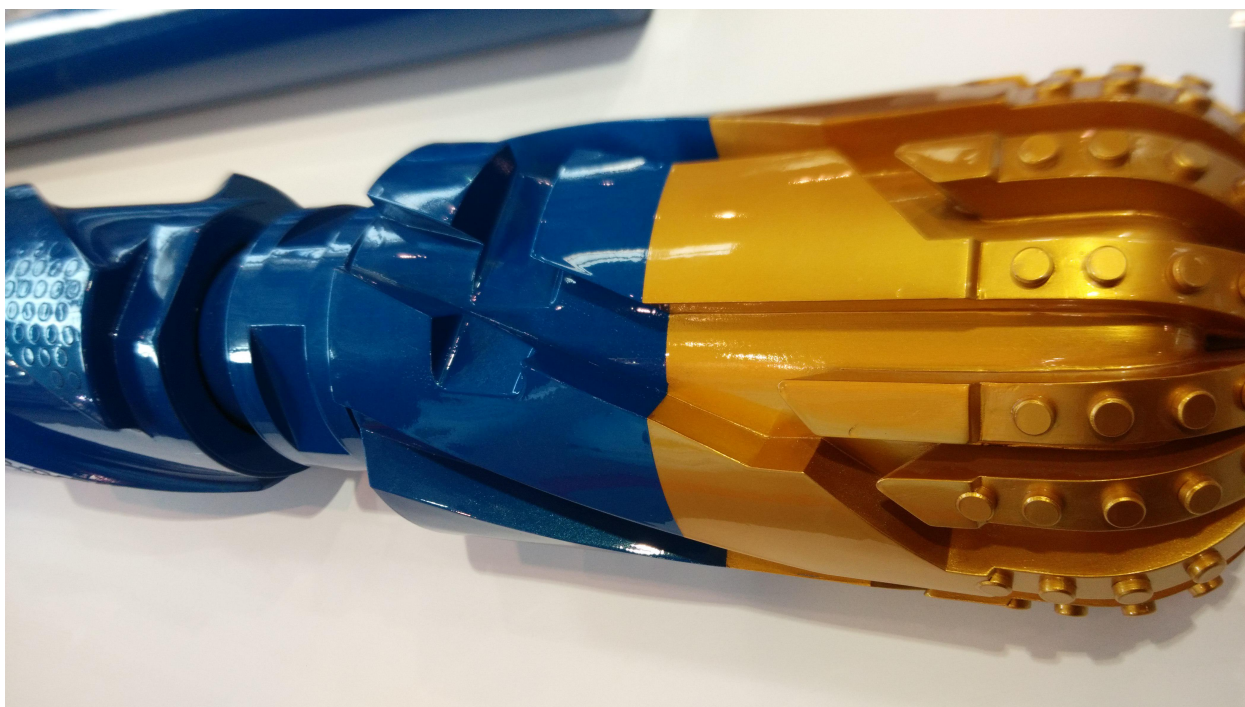




西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD





西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Brief Introduction

KW is professionally engaged in diamond bit research & development, design, manufacturing, sales and technical services. It possesses not only advanced diamond bit design & manufacturing techniques but also advanced manufacturing equipment. It has high-technology talents coming back from abroad and high-qualified skilled technicians engaged in diamond bit manufacturing for more than 20 years.

We can make various kinds of diamond drill bits and core bits from 4" to 17 1/2", and can research, develop, design and manufacture special purpose diamond bits according to customer's requirements.

It has established perfect product quality systems, and has been certified under ISO9001:2000 Quality System. We design diamond bit by using self-developed advanced Computer Aided Design (CAD), PRO-E 3 D design, and computer full size drill bit resultant force & single cutter force and work analysis computing technologies. The diamond bits made by us are completely in compliance with API and SY/T5217-2000 Standards.

It always carries forward its concepts of "Good Faith, Customer Orientation, High Quality, Perfection & Innovation, and Contributions & Honors". We aim to provide our customers with high quality products and excellent services, with highest performance-price ratio products on purpose. It will grow and develop with its customers.

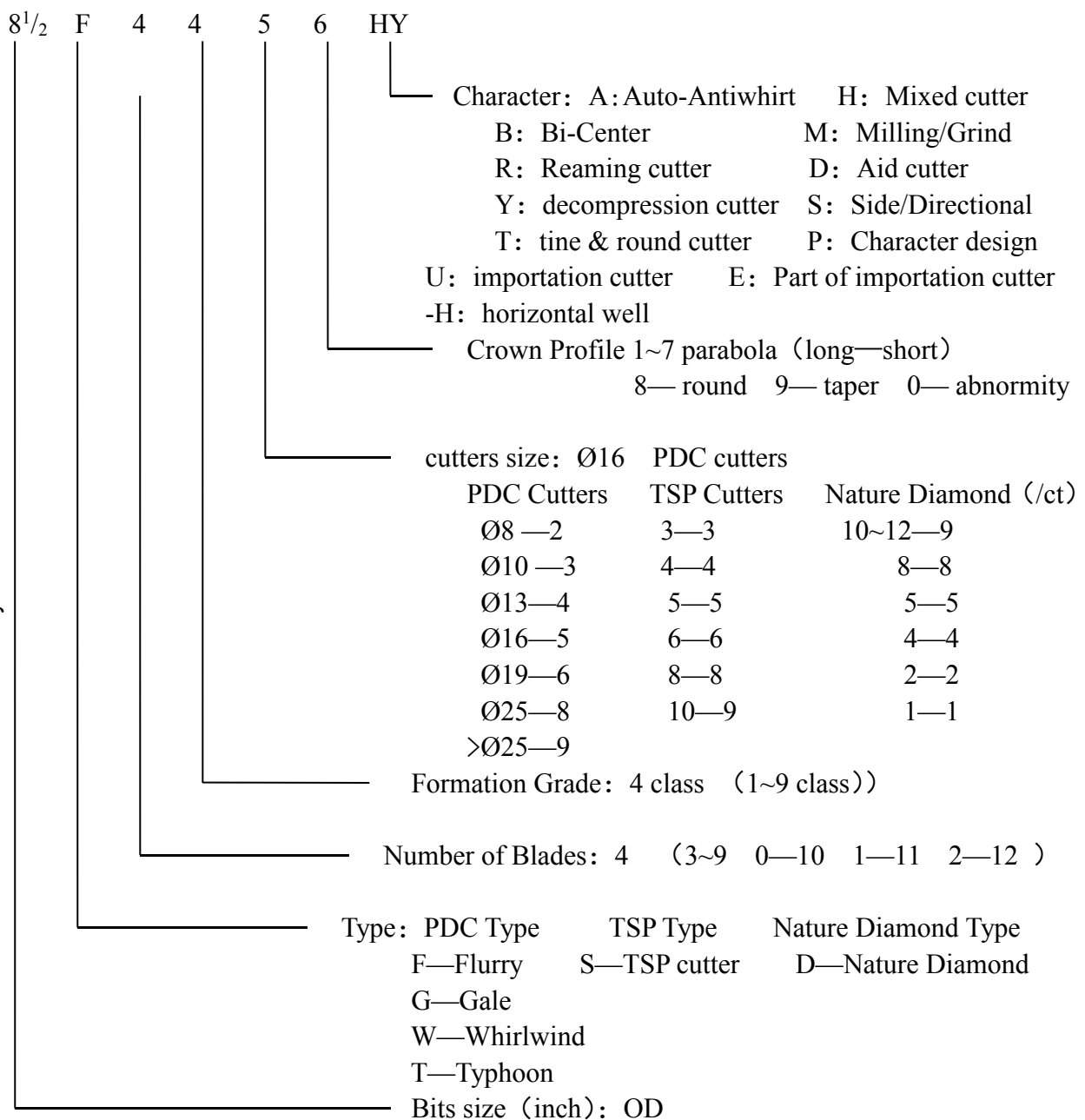


西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Diamond Bit Nomenclature Guide

Diamond Core Bit: Number of Blades、Formation Grade、Cutter Size、Crown Profile、Character



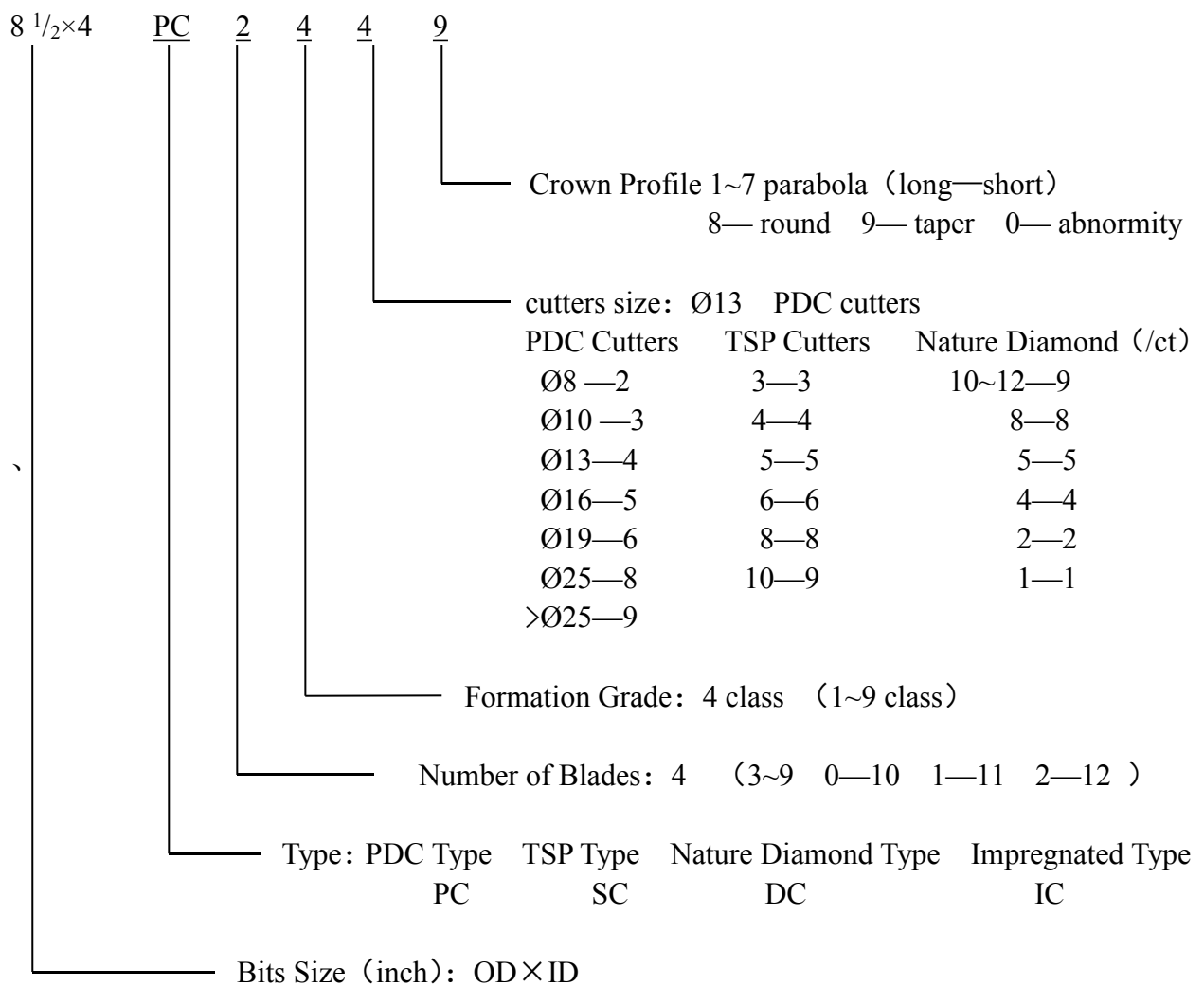


西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Diamond Core Bit Nomenclature Guide

Diamond Core Bit: Number of Blades、Formation Grade、Cutter Size、Crown Profile





西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Selection Guide

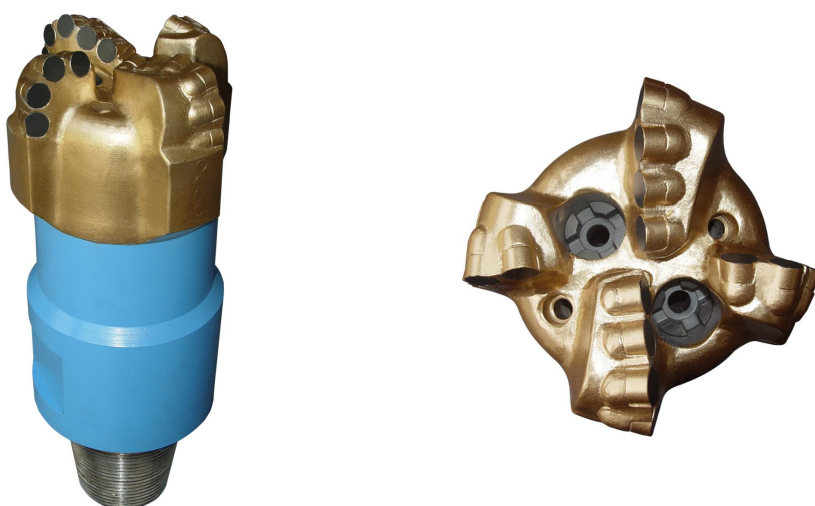
Formation	Rock Type	Formation Grade	Bits Type
Ultra soft formations with low compressive strength and sticky layers	Humous Gumbo Clay Marl	1~2	×4××
Soft formations with low compressive strength and high drill ability	Marl Salt Anhydrite Shale	2~3	×4××
Soft to medium formations with low compressive strength	Sand Shale Chalk	2~4	×4××
Soft-medium to hard formations with high compressive strength and low abrasiveness	Shale Mudstone Limestone Sandstone	3~5	×5××
Hard and dense formations with high compressive strength but not abrasive	Shale Limestone Anhydrite	4~6	×5××
			×6××
Hard dense and abrasive formations with ultra high compressive strength	Siltstone Sandstone Mudstone	6~8	×6××
			×8××
Ultra hard and abrasive formations	Quartzite Volcanic	8≥	×8××



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F4446 / M432



Short parabola Crown Profile, Ø13 cutters, Power of counterpoise design;

reparable nozzles & immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes hard;

Such as clay, marl, sand, shale and salt.

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
3 7/8	325	38	4F	16	4	2 3/8 REG	5-25	90-360	8-20
4 1/2	340	38	4F	20	4	2 7/8 REG	5-30	90-360	8-20
5 7/16	340	38	2R+2F	23	4	3 1/2 REG	5-35	90-360	10-24
5 7/8	360	38	2R+2F	28	4	3 1/2 REG	10-35	90-360	12-28
6	380	38	4R	29	4	3 1/2 REG	10-40	90-280	15-30
6 1/2	380	38	4R	29	4	3 1/2 REG	10-40	90-280	15-30



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F4455D / M422



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

Adopt aid cutters design;

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes hard;

Such as clay, marl, sand, shale and salt。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	425	55	4R	50	4	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	425	55	4R	54	4	4 ¹ / ₂ REG	20-90	90-360	32-44
9	480	65	4R	66	4	4 ¹ / ₂ REG	20-105	90-360	34-46
9 ¹ / ₂	480	65	5R	72	4	6 ⁵ / ₈ REG	22-110	90-280	38-50



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F4455HB / M422



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

reparable nozzles or immobility nozzles, gage of smooth design;

Adopt aid cutters design;

rough-hole diameter Ø210, Expand the hole diameter Ø220, broaching bit;

Such as suitable for Formation Grade of four classes hard;

Such as clay, marl, sand, shale and salt.

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8 ³ / ₄	445	55	4R	60	4	4 ¹ / ₂ REG	20-90	90-360	32-44



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F4456 HY/ M422



Short parabola Crown Profile, Ø16 & Ø19 cutters, Power of counterpoise design;

Mixed cutter & decompression cutters design;

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes hard ;

Such as clay, marl, sand, shale and salt。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	425	55	4R	52	4	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	425	55	4R	56	4	4 ¹ / ₂ REG	20-90	90-360	32-44
9	460	65	4R	66	4	4 ¹ / ₂ REG	20-105	90-360	34-46
9 ¹ / ₂	460	65	5R	72	4	6 ⁵ / ₈ REG	22-110	90-280	38-50



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F4465Y /IADC M432



Short parabola Crown Profile, Ø19 cutters, Power of counterpoise design;

decompression cutters design;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes hard;

Such as clay, marl, sand, shale and salt.

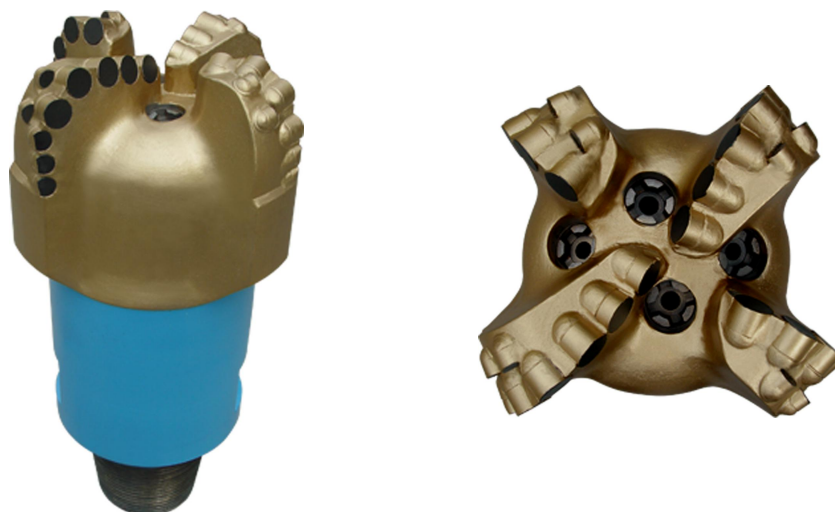
DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	425	55	4R	52	4	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	425	55	4R	56	4	4 ¹ / ₂ REG	20-90	90-360	32-44
9	460	65	4R	66	4	4 ¹ / ₂ REG	20-105	90-360	34-46
9 ¹ / ₂	460	65	5R	72	4	6 ⁵ / ₈ REG	22-110	90-280	38-50



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F4466D / M422



Short parabola Crown Profile, Ø19 cutters, Power of counterpoise design;

Adopt aid cutters design;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes hard ;

Such as clay, marl, sand, shale and salt。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	425	55	4R	50	4	4½REG	15-85	90-360	28-40
8½	425	55	4R	56	4	4½REG	20-90	90-360	32-44
9	460	65	4R	64	4	4½REG	20-105	90-360	34-46
9½	460	65	5R	70	4	6⅝REG	22-110	90-280	38-50



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F5556 / M522



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes hard;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	5R	53	5	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	5R	59	5	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	460	65	5R	73	5	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	7R	140	5	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F5556D / M522



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

Adopt aid cutters design

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes hard;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	5R	53	5	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	5R	59	5	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	460	65	5R	73	5	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	7R	140	5	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F5558DR / M522



Rond Crown Profile, Ø16 cutters, Power of counterpoise design;

Adopt aid cutters design

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes hard;

Such as Shale, Limestone, Sand, Anhydrite。

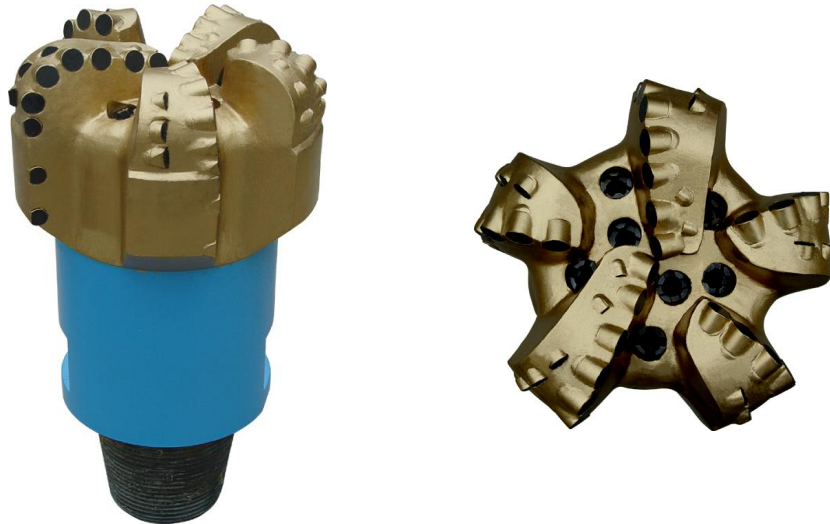
DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	6R	53	5	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	6R	59	5	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	460	65	7R	73	5	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	9R	140	5	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F5558DR-H / M522



Rond Crown Profile, Ø16 cutters, Power of counterpoise design;

Adopt aid cutters design

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes hard;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	7R	53	5	4½REG	15-90	90-240	28-40
8½	435	55	7R	59	5	4½REG	20-100	90-240	32-44
9½	460	65	7R	73	5	6⅝REG	22-115	90-210	38-50
12¼	530	75	9R	140	5	6⅝REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F5566 / M522



Short parabola Crown Profile, Ø19 cutters, Power of counterpoise design;

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes hard;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	5R	53	5	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	5R	59	5	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	460	65	5R	73	5	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	7R	140	5	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F5566D / M522



Short parabola Crown Profile, Ø19 cutters, Power of counterpoise design;

Adopt aid cutters design;

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes hard;

Such as Shale, Limestone, Sand, Anhydrite。

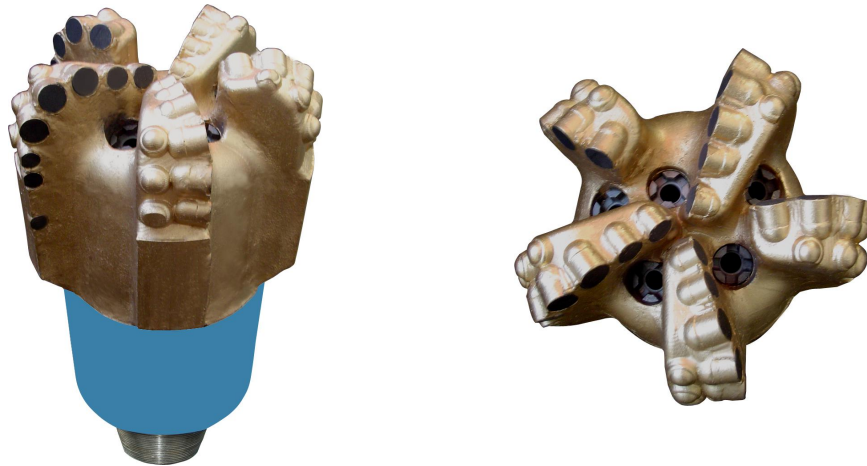
DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	5R	53	5	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	5R	59	5	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	460	65	5R	73	5	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	7R	140	5	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F5556 HY/ M522



Short parabola Crown Profile, Ø16 and Ø19 cutters, Power of counterpoise design;

Mixed cutter & decompression cutters design;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite.

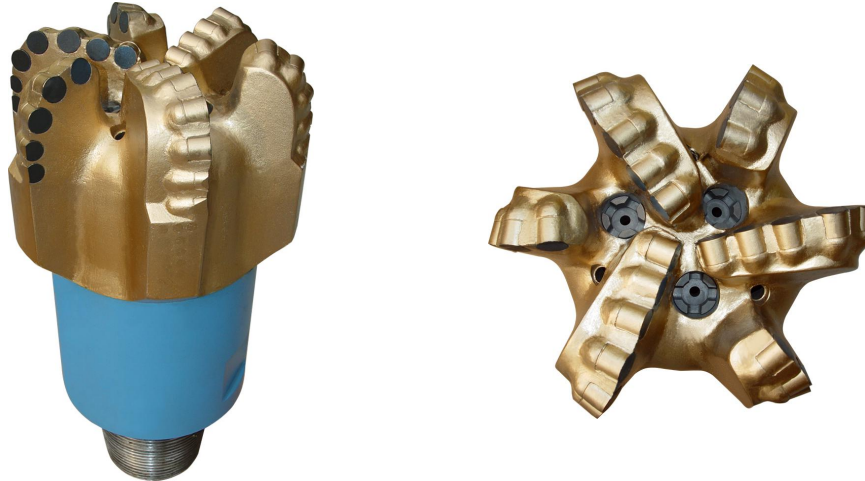
DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	5R	53	5	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	5R	59	5	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	490	65	5R	73	5	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	7R	106	5	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F6556/ M522



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

reparable nozzles & tine nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite.

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	3R+3F	53	6	4½REG	15-90	90-240	28-40
8½	435	55	3R+3F	59	6	4½REG	20-100	90-240	32-44
9½	490	65	7R	73	6	6⅝REG	22-115	90-210	38-50
12¼	530	75	9R	106	6	6⅝REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F6556DR/ M522



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

Adopt aid cutters design;

reparable nozzles & tine nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	3R+3F	53	6	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	3R+3F	59	6	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	490	65	7R	73	6	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	9R	106	6	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: F6556T/ M522



Short parabola Crown Profile , Ø16 round cutters & tine cutters , Power of counterpoise design;

Round cutters & tine cutters mixed design;

reparable nozzles & immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite.

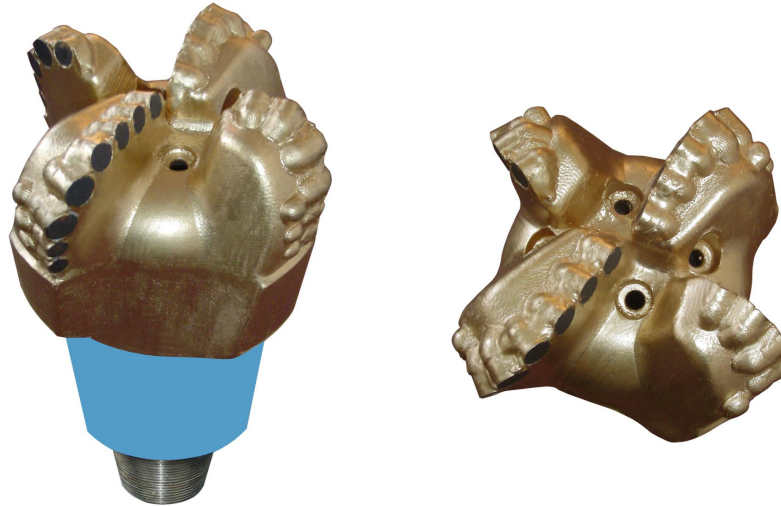
DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	3R+3F	53	6	4½REG	15-90	90-240	28-40
8½	435	55	3R+3F	59	6	4½REG	20-100	90-240	32-44
9½	490	65	7R	73	6	6⅝REG	22-115	90-210	38-50
12¼	530	75	9R	106	6	6⅝REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: G4456 HY/ M422



Short parabola Crown Profile, Ø16 & Ø19 cutters, Power of counterpoise design;

Mixed cutter and decompression cutters design;

helix blade, helix cutters;

reparable nozzles or immobility nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes;

Such as clay, marl, sand, shale and salt.

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	425	55	4R	50	4	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	425	55	4R	56	4	4 ¹ / ₂ REG	20-90	90-360	32-44
9	480	65	4R	64	4	4 ¹ / ₂ REG	20-105	90-360	34-46
9 ¹ / ₂	460	65	4R+1F	70	4	6 ⁵ / ₈ REG	22-110	90-280	38-50



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: G4455D / M422



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

Adopt aid cutters design;

helix blade, helix cutters;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes;

Such as clay, marl, sand, shale and salt.

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	425	55	4R	52	4	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	425	55	4R	56	4	4 ¹ / ₂ REG	20-90	90-360	32-44
9	460	65	4R	66	4	4 ¹ / ₂ REG	20-105	90-360	34-46
9 ¹ / ₂	460	65	5R	72	4	6 ⁵ / ₈ REG	22-110	90-280	38-50



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: G5556 / M522



Short parabola Crown Profile, Ø16 cutters, Power of counterpoise design;

decompression cutters design;

helix blade, helix cutters;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	5R	53	5	4 ¹ / ₂ REG	15-90	90-240	28-40
8 ¹ / ₂	435	55	5R	59	5	4 ¹ / ₂ REG	20-100	90-240	32-44
9 ¹ / ₂	490	65	5R	73	5	6 ⁵ / ₈ REG	22-115	90-210	38-50
12 ¹ / ₄	530	75	7R	106	5	6 ⁵ / ₈ REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: G5566 / M522



Short parabola Crown Profile, Ø19 cutters, Power of counterpoise design;

helix blade, helix cutters;

reparable nozzles , gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	435	55	5R	53	5	4½REG	15-90	90-240	28-40
8½	435	55	5R	59	5	4½REG	20-100	90-240	32-44
9½	490	65	5R	73	5	6⅝REG	22-115	90-210	38-50
12¼	530	75	7R	106	5	6⅝REG	25-145	70-180	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: G5568S / M521



Rond Crown profile, Ø19 cutters, Power of counterpoise design;

helix blade, helix cutters;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	405	55	5R	47	5	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	405	55	5R	53	5	4 ¹ / ₂ REG	20-90	90-360	32-44
9 ¹ / ₂	460	65	5R	67	5	6 ⁵ / ₈ REG	22-110	90-280	38-50
12 ¹ / ₄	500	75	7R	91	5	6 ⁵ / ₈ REG	25-125	70-240	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: G4468SR / M421



Rond Crown profile, Ø19 cutters, Power of counterpoise design;

helix blade, helix cutters;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of four classes;

Such as Shale, Limestone, Sand, Anhydrite。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	395	40	4R	47	4	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	395	40	4R	53	4	4 ¹ / ₂ REG	20-90	90-360	32-44
9 ¹ / ₂	440	40	4R	67	4	6 ⁵ / ₈ REG	22-110	90-280	38-50
10 ⁵ / ₈	480	40	6R	91	4	6 ⁵ / ₈ REG	25-125	70-240	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: G5568SR / M521



Rond Crown profile, Ø19 cutters, Power of counterpoise design;

helix blade, helix cutters;

reparable nozzles, gage of smooth design;

Such as suitable for Formation Grade of five classes;

Such as Shale, Limestone, Sand, Anhydrite。

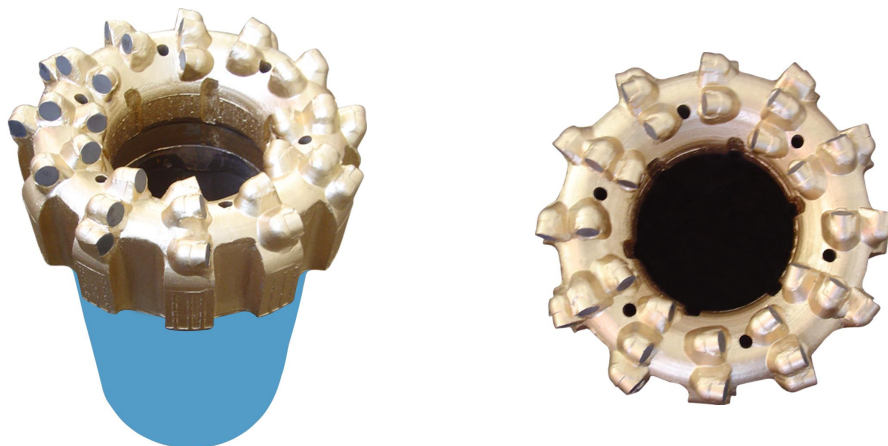
DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
8	395	40	5R	47	5	4 ¹ / ₂ REG	15-85	90-360	28-40
8 ¹ / ₂	395	40	5R	53	5	4 ¹ / ₂ REG	20-90	90-360	32-44
9 ¹ / ₂	440	40	5R	67	5	6 ⁵ / ₈ REG	22-110	90-280	38-50
10 ⁵ / ₈	480	40	7R	91	5	6 ⁵ / ₈ REG	25-125	70-240	46-80



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: PC2449 / M431



Cone crown profile of short, Ø13 cutters, Power of counterpoise design;

fastness nozzles, gage of slot design;

Such as suitable for Formation Grade of four classes;

Such as clay, marl, sand, shale and salt.

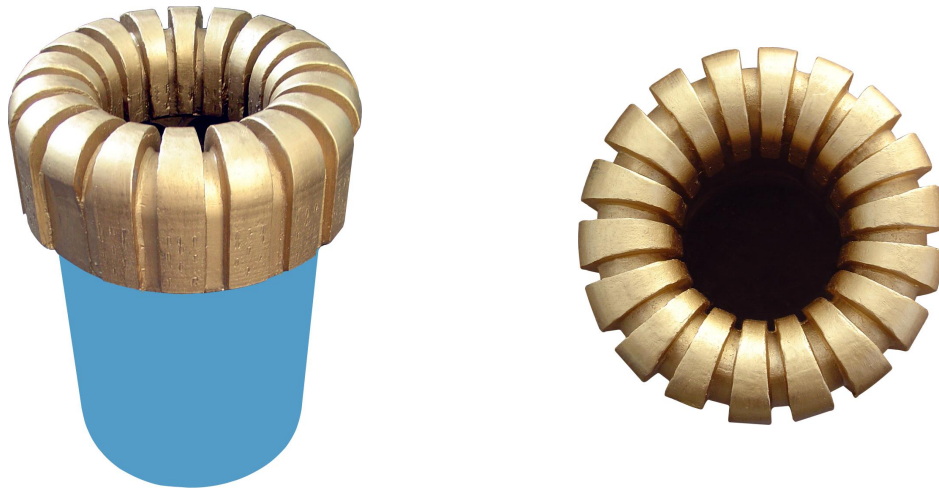
DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzl e	Net weight (kg)	Numbe r of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
7 ⁷ / ₈ ×4	403	38	6F	26	12	250P/Ⅲ 8-4	15-45	60-130	12-24
8 ¹ / ₄ ×4 ¹ / ₈	403	38	6F	29	12	250P/Ⅲ 8-4	15-45	60-130	12-24
8 ¹ / ₂ ×4	403	38	6F	29	12	250P/Ⅲ 8-4	15-45	60-130	12-24
8 ¹ / ₂ ×4 ¹ / ₈	403	38	6F	29	12	250P/Ⅲ 8-4	15-45	60-130	12-24



西安秦威机械设备有限公司

XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

Bits Type/IADC code: IC8838 / M841



Rotundity crown profile, gage of slot design;

Such as suitable for Formation Grade of six and upwards classes;

Such as Ultra hard and abrasive formations;

Such as Silstone, Sandstone, Quartzite, Volcanic。

DESING PARAMETERS							OPERATING PARAMETERS		
Size (in)	Total length (mm)	Gage Length (mm)	Nozzle	Net weight (kg)	Number of blades	API Shank (in)	WOB (kn)	RPM	Flow rate (l/s)
7 ⁷ / ₈ ×4	380	38	0	24	18	250P	15-55	50-130	12-24
8 ¹ / ₂ ×4	380	38	0	27	18	250P	15-60	50-130	12-24
8 ¹ / ₂ ×4 ¹ / ₈	380	38	0	27	18	250P	15-60	50-130	12-24



西安秦威机械设备有限公司
XI'AN KINGWELL OILFIELD MACHINERY CO., LTD

T.F.A values of Nozzles Sizes (mm²)

NozzleSize 1/32" (mm)	Number of Nozzles									
	1	2	3	4	5	6	7	8	9	10
6# (4.76)	17.8	35.61	53.41	71.26	89.02	106.83	124.63	142.44	160.24	178.05
7# (5.56)	24.25	48.49	72.74	96.99	121.23	145.48	169.73	193.97	218.22	242.46
8# (6.35)	31.67	63.34	95.01	126.68	158.35	190.02	221.68	253.35	285.02	316.69
9# (7.14)	40.08	80.16	120.24	160.32	200.40	240.48	280.56	320.64	360.72	400.80
10# (7.94)	49.48	98.96	148.44	197.92	247.40	296.88	346.36	395.84	445.32	494.80
11# (8.73)	59.87	119.74	179.61	239.48	299.35	359.22	419.09	478.96	538.83	598.70
12# (9.53)	71.26	142.52	213.78	285.04	356.30	427.56	498.82	570.08	641.34	712.60
13# (10.32)	83.63	167.26	250.89	334.52	418.15	501.78	585.41	669.04	752.67	836.30
14# (11.11)	96.99	193.98	290.97	387.96	484.95	581.94	678.93	775.92	872.91	969.90
15# (11.91)	111.34	222.68	334.02	445.36	556.70	668.04	779.38	890.72	1000.1	1113.4
16# (12.70)	126.68	253.36	380.04	506.72	633.40	760.08	886.76	1013.4	1140.1	1266.8
17# (13.49)	143.01	286.02	429.03	572.04	715.05	858.06	1001.1	1144.1	1287.1	1430.1
18# (14.29)	160.33	320.66	480.99	641.32	801.65	961.98	1122.3	1282.6	1443.0	1603.3
19# (15.08)	178.63	357.26	535.89	714.52	893.15	1071.8	1250.4	1429.0	1607.7	1786.3
20# (15.88)	197.93	395.86	593.79	791.72	989.65	1187.6	1385.5	1583.4	1781.4	1979.3
21# (16.69)	218.22	436.44	654.66	872.88	1091.1	1309.3	1527.5	1745.8	1964.0	2182.2
22# (17.46)	239.5	479.00	718.50	958.00	1197.5	1437.0	1676.5	1916.0	2155.5	2395.0