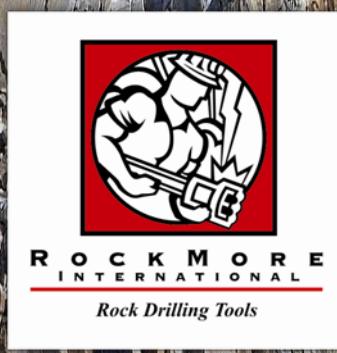


# VECTOR ROD SYSTEM WITH XT THREAD



# For all your rock drilling tool needs contact ROCKMORE INTERNATIONAL



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## **VECTOR ROD SYSTEM WITH XT THREAD**

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# Extension drilling tools

Verlängerungsbohrausrüstung

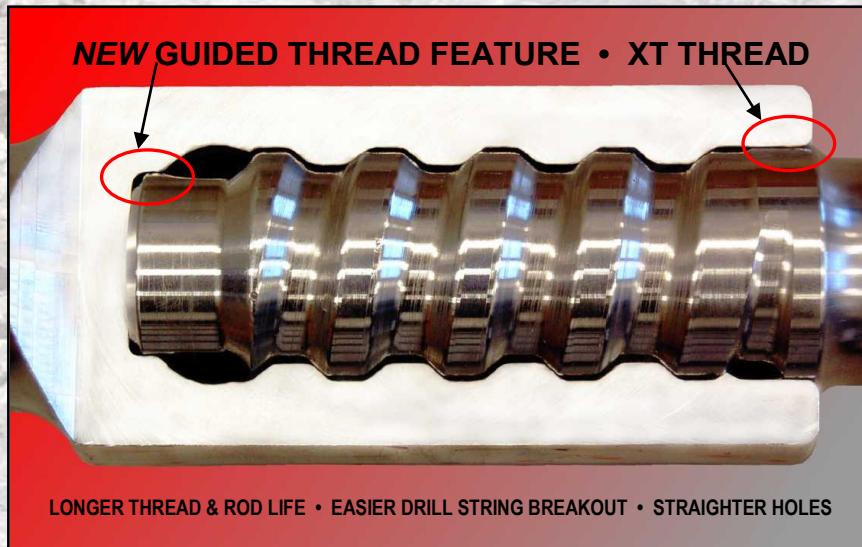
Equipement d'allonge

Varillaje de extensión



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# VECTOR ROD SYSTEM XT THREAD



Vector Rod System with XT Thread  
Suitable for Male/Female (MF) Extension Rod Systems



## Features:

- Design advancement of "T" style thread
- XT38, XT45, & XT51 for MF rods
- XT thread compatible with "T" profile/thread
- Two Cylindrical Contact Zones in front and rear of threads
- Guided thread feature

## Benefits:

- Longer thread life; Easier thread breakout; Straighter holes
- Suited for larger and deeper blast holes
- Reverse compatibility with standard "T" style threads
- Straighter holes; Reduced hole deviation; Improved thread grease retention on thread pitches
- Minimized impact duration ("rattling") required to uncouple connections; Cooler couplings; Longer thread life



# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



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- Press Release -

## ROCKMORE'S VECTOR ROD SYSTEM ADVANCES DRILLING



Rockmore International introduces the Vector Rod System with the new, advanced XT thread profile. Conceived to be a major breakthrough in improving performance and service life of extension drill tools in surface and underground percussive drilling applications, the new line of drill tools promises tremendous advantages in productivity and reliability.

After several years of intense research and development followed up with monitored field tests in various ground conditions, Rockmore engineers developed a new thread design, XT, for the Vector Rod System. The new XT design incorporates revolutionary new guided cylindrical contact zones between the male and female thread joints. These guided surface features are located in the nose and rear of the thread connections and serve various benefits and improvements over traditional threads.

The XT thread profile is based on the traditional trapezoidal "T" thread design and is therefore compatible with industry standard thread types such as T38, T45, and T51. Thus, one can interchange and connect standard "T" style threaded components with the new XT thread, although the guiding

advantages aforementioned would be neglected. For example, a T45 threaded bit or shank adapter can be connected to a XT45 threaded rod with full compatibility.

In order to achieve the full engineered benefits of the XT thread, however, one must consider the drill string as a system of connections between the shank adapter, rods, and the bit in extension drilling applications. Thus, the XT thread design employed in the Vector Rod System enables many performance and reliability benefits leading to major overall cost savings in the drilling cycle.

"We specifically targeted to increase thread service life while enhancing drilling performance in extension drilling applications," says Pejman Eghdami, Executive Vice President of Rockmore International, in explaining the goal of developing the Vector Rod System. The dual cylindrical contact zones in the nose and rear of the XT threads significantly increase the lateral support between thread joints and stabilize the connections with more rigidity to provide better energy transfer. The enhanced thread support and geometry extends thread life and increases the overall component service life of the shank adapters, rods, and bits with XT threads that comprise the Vector Rod System.

*Continued on next page*

## **Extension drilling tools**

### **Verlängerungsbohrausrüstung**

Equipement d'allonge

Varillaje de extensión



**ROCKMORE**  
INTERNATIONAL

*- Press Release continued -*

Because the XT thread guide feature improves thread alignment, the impact duration when "rattling" rods, as required in uncoupling connections, is minimized. This leads to lower wasted energy transmission, cooler couplings on rods, and ultimately to longer rod life. Thread grease is also better retained on the thread pitches resulting from the new XT geometry, further increasing thread life in all XT components.

Another key advantage of this rod system over traditional threaded components is providing straighter holes and minimizing its deviation, so inherently critical in modern drill and blast techniques. The guided XT thread feature increases the rigidity and stability of the connections between the shank adapters, rods, and bits so significantly that overall rod bending is minimized and hole straightness improved. In fact, this improvement allows for larger and deeper blast holes to be achieved using existing rod diameters, but only by converting to XT threaded components. In underground mining long-hole and production applications where up to thirty rod connections are common, hole deviation can be reduced substantially by using Vector Rods.

Mr. Eghdami comments that "As a major breakthrough for extension drilling systems, we have significantly improved drilling productivity and increased drill string lifetime by introducing new design features in the XT thread configuration. And just as important, the new XT design is fully reverse compatible with industry standard "T" style threads, enabling the Vector Rod System to be truly remarkable, yet a practical choice for premium drilling tools."

The Vector Rod System is offered in multiple configurations of button bits, MF rods, and shank adapters. These drill string components are available in XT38, XT45, and XT51 thread types, designed to improve drilling productivity and reduce extension drilling operating costs in surface and underground percussive drilling.

Rockmore International is a global manufacturer of premium rock drilling tools serving the mining and construction percussive drilling sectors for over 75 years.

**VECTOR  
ROD SYSTEM  
XT THREAD**

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



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**XT38 (1 1/2")**

**VECTOR**  
ROD SYSTEM  
XT THREAD

Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]	
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones	1	HEM	6	10	3	10	57	2 1/4"	1.30
	2	BAL	6	10	3	10	57	2 1/4"	1.30
	3	HEM	6	11	3	11	64	2 1/2"	1.70
	4	HEM	6	12.7	3	11	64	2 1/2"	1.70
	5	BAL	6	11	3	11	64	2 1/2"	1.70
B3	3 Front Flushing Holes								
Flat Face	6	HEM	6	12.7	3	12.7	76	3"	2.40
	7	BAL	6	12.7	3	12.7	76	3"	2.40
	8	HEM	6	14	4	14	89	3 1/2"	3.30
	9	BAL	6	14	4	14	89	3 1/2"	3.30
Flat Face	3 Front Flushing Holes								
Flat Face	10	HEM	8	10	4	10	64	2 1/2"	1.60
	11	BAL	8	10	4	10	64	2 1/2"	1.60
Flat Face	12	HEM	8	11	6	11	76	3"	2.40
	13	BAL	8	11	6	11	76	3"	2.40
	14	HEM	8	12.7	6	12.7	89	3 1/2"	3.30
	15	HEM (HD)	8	14	6	12.7	89	3 1/2"	3.30
	16	BAL	8	12.7	6	12.7	89	3 1/2"	3.30
	17	HEM	8	14	6	14	102	4"	4.50
	18	BAL	8	14	6	14	102	4"	4.50
	19	HEM	8	16	6	14	115	4 1/2"	5.30
Flat Face	2 Front Flushing Holes								
Flat Face	20	HEM (HD)	8	12.7	5	10	76	3"	2.40
Flat Face	4 Front Flushing Holes								
Flat Face	21	HEM	9	11	8	10	89	3 1/2"	3.30
	22	BAL	9	11	8	10	89	3 1/2"	3.30
	23	HEM	9	12.7	8	12.7	102	4"	4.40
	24	BAL	9	12.7	8	12.7	102	4"	4.40
	25	HEM	9	14	9	12.7	115	4 1/2"	5.30
Flat Face	3 Front Flushing Holes								

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



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## XT38 (1 1/2")



Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]	[kg]
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones	26 27 28 29 30 31 32 33	HEM BAL HEM BAL HEM BAL HEM BAL	6 6 6 6 6 6 6 6	10 10 11 11 12.7 12.7 14 14	3 3 3 3 3 3 3 3	10 10 11 11 11 11 12.7 12.7	64 64 70 70 76 76 89 89	2 1/2" 2 1/2" 2 3/4" 2 3/4" 3" 3" 3 1/2" 3 1/2"	1.60 1.60 2.00 2.00 2.40 2.40 3.40 3.40
Drop Center      3 Front Flushing Holes	34 35 36 37 38 39	HEM BAL HEM BAL HEM BAL	8 8 8 8 8 8	11 11 11 11 14 14	5 5 4 4 4 4	10 10 11 11 12.7 12.7	76 76 89 89 102 102	3" 3" 3 1/2" 3 1/2" 4" 4"	2.40 2.40 3.30 3.30 4.60 4.60
Drop Center      4 Front Flushing Holes	40 41 42 43	HEM BAL HEM BAL	6 6 6 6	12.7 12.7 14 14	3 3 4 4	12.7 12.7 14 14	76 76 89 89	3" 3" 3 1/2" 3 1/2"	2.50 2.50 3.00 3.00
Flat Face / Retrac      3 Front Flushing Holes	44 45	HEM BAL	8 8	10 10	4 4	10 10	64 64	2 1/2" 2 1/2"	1.80 1.80
Flat Face / Retrac      2 Front Flushing Holes	46 47 48 49 50 51 52	HEM BAL HEM HEM (HD) BAL HEM BAL	8 8 8 8 8 8 8	11 11 12.7 14 12.7 14 14	6 6 6 6 6 6 6	11 11 12.7 12.7 12.7 14 14	76 76 89 89 89 102 102	3" 3" 3 1/2" 3 1/2" 3 1/2" 4" 4"	3.00 3.00 5.50 5.50 5.50 6.90 6.90
Flat Face / Retrac      2 Front Flushing Holes	53	HEM (HD)	8	12.7	5	10	76	3"	3.00
Flat Face / Retrac      4 Front Flushing Holes									

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCK MORE  
INTERNATIONAL



## XT38 (1 1/2")



Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]	[kg]
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones  	54	HEM	6	10	3	10	64	2 1/2"	1.80
	55	BAL	6	10	3	10	64	2 1/2"	1.80
	56	HEM	6	11	3	11	70	2 3/4"	2.50
	57	BAL	6	11	3	11	70	2 3/4"	2.50
	58	HEM	6	12.7	3	11	76	3"	3.00
	59	BAL	6	12.7	3	11	76	3"	3.00
	60	HEM	6	14	3	12.7	89	3 1/2"	4.90
	61	BAL	6	14	3	12.7	89	3 1/2"	4.90
Drop Center / Retrac 3 Front Flushing Holes	62	HEM	8	11	5	10	76	3"	2.90
	63	BAL	8	11	5	10	76	3"	2.90
	64	HEM	8	11	4	11	89	3 1/2"	4.80
	65	BAL	8	11	4	11	89	3 1/2"	4.80
	66	HEM	8	14	4	12.7	102	4"	6.70
	67	BAL	8	14	4	12.7	102	4"	6.70
Drop Center / Retrac 4 Front Flushing Holes									
HEM = Hemispherical button / Kugelstift / Boutons hémisphériques / Botones esféricos BAL = Semi Ballistic button / Paraboloidstift / Boutons semi paraboliques / Botones semi parabólicos CON = Conical carbide on request / Deltastift auf Anfrage / Boutons delta sur demande / Botones conicos a solicitud MP = MultiPoint carbide on request / MultiPoint Stift auf Anfrage / Boutons MultiPoint sur demande / Botones MultiPoint a solicitud									
<b>Extension rod</b> Verlängerungsstange Tige allonge Barra de extensión				Reference Number	D		L		Weight Gewicht Poids Peso [kg]
<b>MF-rod Rd 39 / Ø 14.5 mm (1 1/2" / Ø 37/64")</b>  					[mm]	[in]	[mm]	[ft in]	
		68	56	2 7/32"	1220	4'			10.60
		69	56	2 7/32"	1525	5'			13.05
		70	56	2 7/32"	1830	6'			15.60
		71	56	2 7/32"	2435	8'			20.80
		72	56	2 7/32"	3050	10'			25.60
		73	56	2 7/32"	3660	12'			30.40
		74	56	2 7/32"	4270	14'			35.20
<b>Starter Guide Tube</b> Modular 3-Piece Design				Reference Number	D		L		Weight Gewicht Poids Peso [kg]
<b>MF-Tube Rd 56 (2 7/32") -- Modular 3-Piece Design</b>  					[mm]	[in]	[mm]	[ft in]	
		75	56	2 7/32"	1220	4'			17.00
		76	56	2 7/32"	1830	6'			24.00
		77	56	2 7/32"	3050	10'			39.90
		78	56	2 7/32"	3660	12'			47.40
		79	56	2 7/32"	4270	14'			55.00
Additional lengths available upon request.									

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCKMORE  
INTERNATIONAL



XT38 (1 1/2")



### Shank adapters (striking bars)

Einsteckende

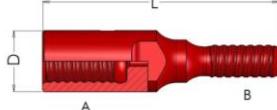
Tiges d'emmanchement

Adaptadores



See ROCKMORE catalog for complete list of suitable shank adapters (striking bars).

Bit adapter  
Übergangsstück  
Manchon d'adaptation  
Adaptador de broca



Reference Number

Thread /  
Gewinde  
Filet / Rosca

D

L

Weight  
Gewicht  
Poids  
Peso  
[kg]

	A	B	[mm]	[in]	[mm]	[in]	
80	R32	XT38	44	1 47/64"	270	10 5/8"	2.50
81	XT38	R32	55	2 11/64"	280	11 1/32"	2.50
82	R38	XT38	55	2 11/64"	280	11 1/32"	2.70
83	XT38	R38	55	2 11/64"	280	11 1/32"	2.70
84	XT38	T45	55	2 11/64"	280	11 1/32"	3.30
85	T45	XT38	63	2 31/64"	280	11 1/32"	2.80

**VECTOR**  
ROD SYSTEM  
**XT THREAD**



**EXTRAC RETRAC BIT**



**MULTIPOINT**

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



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**XT45 (1 3/4")**

**VECTOR**  
ROD SYSTEM  
XT THREAD

Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso	
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]		
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones	1	HEM	6	12.7	3	12.7	76	3"	2.70	
	2	BAL	6	12.7	3	12.7	76	3"	2.70	
	3	HEM	6	14	4	14	89	3 1/2"	3.20	
	4	BAL	6	14	4	14	89	3 1/2"	3.20	
Flat Face	3 Front Flushing Holes		5	8	11	6	76	3"	2.60	
			6	BAL	8	11	76	3"	2.60	
			7	BAL	8	12.7	82	3 1/4"	3.00	
			8	HEM	8	12.7	85	3 3/8"	3.20	
			9	BAL	8	12.7	85	3 3/8"	3.20	
			10	HEM	8	12.7	89	3 1/2"	3.20	
			11	HEM (HD)	8	14	89	3 1/2"	3.20	
			12	BAL	8	12.7	89	3 1/2"	3.20	
			13	HEM	8	14	102	4"	4.20	
			14	BAL	8	14	102	4"	4.20	
			15	HEM	8	16	115	4 1/2"	7.50	
			16	HEM	8	16	127	5"	8.80	
Flat Face	2 Front Flushing Holes		17	HEM (HD)	8	12.7	10	76	3"	2.60
Flat Face	4 Front Flushing Holes		18	HEM	9	11	89	3 1/2"	3.20	
			19	BAL	9	11	89	3 1/2"	3.20	
			20	HEM	9	12.7	102	4"	4.20	
			21	BAL	9	12.7	102	4"	4.20	
			22	HEM	9	14	115	4 1/2"	7.50	
			23	HEM	9	14	127	5"	8.80	
Drop Center	3 Front Flushing Holes		24	HEM	6	11	70	2 3/4"	2.10	
			25	BAL	6	11	70	2 3/4"	2.10	
			26	HEM	6	12.7	76	3"	2.50	
			27	BAL	6	12.7	76	3"	2.50	
			28	HEM	6	14	89	3 1/2"	3.00	
			29	BAL	6	14	89	3 1/2"	3.00	

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



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## XT45 (1 3/4")



Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]	
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones	30 31 32 33 34 35 36	HEM BAL HEM BAL HEM BAL HEM	8 8 8 8 8 8 8	11 11 11 11 14 14 14	5 5 4 4 4 4 4	10 10 11 11 12.7 12.7 14	76 76 89 89 102 102 115	3" 3" 3 1/2" 3 1/2" 4" 4" 4 1/2"	2.50 2.50 3.00 3.00 4.40 4.40 7.20
Drop Center      4 Front Flushing Holes	37 38 39 40	HEM BAL HEM BAL	6 6 6 6	12.7 12.7 14 14	3 3 4 4	12.7 12.7 14 14	76 76 89 89	3" 3" 3 1/2" 3 1/2"	2.70 2.70 4.90 4.90
Flat Face / Retrac      3 Front Flushing Holes	41 42 43 44 45 46 47 48 49 50	HEM BAL BAL HEM HEM (HD) BAL HEM BAL HEM HEM	8 8 8 8 8 8 8 8 8 8	11 11 12.7 12.7 14 12.7 14 14 16 16	6 6 6 6 6 6 6 6 6 8	11 11 11 12.7 12.7 12.7 14 14 14 14	76 76 82 89 89 89 102 102 115 127	3" 3" 3 1/4" 3 1/2" 3 1/2" 3 1/2" 4" 4" 4 1/2" 5"	2.70 2.70 4.00 4.90 4.90 4.90 6.50 6.50 9.20 10.30
Flat Face / Retrac      2 Front Flushing Holes	51	HEM (HD)	8	12.7	5	10	76	3"	2.70
Flat Face / Retrac      4 Front Flushing Holes	52 53 54 55 56 57	HEM BAL HEM BAL HEM BAL	6 6 6 6 6 6	11 11 12.7 12.7 14 14	3 3 3 3 3 3	11 11 11 11 12.7 12.7	70 70 76 76 89 89	2 3/4" 2 3/4" 3" 3" 3 1/2" 3 1/2"	2.10 2.10 2.60 2.60 4.50 4.50
Drop Center / Retrac      3 Front Flushing Holes	58 59 60 61 62 63 64 65	HEM BAL HEM BAL HEM BAL HEM HEM	8 8 8 8 8 8 8 8	11 11 11 11 14 14 14 16	5 5 4 4 4 4 4 4	10 10 11 11 12.7 12.7 14 16	76 76 89 89 102 102 115 127	3" 3" 3 1/2" 3 1/2" 4" 4" 4 1/2" 5"	2.60 2.60 4.70 4.70 6.10 6.10 8.60 9.70
Drop Center / Retrac      4 Front Flushing Holes	66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 20100 20101 20102 20103 20104 20105 20106 20107 20108 20109 20110 20111 20112 20113 20114 20115 20116 20117 20118 20119 20120 20121 20122 20123 20124 20125 20126 20127 20128 20129 20130 20131 20132 20133 20134 20135 20136 20137 20138 20139 20140 20141 20142 20143 20144 20145 20146 20147 20148 20149 20150 20151 20152 20153 20154 20155 20156 20157 20158 20159 20160 20161 20162 20163 20164 20165 20166 20167 20168 20169 20170 20171 20172 20173 20174 20175 20176 20177 20178 20179 20180 20181 20182 20183 20184 20185 20186 20187 20188 20189 20190 20191 20192 20193 20194 20195 20196 20197 20198 20199 201000 201001 201002 201003 201004 201005 201006 201007 201008 201009 201010 201011 201012 201013 201014 201015 201016 201017 201018 201019 201020 201021 201022 201023 201024 201025 201026 201027 201028 201029 201030 201031 201032 201033 201034 201035 201036 201037 201038 201039 201040 201041 201042 201043 201044 201045 201046 201047 201048 201049 201050 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# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCKMORE  
INTERNATIONAL



## XT45 (1 3/4")



Extension rod Verlängerungsstange Tige allonge Barra de extensión	Reference Number	D [mm] [in]	L [mm] [ft in]	Weight Gewicht Poids Peso [kg]				
<b>MF-rod Rd 46 / Ø 17 mm (1 13/16" / Ø 11/16")</b>	66 67 68 69 70 71 72	64 64 64 64 64 64 64	2 17/32" 2 17/32" 2 17/32" 2 17/32" 2 17/32" 2 17/32" 2 17/32"	1000 1220 1500 1525 1830 2000 3050	3' 3" 4' 4' 11" 5' 6' 6' 6" 10'	13.30 15.50 19.00 19.10 21.80 24.20 35.70		
<b>MF-rod Rd 46 / Ø 17 mm (1 13/16" / Ø 11/16")</b>	73 74 75 76 77	64 64 64 64 64	2 17/32" 2 17/32" 2 17/32" 2 17/32" 2 17/32"	3660 4270 4880 5490 6100	12' 14' 16' 18' 20'	42.50 49.50 53.70 62.60 69.60		
Starter Guide Tube Modular 3-Piece Design	Ref No.	D [mm] [in]	L [mm] [ft in]	Weight Gewicht Poids Peso [kg]				
<b>MF-Tube -- Modular 3-Piece Design</b>	78 79 80	64 64 76	2 17/32" 2 17/32" 3"	3660 4270 3660	12' 14' 12'	59.10 68.90 92.50		
Additional lengths available upon request.								
Shank adapters (striking bars) Einstechende Tiges d'emmanchement Adaptadores								
	See ROCKMORE catalog for complete list of suitable shank adapters (striking bars).							
Bit adapter Übergangsstück Manchon d'adaptation Adaptador de broca	Reference Number	Thread / Gewinde Filet / Rosca	D [mm] [in]	L [mm] [in]	Weight Gewicht Poids Peso [kg]			
	81 82 83 84 85 86 87	R32 R38 T38 XT45 XT45 XT45 T51 T51	XT45 XT45 XT45 R38 T38 T51 XT45	44 55 55 63 63 63 72	1 47/64" 2 11/64" 2 11/64" 2 31/64" 2 31/64" 2 31/64" 2 27/32"	360 280 280 280 280 285 285	14 3/16" 11 1/32" 11 1/32" 11 1/32" 11 1/32" 11 7/32" 11 7/32"	3.90 3.30 3.30 3.10 2.80 4.10 3.85

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCK MORE  
INTERNATIONAL



**XT51 (2")**

**VECTOR**  
ROD SYSTEM  
XT THREAD

Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso	
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]		
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones	1 2	HEM BAL	6 6	14 14	4 4	14 14	89 89	3 1/2" 3 1/2"	3.80 3.80	
Flat Face      3 Front Flushing Holes	3 4 5 6 7 8 9 10 11 12 13 14	HEM BAL HEM BAL HEM BAL HEM BAL HEM BAL HEM HEM	8 8 8 8 8 8 8 8 8 8 8 8	12.7 12.7 12.7 12.7 12.7 12.7 14 14 16 16 16 16	6 6 6 6 6 6 6 6 6 6 8 8	11 11 11 11 12.7 12.7 14 14 14 14 14	82 82 85 85 89 89 102 102 115 115 127 140	3 1/4" 3 1/4" 3 3/8" 3 3/8" 3 1/2" 3 1/2" 4" 4" 4 1/2" 4 1/2" 5" 5 1/2"	3.20 3.20 3.40 3.40 3.80 3.80 5.20 5.20 6.70 6.70 8.00 12.20	
Flat Face      2 Front Flushing Holes	15 16 17 18 19 20	HEM BAL HEM BAL HEM HEM	9 9 9 9 9 9	11 11 12.7 12.7 14 14	8 8 8 8 9 9	10 10 12.7 12.7 12.7 14	89 89 102 102 115 127	3 1/2" 3 1/2" 4" 4" 4 1/2" 5"	3.80 3.80 5.30 5.30 6.00 8.10	
Flat Face      3 Front Flushing Holes	21 22 23 24 25	HEM BAL HEM BAL HEM	8 8 8 8 8	14 14 14 14 16	6 6 7 7 8	12.7 12.7 14 14 14	102 102 115 115 127	4" 4" 4 1/2" 4 1/2" 5"	5.30 5.30 6.00 6.00 8.10	
Flat Face      4 Front Flushing Holes	26 27 28	HEM HEM HEM	10 10 10	14 16 16	9 7 8	12.7 16 16	115 127 140	4 1/2" 5" 5 1/2"	6.00 8.10 12.20	
StarFlow Flat Face      5 Front Flushing Holes										

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCK MORE  
INTERNATIONAL



## XT51 (2")



Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]	
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones	29 30 31 32 33 34	HEM BAL HEM BAL HEM BAL	6 6 6 6 6 6	12.7 12.7 12.7 12.7 14 14	3 3 3 3 3 3	11 11 11 11 12.7 12.7	76 76 80 80 89 89	3" 3" 3 1/8" 3 1/8" 3 1/2" 3 1/2"	3.00 3.00 3.30 3.30 3.60 3.60
Drop Center      3 Front Flushing Holes	35 36 37 38 39 40 41 42 43	HEM BAL HEM BAL HEM BAL HEM BAL HEM	8 8 8 8 8 8 8 8 8	11 11 14 14 14 14 16 16 16	4 4 4 4 4 4 4 4 4	11 11 12.7 12.7 14 14 16 16 16	89 89 102 102 115 115 127 127 140	3 1/2" 3 1/2" 4" 4" 4 1/2" 4 1/2" 5" 5" 5 1/2"	3.60 3.60 4.80 4.80 6.20 6.20 7.70 7.70 11.80
Drop Center      4 Front Flushing Holes	44 45 46	HEM HEM HEM	10 10 10	14 16 16	5 5 5	12.7 16 16	115 127 140	4 1/2" 5" 5 1/2"	5.70 7.70 11.80
StarFlow Drop Center      5 Front Flushing Holes	47 48	HEM BAL	6 6	14 14	4 4	14 14	89 89	3 1/2" 3 1/2"	5.40 5.40
Flat Face / Retrac      3 Front Flushing Holes	49 50 51 52 53 54 55 56 57	BAL HEM BAL CON HEM BAL HEM HEM HEM	8 8 8 8 8 8 8 8 8	12.7 12.7 12.7 12.7 14 14 16 16 16	6 6 6 6 6 6 6 8 8	11 12.7 12.7 12.7 14 14 14 14 16	82 89 89 89 102 102 115 127 140	3 1/4" 3 1/2" 3 1/2" 3 1/2" 4" 4" 4 1/2" 5" 5 1/2"	4.00 5.40 5.40 5.40 7.50 7.50 10.20 13.00 17.20
Flat Face / Retrac      2 Front Flushing Holes	58 59 60 61 62 63	HEM BAL HEM BAL HEM HEM	9 9 9 9 9 9	11 11 12.7 12.7 14 14	8 8 8 8 9 9	10 10 12.7 12.7 12.7 14	89 89 102 102 115 127	3 1/2" 3 1/2" 4" 4" 4 1/2" 5"	5.40 5.40 7.50 7.50 10.20 13.00
Flat Face / Retrac      3 Front Flushing Holes									

# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCK MORE  
INTERNATIONAL



## XT51 (2")



Bit Bohrkrone Taillant Broca	Reference Number	Carbide design	Carbide dimension Hartmetallabmessung Dimension métal dur Dimension metal duro				D		Weight Gewicht Poids Peso
			Gauge / Umfang exterieur / exterior [No.]	[mm]	Front / Stirnseite front / frontal [No.]	[mm]	[mm]	[in]	
Button bit / Stiftbohrkrone / Taillant à boutons métal dur / Broca de botones	64 65 66 67	HEM BAL HEM HEM	8 8 8 8	14 14 14 16	6 6 7 8	12.7 12.7 14 14	102 102 115 127	4" 4" 4 1/2" 5"	7.40 7.40 10.20 13.00
Flat Face / Retrac      4 Front Flushing Holes	68 69 70	HEM HEM HEM	10 10 10	14 16 16	9 7 8	12.7 16 16	115 127 140	4 1/2" 5" 5 1/2"	10.20 13.00 17.20
StarFlow Flat Face / Retrac      5 Front Flushing Holes	71 72	HEM BAL	6 6	14 14	3 3	12.7 12.7	89 89	3 1/2" 3 1/2"	5.20 5.20
Drop Center / Retrac      3 Front Flushing Holes	73 74 75 76 77 78 79 80	HEM BAL CON HEM BAL HEM HEM HEM	8 8 8 8 8 8 8 8	11 11 14 14 14 14 16 16	4 4 4 4 4 4 4 4	11 11 11 12.7 12.7 14 16 16	89 89 89 102 102 115 127 140	3 1/2" 3 1/2" 3 1/2" 4" 4" 4 1/2" 5" 5 1/2"	5.20 5.20 5.20 7.40 7.40 9.90 12.60 17.00
Drop Center / Retrac      4 Front Flushing Holes	81 82 83	HEM HEM HEM	10 10 10	14 16 16	5 5 5	12.7 16 16	115 127 140	4 1/2" 5" 5 1/2"	9.90 12.60 17.00
StarFlow Drop Center / Retrac      5 Front Flushing Holes									

HEM = Hemispherical button / Kugelstift / Boutons hémisphériques / Botones esféricos

BAL = Semi Ballistic button / Paraboloidstift / Boutons semi paraboliques / Botones semi parabólicos

CON = Conical carbide on request / Deltastift auf Anfrage / Boutons delta sur demande / Botones conicos a solicitud

MP = MultiPoint carbide on request / MultiPoint Stift auf Anfrage / Boutons MultiPoint sur demande / Botones MultiPoint a solicitud



# Extension drilling tools

## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCKMORE  
INTERNATIONAL



## XT51 (2")



Extension rod Verlängerungsstange Tige allonge Barra de extensión	Reference Number	D		L		Weight Gewicht Poids Peso [kg]
[mm]	[in]	[mm]	[ft in]			
<b>MF-rod Rd 52 / Ø 21.5 mm (2 1/16" / Ø 27/32")</b>	84	72	2 27/32"	1830	6'	27.30
	85	72	2 27/32"	3050	10'	46.00
	86	72	2 27/32"	3660	12'	52.50
	87	72	2 27/32"	4000	13' 1-1/2"	57.00
	88	72	2 27/32"	4270	14'	61.00
	89	72	2 27/32"	4880	16'	67.90
	90	72	2 27/32"	5490	18'	78.00
	91	72	2 27/32"	6100	20'	86.50
Starter Guide Tube Modular 3-Piece Design	Reference Number	D		L		Weight Gewicht Poids Peso [kg]
[mm]	[in]	[mm]	[ft in]			
<b>MF-Tube Rd 76 (3") -- Modular 3-Piece Design</b>	92	76	3"	3660	12'	80.00
	93	76	3"	4270	14'	98.70
Additional lengths available upon request.						
Shank adapters (striking bars) Einstechende Tiges d'emmanchement Adaptadores						
	See ROCKMORE catalog for complete list of suitable shank adapters (striking bars).					
Bit adapter Übergangsstück Manchon d'adaptation Adaptador de broca	Reference Number	Thread / Gewinde Filet / Rosca		D		Weight Gewicht Poids Peso [kg]
A	B	[mm]	[in]	[mm]	[in]	
	94	T45	XT51	63	2 31/64"	4.10
	95	XT51	T45	72	2 27/32"	3.85
	96	XT51	ST58	76	3"	5.70

# Extension drilling tools

## Verlängerungsbohrausrüstung

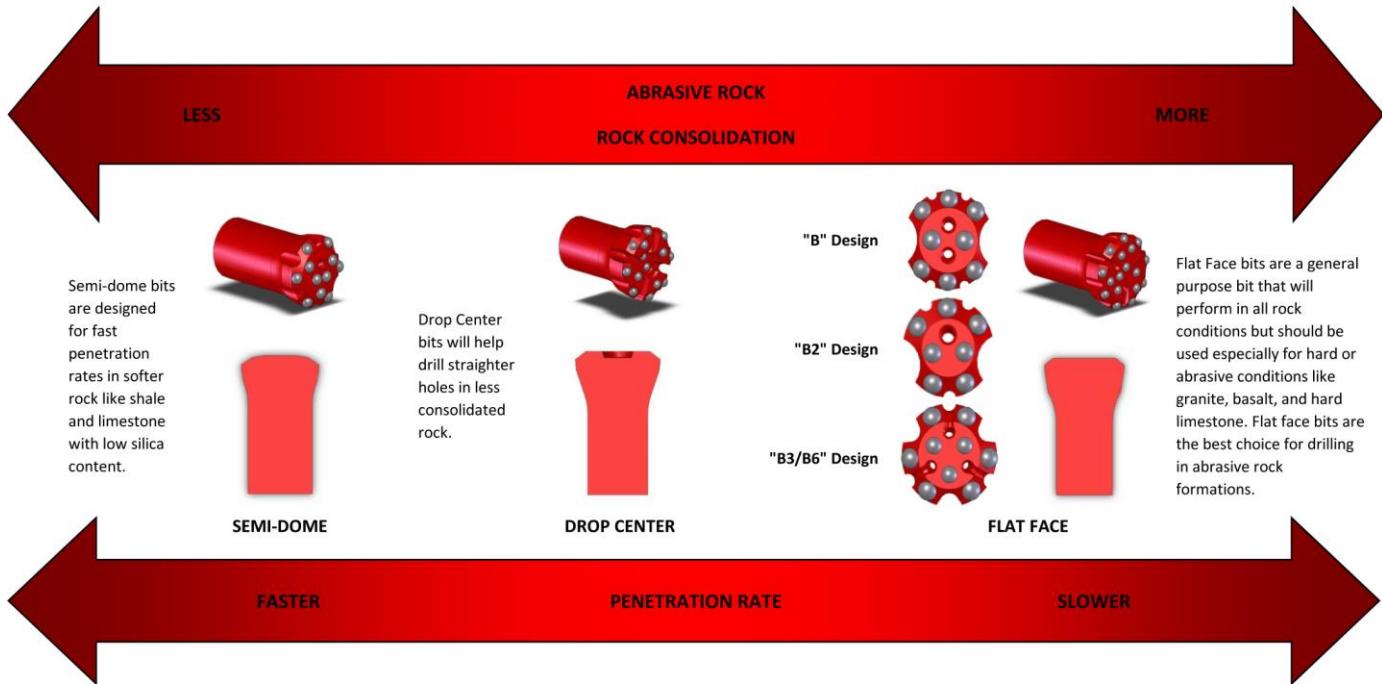
Equipement d'allonge

Varillaje de extensión

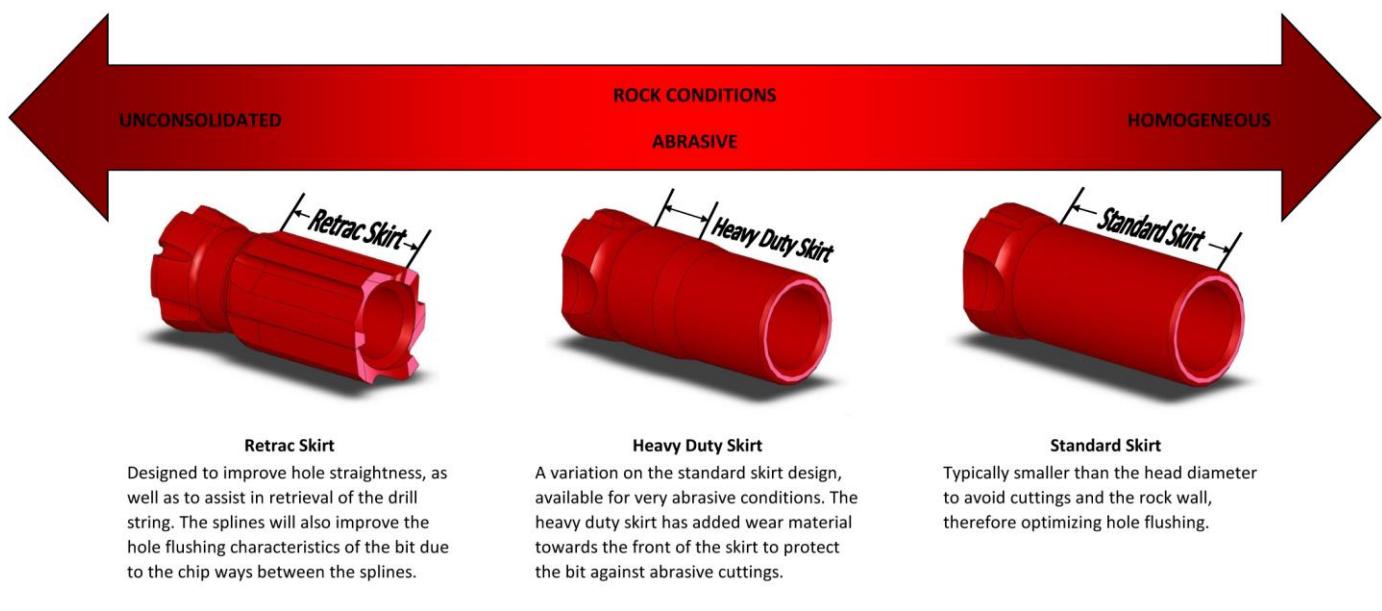


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## BIT FACE SELECTION



## SKIRT SELECTION



## **Extension drilling tools**

## **Verlängerungsbohrausrüstung**

## Equipement d'allonge

## Varillaje de extensión



**R O C K M O R E**  
INTERNATIONAL

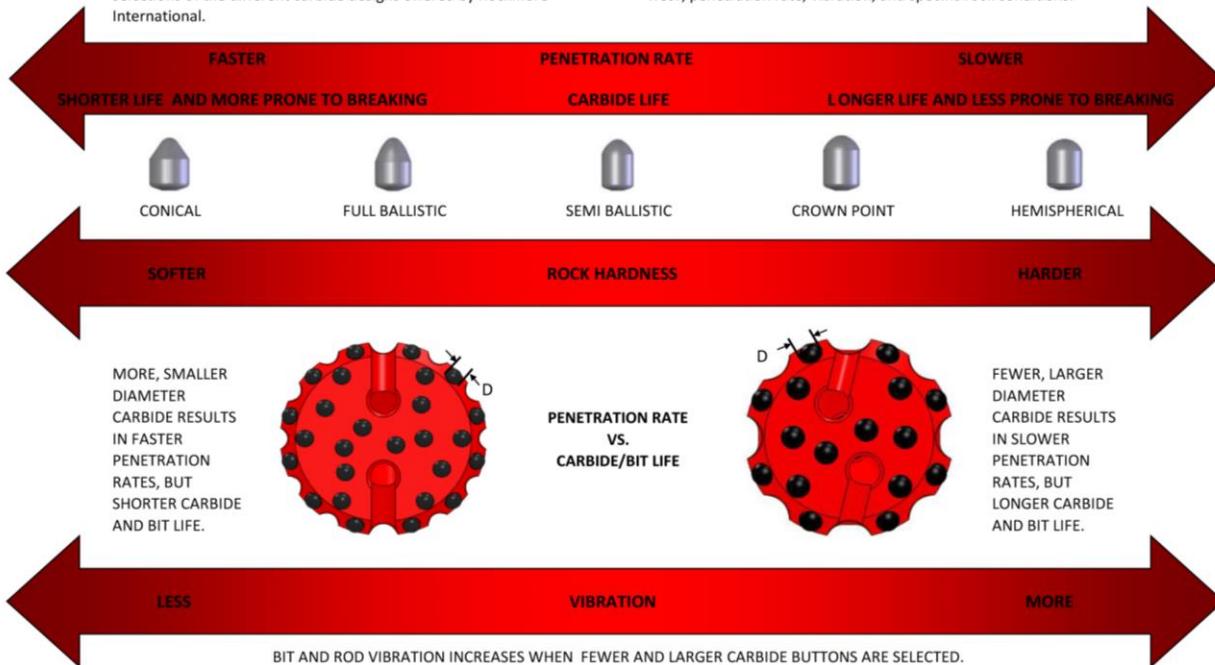
## **CARBIDE SELECTION**

Carbide Designs

Perhaps the most fundamental decision when selecting different carbide configurations is profile shape. Button bits most commonly have either a hemispherical or semi-ballistic carbide design; however it is not uncommon to use other carbide designs as well. Below are selections of the different carbide designs offered by Rockmore International.

## **Carbide Configurations**

Most face designs for button bits are offered in multiple carbide configurations and typically differ in diameter, shape (i.e. profile) and quantity. There are some general guidelines to follow while selecting between multiple carbide configurations including resistance to wear, penetration rate, vibration, and specific rock conditions.



MULTIPORT

**MultiPoint** -- the next generation carbide insert. Rockmore's exclusive new carbide insert design provides multiple strike points for more efficient rock fracture and longer insert life. Along with longer insert life, MultiPoint carbides also provide smoother bit rotation and advancement.



## **SKIRT SELECTION**



## **Retrac Skirt**

Designed to improve hole straightness, as well as to assist in retrieval of the drill string. The splines will also improve the hole flushing characteristics of the bit due to the chip ways between the splines.



### **Heavy Duty Skirt**

A variation on the standard skirt design, available for very abrasive conditions. The heavy duty skirt has added wear material towards the front of the skirt to protect the bit against abrasive cuttings.



#### **Standard Skirt**

Typically smaller than the head diameter to avoid cuttings and the rock wall, therefore optimizing hole flushing.

# Extension drilling tools

Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



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CRAFTED WITH PRIDE  
IN U.S.A.

EXTRAC RETRAC BIT

## Xtrac BIT DESIGN

### Tapered Body Retrac Bit

Designed to improve top-hammer drill and blast operations. The Xtrac retrac bit increases overall drilling productivity by incorporating enhancements in the bit body design and improvements in the configuration of flushing geometry. This promotes straighter holes, faster penetration rates and longer bit life.

Available in standard "T" threads and the new "XT" thread connections of the Vector Rod System



AVAILABLE WITH THE FOLLOWING CARBIDE PROFILES



CONICAL



SEMI BALLISTIC



CROWN POINT



HEMISpherical



MULTIPOINT

Rev. 0

# Extension drilling tools

Verlängerungsbohrausrüstung

Equipement d'allonge

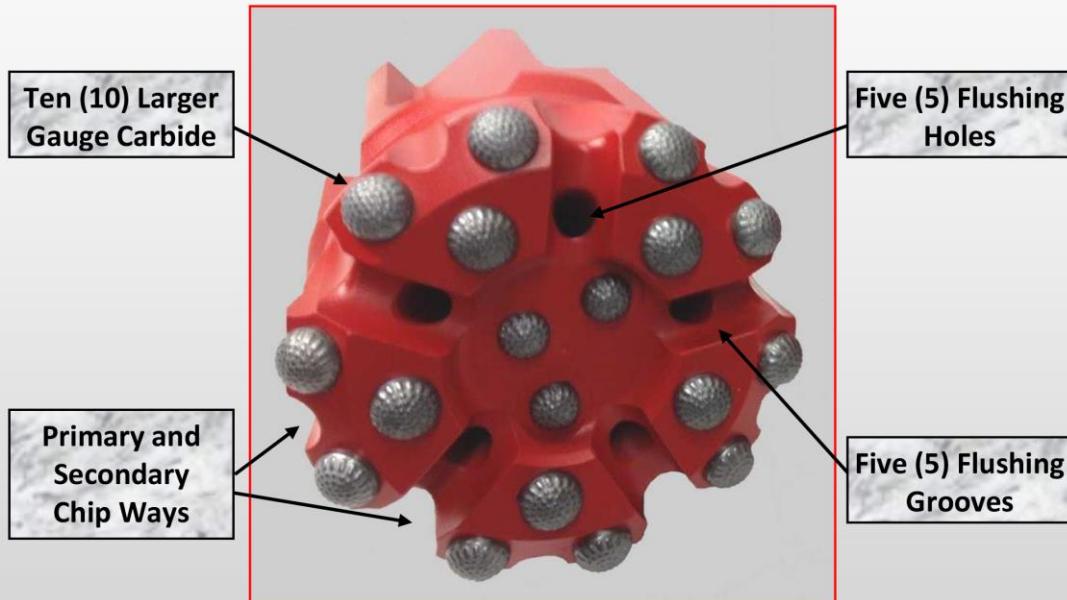
Varillaje de extensión



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## STARFLOW BIT DESIGN



- ★ OPTIMAL FOR HARD, ABRASIVE AND CHALLENGING ROCK FORMATIONS
- ★ OFFERED IN 115mm & 127mm (4-1/2" & 5") DIAMETERS
- ★ AVAILABLE IN FLAT FACE AND DROP CENTER FACE DESIGNS
- ★ TEN (10) LARGER TUNGSTEN CARBIDE INSERTS ON THE GAUGE ROW FOR ENHANCED ROCK BREAKING
- ★ FIVE (5) FLUSH HOLES AND FLUSH GROOVES EFFECTIVELY CARRY THE ROCK CUTTINGS AWAY FROM THE BIT FACE
- ★ PROLONGED BIT LIFE AND INCREASED DRILLING PENETRATION RATES
- ★ INCREASED DRILLING EFFICIENCY AND REDUCED OPERATING COST

AVAILABLE WITH THE FOLLOWING CARBIDE PROFILES



SEMI BALLISTIC



CROWN POINT



HEMISPERICAL



MULTIPOINT

Rev. 09/25/23

# Extension drilling tools

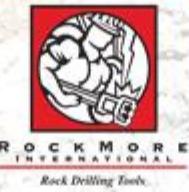
## Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



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## STARTER GUIDE TUBE

### STRAIGHT-HOLE DRILLING



#### Available Female Threads:

- T45
- XT45
- T51
- T51
- GT60

#### Available Lengths (L):

- 3660mm (12')
- 4270mm (14')
- Per request

#### Available Male Threads:

- T45
- XT45
- T51
- T51
- GT60



### MODULAR 3-PIECE DESIGN

- ♦ Modular design: Thread ends can be changed to suit needed application
- ♦ Replaceable female and male thread ends easily assembled to center tube
- ♦ Superior performance compared to standard guide tubes
- ♦ 92mm to 152mm (3-5/8" to 6") bit diameters
- ♦ Optimal for unconsolidated rock conditions
- ♦ Male/Female (MF) design reduces thread wear
- ♦ Diameter of guide tube is larger and more rigid than standard drill rods, resulting in straighter holes
- ♦ Stronger thread connections, resulting in less breakages
- ♦ Improved energy transfer
- ♦ Increased drilling efficiency reduces operating costs
- ♦ Extended service life of entire drill string



# Extension drilling tools

Verlängerungsbohrausrüstung

Equipement d'allonge

Varillaje de extensión



ROCKMORE  
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CRAFTED WITH PRIDE  
IN U.S.A.



ROCKMORE  
INTERNATIONAL

Rock Drilling Tools



## The Next Generation Carbide Insert

••• MULTIPONT •••



- Unique multiple contact carbide points
- Exclusive ROCKMORE design
- Smoother bit rotation & advancement

- More efficient rock fracture
- Longer insert life
- Faster penetration rates



[www.rockmore-intl.com](http://www.rockmore-intl.com)



Rev. 09/25/23

For all your rock drilling tool needs contact  
**ROCKMORE INTERNATIONAL**



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