Epiroc TC drill strings

Optimized bench and production drilling

Epiroc

More time for drilling

The Epiroc TC drill string has a tough, conical shaped trapezoidal T-thread system. More material where it is needed means a stronger, stiffer rod with improved wear resistance, that prevents blast hole deviations and reduces downtime for rod and shank changes.

The TC drill string is developed for mines and surface drilling projects where there is a demand for cable bolting and production drilling. Our drilling system comes in 2 dimensions: TC35, TC42B with hole ranges from 54 to 76 mm.

A more rigid drill string means fewer tensile shock waves that lead to the stresses causing thread breakage, extending the service life. Maintenance can be planned, less stock carried for replacements and productivity optimized by drilling straighter and more accurate holes.

Adapted to the new generation of powerful hydraulic rock drills the TC drill string transmits that power into the rock efficiently and reliably. With a faster rate of advance it lowers the cost per drill meter, boosting productivity and increasing safety and operator efficiency.

Main benefits

More drilled meters per day – improved thread stability, quicker bit and rod changes mean less downtime, and higher productivity

Straighter holes – more material at the rod end means thicker and stronger rods, minimizing deviation with easier collaring

Less replacement parts and a longer service life – with less wear on the rock drill thanks to the ingenious design of the conical thread system

Scan to read more about our products.

Straightness and accuracy. Optimized productivity.

The TC conical shape means more quality material at the rod bit end to minimize breakage with less tendency for deviation when collaring. High quality materials combined with state-of-the-art manufacturing means equipment holds up to heavy duty drilling cycles with superior product life for all rock formations.

Boost your bench and production drilling productivity

The Epiroc TC drill string translates into a very real boost in productivity, with straighter holes, longer rod service life and quicker bit changes that save time for operators. With Epiroc´s T-thread drill string you can expect higher productivity and a better service life which means lower cost of ownership.

+ Sustainability

The TC drill string is adapted to a new generation of rock drills with a considerably longer rod life and less wear thanks to the design of the conical shaped rope thread that leads to less breakages.

+ Operator in focus

High operator acceptance thanks to easy coupling and uncoupling of the drill bits. Easy uncoupling provides a safer working environment, and a stronger drill string means less stoppages for bit and rod changes.

+ Improved performance

A thread pitch optimized to reduce tensile shock waves in the drill string, with a higher fatigue strength and effective transfer of energy improves resistance and reliability, raising productivity with less wear, better fuel efficiency and sustainable drilling.

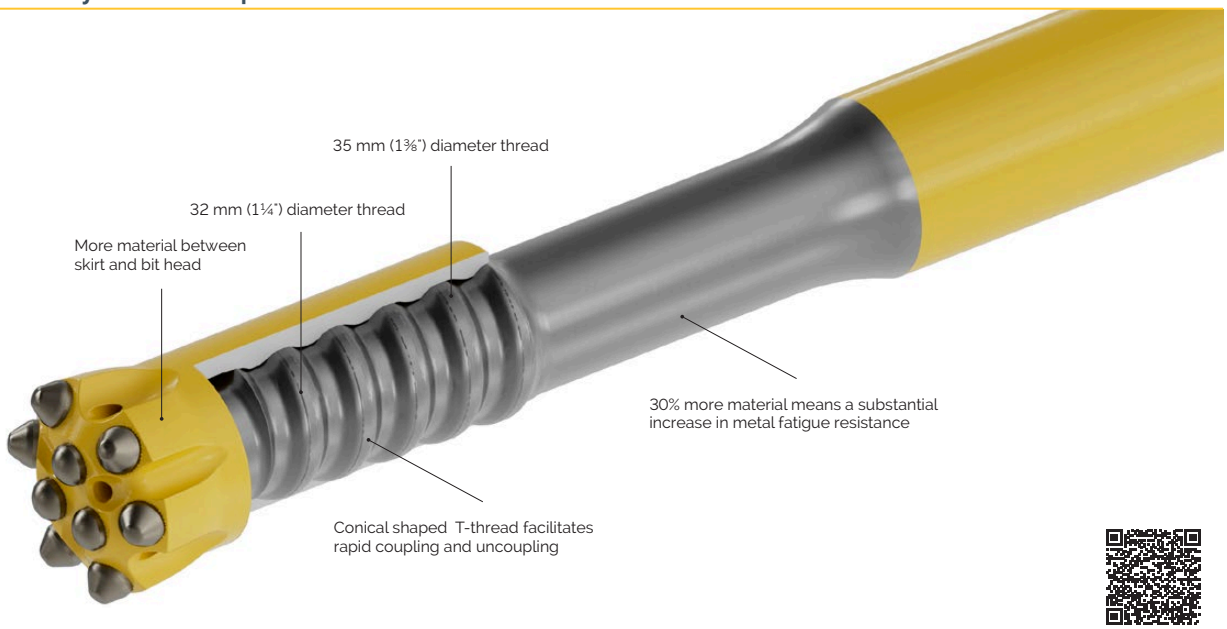
A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

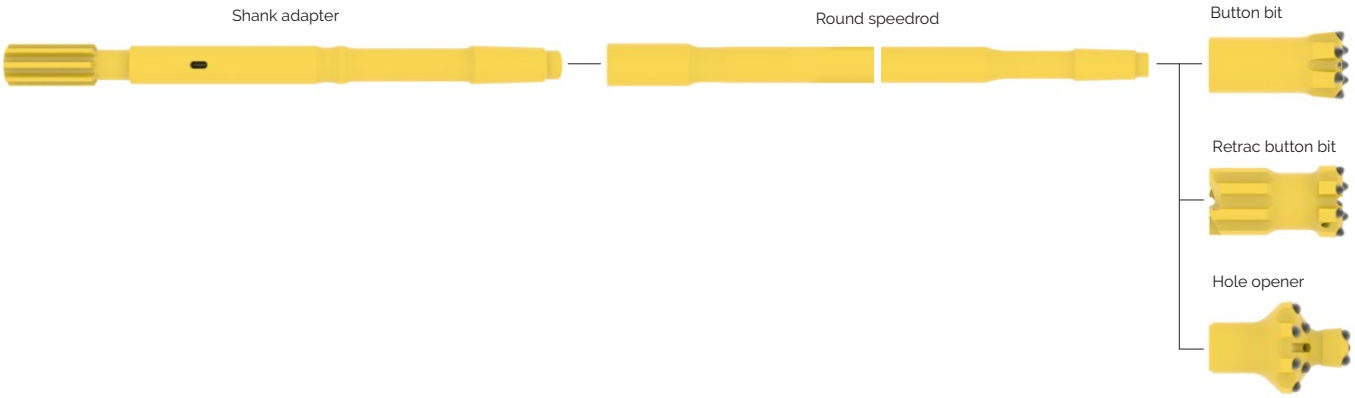
Epiroc TC drill strings – Technical specifications

Epiroc TC thread system – Example below shows TC35



Discover more about Epiroc TC drill string family

Example of Epiroc TC drill string



Example of Epiroc TC drill bits

For more drill bits and other technical specifications, see next page or Epiroc Tophammer catalogue.

Short retrac bit

Standard retrac bit

Dome bit

Hole opener

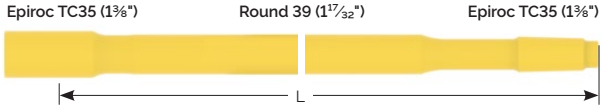
Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size thanks to drilling conditions, drilling practices and ground formation.

Epiroc TC35 drill strings – Technical specifications

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic buttons														
90516564	169-6054-67,39-20	Drop Center	Std	54	2⅛"	No	9	6x10	3x9	40°	-	3	-	87004754
90516536	169-6057-45-67,39-20	Drop Center	Std	57	2¼"	Yes	9	6x11	3x9	40°	-	3	0	87003734
90029059	169-6076-44-67,49-20	Drop Center	Std	76	3"	Yes	13	8x11	5x11	35°	-	-	4	87003985
Spherical buttons														
90029298	169-6057-45,39-20	Drop Center	Std	57	2¼"	Yes	9	6x11	3x9	40°	-	-	3	87003487
Spherical buttons														
90029572	169-9127-51,49-20	Hole Opener	Std	127	5"	No	17	8x14,5	9x12,7	25°	-	-	3	-

Speedrods



Fully carburized. D = 46 mm. Without wrench flat.
Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch				mm	mm	mm		
90003595	269-4712-MF-C,02	1 220	4'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003647	269-4715-MF-C,02	1 525	5'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003576	269-4718-MF-C,02	1 830	6'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003646	269-4724-MF-C,02	2 435	8'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003577	269-4731-MF-C,02	3 050	10'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003578	269-4737-MF-C,02	3 660	12'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003579	269-4743-MF-C,02	4 270	14'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive

Cross-Over Coupling

Cross-Over Coupling

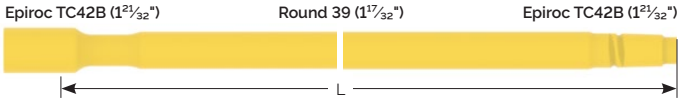
Product No.	Product code	Short description	Diameter (D)		Length	
			mm	inch	mm	inch
90003560	369-1050-03,10	TC35-R32	50	1 31/32"	170	6¾"

Epiroc TC42B drill strings – Technical specifications

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic buttons														
5697002168	172-6057-44-70,37-20	Drop Center	Std	57	2¼"	Yes	10	6x11	3x9	35	–	1	3	87003487
90029844	172-6064-48-45-67,57-20	Drop Center	Std	64	2½"	Yes	13	8x10	4x10	35	–	–	4	87003985

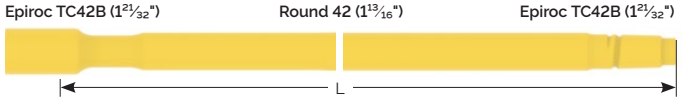
Speedrods



Fully carburized. D = 56 mm. Without wrench flat.
Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch				mm	mm	mm		
90029851	272-4724-MF-C,02	2 435	8'	TC42B	C	Rnd39	39	14,5	46	No	Bottom drive
90029838	272-4731-MF-C,02	3 050	10'	TC42B	C	Rnd39	39	14,5	46	No	Bottom drive
90029852	272-4737-MF-C,02	3 660	12'	TC42B	C	Rnd39	39	14,5	46	No	Bottom drive

Guide rods



Fully carburized. D = 56 mm.
Flushing hole diameter 17,0 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch				mm	mm	mm		
90029846	272-4937-MF-C,02	3 660	12'	TC42B	C	Rnd42	42	17	56	No	Bottom drive
90029847	272-4949-MF-C,02	4 920	16'1¾"	TC42B	C	Rnd42	42	17	56	No	Bottom drive
90029848	272-4955-MF-C,02	5 530	18'1¾"	TC42B	C	Rnd42	42	17	56	No	Bottom drive
90029839	272-4961-MF-C,02	6 095	20'⅛"	TC42B	C	Rnd42	42	17	56	No	Bottom drive

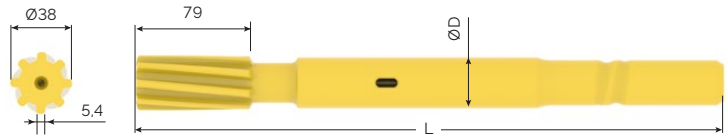
Cross-Over Coupling

Cross-Over Coupling

Product No.	Product code	Short description	Diameter (D)		Length	
			mm	inch	mm	inch
90029837	335-1057-72,10	T38-TC42B	72	2 27/32"	225	6⅞"

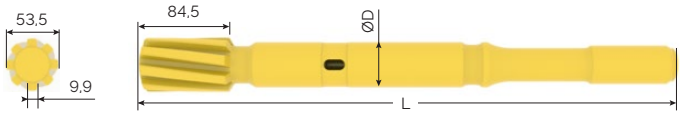
Epiroc TC35 and TC42B drill strings – Technical specifications

COP 1140
COP SC14, RR14



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90003555	469-19001,10	TC35	410	35	27.8	Helical	79	38	5,4	Standard

COP 3038, 4038



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting and Production drilling										
90029836	472-18703,10	TC42B	525	45	34,9	Helical	84,5	53,5	9,9	Standard

Products in this brochure are just a part of our wide range.
For the rest of the range, please see our Tophammer product catalogue.