



Rocktools Catalogue

**HELSO OY**

ROCKTOOLS

Rock drilling tools for better value

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[www.helso.fi](http://www.helso.fi)

# HELSO OY

## QUALITY BITS FOR BETTER VALUE

Helso Oy, a company dealing in rock drilling tools, is located in the capital area of Finland. The company specialises in button bits for percussive rock drills. The high quality of Helso products is based on continuous product development in Finland, while the cost-effective manufacturing allows for the attractive pricing. The manufacturing plant meets all the demands of the market, and has achieved the ISO 9001 quality certification. The production is based on a long term contract, which guarantees a steady and reliable supply.

## EXPERTISE IN ROCK DRILLING

Helso was established in 1988 and has grown steadily since its foundation. However, the roots of the company go much further than that. The success of Helso is based on 30 years of experience in the heart of the rock drilling business. Helso drill bits have been designed to give our customers the advantage of optimal performance based on the most modern techniques and know-how in the field. Our product range includes most international standard threaded button bits with either spherical, ballistic or conical buttons, flat-face or drop-centre options, as well as retrac and longer length versions. We can also offer you flexible solutions to fit with your specific product requirements. Helso buttons bits can be used with most rock drilling equipment.

## INTERNATIONAL EXPANSION

During the years Helso button bits have achieved a prominent position in the Finnish market. Now these high quality products are not only available in Scandinavia, but also elsewhere in Europe and Asia. We can assure you satisfaction with Helso rock drilling tools.

# INSTRUCTIONS

## HELSO Drill Bit Product Code System

**6** 4 Tube thread  
6 T-thread  
7 R-thread  
8 GT-thread

**73** Threaded bits

**6** 1=22mm, 7/8" thread  
2=25mm, 1" thread  
3=32mm, 1 1/4" thread  
4=38mm, 1 1/2" thread  
5=45mm, 1 3/4" thread  
6=51mm, 2" thread  
9=28mm, 1 1/8" thread

### 5th and 6th

02 4 gauge buttons, normal  
03 4 gauge buttons, normal heavy duty  
04 5 gauge buttons, normal  
05 5 gauge buttons, normal heavy duty  
66 6 gauge buttons, normal  
67 6 gauge buttons, normal heavy duty  
86 6 gauge buttons, retrac  
87 6 gauge buttons, retrac heavy duty

### Diam 61mm and over

66 8 gauge buttons, normal  
67 8 gauge buttons, normal heavy duty  
68 9 gauge buttons, normal  
84 8 gauge buttons (8+6) diam 12/11  
85 8 gauge buttons, retrac drop center  
86 8 gauge buttons, retrac  
87 8 gauge buttons, retrac heavy duty  
88 9 gauge buttons, retrac  
89 9 gauge buttons, retrac 12mm  
95 8 gauge buttons, retrac drop center long  
96 8 gauge buttons, retrac long

### 7th and 8th

Nominal diameter

**9** S Spherical  
B Ballistic  
SB Semi Ballistic

**10** Hartmetal grade 6

**All button bits can be received with either spherical, ballistic or semi ballistic buttons**

## Bit codes used in catalog

**R** Retrac for applications where broken ground is a problem and also used where hole directional stability is required.

**DC** Drop Center suitable for soft rock and where hole deviation needs to be a minimum.

**HD** Heavy Duty suitable for applications where carbide wear is high, e.g. hard and abrasive rock.

**L** Long long body

## Concerning bit diameters

Note that all bits are bigger on diameter than the given measurements in the catalogue. Button bits can be max 2,5 mm larger in order to make up for fast initial wear on the diameter. The minimum diameter is 1 mm above given measurement. Keep in mind that depending on rock conditions the hole can be up to 4 mm bigger than bit diameter.

## Non standard products

Products in this catalogue are standard items. We however can supply non standard products to solve specific customer problems.

## Attention

Helso reserves the right to amend product specification without prior notice.

# HELSO OY

Threaded button bits

# TAPER

TAPER BITS 12 DEG



1222-0430

1222-0633

1222-0635

1222-0638

1222-0641

1222-0645

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
30	1222-0430		5x7	2x7		1x4	1x4			0,190
32	1222-0632		6x7	2x7		2x4				0,260
33	1222-0633		6x7	2x7		2x4				0,260
35	1222-0635		6x8	2x7		2x4	2x5			0,300
38	1222-0638		6x8	2x7		2x4	2x4			0,290
41	1222-0641		6x8	2x8		2x5	1x5			0,360
45	1222-0645		6x8	2x8		2x5	2x5			0,440

Also available in other degrees 7 and 11

# R25

## ROPE-THREAD 1"



Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
35	7732-0435		5x9	2x7		1x5	2x5	95	31	0,390
38	7732-0638		6x8	2x7		2x5	1x5	90	34	0,440
41	7732-0641		6x9	2x8		2x5	1x5	90	36	0,450

\* Ballistic / Spherical / Semi ballistic



Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
45	7732-0645		6x9	3x8		3x6	1x6	100	36	0,650

\* Ballistic / Spherical / Semi ballistic

# HELSO OY

## Threaded button bits

**R28**  
ROPE-THREAD 1 1/8"



Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
38	7739-0638		6x8	2x7		2x5	1x5	90	34	0,450
41	7739-0641		6x9	2x8		2x5	1x5	90	36	0,500

\* Ballistic / Spherical / Semi ballistic



7739-6645



7739-6651

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
45	7739-6645		6x9	3x8		3x6	1x6	112	38	0,800
51	7739-6651		6x10	3x9		3x7	1x7	115	40	0,940

\* Ballistic / Spherical / Semi ballistic

# ROPE

## ROPE THREAD 1 1/4"



7733-0641  
7733-0645

7733-6651

7733-8651  
7733-8657

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
41	7733-0641		6x9	3x8		3x6	1x6	115	41	0,650
45	7733-0645		6x9	3x8		3x6	1x6	115	41	0,760
51	7733-6651		6x10	3x9		3x6	1x6	120	43	0,970
51	7733-8651	Retrac	6x10	3x9		3x6	1x6	135	50	1,250
57	7733-8657	Retrac	6x10	3x10		3x8	1x6	135	56	1,680

\* Ballistic / Spherical / Semi ballistic

# HELSO OY

Threaded button bits

**R92**  
ROPE THREAD 1 1/4"



Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
57	7733-6657		6x10	3x10		3x8	1x6	121	46	1,200
64	7733-6664		8x10	4x10		2x8	2x7	121	50	1,620
64	7733-8564	Retrac DC	8x11	4x11	1x11	4x12	2x7	145	60	1,900

\* Ballistic / Spherical / Semi ballistic



# R&S

ROPE THREAD



7735-6648  
7735-6651



7735-8651  
7735-8657

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
48	7735-6648	Retrac	6x10	3x9		3x6	2x6	113	44	0,810
51	7735-6651		6x10	3x9		3x6	2x6	113	44	0,910
51	7735-8651	Retrac	6x10	3x9		3x6	1x6	133	50	1,200
57	7735-8657	Retrac	6x10	3x10		3x8	1x8	135	56	1,680

\* Ballistic / Spherical / Semi ballistic

# HELSO OY

Threaded button bits

# T95

T-THREAD



6733-8554

6733-8557

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
54	6733-8554	Retrac	6x10	3x9		3x6		130	48	1,260
57	6733-8557	Retrac	6x11	3x10		3x7		130	51	1,480

\* Ballistic / Spherical / Semi ballistic

# RETRAC

## ROPE THREAD 1 1/2"



7734-6664  
7734-6670



7734-8564  
7734-8570



7734-8664  
7734-8670

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
64	7734-6664		8x10	4x10		2x10	2x7	130	55	1,820
64	7734-8564	Retrac DC	8x10	4x10	1x10	2x9	2x7	160	64	2,620
64	7734-8664	Retrac FF	8x10	4x10		2x10	2x7	160	64	2,340
70	7734-6670		8x10	4x10		2x10	2x7	140	68	1,800
70	7734-8570	Retrac DC	8x10	4x10	1x10	2x10	2x7	140	68	2,660
70	7734-8670	Retrac FF	8x10	4x10		2x10	2x7	140	68	2,700

\* Ballistic / Spherical / Semi ballistic

# HELSO OY

Threaded button bits

# T98

T-THREAD 1 1/2"



Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
60	6734-6660		8x10	4x10		2x10	2x6	135	55	1,500
60	6734-8560	Retrac DC	8x10	4x9	1x8	4x8	1x7	150	58	1,740
64	6734-6664		8x10	4x10		2x10	2x6	135	55	1,820
64	6734-8564	Retrac DC	8x10	4x10	1x9	4x8	1x7	150	61	1,920
64	6734-8664	Retrac FF	8x10	4x10		2x10	2x7	160	64	2,600

\* Ballistic / Spherical / Semi ballistic

# T98

## T-THREAD 1 1/2"



6734-6576



6734-8570  
6734-8576



6734-8670  
6734-8676

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
70	6734-6670		8x10	4x10		2x10	2x7	130	55	1,940
70	6734-8570	Retrac DC	8x10	4x10	1x9	4x8	1x7	150	68	2,790
70	6734-8670	Retrac FF	8x10	4x10		4x10	2x7	150	68	2,600
76	6734-6576	DC	8x11	4x11		4x10	2x8	140	62	2,500
76	6734-8576	Retrac DC	8x11	4x11	1x11	4x10	1x8	165	74	3,200
76	6734-8676	Retrac FF	8x11	4x11		4x10	2x8	165	74	3,300

\* Ballistic / Spherical / Semi ballistic

# HELSO OY

## Threaded button bits

# T45



6735-6570  
6735-6576



6735-8570  
6735-8576  
6735-8583



6735-8670  
6735-8676  
6735-8680  
6735-8683  
6735-8689

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
70	6735-6570		8x11	4x11	1x11	4x8	2x8	146	62	2,500
70	6735-8570	Retrac	8x11	4x11		4x10	1x7	163	74	2,400
70	6735-8670	Retrac FF	8x11	4x11		4x10	1x7	163	74	2,600
76	6735-6576		8x11	4x11		2x11	2x7	140	62	2,500
76	6735-8576	Retrac DC	8x11	4x11	1x11	4x10	1x8	162	74	3,200
76	6735-8676	Retrac	8x11	4x11		4x10	1x8	165	74	3,200
80	6735-8680		8x11	6x11		2x13	2x7	177	76	3,900
83	6735-8583		8x11	6x11	1x11	2x13	2x7	177	78	4,300
83	6735-8683		8x11	6x11		2x13	2x7	177	78	4,300

\* Ballistic / Spherical / Semi ballistic

# T45

T-THREAD 1 3/4"



6735-8689



6735-8589  
6735-8502



6735-6602



6735-9589

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
89	6735-8689	Retrac	8x12	6x12		2x13	2x8	180	88	5,400
89	6735-8589	Retrac DC	8x12	4x11	2x9	4x11	2x8	180	88	5,300
89	6735-9589	R D L	8x12	4x12	2x8	4x11	2x8	236	88	7,000
102	6735-6602		8x14	6x14		2x15	2x7	180	80	6,000
102	6735-8502	Retrac DC	8x12	4x12	4x10	4x10		185	100	7,900
102	6735-8602	Retrac FF	8x12	4x12	4x12	4x10		185	100	8,000

\* Ballistic / Spherical / Semi ballistic

# HELSO OY

Threaded button bits

# T-THREAD 2"



6736-6589



6736-8689



6736-8589  
6736-8583

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
83	6736-8583	Retrac	8x12	4x11	2x9	4x10	2x8	185	82	4,300
89	6736-6589		8x12	4x12	2x10	4x10	2x8	175	74	4,300
89	6736-8589	Retrac	8x12	4x12	2x10	4x11	1x8	185	88	5,000
89	6736-8689	Retrac	8x12	6x12		2x14		180	88	5,000

\* Ballistic / Spherical / Semi ballistic



# T51

T-THREAD 2"



6736-6602



6736-8502  
6736-8515



6736-8602  
6736-8615

Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
102	6736-6602		8x14	6x14		2x15		180	80	5,900
102	6736-8502	Retrac	8x14	6x12	2x12	2x15		180	100	6,800
102	6736-8602	Retrac	8x14	6x12		2x15		180	100	6,800
115	6736-8515	Retrac	8x14	6x12	2x12	2x15		185	112	10,200
115	6736-8615	Retrac	8x14	8x12		2x15		185	112	10,200

\* Ballistic / Spherical / Semi ballistic

# HELSO OY

Threaded button bits

# BT60



Diam mm	Product Number	Design*	Buttons			Flushing		Length L mm	Sleeve D mm	Weight kg
			Gauge mm	Front mm	Center mm	Front mm	Side mm			
102	6738-8502	Retrac DC	8x14	4x14	2x12	4x12				8,100
115	6738-8515	Retrac DC	8x14	4x14	3x12	4x12		218	103	9,000
127	6738-8527	Retrac DC	8x16	4x14	4x12	4x14		230	114	12,700

\* Ballistic / Spherical / Semi ballistic

# INDEX

Product Number	Page	Weight kg	Product Number	Page	Weight kg
6733-8554	10	1,260	6738-8502	18	8,100
6733-8557	10	1,480	6738-8515	18	9,000
			6738-8527	18	12,700
6734-6576	13	2,500			
6734-6660	12	1,500	7732-0435	5	0,390
6734-6664	12	1,820	7732-0638	5	0,450
6734-6670	13	1,940	7732-0641	5	0,450
6734-8560	12	1,740	7732-0645	5	0,650
6734-8564	12	1,920			
6734-8570	13	2,790	7733-0641	7	0,650
6734-8576	13	3,200	7733-0645	7	0,760
6734-8664	12	2,600	7733-6651	7	0,970
6734-8670	13	2,600	7733-6657	8	1,200
6734-8676	13	3,300	7733-6664	8	1,620
			7733-8564	8	1,900
6735-6570	14	2,500	7733-8651	7	1,250
6735-6576	14	2,500	7733-8657	7	1,680
6735-6602	15	6,000			
6735-8502	15	7,900	7734-6664	11	1,820
6735-8570	14	2,400	7734-6670	11	1,800
6735-8576	14	3,200	7734-8564	11	2,620
6735-8583	14	4,300	7734-8570	11	2,660
6735-8589	15	5,300	7734-8664	11	2,340
6735-8602	15	8,000	7734-8670	11	2,700
6735-8670	14	2,600			
6735-8676	14	3,200	7735-6648	9	0,810
6735-8680	14	3,900	7735-6651	9	0,910
6735-8683	14	4,300	7735-8651	9	1,200
6735-8689	15	5,400	7735-8657	9	1,680
6735-9589	15	7,000			
			7739-0638	6	0,450
6736-6589	16	4,300	7739-0641	6	0,500
6736-6602	17	5,900	7739-6645	6	0,800
6736-8502	17	6,800	7739-6651	6	0,940
6736-8515	17	10,200			
6736-8583	16	4,300			
6736-8589	16	5,000			
6736-8602	17	6,800			
6736-8615	17	10,200			
6736-8689	16	5,000			

## Attention

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# HELSO OY

## Threaded button bits

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# MAINTENANCE OF THE BITS

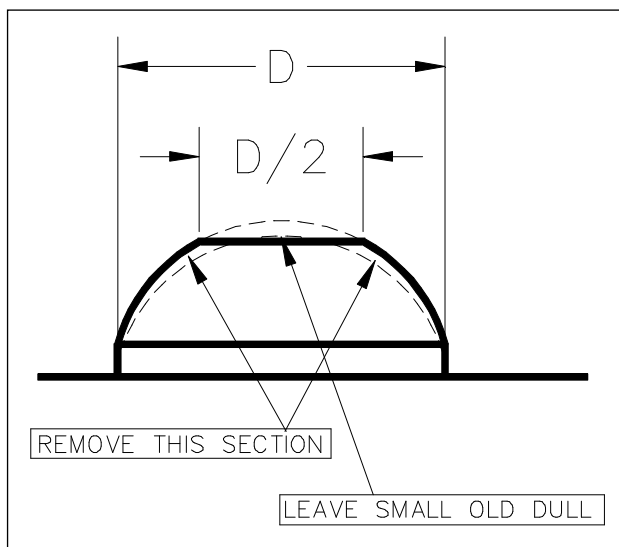
Grind the buttons to their original shape, when the dull width is as half of the diameter (D) of the button.

Continue the grinding until only a small portion of the old dull remains. This way all the buttons have the same height and contact to the rock and the percussive load will be evenly divided to the buttons.

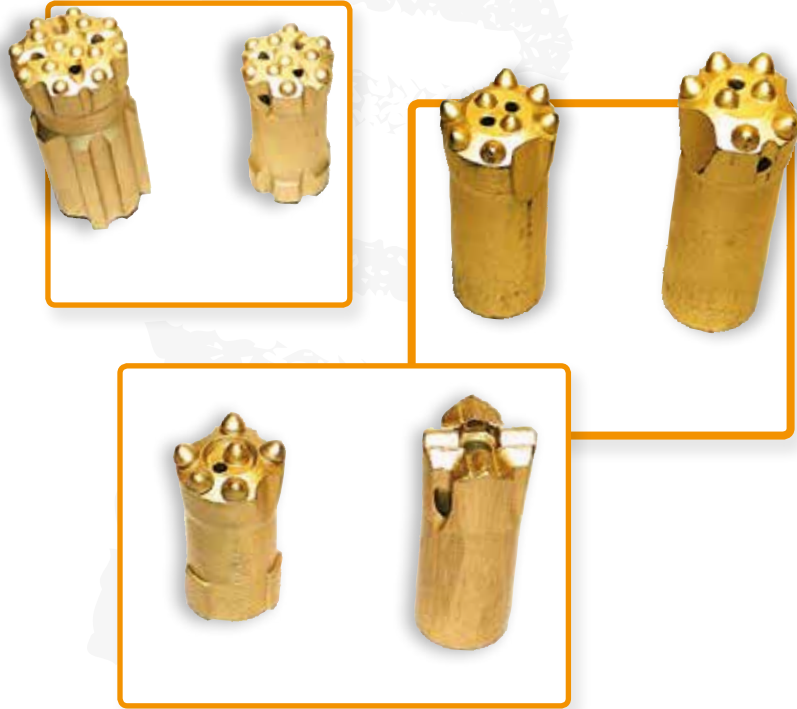
It is better to regrind too soon than too late. The risk of damage increases with the dull width, and at the same time the penetration rate decreases.

If needed remove the steel between the buttons to keep the protrusion of the buttons at least half of the button diameter. This increases the penetration rate and decreases the wear of the drilling tools and machinery.

To prevent cracks in the button, caused by excess heat, use soft enough ceramic grinding wheels. When using diamond grinding pins without water, lower the rotation speed to avoid over heating of the diamond pins and the button.



# Rocktools Catalogue



## HELSO OY

Rock drilling tools for better value

### HELSO OY

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