# **Thread repair kits**

#### 14800 HELICOIL® plus repair kit

230 pieces, set contents:

20 each of thread inserts

10 each of thread inserts

5 installation mandrels,

5 tang break mandrels.

M 6 x 12,

5 twist drills,

5 hand taps,

## HELICOIL plus

- The record holder for fast thread repairs:
- For scrap recovery and thread repair
- For repair of damaged or worn threads
- For thread reinforcement, where low-shearstrength materials, e.g. aluminium, are used (mechanical engineering, automotive, electrical and medical technology, etc.)
- Absolutely secure positioning, even under the most extreme loads, abrasion-resistant thread insert made of corrosion-resistant, wear-resistant and heat-resistant CrNi steel, ideal power transmission and increased load capacity of nut and bolt threads



14800

Set contents	Set size	14800
230 pieces	M 5 - M 12	202

14810

HELICOIL plus Applications

14810 103-106 Design

Set contents:

14810 107-112

1 twist drills, 1 hand taps, 1 installation mandrel, 1 tang break mandrel.

14810 113-114 Design Set contents:

1 hand taps,

1 installation mandrel.

30 thread inserts (10 per nominal length),

Design Set contents:

1 twist drills. 1 hand taps, 1 installation mandrel, 1 tang break mandrel.

Quality

# HELICOIL® plus repair packs





d mm	Nominal length	Core hole Ø mm	Number of inserts	14810		d mm	Nominal length	Core hole Ø mm	Number of inserts	14810	
	mm				400		mm				
M 3	3/4.5/6	3.2	60		103	M 9	9/13.5/18	9.4	30		109
M 4	4/6/8	4.2	60		104	M 10	10/15/20	10.5	30		110
M 5	5/7.5/10	5.2	60		105	M 11	11/17.5/22	11.5	30		111
M 6	6/9/12	6.3	60		106	M 12	12/18/24	12.5	30		112
M 7	7/10.5/14	7.3	30		107	M 14	14/21/28	14.5	30		113
M 8	8/12/16	8.4	30		108	M 16	16/24/32	16.5	30		114

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## Individual parts for HELICOIL® plus art. no. 14800 + 14810

## HELICOIL plus

Thread inserts M 3–M 6, pack = 20 pieces, M 8–M 12, pack = 10 pieces.

14802 - 14808

Short screw tap, HSS.

Installation mandrel.

Size

M 3 x 3

M3x6

M4x4

M4x6

M4x8

M 5 x 5

M 5 x 7.5

M 5 x 10

M 6 x 6

M6x9

M 6 x 12

M 8 x 8

M 8 x 12

M 8 x 16

M 10 x 10

M 10 x 15

M 10 x 20

M 12 x 12

M 12 x 18

M 12 x 24

M 3 x 4.5

Tang break-off tool.

Core hole Ø

mm

3.2

3.2

3.2

4.2

4.2

4.2

5.2

6.3

8.4

8.4

8.4

10.5

10.5

10.5

12.5

12.5

12.5



Screw tap

Tang break-off tool

Installation mandrel

Drilling tools

100
106
107
107
107

5.2	
5.2	
6.3	
6.3	

**###** 14.81

#### 11069 Solid-carbide tap removal tools

Note:

101

103

d<sub>1</sub> h9

mm

5.0

6.8

Stable clamping is required. Hole dry and free from cutting oil.

D**in** 6535 Ha

11069

VHM

TiN

#### Applications

With straight shank, self-centring.

12

mm

15

15

**H H** 

Design

For drilling out broken-off HSS and HSS-E screw taps.

#### Quality

d<sub>1</sub> h9

mm

3.3

4.2

Solid-carbide micro-fine grain/TiN-coated.

I<sub>1</sub>

mm

50

50

 $d_2 h6$ 

mm

6

6

11069

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ē	d2
<u> </u>	†

	d <sub>1</sub> h9 mm	l <sub>2</sub> mm	l <sub>1</sub> mm	d <sub>2</sub> h6 mm	11069	
05	8.5	25	70	10		109
07	10.2	30	75	12		111

Al<10%Si	Al>10%Si	Cu	St<520N	St<750N	St<900N	St<1100N	St<1200N	St<1400N	<45HRC	<55HRC	<60HRC	<67HRC	VA<900N	VA>900N	Ti alloy	GG(G)	Plastic
-	-	-	-	-	-	-	-	-	-	-	-	35–45	-	-	-	-	-

 $d_2 h6$ 

mm

6

8

1

mm

50

60

11069

1

#### 14900 - 14904 Screw tap extractors

the grooves of the broken screw tap by moving the

back and forth using a tap wrench until it loosens

For screw taps with 3 flutes. Complete delivery in

For screw taps with 4 flutes. Complete delivery in

upper retaining ring (1) and secured with the guide bush (2). The broken screw tap piece is moved

#### 14900-14903

Applications For broken screw taps. The fingers are guided into

and can be unscrewed.

14900 102-104 Screw tap extractor sets

Applications

14900 106-108 Screw tap extractor sets

Applications

a case.

a case.

14902 Screw tap extractor, individual Applications For screw taps with 3 flutes.

l<sub>2</sub>

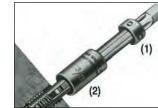
mm

15

20

14904 **Replacement fingers** For extractors in 3-flute design.





Sets Set contents	Extractor	3 flutes 14900		4 flutes 14900
6 pieces	M 4/5/6/8/10/12		102	
10	M 0 / 4 / F / C / 0 / 10 / 10 / 14 / 1C / 00		404	

6 pieces	M 4/5/6/8/10/12	102	106
10 pieces	M 3/4/5/6/8/10/12/14/16/20	104	
10 pieces	M 4/5/6/8/10/12/14/16/20/22		108

Individual	3 flutes	3 replacement fingers	
for screw tap Metric/Whitworth	14902	14904	
M 3/1/8	102		102
M 4/5/32	104		104
M 5/3/16	105		105
M 6/1/4	107		107
M 8/5/16	109		109
M 10/3/8	111		111
M 12/1/2	113		113
M 14/9/16	114		114
M 16/5/8	115		115
M 20/3/4	117		117



H:W

14929	Screw ta	ap ext	ractor sets	
Applications			14929 101	14929 101
For extracting broken so	prew taps.		Design - 6 pieces - Size 1-4 three-fluted - Size 5-6 four-fluted	
			14929 102 Design - 9 pieces - Size 2-4 three-fluted	
Set contents	14929		- Size 5-10 four-fluted	
6 pieces		101		
9 pieces		102	CHARLEN SE	

## 14930 - 14931

## Screw tap extractor

#### Applications

For extracting broken screw taps.

## 14930 For three-fluted screw taps.

14931 For four-fluted screw taps.



Size	for screw tap metric/Whitworth	Total length mm	Square mm	14930		14931	
1	M 4/5/32	55	3.0	1	101		
2	M 5/3/16	60	3.5	1	102		
3	M 6/1/4	60	3.8	1	103		103
4	M 8/5/16	60	5.0	1	104		104
5	M 10/3/8	70	6.0	1	105		105
6	M 12/1/2	70	7.5	1	106		106
7	M 14/9/16	70	8.5	1	107		107
8	M 16/5/8	80	10.5	1	108		108
9	M 20/3/4	80	13.0	1	109		109



## Bolt extractor set

#### Applications

Enables broken bolts and stud bolts to be professionally extracted. Quality HSS steel.

#### Set contents:

- 5 HSS drills 3.2/4.8/6.4/8.0/8.7 mm
- 10 drill guide bushes
- 5 extractor pins
- 5 extractor adapters

Set contents	for stud bolt Ø mm	Design	14933
25 pieces	5-16	in box	201

14933

14931



HIN

14.83

# 14935 Erosion drills eromobil®

## The new eromobil®

#### More compact, more functional, more practical

Since it was invented in 1972, the **eromobil®** has been, and remains to this day, the most effective solution for tool breakage. Broken-off screw taps, twist drills, reamers, etc. can be eroded in minutes. The device can be used quickly on column, radial and magnetic drills, milling machines, drilling equipment, as well as CNC machines. This minimises production downtimes and avoids damage to workpieces and additional costs. With its new design, the **eromobil®** is more compact and functional. The new intelligent design integrates all components in a clear and space-saving way, handling is easy and comfortable.

#### Functional principle

The hollow electrode is clamped in the oscillating head. Its diameter is smaller than the broken-off tool. The centre of the broken-off tool is dismantled during erosion. The cutting edges then loosen and can be removed easily. The electrode does not come into contact with the workpiece meaning the thread remains undamaged. The drilling emulsion usual in operation is used as a cooling lubricant.



Erosion drill	14934
er 230 s-ND	201
er 400 t-ND	202

Special accessories	14935	
WiFi inspection camera		103
Oscillating head mount, MK 2		105

Continued

eng/P

14.84

## 14936 - 14937 Electrodes and collet chucks for eromobil<sup>®</sup>

Collet chucks

14937

Continued 14936 Copper electrodes

Applications For tools made of HSS.

Note:

Special electrodes up to a diameter of 30 mm and 1000 mm in length, as well as electrodes made of graphite and tungsten-copper for machining of cemented carbide tools and square copper hollow electrodes from 3 x 3 mm to 30 x 30 mm are deliverable on request.

-				
Electrode Ø x length mm	for thread M	14936		Collet chucks Ø mm
1.0 x 250	2-2.6		101	1.0
1.5 x 250	3		102	1.5
2.0 x 250	4		103	2.0
2.5 x 250	5		104	2.5
3.0 x 250	5-6		105	3.0
3.5 x 250	6		106	3.5
4.0 x 250	6-8		107	4.0
4.5 x 250	8		108	4.5
5.0 x 250	8-10		109	5.0
6.0 x 250	10		110	6.0
7.0 x 250	12		111	7.0
8.0 x 250	12-14		112	8.0
10.0 x 250	16-20		113	10.0

Collet chucks Ø	14937	
mm		
1.0		101
1.5		102
2.0		103
2.5		104
3.0		105
3.5		106
4.0		107
4.5		108
5.0		109
6.0		110
7.0		111
8.0		112
10.0		113



14936

14.85

**Design** 51995 103
 51995 101

 **Day** Rapid attachment using adjusting screw. Automatic adjustment of the blade on any thread pitch.
 **MAZET OF MAZET OF Applications** For cutting right and left-handthreads.
 For all metric and non-metric types of thread (c0°-edge dimension).
 **MAZET OF MAZET OF**

For thread diameter	For thread diameter	51995	
mm	inch		
4 - 13	5/32 - 1/2		101
16 - 38	5/8 - 1,1/2		103



51985 - 51986

51995

## Screw extractor, double-edged

Universal thread repair tool

### **H** Design

Non-slip double-edged engagement with the screw or stud bolt to be loosened. With punch tip. Bronzed surface, cutting surface polished.

#### Applications

Set

For extracting broken screws or stud bolts from threaded holes without causing damage. For right-hand and left-hand threads.

For a safe and secure hold, the extractor is fed into the hole.

## Quality

Chromium-vanadium steel, hardened.



Number of extractors	Set contents Size	Design	51985
5	1-5	in metal box	101

Individual								
Size	Size mm	Hole diameter min. mm	Hole diameter max. mm	Screw size min.	Screw size max.	Design	519	986
1	6.35	3.2	4.8	M 5	M 6	in plastic box		101
2	9.50	4.8	7.1	M 8	M 10	in plastic box		102
3	12.70	6.4	9.5	M 10	M 12	in plastic box		103
4	15.90	8.7	12.7	M 12	M 16	in plastic box		104
5	19.00	11.1	15.9	M 16	M 20	in plastic box		105
6	22.00	14.3	19.1	M 20	M 24	in plastic box		106
7	25.40	19.1	23.8	-	M 30	in plastic box		107

51.87

**| #:**]

## Screw extractors | Bolt extractors | Screwdriver



## schr**Öde**r Design

Rolled thread, ground shaft.

#### Applications

Maximum user torque in Nm with a test element with a material strength of 1147 N/mm<sup>2</sup> and a hardness of 35 HRc. For extracting broken screws with a righthand thread and removing torn off pipe ends from fittings.

#### Quality

Hand tools

59 chrome vanadium steel, hardened to 54-56 HRc.

Set contents

Size

1-5

1-6

1-8

Set

5

6

8

Number of

extractors

## 51991

### Screw extractor HITRAC Design

Also with milled groove. The optimised geometry and thread length reduces the extraction force considerably. Available in two different set sizes.





Design 51990 51991 100 in plastic box in plastic box 101 101 in plastic box 102

HITRAC

#### Individual

Size	Tip Ø mm	Shaft Ø mm	Total length mm	Recommended drill Ø mm	For screws	51992	
1	1.4	3.6	50	1.8	M 3-4		101
2	2.1	4.9	57	3.2	M 5-7		102
3	3.1	6.5	64	4.5	M 8-10		103
4	4.8	8.8	71	6.5	M 11-14		104
5	6.2	11.0	79	8.5	M 16-18		105
6	9.4	15.0	85	11.8	M 18-24		106
7	12.7	19.0	92	15.3	M 24-33		107
8	17.5	24.0	100	20.0	M 33-45		108



#### 51992

14933



14933

## **Bolt extractor set**

#### Applications

Enables broken bolts and stud bolts to be professionally extracted. Quality HSS steel.

### Set contents:

- 5 HSS drills 3.2/4.8/6.4/8.0/8.7 mm
- 10 drill guide bushes
- 5 extractor pins

51.88

5 extractor adapters

Set contents	for stud bolt Ø mm	Design	14933
25 pieces	5-16	in box	201



