Workshop equipment

78015

78010

Mechanical nut splitter



- With a chisel
- Easy retraction of the chisel from the split nut through **pull-back technology**
- No catching
- Very sharp cutting edge through chamfer cut

Size	AF	Length	78010
	mm	mm	
0	4 - 10	75	101
1	10 - 18	100	102
2	19 - 27	130	103
3	27 - 36	150	104





78015

Mechanical nut splitter



 With double splitting effect through 2 chisels, zincplated

Length

mm

130

- Easy retraction of the chisel from the split nut through **pull-back technology**
- No catching
- Very sharp cutting edge through facet cut

AF

mm

10 - 27

17 - 36

Applications

Applications

For removing nuts up to quality classes 5, 6 and 8 that are jammed and cannot be loosened.

For splitting nuts up to quality class 6 that are

jammed and cannot be loosened.

Quality

Chromium-vanadium steel.





Hydraulic nut splitter



- Very sharp cutting edge through chamfer cut **Applications**

For splitting nuts up to quality classes 5, 6, 8 and 10 that are jammed and cannot be loosened. The double shoulder facilitates use even in narrow spaces. Only a small amount of force needs to be applied due to the hydraulics.

Quality

Special steel.





78015

101

102



Size	For AF mm	For AF inch	For thread M	78018
1	7 - 22	9/32 - 7/8	-	101
2	22 - 36	7/8 - 1.7/16	=	102

78020

Stud bolt inserter and extractor



Applications

For stud bolts with right-hand and left-hand threads.

Hardened and tempered, the stud bolt is securely clamped against the internal teeth by a knurling wheel in eccentric arrangement with a groove, operated by open-ended wrench or box wrench.

Size	For bolts	Inch	AF	78020	
	mm		mm		
1	5 - 10	3/16 - 3/8	17		101
2	8 - 19	5/16 - 3/4	27		102
3	18 - 25	3/4 - 1	36		103



78025

Stud bolt inserter and extractor



Design

General purpose, continuously adjustable.

Applications

Can be used in extremely tight spaces, ideal even for rusted or scaled screws.

Clamping range	78025
mm	
6 - 12	101





For inserting and extracting stud bolts. For clockwise and anti-clockwise tightening. Strong steel body with a continuous longitudinal bore. The stud bolts are carefully gripped by three rollers in an eccentric arrangement. Simply place the device on the stud bolt and turn. The stud bolt is gripped and held automatically.

Applications

For bolts, express screws and stud screws. Quality

CV steel, chrome-plated.



Set contents	For bolt Ø mm	Square drive inch	Version	78029	
4 pieces	6/8/10/12	1/2	In box	101	1

78030

Design

Stud bolt inserters and extractors

Applications

For bolts, express screws and stud screws.

Quality

CV steel, chrome-plated.



78030 206-208







arrange	ment. Simple turn. The st	y place the	illers in an ecce device on the st ripped and held	
	For bolt Ø mm	Outer Ø mm	Hex shoulder AF mm	Le
	c	0.4	20	

For inserting and extracting stud bolts. For clockwi-

se and anti-clockwise tightening. Strong steel body

with a continuous longitudinal bore. The stud bolts

For bolt Ø	Outer Ø	Hex shoulder	Length	Square drive	78030	
mm	mm	AF mm	mm	inch		
6	24	22	65	1/2		206
7	24	22	65	1/2		207
8	24	22	65	1/2		208
10	28	22	75	1/2		210
12	28	22	75	1/2		212

78050 - 78060

Two-arm and three-arm puller sets



Design

Workshop equipment

- Quality tool steel, with 2 or 3 sliding, constantly parallel pullers in each size
- Good running properties and fixing of the hooks onto the cross beam through the new Glide & FIX technology
- The ARM-LOCK technology guarantees maximum stability of the suspension in the sliding piece through the cross hooks
- This prevents the puller from slipping off the part to be extracted
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip).

Applications

For universal use, interchangeable puller hooks for each required clamping depth.

For hard-to-reach areas. Can be used as an internal and external extractor for centric and eccentric extraction.











78070

Two-arm and three-arm universal extractor set





Design

- The set allows the assembly of 8 different extraction models through the combination of pullers and
- Can be used as external or internal extractor by turning the pullers
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip)

Applications

For narrow spaces at multiple clamping depths.

Comprising

- Two-arm puller with 3 pairs of puller hooks, clamping width 120 mm,
- 1 Three-arm puller with 3 pairs of puller hooks, clamping width 130 mm.

Clamping width mm	Clamping depth mm	Weight approx. kg	Version	78070
120	100/200/250	8.5	In L-BOXX	101



www.hhw.de Fax order hotline: 0800 0 915910







Two-arm and three-arm pullers



Design

- With automatic quick-action clamping
- Automatic guidance and centring of the hooks
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip)

Applications

For ball bearings, pinions, gear wheels, pulleys, pole terminals etc.



			2-arm
Size	Clamping width mm	Clamping depth mm	78101
3/1	60	50	101
3/2	70	70	102
3/3	80	80	103
4/1	100	100	104
4/2	120	120	105
4/3	160	160	106
4/4	250	200	107

			3-arm	
Size	Clamping width mm	Clamping depth mm	78102	
3/11	60	50		101
3/12	70	70		102
3/13	80	80		103
5/1	100	100		104
5/2	120	120		105
5/3	160	160		106
5/4	250	200		107

78103

Three-arm combi-puller set







Design

- Universal application through the use of 2-arm and 3-arm cross beam
- 2 pairs of puller hooks for internal and external extraction included
- Self-locking retaining pins ensure fast and easy replacement of the puller hooks without the need to relieve the compression spring
- Puller hook position is fixed via easily accessible locking lever
- Innovative spring technology allows for a compact and maintenance-free construction
- Ergonomic design for better handling
- Long durability through encapsulated mechanism
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip)
- The puller can also be used with a slide hamme

Applications

Changing the puller hooks enables use as both a internal and external extractor.



er an			
all	-		
ersion	Weight	78103	

Clamping width outer mm	Clamping width inner mm	Slide hammer length mm	Connecting thread	Load max. t	Version	Weight kg	78103
22 - 160	55 - 180	320	M 16x1.5	4.5 (5.5 US)	In L-BOXX	2.4	101

78105

Two-arm puller

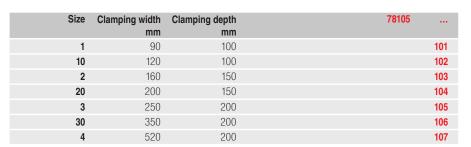


Design

- Quality tool steel
- Good running properties and fixing of the puller hooks onto the cross beam through Glide & FIX technology
- The ARM-LOCK technology guarantees maximum stability of the suspension in the sliding piece through the cross hooks
- This prevents the puller from slipping off the part to
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip)

Applications

Can be used as an internal and external extractor.









78106

Spare hook for two-arm puller art. no. 78105



Design

Complete with sliding piece, in pairs. Quality tool steel

		Standard	
For	Clamping depth	78106	
size	mm		
1/10	100		101
2/20	150		102
3/30/4	200		103



78106

78.3



- Quality tool steel
- Mechanical puller with standard hooks and lengths and Quik-adjust for quickly releasing and moving the hooks on the beam without a wrench
- Good running properties and fixing of the hooks onto the cross beam through the Glide & FIX technology
- The ARM-LOCK technology guarantees maximum stability of the suspension in the sliding piece through the cross hooks
- This prevents the puller from slipping off the part to be extracted
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip).

Applications

Can be used as an internal and external extractor.

Size	Clamping width mm	Clamping depth mm	78108	
1	90	100		101
10	120	100		102
2	160	150		103
20	200	150		104
3	250	200		105
30	350	200		106







78110

Hydraulic ancillary presses



Design

Steel body with hydraulic mechanism.

Applications

These presses are good tools to significantly increase the pressure capacity of mechanical pullers when removing particularly seized parts. To prevent overloading, use only with pullers with a minimum spindle diameter of 25 or 30 mm.

Operation:

Place press with screwed-back spindle between the shaft and the puller spindle and clamp with the puller spindle. The hydraulic system is activated by tightening the spindle.





Size I	Force kN	Maximum torque Nm	Stroke mm	Height mm	Ø mm	For spindles from Ø mm	78110
9/1	100	35	10	62	37	25	
9/2	150	50	12	80	50	30	

Separators and pullers



Design

- Quality tool steel

78115

Applications

Gripper for normal use and for releasing flush-fitted parts.

The blades are pressed behind the parts by the clamp and then removed.

101 102

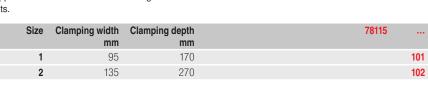
101

102

103

104

105





78125 104-105

78125

Three-arm puller

Clamping depth

mm

100

180

225



Design

Quality tool steel, with slim puller arms for difficultto-reach locations.

Applications

For extracting ball bearings, gear wheels, pulleys etc.

Clamping width

mm

100

150

200

250

350

Note:
The cla
not no

amping width is adjusted with a wrench. It is not possible for the hooks to slip from the parts to be extracted.



78125 101-103

- Three-arm universal puller with standard puller hooks guarantees uniform load distribution with a particularly secure hold
- Good running properties and fixing of the hooks through the new Glide & FIX technology
- Puller hooks parallel in any position
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip).

Applications

Can be used as external or internal extractor by turning the puller hooks.





Size	Clamping width	Clamping depth	78126	
	mm	mm		
1	90	100		101
10	120	100		102
2	160	150		103
20	200	150		104
3	250	200		105



78128

Three-arm universal extractor with quick adjustment



Design

- Quality tool steel
- Mechanical puller with standard puller hooks in standard lengths and Quik-adjust for quickly releasing and moving the hooks on the cross beams without a wrench
- Good running properties and fixing of the hooks onto the cross beam through the ${\bf Glide~\&~FIX}$ technology
- The ARM-LOCK technology guarantees maximum stability of the suspension in the sliding piece through the cross hooks
- This prevents the puller from slipping off the part to be extracted by 2-sided spindle tip
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip)

Application	•
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Can be used as an internal and external extractor.











312	e Clamping width	Ciamping deput	/0120	
	mm	mm		
	1 90	100		101
1	130	100		102
	2 160	150		103
2	200	150		104
;	3 250	200		105
3	350	200		106

78129

Three-arm puller



Design

- Quality tool steel
- With mechanical pressure spindle

Applications

For heavy-duty use, for careful extracting of heavy gear wheels, pulleys etc. Can be used as internal and external extractor.

Size	Clamping width	Clamping depth	78129	
	mm	mm		
11/0	375	200		101
11/1	520	200		102
11/2	650	200		103



78.5

Ball bearing internal extractors



Design

Made of quality tool steel.

Applications

For extracting ball bearings, ball bearing outer rings, bushings etc.

Note:

Even bearings seated fully on the rear wall are securely gripped and quickly extracted. The complete extraction device consists of an internal extractor and counter-support.

78140

Internal extractor

Internal extractor

		mitorinar oxtraotor	
Size	For bores mm	78140	
0	5-8		201
00	6 - 10		202
01	8 - 12		203
02	10 - 14		204
1	12 - 16		205
2	14 - 19		206
3	18 - 23		207

78141

Counter-support

Design

Easy actuation of the counter-support nut through integral pressure bearing. The friction resistance is reduced to a minimum (easy-screw technology). Smooth, adjustable hooks through the internal spring (Light-Shift technology).

Applications

For internal extractor, art. no. 78140.





Internal extractor

Size	For bores	78140	
	mm		
4	20 - 30		208
5	28 - 40		209
6	36 - 46		210
7	45 - 58		211
8	56 - 70		212
9	70 - 100		213



Counter-support

Size	For	78141	
	Size		
1	0 - 5		101
2	3-8		102
3	9		103

78150

Ball bearing puller and extractor sets





Design

Quality tool steel

Applications

For extracting ball bearings, ball bearing outer rings, bushings etc.

Note:

Even bearings seated fully on the rear wall are securely gripped and quickly extracted.















78165

Puller with slide hammer



Design

Complete with thread inserts M3/M4/M5/M6/M8/M10/M12/M14/M16/M18 and slide hammer device.

Applications

For pulling and extracting pins with female thread (DIN 7978/ISO 8736 or DIN 7979/ISO 8735) and parts with thread holes. The corresponding thread

insert is screwed into the thread hole of the part to be extracted and extracted with knocks of the slide hammer.





For thread	78165
M3 - M18	101

Sleeking hammer device for internal extractor



Design

Very practical, since the sleeking hammer device can also be used where space is limited because no support surface is required. Suitable for many workshop applications, especially if a strong shock effect is required.

Applications

For extracting close-fitting ball bearings, ball bearing outer rings and bushings.

For art. no. 78140.

Note:

With 78164 103, the striking weight and thus the impact force can optionally be increased by screwing in one or more additional weights.





L mm	Striking length mm	Sliding piece weight approx. kg	Weight approx. kg	7816	4
250	150	0.50	0.70		101
340	230	1.70	2.50		102
530	340	5.00	6.50		103

78166 Slide hammer set



Design

Contents:

1 slide hammer,

6 adapters, bronzed, each with M12 connecting thread to attach onto the slide hammer base. The interchangeable set screws on the adapter end side have thread sizes M3/M4/M5/M6/M8 and M10.

3 adapters, zinc-plated, for attaching all KUKKO internal extractors from size 00 to 9.

Applications

For KUKKO internal extractor art. no. 78140 and other applications. The stop in the impact weight optimally utilises the length of the slide hammer guide rod with low space requirement and prevents injuries from crushing.



Contents	Version	78166	
10 pieces	In plastic case with foam insert		101

78168

Ball joint puller



Design

- Quality tool steel

Applications

For pressing out the ball pins when removing the ball joints.

Size	Clear height A mm	Clear width B mm	Opening C mm	78168	
1	38	36	18		101
2	48	45	23		102
3	60	60	29		103
4	80	60	40		104
5	100	75	46		105



78170

Ball bearing puller and extractor sets Set consisting of:





Applications

For universal use for extracting ball bearings, bearings, gear wheels, separable bearing inner rings, deep groove ball bearings, etc. For extracting close-fitting ball bearings, outer rings and bushings.

Art. no. 78170 101, size 1	
6 internal extractors (sizes 1-6) 12-46 mm	art. no. 78140,
2 counter-supports (sizes 1 and 2)	art. no. 78141,
1 battery terminal puller size 1	art. no. 78101,
1 two-arm puller (size 1) 90 mm	art. no. 78105,
1 pull-off chuck	art. no. 78160.
Art. no. 78170 102, size 2	
As with size 1, in addition:	
2 internal extractors (sizes 7 and 8) 45-70 mm,	art. no. 78140,
1 two-arm puller (size 2) 160 mm.	art. no. 78105.
Art. no. 78170 103, size 3	
As with size 1, in addition:	
1 internal extractor (size 7) 45-58 mm,	art. no. 78140,
1 internal extractor (sizes 8 and 9) 56-110 mm	art. no. 78140,
1 counter-support (for sizes 8 and 9),	art. no. 78141,
1 two-arm puller (size 2) 160 mm.	art. no. 78105.

Size	Version	78170	
1	In L-Boxx		101
2	In L-Boxx		102
3	In L-Boxx		103



www.hhw.de Fax order hotline: 0800 0 915910 78170

Ball bearing extractor set





Applications

For extracting deep-groove ball bearings. Selection table with ball bearing numbers in the case lid.

Operation:

Place the hooks with claws between the balls in the outer bearing ring. Squeeze the hooks together at the top and press with the recesses around the hub collar. Tighten the tension disk, sliding the retaining bushing over the hooks. The ball bearing can only be extracted if the tension disk is securely tightened.

Version	78182	
In L-Boxx		101

Set consisting of:

- Puller size 1 and 1 set of hooks 150 mm in length, for ball bearings 6000-6003, 6200,
- Set of hooks 150 mm in length. for ball bearings 6004-6006, 6201-6203, 6300,
- Set of hooks 170 mm in length, for ball bearings 6204-6205, 6301-6303,
- Puller size 2 and 1 set of hooks 180 mm in length. for ball bearings 6007-6010, 6013,
- 1 Set of hooks 180 mm in length, for ball bearings 6011-6012, 6206-6207, 6304-6306.
- Puller size 3 and 1 set of hooks 217 mm in length, for ball bearings 6208-6210, 6307, 6403, 6407,
- Set of hooks 217 mm in length. for ball bearings 6211-6212, 6308-6311, 6404-6406, 6408,
- 26 Support rings.



78183

Deep-groove ball bearing extractor set





For extracting deep-groove ball bearings both seated on a shaft and embedded in a housing due to the installation conditions. Simple mounting in the inner ring is possible due to the guide ring.

Comprising

- 7 Set of puller hooks with ball heads,
 - 1 set of hooks, 3 pieces, 150 mm in length, for ball bearings 6000-6003, 6200,
 - 1 set of hooks, 3 pieces, 150 mm in length, for ball bearings 6004-6006, 6201-6203, 6300,
 - 1 set of hooks, 3 pieces, 170 mm in length, for ball bearings 6204, 6205, 6301-6303,
 - 1 set of hooks, 4 pieces, 180 mm in length, for ball bearings 6007-6010, 6013,
 - 1 set of hooks, 4 pieces, 180 mm in length, for ball bearings 6011, 6012, 6206, 6207, 6304-6306,
 - 1 set of hooks, 4 pieces, 217 mm in length, for ball bearings 6208-6210, 6307, 6403, 6407,
 - 1 set of hooks, 4 pieces, 217 mm in length, for ball bearings 6211, 6212, 6308-6311, 6404-6406, 6408,
- Index plates with jam nut and spindle,
- Guide rings and
- 26 Different support rings.

Version	78183	
In L-Boxx		101



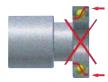
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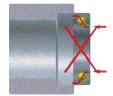
Expert installation of roller bearings

Roller bearings can be damaged by improper installation.

This leads to premature bearing failure and thus to machine or plant downtime.

For this reason, skilled operators and specialist companies use an installation tool set!





Improper installation

When installing a roller bearing, it is important to ensure that the installation forces are not transferred to the bearing seat via the rolling element.





Professional installation of rolling bearings

Through an installation tool set, the installation forces are The recoil-free soft-face hammer ensures a clean distribution

transferred directly to the inner or outer ring of the bearing. of the force.

78185

Roller bearing installation tool set





Applications

For safe, fast and precise mounting of bearings, bushings, sealing rings and pulleys with hole diameter 10-50 mm. For SKF, FAG, Timken, NTN and corresponding bearings from other manufacturers. The light design makes it especially suitable for use on construction sites and off-site assembly.

Comprising

- **33 Impact rings** made of extremely impact-resistant plastic,
- 3 Impact tubes made of anodised aluminium,
- 1 Recoil-free hammer,
- 1 Selection table for roller bearings.

for use on construction sites and off-site assembly.				
Set contents	Version	78185		
38 pieces	In L-BOXX		201	



78187

Roller bearing installation tool set





Applications

For fast and safe installation of roller bearings with hole diameter up to 50 mm and problem-free mounting of bushings, sealing rings, pulleys and similar parts. For SKF, FAG, NTN and corresponding bearings from other manufacturers.

Version

Set contents

- 33 Different hardened impact rings,
- 5 Impact sleeves, which can be slid up to 220 mm over the end of each shaft.

78187

101

 Recoil-free hammer 0.7 kg with sparkless soft head (nylon).



39 pieces	In L-BOXX

78189

Set contents

Separator and puller sets





- With 2-screw tightening

- Quality tool steel

Applications

For extracting close-fitting ball bearings, inner rings, etc. The blades of the separator jaws press behind

the parts to be extracted and release them from their seat.

Note:

The separator is connected with a suitable puller for extraction.



Article no.	Separator size	Puller size	Extension (1 pair) length mm
78189 101	0	0	100
78189 102	1	1	100
78189 103	2	2	100
78189 104	3	3	100

Clamping range mm	Weight approx. kg	Version	78189	
60	2.7	In L-Boxx		101
75	4.7	In L-Boxx		102
115	8.4	In L-Boxx		103
155	14.7	In L-Boxx		104 NE



Separators and pullers



Design

- With 2-screw tightening
- Quality tool steel

Applications

For extracting close-fitting ball bearings, inner rings, etc. The blades of the separator jaws press behind the parts to be extracted and release them from their seat.

Note:

To connect with the separators, the tension bolts are screwed into the thread holes of the separator jaws.





					Separators	Pullers
Size	Α	В	Clamping width	Length of	78190	78192
	mm	mm	mm	tension bolt mm		
0	8 - 60	60	50 - 110	150	101	101
1	12 - 75	75	60 - 150	200	102	102
2	22 - 115	115	60 - 200	250	103	103
3	25 - 155	155	80 - 300	300	104	104

78192

Thread repair kits

14800

HELICOIL® plus repair kit

HELICOIL[®] plus

Applications

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

230 pieces, set contents:

20 each of thread inserts

M $5 \times 5/M 5 \times 7.5/M 5 \times 10/M 6 \times 6/M 6 \times 9/$ M 6 x 12,

10 each of thread inserts

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,

5 twist drills,

- 5 hand taps,
- 5 installation mandrels,
- 5 tang break mandrels.



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

14810

HELICOIL® plus repair packs

HELICOIL plus

Applications

For standard metric ISO thread DIN 13.

Quality

Thread inserts made of stainless steel.

14810 103-106

Design

Set contents:

60 thread inserts (20 per nominal length),

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

14810 107-112

Design

Set contents:

30 thread inserts (10 per nominal length),

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

14810 113-114

Design

Set contents:

30 thread inserts (10 per nominal length),

- 1 hand taps,
- 1 installation mandrel.









d mm	Nominal length mm	Core hole Ø mm	Number of inserts	14810	
М 3	3/4.5/6	3.2	60		103
M 4	4/6/8	4.2	60		104
M 5	5/7.5/10	5.2	60		105
M 6	6/9/12	6.3	60		106
М7	7/10.5/14	7.3	30		107
M 8	8/12/16	8.4	30		108

d mm	Nominal length mm	Core hole Ø mm	Number of inserts	14810	
M 9	9/13.5/18	9.4	30		109
M 10	10/15/20	10.5	30		110
M 11	11/17.5/22	11.5	30		111
M 12	12/18/24	12.5	30		112
M 14	14/21/28	14.5	30		113
M 16	16/24/32	16.5	30		114

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

HELICOIL plus

14802

Thread inserts

M 3-M 6, pack = 20 pieces,

M 8-M 12, pack = 10 pieces.

14804

Short screw tap, HSS.

14806

Installation mandrel.

14808

Tang break-off tool.



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14804

14806 14808

		Thread inserts	Screw tap	Installation mandrel	Tang break-off tool
Size	Core hole Ø mm	14802	14804	14806	14808
M 3 x 3	3.2	114	102	102	102
M 3 x 4.5	3.2	115	102	102	102
M 3 x 6	3.2	116	102	102	102
M 4 x 4	4.2	120	104	104	103
M 4 x 6	4.2	121	104	104	103
M 4 x 8	4.2	122	104	104	103
M 5 x 5	5.2	126	106	106	104
M 5 x 7.5	5.2	127	106	106	104
M 5 x 10	5.2	128	106	106	104
M 6 x 6	6.3	130	107	107	104
M 6 x 9	6.3	131	107	107	104
M 6 x 12	6.3	132	107	107	104
M 8 x 8	8.4	141	109	109	109
M 8 x 12	8.4	142	109	109	105
M 8 x 16	8.4	143	109	109	109
M 10 x 10	10.5	156	112	112	100
M 10 x 15	10.5	157	112	112	100
M 10 x 20	10.5	158	112	112	100
M 12 x 12	12.5	176	116	116	107
M 12 x 18	12.5	177	116	116	107
M 12 x 24	12.5	178	116	116	107

Tap destroying tools | Screw tap extractors | Bolt extractors

11069

Solid-carbide tap removal tools







Design

With straight shank, self-centring.

Note:

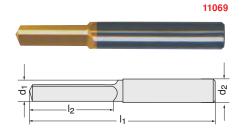
Stable clamping is required. Hole dry and free from cutting oil.

Applications

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

Quality

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



d ₁ h		l ₂ mm	l ₁ mm	d ₂ h6 mm	11069	
3.	3	15	50	6		101
4	2	15	50	6		103

	d ₁ h9 mm	l ₂ mm	I ₁ mm	d ₂ h6 mm	11069	
i	5.0	15	50	6		105
	6.8	20	60	8		107

d ₁ h9 mm	l ₂ mm	I ₁ mm	d ₂ h6 mm	11069	
8.5	25	70	10		109
10.2	30	75	12		111

Al<10%S	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	-	-	-	-	-

14900 - 14904 **Screw tap extractors**

14900-14903

Applications

For broken screw taps. The fingers are guided into the grooves of the broken screw tap by moving the upper ${\bf retaining}\ {\bf ring}\ ({\bf 1})$ and secured with the ${\bf guide}$ bush (2). The broken screw tap piece is moved back and forth using a tap wrench until it loosens and can be unscrewed.

14900 102-104

Screw tap extractor sets

Applications

For screw taps with 3 flutes. Complete delivery in a case.

14900 106-108

Screw tap extractor sets

Applications

For screw taps with 4 flutes. Complete delivery in a case.

14902

Screw tap extractor, individual

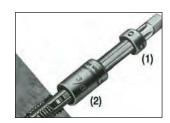
Applications

For screw taps with 3 flutes.

14904

Replacement fingers

For extractors in 3-flute design.





Sets		3 flutes		4 flutes	
Set contents	Extractor	14900		14900	
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	10	02	102
M 4/5/32	10	04	104
M 5/3/16	10	05	105
M 6/1/4	10	07	107
M 8/5/16	10	09	109
M 10/3/8	1	11	111
M 12/1/2	1	13	113
M 14/9/16	1	14	114
M 16/5/8	1	15	115
M 20/3/4	1	17	117



Screw tap extractor sets

Applications

For extracting broken screw taps.

14929 101

Design

- 6 pieces
- Size 1-4 three-fluted - Size 5-6 four-fluted

14929 102

- Design - 9 pieces
- Size 2-4 three-fluted
- Size 5-10 four-fluted

Set contents	14929	
6 pieces	101	
9 pieces	102	





14930 - 14931

Screw tap extractor

Applications

For extracting broken screw taps.

14930

For three-fluted screw taps.

14931

For four-fluted screw taps.



14931

14933

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

13.0



14933

9 M 20/3/4

Bolt extractor set

80

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	Design	14933
25 pieces	5–16	in box	201

Erosion drills and accessories

14934 - 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.



14935 103

WiFi inspection camera

- For smartphone and tablet, for Android and IOS devices
- Diameter of camera 8 mm
- Length: 80 mm
- Bending radius 45 mm
- Includes 3 interchangeable magnetic tips



14935 105 Oscillating head mount: MK2 directly into the sleeve of a machine tool.



Two models are available

eromobil®-er 230 s-ND

- For threads from M2 up to approx. M20
- 220/230 V
- 50 Hz alternating current
- 3.6 kVA
- 16 amp

eromobil®-er 400 t-ND

- For threads from M2 up to approx. M40
- Ideally suited for deep drilled holes and cemented carbide tools
- 380/400 V
- 50 Hz three-phase current
- 6.0 kVA
- 16 amp

Supplied as standard

- Generator in the trolley
- Oscillating head
- Supply hose
- Earthing cable - Coolant pump
- Coolant tank
- 1 each of open-ended spanner sizes 19 and 24
- 10 splash guard bags

Storage compartment for oscillating head, supply hose and earthing



Open cover housing compartment with oscillating head and supply hose

Trolley with footprint for coolant pump and tank, with smooth-running locking rollers

Coolant tank with two chambers for intake and return. with practical carrying handles

Tool drawer with internal compartment settings for electrodes, collet chucks, open-ended spanners, splash guard bags and accessories that can be pulled out on smoothrunning profile rails



Coolant pump for effective rinsing with approx. 3.4 bar pressure including 2-m intake hose with foot valve and 2-m pressure hose with quick-action coupling (hoses up to 5 m deliverable)

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

www.hhw.de Fax order hotline: 0800 0 915910

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



Rear view

Electrodes and collet chucks for eromobil®

Continued 14936
Copper electrodes

14937 Collet chucks 14936

For tools made of HSS.

Maria

Applications

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

Collet chucks Ø mm	14937	
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



Rapid attachment using adjusting screw. Automatic adjustment of the blade on any thread pitch.

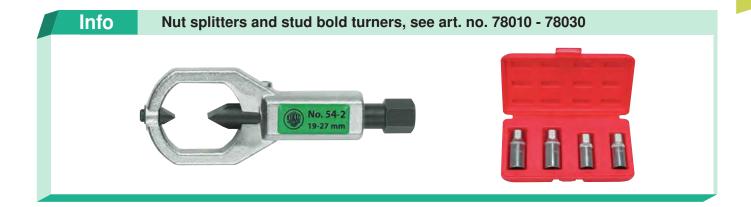
Applications

For cutting right and left-handthreads. For all metric and non-metric types of thread (60°-edge dimension).





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

Screw extractor, double-edged



Design

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

Applications

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.





In	di	vio	ub	а
	w	A 1.	uu	u

Size	e Size	Hole diameter min. mm	Hole diameter max. mm	Screw size min.	Screw size max.	Design	51986	
	l 6.35	3.2	4.8	M 5	M 6	in plastic box		101
:	9.50	4.8	7.1	M 8	M 10	in plastic box		102
;	12.70	6.4	9.5	M 10	M 12	in plastic box		103
	15.90	8.7	12.7	M 12	M 16	in plastic box		104
!	19.00	11.1	15.9	M 16	M 20	in plastic box		105
(3 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

- Fits through 1/4 inch hexagon socket in every cordless screwdriver or drill with clockwise and anti-clockwise rotation function

Quality

Special tool steel.



Number of extractors	Screw size mm	Design	51993
2	3-10	in plastic box	100

51990 - 51992 **Screw extractors**

schr&der

Design

Rolled thread, ground shaft.

Applications

Maximum user torque in Nm with a test element with a material strength of 1147 N/mm² and a hardness of 35 HRc. For extracting broken screws with a righthand thread and removing torn off pipe ends from fittings.

Quality

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

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.



51990 102



Set				HITRAC	;
Number of extractors	Set contents Size	Design	51990	5199	l
5	1-5	in plastic box	1	100	
6	1-6	in plastic box	1	101	101
8	1-8	in plastic hox	•	102	

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







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
5	extractor adapters

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

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