

## MECHANICAL PULLERS

### BETEX 46

**Simple, handy 2-arm puller for parts gripped externally like pulleys, bearings, rings, etc. Suitable for removing fans from electric motors**

During operation the arms can not slip because they are pressed against the cross bar. The higher the necessary pulling force, the stronger the arms are pressed against the cross bar. The one-hand operation of the puller permits easy use even under unfavourable conditions. A spring inside the housing guarantees a continual clamping of the forged alloy steel arms.



**BETEX 46 is available in 4 types**

Type	Max. diam. mm	Max. shaft length mm
46-200	60	40
46-000	75	60
46-010	110	100
46-020	220	200

### BETEX 47

**Patented special 2-arm bearing pullers**

This bearing puller is particularly suitable for extracting bearings, bearingrings etc. that fit flushly with other parts. This system is generally applied when dismantling bearings from anchors, pump shafts etc.



**BETEX 47 is available in 3 types**

Type	Max. diam. mm	Max. shaft length mm
47-100	45	65
47-200	90	100
47-300	150	150

### BETEX 48/49

**2/2 bearing splitters and pullers**

Betex no. 48/49 is designed for dismantling flush-fitting bearings and other parts where an ordinary puller would be unable to get a proper grip. Suitable for various applications.

**BETEX 48 is available in 5 types**

**BETEX 49 is available in 4 types**

Type	Max. diam. mm	Counter support	Max. shaft length mm	
			standard	with extension
48-060	60	49-100	150	250
48-075	75	49-100	150	250
48-115	115	49-200	200	300
48-150	150	49-300	300	400
48-210	210	49-400	300	400



## MECHANICAL PULLERS

### BETEX 52

**Patented self-centering 3-arm pullers (mechanical and hydraulic) for diameter Ø40 mm till Ø640 mm**

The 3 arms of these pullers adjust themselves simultaneously and symmetrically, inwards or outwards. There is no possibility of the arms bending or deflecting. Hydraulic screws with a 20 ton capacity are available for use in combination with the two largest pullers. The thread of the screws is in no way affected by the building up of hydraulic pressure, thus keeping wear and tear to the screws down to a minimum.

**BETEX 52 with mechanical screw is available in 6 types**

Type	Max. diam. mm	Max. shaft length mm
52-085	85	65
52-130	130	105
52-230	230	150
52-295	295	235
52-390/394*	390	270
52-640/644*	640	300

\* these types may be converted into hydraulic tools simply by replacing the mechanical screw and the screw-bush with a 20 ton mechanical hydraulic screw.



### BETEX 54

**Patented 2-arm pullers for diameter Ø40 mm till Ø350 mm**

This 2-arm puller is extremely well-suited to applications involving the extraction of bearing-rings, innerrings (NU-NJ). Reversal of the arms makes internal dismantling also possible. The self-locking system guarantees that the arms will not deflect. Extended and extra-extended arms can be supplied for long shafts.

**BETEX 54 with standard arm-length is available in 6 types**

Type	Max. diam. mm	Maximum shaft length mm		
		standard	with extension	with extra extension
54-100	80	100	200	250
54-200	120	125	200	250
54-300	160	150	250	300
54-400	200	175	250	300
54-500	250	200	300	400
54-600	350	250	300	400



## MECHANICAL PULLERS

### BETEX 56

**Internal 4-arm bearing pullers with interchangeable claws (in case) for total 66 bearings till Ø105 mm**

This 4-arm bearing puller has been specially developed to extract ball-bearings from casings and shafts using a single action. This concerns the 6000, 6200, 6300 and 6400 series. 66 different ball-bearings can be removed with these three sets of pullers.

BETEX 56 is available in 3 sets

Set	Max. shaft length mm	Claws (4 per set)	No of bearings	
56-020	65	3 sets	12	
56-120	90	5 sets	30	
56-220	150	5 sets	24	
Set	Ball-bearing 6000	Ball-bearing 6200	Ball-bearing 6300	Ball-bearing 6400
56-020	6004 t/m 6006	6200 6205	6300 6302	-
56-120	6007 t/m 6020	6206 6212	6303 6308	6403 6405
56-220	6021	6213 6219	6309 6319	6406 6412



### BETEX 44

**Hydraulic 8/15 tons mini-press**

When using mechanical screws, much of the force is lost as a result of the friction caused by the thread. This minipress administers a shock to the part which is to be extracted. This enables optimal use to be made of BETEX pullers 52 and 54, without loss of force or wear and tear to screws. Note\*: may be used from 49-200, 52-230 and 54-300 and upwards.

\* application: heavy duty pullers, BETEX 49-200, 52-230 en 54-300 upwards \* height: 35 mm

Betex 44 is available in 2 types

Type	Capacity ton	Stroke mm
44-080	8	7
44-150	15	10



### BETEX 625/630

**Shaft protector sets for shaft centers and hollow shafts**

These shaft protectors are indispensable between shaft and bearing puller while dismantling bearings, couplings etc. There are two types: 625 for protecting shaft centers and 630 for hollow shafts.

Use of shaft protectors prevents distortion to the shaft centers and the screw.



**BETEX 625 consists of a 6-piece set**

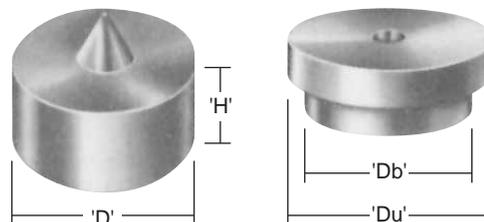
'D' min. = Ø 19 mm 'H' min. = Ø 16 mm  
'D' max. = Ø 38 mm 'H' max. = Ø 19 mm

**BETEX 630 'S' consists of a 11-piece set**

'Db' min. = Ø 19 mm 'Du' min. = Ø 25 mm  
'Db' max. = Ø 51 mm 'Du' max. = Ø 64 mm

**BETEX 630 'T' consists of a 6-piece set**

'Db' min. = Ø 54 mm 'Du' min. = Ø 67 mm  
'Db' max. = Ø 76 mm 'Du' max. = Ø 89 mm



## MECHANICAL PULLERS

### BETEX 62

#### Internal expander puller up to a bore of Ø 150 mm

This special expander system has been developed to facilitate rapid and effective dismantling under difficult conditions, e.g. in 'blind holes'. The multiple adjustable jaws (up to 6) ensure the correct grip from behind the bearing, bush etc. Bearings, bushes, sealings etc. are extracted effortlessly.

Smaller, larger and longer sizes are available on request.



### BETEX 62 is available in 3 sets

The two sets together come in a free carrying case

Counter support type	Suitable for expanders	Expander	For diameter mm	For max. depth mm			
62-100	62-004 → 62-030	62-004	4-7	35	*	****	
		62-007	7-10	35	*	****	
		62-010	10-14	35	*	****	
	62-200	62-040 → 62-070	62-014	14-20	45	*	****
			62-020	20-30	50	*	****
			62-030	30-40	90	*	****
62-200/62-300	62-070 → 62-0125	62-040	40-50	95	**	****	
		62-050	50-60	95	**	****	
		62-060	60-70	95	**	****	
		62-070	70-80	95	**	****	
		62-080	80-100	140	***		
		62-0100	100-125	140	***		
		62-0125	125-150	140	***		

\* = set 1 62-101

\*\* = set 2 62-201

\*\*\* = set 3 62-301

\*\*\*\* = combination set 62-105, including free carrying case

### BETEX 62-9

#### Slide hammer puller

Used in combination with the internal puller. Slide hammer weight: 0,9 kg

2 sizes with strokes of 90 mm and 300 mm

2 connecting threads (M10 and M14x1,5)

The advantage of the slide hammer is that it can be used independent of any supporting face. After positioning the internal puller the slide hammer is connected through the hexagon adaptor.

We recommend:

Up to bore-diameter 39,5 mm Nr. 62-9092

Up to bore-diameter 79,5 mm Nr. 62-9302

## MECHANICAL PULLERS

### BETEX 63, 64 / TRACTA

These systems are unique and suitable for difficult dismantling jobs of roller bearings.

#### Advantages:

- For all kinds of roller bearings
- Shaft Ø 10,5 mm up to Ø 100 mm, larger sizes on request
- Dismounting from house and shaft in one act
- Also for flush fit bearings
- Unlimited shaft lengths through extensions
- 360°C grip over full bearing
- Hydraulic type on request
- Suitable for serial dismantling
- Prevents damage to bearing, bearing house and shaft!

### BETEX 63, 64 / TRACTA

Type	Shaft diam. mm	Outside diam. mm	Max stroke mm	Max shaft length mm	Max shaft length mm with extra extension
63-100	10,5	26	62	95	165
63-200	18	35	64	100	180
64-400	30,5	60	78	135	235
64-500	46	75	80	150	250
64-600	66	100	92	170	270
64-700	77	125	120	205	305
63-800	100	140	150	240	390

Larger models on request



BETEX 63



BETEX 64

## MECHANICAL PULLERS

### Collets for BETEX 63 and 64

There are 4 different pulling principles that can be applied, depending on bearing type. To define the correct collet the following is mandatory:

**Principle 1:** grip on inner bearing ring. Bearing is dismantled in one act, from shaft and bearing house.

**Example:** self aligning ball bearings, four point bearings and ball bearings with split innering.



Principle 1

**Principle 2:** grip on rollers, independent of number of rolls. Also when bearing is flush fit.

**Example:** wheel bearings, tapered bearings.



Principle 2

**Principle 3:** grip on bearing inner ring.

**Example:** tapered roller bearings.



Principle 3

**Principle 4:** grip inside or behind bearing inner ring, or behind bearing outside ring.

**Example:** cylindrical roller bearing, lowest innerring of the ball bearings, outside ring of the needle roller bearings, spherical roller bearings, NU-, NJ-bearing bushes, ABS-rings, bushes, gear wheels.



Principle 4