



## Fitting tools for bearings and seals

### Fitting Tool FT 33



#### Bearing Fitting Tool FT 33 Minimised danger of damaging the bearing

The simatool bearing fitting tools are designed for the fast, precise and secure mounting of bearings with bore diameters from 10 to 50mm. The right combination of impact rings and impact sleeves makes sure that the mounting forces never go through the rolling elements of a bearing.

- Impact rings are made of extremely shock-resistant material
- Even power transmission to the bearing rings due to the special construction of the impact rings
- Nylon double-sided hammer head prevents damage of the bearings effectively
- Also suitable for the fitting of bushings, seals, pulleys, etc.
- Suitable for a wide range of bearing sizes
- Impact rings and impact sleeves are also available individually
- Blow-back proof hammer FT 33-H included
- No mechanical damage of the bearing during the cold mounting process



#### Cold mounting of bearings

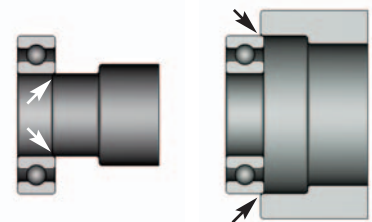
Incorrect mounting can lead to damages and to an early breakdown of the bearing.

Reasons for this can be:

- Damages caused during the mounting process
- Wrong tolerances of the bearing carrier on the shaft or inside the housing
- Loosening of the locknut during operation
- Burrs and damages on the shaft and the housing seats and shoulders

#### Interference fits - cylindrical bearing shaft

For most bearings either the inner or the outer ring (in certain cases even both) are mounted onto the shaft or into the housing with an interference fit. Please review the documentation of the bearing manufacturer for information.

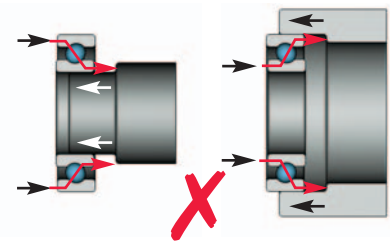


Shaft interference fit

Housing interference fit

#### Improper mounting

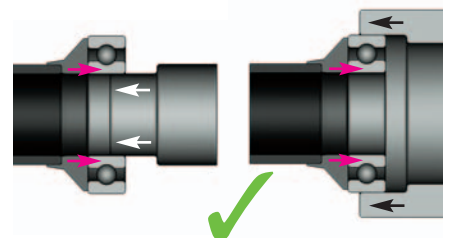
During cold mounting of a roller bearing, it must be made sure that the mounting forces are always applied to the ring with the interference fit. Mounting forces should never go through the rolling elements.



The raceway can be damaged by application of force on the wrong bearing ring.

#### Proper mounting


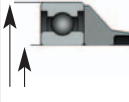








The danger of damaging raceways can be minimised by the use of the specifically designed simatool fitting tools (FT 33, MK 10-30).



Raceway damages can be prevented with the correct tools.



## Selection table Fitting Tool **FT 33**

impact sleeves	impact rings	roller bearings of the following series							
	 <b>d / D</b>	 <b>60 63 62 64</b>	 <b>12 13 22 23</b>	 <b>72B 73B</b>	 <b>32 32</b>	 <b>222 223 213</b>	 <b>NU-NJ-N 2 3 4</b>	 <b>302 303 322</b>	 <b>313 323</b>
<b>A</b> FT 33-A	10 / 26 10 / 30 10 / 30 10 / 35	6000 6200 6300	129 1200 2200 1300		3200				
	12 / 28 12 / 32 12 / 32 12 / 37 12 / 37	6001 6201 6301	1201 2201 1301 2301		3201				
	15 / 32 15 / 35 15 / 35 15 / 42 15 / 42	6002 6202 6302	1202 2202 1302 2302	7202 B	3202 3302			30302	
	17 / 35 17 / 40 17 / 40 17 / 47 17 / 47	6003 6203 6303	1203 2203 1303	7203 B 7303 B	3203 3303			30203 30303	
<b>B</b> FT 33-B	20 / 42 20 / 47 20 / 47 20 / 52 20 / 52	6004 6204 6304 6403	1204 2204 1304 2304	7204 B 7304 B	3204 3304	22205/20	204 304	30304	32304
	25 / 47 25 / 52 25 / 52 25 / 62 25 / 62	6005 6205 6305 6404	1205 2205 1305 2305	7205 B 7305 B	3205 3305	22205 21305	205 305	30205 30305	31305 32305
	30 / 55 30 / 62 30 / 62 30 / 72 30 / 72	6006 6206 6306 6405	1206 2206 1306 2306	7206 B 7306 B	3206 3306	22206 21306	206 306 405	30206 32206 30306	31306 32306
	35 / 62 35 / 72 35 / 72 35 / 80 35 / 80	6007 6207 6307 6406	1207 2207 1307 2307	7207 B 7307 B	3207 3307	22207 21307	207 307 406	30207 32207 30307	31307 32307
<b>C</b> FT 33-C	40 / 68 40 / 80 40 / 80 40 / 90 40 / 90	6008 6208 6308 6407	1208 1308 2308	7208 B 7308 B	3208 3308	22208 21308 22308	208 308 407	30208 30308	31308 32308
	45 / 75 45 / 85 45 / 85 45 / 85	6009 6209	1209 2209	7209 B	3209	22209	209	30209 32209	
	45 / 100 45 / 100 45 / 100* 45 / 100*	6309 6408 6013 6211	1309 2309 1211 2211	7309 B 7211 B	3309 3211	21309 22309 22211	309 408 211	30309	31309 32309
	50 / 80 50 / 90 50 / 90 50 / 90* 50 / 90* 50 / 110 50 / 110 50 / 110* 50 / 110* 50 / 110* 50 / 110* 50 / 110* 50 / 110*	6010 6210 6011 6012 6310 6409 6014 6015 6212 6313 6311 6410	1210 2210 1310 2310 1212 1213 2212 2213 1311 2311	7210 B 7310 B 7212 B 7213 B 7311 B	3210 3310 3212 3213 3311	22210 21310 22310 22212 22213 21311 22311	210 310 409 212 213 311 410	30210 32210 30310	31310 32310





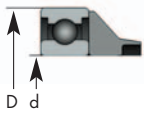

\*outer ring fitting only

\*\*inner ring fitting only

## Maintenance Kit MK 10-30



Selection chart MK 10-30

					
6000	M12	A1	1	A10/26	A
6200	M12	A1	1	A10/30	
6300	M12	A3	1	A10/35	
6001	M12	A1	2	A12/28	
6201	M12	A2	2	A12/32	
6301	M12	A3	2	A12/37	
6002	M12	A1	3	A15/32	
6202	M12	A2	3	A15/35	
6302	M12	A3	3	A15/42	
6003	M12	A1	4	A17/35	
6203	M12	A2	4	A17/40	B
6303	M16	A4	4	A17/47	
6403	M16	A5	4	B20/52	
6004	M12	A2	5	B20/42	
6204	M12	A3	5	B20/47	
6304	M16	A4	5	B20/52	
63/22	M16	A4	6	B25/52	
6005	M12	A2	6	B25/47	
6205	M12	A3	6	B25/52	
6305	M16	A5	6	B25/62	
63/28	M16	A5	7	B30/62	
6006	M12	A2	7	B30/55	
6206	M16	A4	7	B30/62	
6306	M16	A5	7	B30/72	
6007	M12	A3			
6207	M16	A5			
6307	M16	A5			
6008	M12	A3			
6208	M16	A5			
6009	M12	A3			
6209	M16	A5			
6010	M12	A3			
6210	M16	A3			
6011	M16	A4			
6211	M16	A5			
6012	M16	A4			
6013	M16	A4			
6014	M16	A5			
6015	M16	A5			
6016	M16	A5			
6017	M16	A5			

## Maintenance-Kit MK 10-30

### Universal tool kit for the easy and quick mounting and dismounting of bearings

With the MK 10-30 Maintenance-Kit, simatec introduces a new tool kit, which is especially designed for users of smaller bearings, such as car and motorcycle shops, service plants for electro motors or maintenance companies. The Maintenance-Kit MK 10-30 consists of a total of 50 components. It enables a quick, precise and secure mounting and dismounting of most common bearings with a bore diameter from 10 to 30 mm. For mounting, a multi-functional fitting tool with impact sleeve and impact rings is included, which is suitable for the mounting of bearings as well as bushings, sealings, belt pulleys or similar products.

For dismounting, a three-armed bearing puller is included. With the five attached puller arm sets, the puller even fits bearings with a bore diameter up to 85 mm.

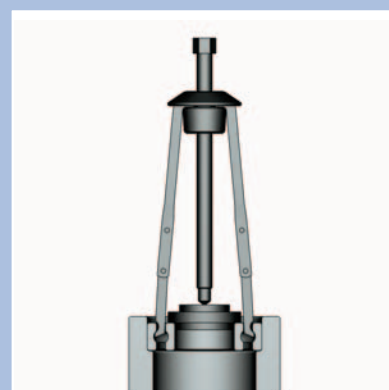
The bearing puller is suitable for deep groove ball bearings with an interference fit on both rings or on the outer-ring without a shaft. All parts are neatly arranged in a display case. A selection table for the choice of the correct tool and a pictured instruction sheet are displayed in the case as well.

### Dismounting tool benefits

- Power transmission onto the bearing by the use of hinged puller arms
- User friendly elastic locking ring, that keeps the puller arms in position
- All arms are clearly marked on each leg with their size
- Puller arms are made of high quality steel

### Fitting tool benefits

- Impact damages to bearings are prevented effectively
- Impact rings are made of shock-resistant acetal resin, resulting in high mechanical strength
- Blow-back proof hammer with an impact surface made of nylon and a fibreglass handle for safe and ergonomic grip



# Ball Bearing Puller BP 61



## Bearing Puller Tool Kit Easy dismounting of ball bearings in blind housings

The tool kit BP 61 enables the dismounting of ball bearings in blind housings. It consists of 6 puller arm sets and 2 supporting spindles and is suitable for deep groove ball bearings from 10 to 100 mm shaft diameter.

- 6 puller arm sets and 2 spindles in a display case weighing only 3.2 kg
- Hinged puller arms for power transmission to the bearing
- User-friendly because of the elastic locking ring, which keeps the puller arms in the right position
- Puller arms made of high quality steel
- Selection chart for deep groove ball bearings inside the case



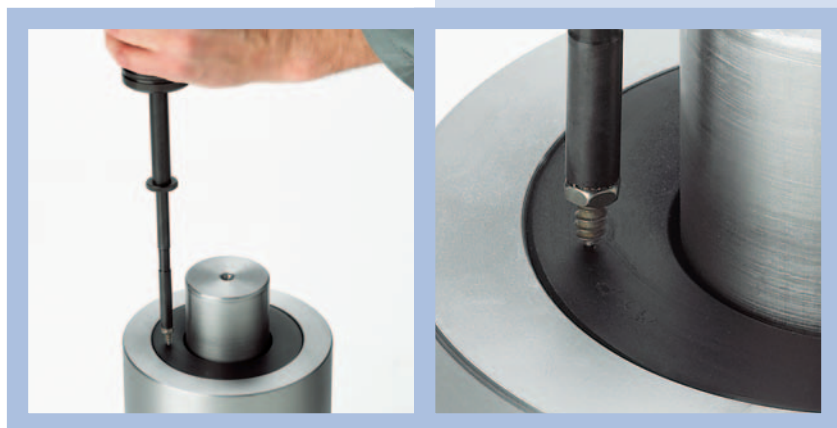
Selection chart BP 61

Ball bearing type				puller arm	spindle
60..	62..	63..	64..		
6000 6001 6002 6003	6200			BP A1	
6004 6005 6006	6201 6202 6203			BP A2	BP M12
6007 6008 6009 6010	6204 6205	6300 6301 6302		BP A3	
6011 6012 6013	6206	6303 6304		BP A4	
6014 6015 6016 6017	6207 6208 6209 6210 6211	6305 6306 6307	6403	BP A5	BP M16
6018 6019 6020	6212 6213 6214 6215 6216 6217	6008 6309 6310 6311 6312 6313	6404 6405 6406 6407 6408 6409 6410	BP A6	

## Seal Puller SP 50

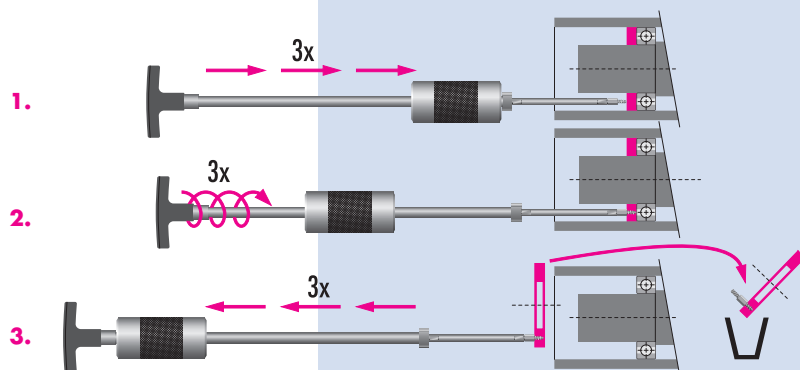
### Seal Puller SP 50 Dismounting rotary shaft seals

The toolkit SP 50 provides a simple method for dismounting rotary shaft seals in a wide variety of applications. It consists of a sliding hammer, 2 extensions and 50 spare screws. With this basic equipment 50 seals can be dismounted.



Process of dismounting:

1. Hit the screw into the seal with 3 impulses.
2. Turn in the screw with 3 turns.
3. Pull the seal out of its original position by 3 impulses into the opposite direction.

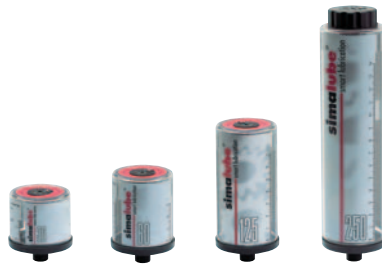


## simatec maintenance products

### World class lubrication, mounting and dismantling

With 3 products lines, simatec takes care of your critical machinery and plant operation to ensure maximum uptime.

**The automatic single point lubricator simalube** can be adjusted from 1 to 12 months using the unique gas-producing drycell that is patented world-wide. The drycell generates pressure that pushes the grease or oil into the lubrication point.



**The simatherm induction heaters** provide fast warm-up of circular metal parts, for example bearings, for hot-mounting parts with an interference fit. Inductive heating of metal workpieces is cost-effective, time-saving and protects the environment. simatec is a global leader in thermal mounting technologies.



**The simatool product range** is designed for a quick, precise and safe mounting and dismantling of bearings and seals. simatools are used around the globe in machinery repair and maintenance shops.



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