



EISENGIESSEREI &  
MASCHINENFABRIK

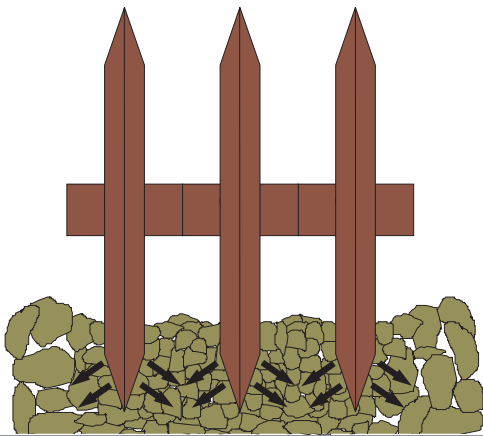


**TAILOR-MADE SOIL  
CULTIVATION**

## UNDERGROUND **PACKER**

Benchmark for economical  
soil cultivation

# Underground packer UP - UPN - DP



## Professional Packer Technology - Advantage through Experience

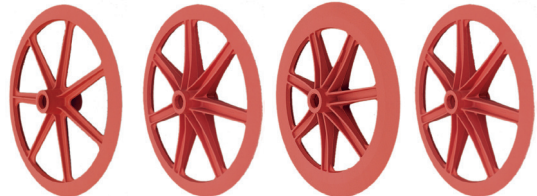
### The principle

The principle of the packer is based on the spreading effect of the wedge-shaped ring cutting edges which, when the rings penetrate, not only causes the fragmentation of the clods but also compresses the soil between the rings to the depth of the crumb. This results in optimum reconsolidation for the seedbed and a reduction in the track depth during subsequent operations.

### The ring shapes

While in lighter and medium soils great importance is attached to reconsolidation, in heavy soils the cutting of the slabs is more important. Therefore: large ring diameter with wide cutting edge for light soils and small ring diameter with slim ring cutting edge for heavy soils. The decisive factor for the penetration depth is therefore not only the weight of the individual packer ring but also its cutting-edge geometry. Another important factor for the working result is the ring distance. A narrow ring spacing reduces the penetration depth, improves the packing effect in the upper layers, but increases the risk of clogging. Conversely, a large ring spacing has the opposite effect.

**Packer rings  
Ø 700 mm**



Typ	W 163	W 280	W 305	W 281
Soil	medium-heavy	medium-heavy	very-heavy	light-medium
Ring profile	30°	30°	30°	45°
Shoulder	32 mm	32 mm	32 mm	45 mm
Weight	28 kg	31 kg	46 kg	37 kg

**Packer rings  
Ø 900 mm**



Typ	W 160	W 300	W 302
Soil	various	light-medium	
Ring profile	40°	50°	
Shoulder	55 mm	65 mm	60 mm
Weight	68 kg	74 kg	74 kg

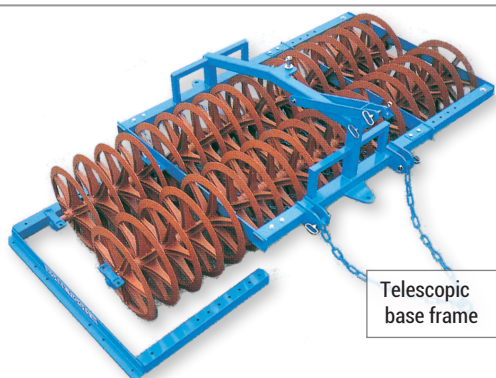
### The technology

- High resilient quality castings from own production
- High-strength shafts with low-maintenance ball bearings
- Movable cleaning chains for clog-free operation
- Standard with three-point mounting frame category II (except N50 / N55 and DP 900 III)

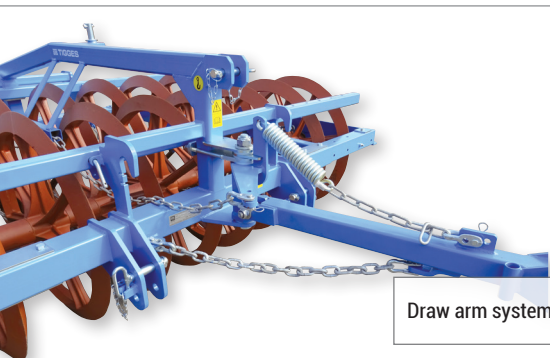
As one of the pioneers in the field of packer technology, TIGGES has decades of experience at its disposal and, together with new practical findings, consistently translates this into advantageous technical solutions.

# UNDERGROUND PACKER

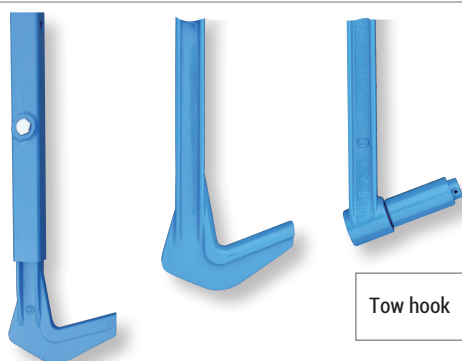
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Telescopic  
base frame



Draw arm system



Tow hook

## Extensibility

TIGGES packers (except DP 900 III) have a telescopic base frame which allows the working width to be extended by installing additional rings and new shafts.

## Draw arm system

The length and height of the draw arms can be adjusted to suit the plough and the operating conditions. In addition, they are spring mounted in height, so that even when a plough with a high clearance is inserted, the height is automatically adjusted.

The standard shock absorbers protect the plough and packer during trapping and on clumsy soils. The swivel joints are equipped with adjustable brakes to prevent the arms moving away when the plough arm is approaching quickly and to prevent them from sliding off on side slopes.

## Tow hooks

Tigges offers the right tow hook for every plough brand or release system.

## Long-travel device

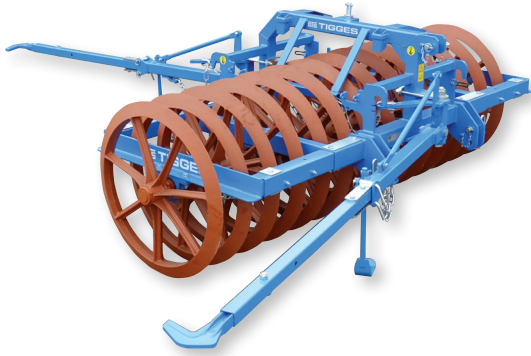
For road transport, the double packers over 280 cm working width are optionally available with a hydraulic long-travel device. They are attached to the lower links via a telescopic drawbar. This means that even large working widths can be transported in accordance with the StVO (German road traffic regulations).



DP 900



# Underground packer **UP - UPN - DP**



**Underground packer UP 900**

## **Application area:**

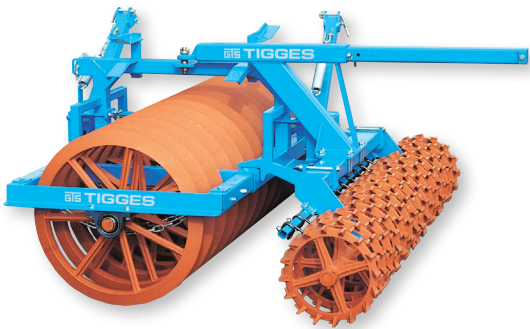
For use on very light to medium, pourable soils with a low tendency to stick.

## **Basic equipment:**

- Ring type W 300
- expandable telescopic frame
- from 230 cm fourfold shaft bearing
- Trunnion for trailing roller

## **Additional equipment:**

- Pull chain for conventional plough, 2 strands
- High-adjustable tow hooks with support brackets and swivel brakes, standard with shock absorbers.



**Turning packer UPN 900**

## **Application area:**

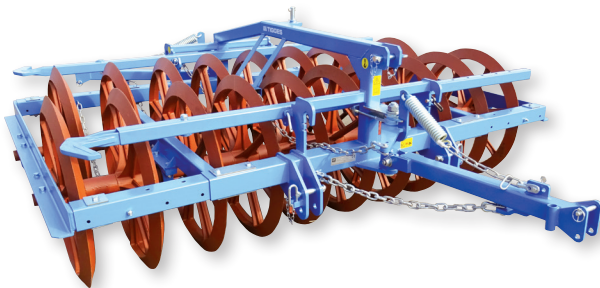
Same application as UP900, but with additional near-surface reconsolidation and fine crumbling by the trailed roller.

## **Basic equipment:**

- Ring type W 300
- With a cam roller  $\varnothing$  500/550 mm with a telescopic drawbar and semi-mounted equipment (favourable transportation balance point)

## **Additional equipment:**

- Pulling chain for conventional plough, 3 strands
- Spring-loaded tow hooks height adjustment and swivel brakes, standard with shock absorbers.



**Double packer DP/DP S**

## **Application area:**

- DP 700 with ring type W 280 - 30° for medium to heavy soils
- DP 700 S with ring type W 305 - 30° for heavy to very heavy soils
- DP 700 B with ring type W 281 - 45° for light to medium soils
- DP 900 with ring type W 160 - 40° for varying soils
- DP 900 S with ring type W 300 - 50° for light to medium soils

## **Basic equipment:**

- Expandable telescopic frame
- from 285 cm fourfold shaft bearing
- Trunnion for trailing roller

## **Additional equipment:**

- Pull chain for conventional plough, 2-strands
- Spring-loaded tow hooks with height adjustment and swivel brakes, standard with shock absorbers
- Hydraulic long-travel device

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## TECHNICAL DATA

### UNDERGROUND PACKER with ring diameter 900 mm

Type	Working width approx. cm	Number* of rings	Ring-Ø approx. cm	Weight approx. kg**		
				UP 900	UPN 900 approx. ø 500 mm	UPN 900 approx. ø 550 mm
UP 900-150	150	8 (10)	900	900	1320	1390
UP 900-170	170	9 (11)	900	980	1420	1500
UP 900-190	190	10 (12)	900	1150	1520	1610
UP 900-210	210	11 (13)	900	1230	1710	1800
UP 900-230	230	12 (14)	900	1330	1850	1950
UP 900-250	250	13 (15)	900	1410	1950	2060
UP 900-270	270	14 (16)	900	1490	2060	2180
UP 900-290	290	15 (17)	900	1570	2160	2290
UP 900-310	310	16 (18)	900	1660	2280	2410
UP 900-330	330	17 (20)	900	1780	2450	2600
UP 900-350	350	18 (20)	900	1840	2650	2800
UP 900-370	370	19 (22)	900	1910	2780	2950

\* Values in parentheses = Number of cam rings for UPN series | \*\* Weight incl. draw arms | Standard ring W 300 (50°)

### DOUBLE PACKER with ring diameter 700 mm

Type	Working width approx. cm	Numbers of rings	Ring-Ø approx. cm	Weight approx. kg*		
				Ring W 280	Ring W 281 Serie B	Ring W 302 Serie S
DP 700 I-150	150	15	700	830	930	1050
DP 700 I-170	170	17	700	910	1010	1160
DP 700 II-190	190	19	700	1000	1110	1270
DP 700 II-210	210	21	700	1070	1190	1380
DP 700 II-230	230	23	700	1230	1360	1560
DP 700 II-250	250	25	700	1300	1450	1660
DP 700 II-270	270	27	700	1390	1550	1780
DP 700 II-290	290	29	700	1490	1660	1900
DP 700 II-310	310	31	700	1560	1740	2010
DP 700 II-330	330	33	700	1630	1830	2110
DP 700 II-350	350	35	700	1720	1920	2220
DP 700 II-370	370	37	700	1790	2000	2320
DP 700 III-390	390	39	700	2030	2260	2590
DP 700 III-410	410	41	700	2090	2330	2680
DP 700 III-430	430	43	700	2160	2420	2770

### DOUBLE PACKER DP 700 semi mounted

DP 700 II-290 FW	290	29	700	1980	2050	2300
DP 700 II-310 FW	310	31	700	1960	2140	2400
DP 700 II-330 FW	330	33	700	2030	2220	2500
DP 700 II-350 FW	350	35	700	2120	2320	2610
DP 700 II-370 FW	370	37	700	2190	2400	2720
DP 700 III-390 FW	390	39	700	2370	2600	2930
DP 700 III-410 FW	410	41	700	2420	2670	3020

DP 700 III: one-piece frame | \* weight incl. tow arms | other ring types on request



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## UP - UPN - DP

### TECHNICAL DATA

#### DOUBLE PACKER with ring diameter 900 mm

Type	Working width approx. cm	Number of rings	Ring-Ø approx. cm	Weight approx. kg*	
				Ring W 160	Ring W 300 Serie S
DP 900 I-150	150	10	900	1090	1140
DP 900 I-165	165	11	900	1160	1210
DP 900 I-180	180	12	900	1250	1300
DP 900 I-195	195	13	900	1320	1370
DP 900 II-210	210	14	900	1420	1480
DP 900 II-225	225	15	900	1490	1550
DP 900 II-240	240	16	900	1690	1760
DP 900 II-255	255	17	900	1760	1840
DP 900 II-270	270	18	900	1870	1950
DP 900 II-285	285	19	900	1970	2060
DP 900 II-300	300	20	900	2060	2160
DP 900 II-315	315	21	900	2140	2230
DP 900 II-330	330	22	900	2270	2330
DP 900 II-345	345	23	900	2300	2410
DP 900 II-360	360	24	900	2380	2500
DP 900 II-375	375	25	900	2460	2580
DP 900 III-390	390	26	900	2760	2890
DP 900 III-405	405	27	900	2840	2970
DP 900 III-420	420	28	900	2900	3090
DP 900 III-435	435	29	900	2980	3110
DP 900 III-450	450	30	900	3050	3190
DP 900 III-465	465	31	900	3120	3260

#### DOPPELPACKER DP 900 semi mounted

DP 900 II-285 FW	285	19	900	2360	2440
DP 900 II-300 FW	300	20	900	2450	2540
DP 900 II-315 FW	315	21	900	2520	2620
DP 900 II-330 FW	330	22	900	2610	2720
DP 900 II-345 FW	345	23	900	2680	2790
DP 900 II-360 FW	360	24	900	2770	2890
DP 900 II-375 FW	375	25	900	2950	2970
DP 900 III-390 FW	390	26	900	3100	3230
DP 900 III-405 FW	405	27	900	3170	3300
DP 900 III-420 FW	420	28	900	3240	3370
DP 900 III-435 FW	435	29	900	3310	3450
DP 900 III-450 FW	450	30	900	3380	3520
DP 900 III-465 FW	465	31	900	3450	3600

DP 900 III: one-piece frame | \* Weight incl. draw arms | other ring types on request

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## REAR-TRAILED ROLLER

### Cam roller N 50/55

For use on light to medium-heavy soils as an ideal  
combination supplement to the packer.



DP 900 with N 50

- Easy handling without influence on the turning process
- Additional reconsolidation also in the near-surface area
- Optimum crumbling with erosion-inhibiting seedbed structure
- Extendable in working by unilateral wheel bearing
- From 350 cm working with triple shaft bearings
- Self-cleaning roller with scraper, individually replaceable

### Design variants:

- Basic unit without attachments
- Standard drawbar for packer draw
- Telescopic drawbar with coupling device for transportation
- Transport wheels with lifting kinematics
- Swivel roller for larger working widths

## TECHNICAL DATA

### CAM ROLLER

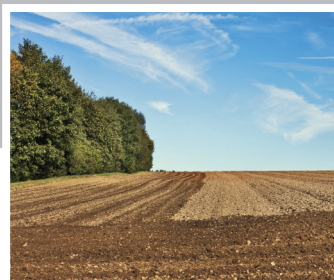
Working width approx. cm	Number of rings	Bearing clearance approx. cm	Type approx. ø 500 mm	Weight* approx. kg	Type approx. ø 550 mm	Weight* approx. kg
150	9	154	N 50-150	345	N 55-150	410
170	10	174	N 50-170	375	N 55-170	445
185	11	154	N 50-185	390	N 55-185	470
205	12	174	N 50-205	420	N 55-205	510
220	13	154	N 50-220	445	N 55-220	540
240	14	174	N 50-240	470	N 55-240	575
260	15	154	N 50-260	495	N 55-260	605
280	16	174	N 50-280	525	N 55-280	650
300	17	154	N 50-300	545	N 55-300	675
320	18	174	N 50-320	575	N 55-320	810
350	20	2x141	N 50-350	675	N 55-350	825
380	22	2x141	N 50-380	725	N 55-380	890

### SWIVELELING ROLLERS

350	20	2x 154	N 50-350 SW	1110	N 55-350 SW	1180
380	22	2x 154	N 50-380 SW	1170	N 55-380 SW	1250
440	25	2x 121/1x 87	N 50-440 SW	1220	N 55-440 SW	1400
480	27	2x 121/1x 87	N 50-480 SW	1270	N 55-480 SW	1480

\* Weight with standard drawbar | Articulated drawbar on request

All devices and their accessories comply with the provisions of the European Machinery Directive. We reserve the right to make technical changes to the devices described here. The weights stated are approximate and only apply to the respective standard version. The possible earth attachment must be taken into account for the lifting force requirement!



**EISENGIESSEREI &  
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