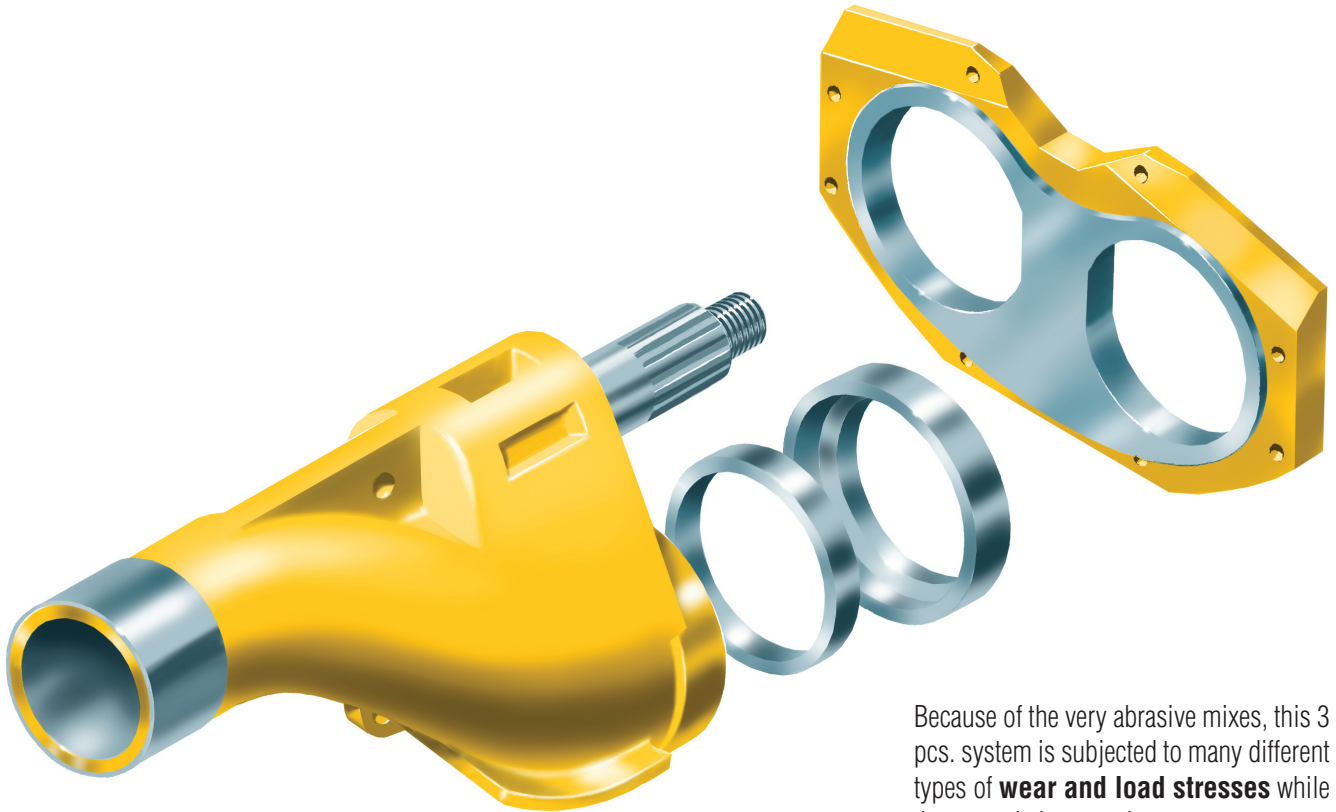


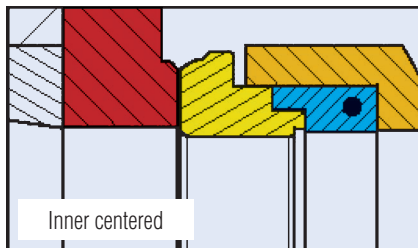
S-transfer tube wear parts

DURO 22 · Carbide · Wear-resistant castings (cast-iron)

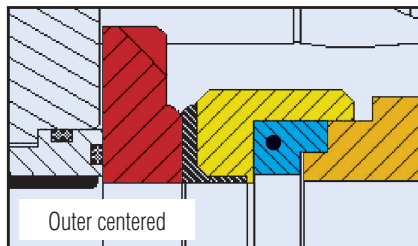
Putzmeister



Because of the very abrasive mixes, this 3 pcs. system is subjected to many different types of **wear and load stresses** while the pump is in operation:



Inner centered
Application for nominal diameters
ND 180 + ND 200



Outer centered
Application for nominal diameters
ND 230 (big mouth)

- The spectacle wear plate is fitted in the hopper, to the openings that lead to the delivery cylinders.
- The wear ring is fixed to the inlet opening on the S-transfer tube.
- The thrust ring lies between the wear ring and S-transfer tube entry.

There are two different types of fixing: inner centered and outer centered.

- **Sliding abrasion** on both contact surfaces of the wear parts
- **Blast jet wear** on the outer edges of the wear ring and inner edges of openings on the spectacle wear plate
- **Impact stress** at the parting plane, between the spectacle wear plate and wear ring
- **Flow abrasion** on openings of the spectacle wear plate and ring

Rule of thumb: The wear ring should “always” be as hard as the spectacle wear plate, if not harder, but never the other way around.

■ Spectacle wear plate ■ Thrust ring
■ Wear ring ■ S-transfer tube

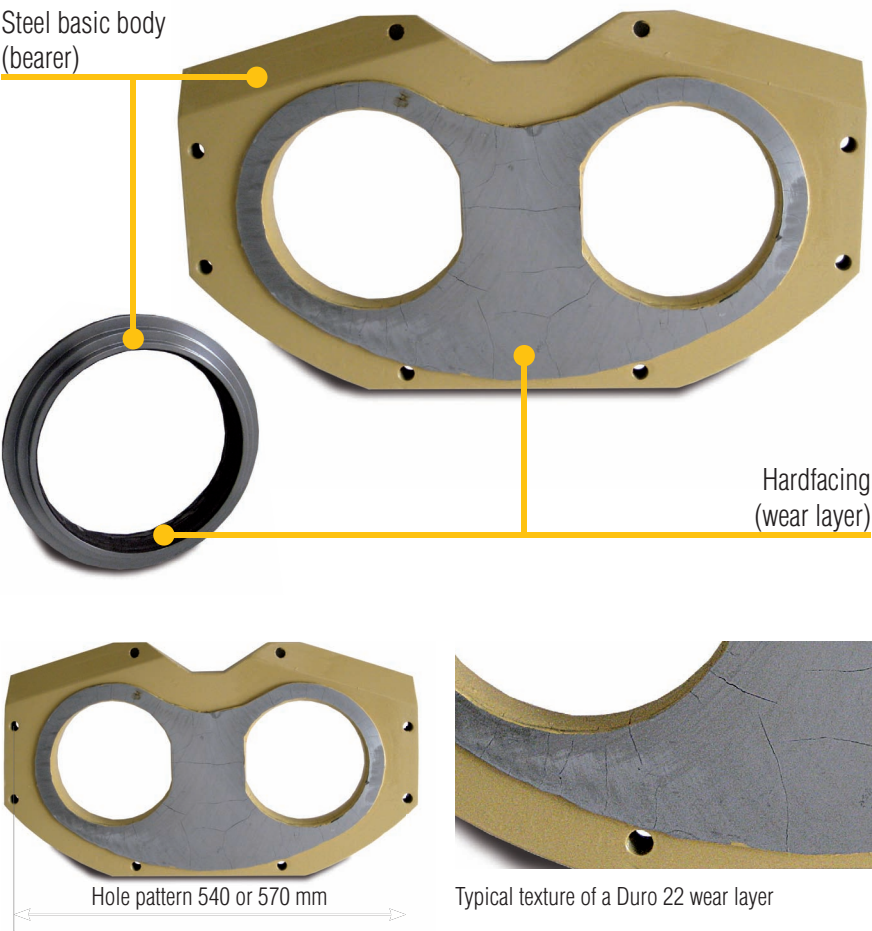
DURO 22

Mounting instructions for hardfaced
spectacle wear plates available on
request (document no. 063414)

Wear parts with the designation DURO 22 are components that consist of a basic body (bearer) armoured with a welded, hardfaced material in areas subject to wear (wear layer welded on).

Advantages:

- good value and adequate service life
- suitable for practically all fields of application in the concrete pumping sector



Wear parts for S transfer tube DURO 22		Hoppers RS 600 + all RS 905		Hopper RS 907	
		ND 180	ND 200	ND 230	
Description	Type	Part no.	Part no.	Part no.	
Thrust ring	NBR	249304.004	252898.002	458878	
Wear ring	DURO 22	251231.000	251031.006 more economical alternative ECOLINE 403094	261123.001	
Spectacle wear plate	DURO 22	234559.000	229488.005 more economical alternative ECOLINE 403095	261122.002 Hole pattern 540 mm	406927 Hole pattern 570 mm (11HLS / 16HLS / 20H only)

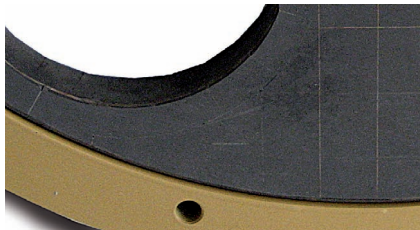
Carbide

High hardness values: 2 to 4 times longer service life compared to the conventionally faced version!

Mounting instructions for spectacle wear plates equipped with carbide segments, available on request (document no. 048422)

Carbide wear parts consist of a basic body ("structural steel") and a 5 mm thick (approx.) carbide wear layer.

Carbide wear parts have been available from Putzmeister for approx. 20 years. Due to many years' experience in extreme long-distance and high-rise concrete pumping (e.g. Burj Dubai), we have developed and deployed three carbide spectacle wear plate designs.



Typical texture of a carbide wear layer

- Insert ring consisting of steel basic body with carbide segments brazed on; clamping element in the section between the rings hardfaced **(1)**

side, whereby the section between the rings is covered by a carbide coating or replaceable screw-on wear plate segments **(2)**

- A "clamping frame" fixes a kidney-shaped, carbide coated wear insert **(3)**
- Steel basic body with carbide coated steel rings, inserted on the wear ring



(1) Spectacle wear plate with carbide insert rings



(2) Spectacle wear plate with carbide insert rings (gusset version)



(3) Spectacle wear plate with carbide kidney-shaped insert

Wear parts for S-transfer tube Carbide		Hoppers RS 600 + all RS 905		Hopper RS 907	
		ND 180 Ø	ND 200 Ø	ND 230 Ø	
Description	Type	Part no.	Part no.	Part no.	
Thrust ring	NBR	249304.004	252898.002	458878	
Wear ring	Carbide	269758.009	269760.000	494520	
Spectacle wear plate	Carbide insert ring	254566.002 Assembly consists of: 2 x 269759.008 1 x 275604.008	254565.003 Assembly consists of: 2 x 485385 1 x 275608.004	263726.008 Hole pattern 540 mm Assembly consists of: 2 x 271070.005 1 x 263728.006	276313.000 Hole pattern 570 mm Assembly consists of: 2 x 271070.005 1 x 276312.001
	Carbide insert ring (gusset version)		463444 Assembly consists of: 2 x 485385 1 x 463435, 1 x 463426		
	Carbide kidney-shaped insert	474607 Assembly consists of: 1 x 473856 1 x 474603	498276 Assembly consists of: 1 x 498270 1 x 498275		

Wear-resistant castings (cast-iron)

The wear-resistant casting (cast-iron) version is used mainly at PIT in process engineering, and for concrete applications in BSA pumps only.

Because it has been alloyed with certain elements, the special wear-resistant casting (cast-iron) displays higher wear resistance compared to conventional steels.

- Wear rings – complete component made of wear-resistant casting (cast-iron)
- Spectacle wear plates – two varieties: insert rings or kidney-shaped insert – both made entirely of wear-resistant casting (cast-iron)

A wear-resistant casting (cast-iron), of course, does not have the same wear resistance as DURO 22, for example, but still has a distinct advantage in that it is free of cracks. As these wear parts are less susceptible to blast jet wear, they are to be used preferably for pumping thin mediums and high-pressure pumping (mainly of less abrasive mixes).

Clamping element for insert rings (section between rings welded on)

Insert ring

Wear ring



Spectacle wear plate with insert rings made of wear-resistant casting (cast-iron)

Clamping element for kidney-shaped insert

Kidney-shaped insert



Spectacle wear plate with kidney-shaped insert made of wear-resistant casting (cast-iron)

Wear parts for S-transfer tube Wear-resistant casting (cast-iron)		Hoppers RS 600 + all RS 905	
		ND 180	ND 200
Description	Type	Part no.	Part no.
Thrust ring	NBR	249304.004	252898.002
Wear ring	Casting W72	247213.003	257270.007
Spectacle wear plate	Casting W72 insert ring	282242.000 Assembly consists of: 2 x 282056.005, 1 x 275604.008	282243.009 Assembly consists of: 2 x 282240.002, 1 x 275608.004
	Casting W72 Kidney-shaped insert	257297.006 Assembly consists of: 1 x 247246.009, 1 x 273911.007	257298.005 Assembly consists of: 1 x 247247.008, 1 x 247245.000

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