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### 1 Purpose

This LESER Global Standard (LGS) provides instructions on the removal of discs from LESER safety valves. The required work steps and materials are described.

### 2 Scope

This document must be applied when removing discs in agencies and subsidiaries of Leser GmbH & Co. KG.

### 3 Disclaimer

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LESER GmbH & Co. KG is available to the users of this document to provide additional information.

#### 4 Qualified fitting personnel

LESER safety valves may only be cleaned by trained or qualified fitters. The qualifications must be obtained through the appropriate training measures.

#### 5 Metallic seal types 437 / 481

Illustrations	Description	Aids / Tools
 <p>Figure 5-1</p>	<p>After removal of the pin (connection of spindle / disc), push the disc out of the lifting aid.</p>	

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## 6 Soft seal types 438, 481




Illustrations	Description	Aids / Tools
 <p data-bbox="188 815 316 846"><b>Figure 6-1</b></p>		
 <p data-bbox="188 1252 316 1283"><b>Figure 6-2</b></p>	<p data-bbox="794 853 1107 913">Push the disc out of the lifting aid.</p>	
 <p data-bbox="188 1742 316 1774"><b>Figure 6-3</b></p>	<p data-bbox="794 1294 1107 1355">Remove the O-ring from the lifting aid.</p>	

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## 7 Plastic sealing plate type 437

Illustrations	Description	Aids / Tools
 <p>Figure 7-1</p>	<p>Unscrew the disc with the special spanner socket. Screw the disc out of the lifting aid. Remove the sealing plate from the lifting aid.</p>	<p>Special spanner socket (special tool)</p>
 <p>Figure 7-2</p>		<p>Special spanner socket (special tool)</p>
 <p>Figure 7-3</p>	<p>Individual parts</p>	


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Illustrations	Description	Aids / Tools
 <p>Figure 7-4</p>	Individual part	



## 8 Vulcanised sealing surface type 439

Illustrations	Description	Aids / Tools
 <p>Figure 8-1</p>	Loosen the lock nut and unscrew. Take the disc out of the lifting aid.	

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## 9 Metallic seal type 459

Illustrations	Description	Aids / Tools
 <p>Figure 9-1</p>	<p>Turn the lifting aid with a C-spanner so that the retaining clip twists out. Remove the retaining clip. Pull the lifting aid off the disc.</p>	<p>C-spanner</p>
 <p>Figure 9-2</p>	<p>Individual parts</p>	

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## 10 Plastic sealing plate types 459, 462

Illustrations	Description	Aids / Tools
 <p>Figure 10-1</p>	<p>Turn the lifting aid with the C-spanner so that the retaining clip twists out. Remove the retaining clip. Pull the lifting aid from the disc. Remove the sealing plate from the disc.</p>	<p>C-spanner with nose</p>
 <p>Figure 10-2</p>	<p>Individual parts</p>	

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## 11 O-ring seal type 462



Illustrations	Description	Aids / Tools
 <p>Figure 11-1 Heavy clamping sleeves</p>		
 <p>Figure 11-2</p>	Remove the pin from the lifting aid. Push the disc out of the lifting aid. Remove O-ring from the disc.	
 <p>Figure 11-3</p>	Individual parts	

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## 12 Disc with rotating lifting aid

Illustrations	Description	Aids / Tools
 <p>Figure 12-1</p>	<p>Remove pins from both sides of the lifting aid. Remove lifting aid from disc.</p>	
 <p>Figure 12-2</p>	<p>Individual parts</p>	

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### 13 O-ring disc (for several valve types)

Illustrations	Description	Aids / Tools
 <p>Figure 13-1</p>	<p>Twist off nut</p>	<p>Spanner</p>
 <p>Figure 13-2</p>	<p>Remove retainer</p>	
 <p>Figure 13-3</p>	<p>Remove O-ring from disc.</p>	
 <p>Figure 13-4</p>	<p>Individual parts</p>	

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## 14 Disc with sealing plate (for several valve types)

Illustrations	Description	Aids / Tools
 <p>Figure 14-1</p>	<p>Twist off nut</p>	<p>Spanner</p>
 <p>Figure 14-2</p>	<p>Remove retainer</p>	
 <p>Figure 14-3</p>	<p>Remove sealing plate from disc.</p>	

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## 15 Metal seat (for several valve types)

Illustrations	Description	Aids / Tools
 <p data-bbox="188 853 331 880">Figure 15-1</p>	<p data-bbox="730 456 1114 618">Turn the lifting aid with a C-spanner so that the retaining clip twists out. Remove the retaining clip. Pull the lifting aid from the disc.</p>	<p data-bbox="1145 456 1422 483">C-spanner with nose</p>
 <p data-bbox="188 1361 331 1388">Figure 15-2</p>	<p data-bbox="730 887 935 913">Individual parts</p>	

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## 16 Disc 441XXL and 442XXL (for several valve types)

Illustrations	Description	Aids / Tools
 Figure 16-1	Bend back the wings of the locking plate	Screwdriver
 Figure 16-2	Loosen and remove screw	Spanner
 Figure 16-3	Raise the lifting aid	
 Figure 16-4	Individual parts	

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## 17 Disc type 546 (to DN80)

Illustrations	Description	Aids / Tools
 <p>Figure 17-1</p>	<p>Remove snap ring with snap ring pliers</p>	<p>Snap ring pliers</p>
 <p>Figure 17-2</p>	<p>Remove lifting aid from disc body (CAUTION GLASS)</p>	

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## 18 Disc type 546 (to DN100)



Illustrations	Description	Aids / Tools
 <p>Figure 18-1</p>	<p>Remove the pin. Remove the lifting aid from the disc body. (CAUTION GLASS)</p>	

## 19 Disc types 483, 484, 485, 488

Illustrations	Description	Aids / Tools
 <p>Figure 19-1</p>	<p>Push disc body out of lifting aid.</p>	
 <p>Figure 19-2</p>	<p>Remove elastomer bellows from the lifting aid.</p>	

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Illustrations	Description	Aids / Tools
 <p>Figure 19-3</p>		
 <p>Figure 19-4</p>	<p>Remove the O-ring from the lifting aid.</p>	

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