

## INSTRUCTIONS FOR USE FILTER SOCKET E

### 1. Instructions for use



These instructions for use are a supplement to the working instructions for the Thermit® welding process.

*Figure 1: filter socket E*

Filter socket E can be used in the following combinations, in all Thermit® welding processes:

- In combination with the charged single use crucible I

In order to use filter socket E with the charged single use crucible I, it is necessary to remove the lid and the inserted foam ring (Figure 2). The labyrinth disc must then be checked for tightness.



*Figure 2: opening the charged single use crucible I with a crucible opener*

- In combination with the uncharged single use crucible I or the uncharged single use crucible I, high design

In order to use filter socket E with the uncharged single use crucible I, it is necessary to remove the lid and the inserted cardboard ring. Then fill in the portion and put on the crucible cap according to the working instructions.

### 1.1 Signal words and symbols


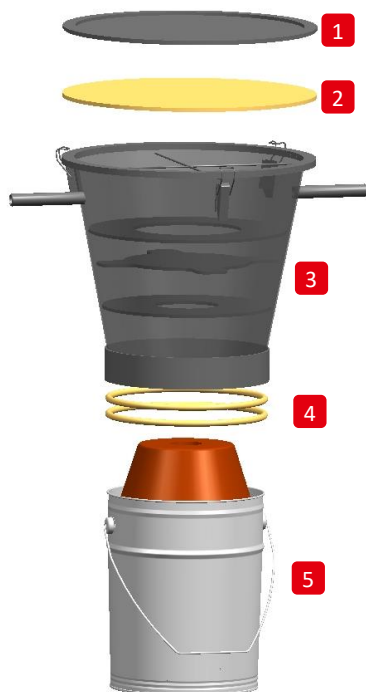
SYMBOL	MEANING
<b>WARNING</b>	The signal word WARNING indicates a hazard with a moderate level of risk that, if not avoided, may result in serious injury.
	Situations with a risk of injury are additionally marked with a warning sign.

Table 1: signal words and symbols

## 2. Filter design and use

This chapter illustrates the most important components of filter socket E and explains their functions.

### 2.1 Product description



Filter socket E consisting of:


	COMPONENT
(1)	Supporting grid
(2)	Filter
(3)	Filter housing
(4)	Sealing cords
(5)	Uncharged single use crucible I

Figure 3: overview of filter socket E with the uncharged single use crucible I

### 2.2 Use

1. The Thermit® weld should be prepared for in accordance with the working instructions for the relevant welding process.
2. Position the filter (2) on the filter housing. (3).
3. Then position the supporting grid (1) on the filter (2) and secure it (3) with the filter housing.
4. Check the sealing cords (4) for wear and correct fit.
5. Place the single use crucible I (5) on the mould shoe.
6. Igniting the Thermit® portion.
7. Place filter socket E on the single use crucible I (5).
8. When the Thermit® welding has been completed, filter socket E remains on the single use crucible I for at least two minutes to cool down (5).
9. Wearing protective gloves, remove filter socket E from the single use crucible I (5), and set it down on a fire-resistant surface in a safe place for at least two minutes to let it cool down.

10. Turn the filter after Thermit® welding (2) and then replace it after a subsequent round of Thermit® welding.

	<b>WARNING</b>
	Deflagrations and serious burns may happen when turning the filter immediately after use.

### Handling of sealing cords

Two sealing cords (4) (diameter: 12 mm, length: 800 mm) are used to ensure that filter socket E is correctly positioned on the single use crucible I. These must be inserted into filter socket E, in compliance with the following instructions:

1. The first sealing cord is inserted into the groove in filter socket E and pressed down.
2. The second sealing cord should lie loosely on top of the first sealing cord.
3. When placing filter socket E on the rim of the crucible, turn filter socket E slightly so that the sealing cord can be adjusted to the geometry of the rim of the crucible. If the second sealing cord is already firmly pressed into the fitting of the attachment ring, this adjustment may not be sufficient. In this case, it is recommended to remove the sealing cord and reinsert it.

The sealing cords are made of heat-resistant material and can be used several times. The user must check the condition of the sealing cords. The sealing cords must be replaced if damaged.

### 2.3 Disposal of filter material

Check all relevant local, regional and national laws and regulations. Local regulations may be more stringent than regional and national ones.

The waste code number, according to the European List of Wastes, is 101103.

Publisher:  
ELEKTRO-THERMIT GMBH & CO. KG  
A GOLDSCHMIDT COMPANY  
Chemiestr. 24, 06132 Halle (Saale), Germany  
Telephone +49 345 7795-600, Fax +49 345 7795-770  
et@goldschmidt.com, www.goldschmidt.com

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