CE/Handschesisextruder

D EG – Konformitätserklärung
F Déclaration CE de conformité
I Dichiarazione CE di conformità
GB EC Declaration of conformity
E Declaración CE de conformidad

D EG – Konformitätserklärung
DOHLE Extrusionstechnik, D-53809 Ruppichteroth/BRD
Bestätigt, dass das nachfolgend bezeichnete Gerät in der von uns in Verkehr gebrachten Ausführung die Anforderungen der folgenden EG-Richtlinie(n) erfüllt.

Bezeichnung des Gerätes : Handschweissextruder
Typ    : Mini
EG – Richtlinie   : Elektromagnetische Verträglichkeit
                      89/336/EWG Niederspannungsrichtlinie 73/23/EWG
Harmonisierte Normen  : EN55014-1, EN55014-2, EN61000-3-2,
                      EN61000-3-3, EN60335-2-45

Ruppichteroth, 1.04.2003
Peter Christian Dohle, Geschäftsführer

F Déclaration CE de conformité
DOHLE Extrusionstechnik, D-53809 Ruppichteroth/BRD
déclare qu’à la sortie de ses usines l’appareil désigné ci-dessous était conforme aux dispositions de(s) la directive(s) CEE suivante(s).

Description de l’appareil : Handschweissextruder
Modèle  : Mini
Directive(s) CEE : 89/336/CEE, 73/23/CEE
Normes harmonisées : EN55014-1, EN55014-2, EN61000-3-2,
                      EN61000-3-3, EN60335-2-45

Ruppichteroth, 1.04.2003
Peter Christian Dohle, Geschäftsführer

I Dichiarazione CE di conformità
DOHLE Extrusionstechnik, D-53809 Ruppichteroth/BRD
dichiara che l’apparecchio qui di seguito descritto nei modelli commercializzati risulta conforme alle direttive di armonizzazione comunitarie imparatite dalla CEE.

Descrizione dell'apparecchio : Handschweissextruder
Modello  : Mini
Direttive CEE : 89/336/CEE, 73/23/CEE
Norme armonizzate : EN55014-1, EN55014-2, EN61000-3-2,
                    EN61000-3-3, EN60335-2-45

Ruppichteroth, 1.04.2003
Peter Christian Dohle, Geschäftsführer

GB Declaration of conformity
DOHLE Extrusionstechnik, D-53809 Ruppichteroth/BRD
decides that the tool described below, released by us. Fulfits the provisions of the following EC directive(s).

Description of tool : Handschweissextruder
Type    : Mini
EC directives : 89/336/CEE, 73/23/CEE
Harmonized standards : EN55014-1, EN55014-2, EN61000-3-2,
                      EN61000-3-3, EN60335-2-45

Ruppichteroth, 1.04.2003
Peter Christian Dohle, Geschäftsführer

E Declaración CE de conformidad
DOHLE Extrusionstechnik, D-53809 Ruppichteroth/BRD
certifica que el aparato que a continuación se describe cumple con la ejecución que hemos puesto en circulación, con las exigencias de las directrices armonizadas de la CE.

Denominación del aparato : Handschweissextruder
Modelo  : Mini
Directrice(s) de la CE : 89/336/CEE, 73/23/CEE
Normas armonizadas : EN55014-1, EN55014-2, EN61000-3-2,
                      EN61000-3-3, EN60335-2-45

Ruppichteroth, 1.04.2003
Peter Christian Dohle, Geschäftsführer
Operating instructions
Mini CS

Type of machine : Mini CS
Machine No. : ……………………
Required voltage : 230 V / 50 - 60 Hz
Heating : 320 W
Air heating : 1600 W
Extruder drive unit : 710 W
Air flow : 230 l/min

We retain all copyrights of all descriptions, drawings and schedules contained in these operating instructions which may not be reproduced nor be made accessible by third parties or by competitors, neither in whole nor in part, unless we have expressly consented thereto.

Before start-up these operating instructions must be examined carefully because we will not assume any liability for any failures resulting from improper use. No warranty claims will be accepted if the hand-held welding and extruding machine has been modified unless this has been done in consultation with the manufacturer/ supplier.

**The extruder shall be used for extrusion weld works only !**

**These operating instructions should always be accessible by the operator.**

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**For after-sales service and orders please contact:**

BAK Thermoplastic welding technology Ltd.
Birkenweg 3
CH – 6056 Kägiswil(OW)

Telefon: 0041 41 661 22 50
Telefax: 0041 41 661 22 51
E-Mail: info@bak-ag.com
**Safety:**

Pursuant to section 55 of VDE 0 100 (Regulations of the Association of German Electrotechnical Engineers), the extruder must be operated using a protective switch or an isolation transformer.

Always keep extruder dry!

Operating hand-held welding and extruding machines is subject to applicable national regulations.

Observe applicable regulations for the prevention of accidents as well as technical rules for safe and professional operation.

Directive 92/ 57/ EWG dated June 24, 1992, shall be applicable by analogy.

**Utilisation:**

Hand-held welding and extruding machines are manufactured according to the latest state of the art and in compliance with safety requirements.

Any improper use may result in dangers for the operator or third parties or may adversely affect machines and assets.

Only use hand-held welding and extruding machines if in technically perfect condition and for the purposes for which they are intended while observing the operating instructions.

The manufacturer / supplier will not accept any liability for any failure to comply with the above or for damages resulting therefrom.

Any utilisation of the hand-held welding and extruding machine for other purposes than those for which it is intended is subject to the consent of the manufacturer / supplier.

Work on electrical parts of the hand-held welding and extruding machines may only be performed by an electrical engineer in compliance with electro-technical rules.
**Special risks:**

All hand-held welding and extruding machines may only be held and operated using the handles provided for this purpose.

A risk of burning exists on all uncovered metal parts. Avoid contact with these parts because they may achieve temperatures of up to 350 °C.

**Safety area:**

The hot air stream of the hand-held welding and extruding machine may not be directed to temperature-sensitive objects or living things. Ensure that a safety distance of 2m is observed in all directions.

**Operation:**

Never use hand-held welding and extruding machines without air supply.

In case of external air supply ensure that the feed line is of sufficient size.

The pressurised air that is supplied must be free of oil and water.

**Overhead work:**

When working overhead always wear appropriate safety devices (such as hard hat, goggles etc.).
Safety:

Check for correct nominal voltage before connecting the hand-held welding and extruding machine to the mains voltage.

Mains voltage must be identical to the nominal voltage shown on the type plate of the hand-held welding and extruding machine.

Pursuant to sec. 55 of VDE 0 100 the hand-held welding and extruding machine must be operated using a protective switch or an isolation transformer.

Extension cords:

When using extension cords the minimum diameter of cables must be observed.

Length up to 18 m: diameter 2.5 mm²
Length up to 50 m: diameter 4.0 mm²

Extension cords must be approved and marked for their place of utilisation.

Stop operating the hand-held welding and extruding machine if:

- connecting line or plug have been damaged
- safety installations have been damaged
- foreign objects or liquids have entered the hand-held welding and extruding machine
- changes occur in the operating state

Never spray water on hand-held welding and extruding machines

(risk of short circuit)

Never use hand-held welding and extruding machines in hazardous or inflammable areas.
Start-up

General:

Observe the notes on safety contained in these operating instructions. In addition, the regulations on the prevention of accidents and the national regulations shall apply.

Assembling the hand-held welding and extruding machine

When dispatched, our hand-held welding and extruding machines are almost completely assembled. What remains to be done is to screw the enclosed handle to the machine.

For machines with external air supply the air supply hose must be connected.

Ensure sufficient supply with air which is free of oil and water (min. 300 l/min).

We recommend our air compressor, item no. DX 011.

Weld fitting

The machine is supplied with two blanks for weld fittings which can be machined to suit your requirements.

Note: please observe guideline DVS 2207 part 4.

If you indicate your required form of seam and thickness of plates we will supply two weld fittings machined ready for use.
Start-up of hand-held welding extruder

Observe the section concerning safety of these operating instructions.

Hand-held welding and extruding machines may not be used without air supply. This would inevitably result in damages of the extruder.

Before connecting the extruder to the mains supply please check that:

- air supply is connected correctly
- the driving machine has not been put to permanent operation
- now switch on air supply
- and put plug into socket.

If you give now the power supply plug to a suitable plug socket (230V, 16A), press that On-off switch on the air heater on position ON and place on position 4 the potentiometer. The machine heats now up.

Make sure by each switching on of the machine, that the on-off switch of the drive engine is switched off.

After a heating-up time of approx. 15 minutes, start the machine using the welding material wished by you and examine the air and welding material temperature with a suitable temperature measurement. By changing the temperature of the air heater consider the reaction response time of the system.
**Operating instructions**

**Mini CS**

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**Change of the welding shoe**

In order to be sure that no more old welding rod is in the hand welding extrusion, heat up the machine on operating temperature, remove the welding shoe and change the nozzle (note: left hand thread!).

**Note: with work on heated machine burn danger.**

When the nozzle is changed drive for approx. 1 min. the new welding rod in the hand welding extrusion.

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**Interruption of the welding**

Do not leave the hand welding extruder unsupervised.

The air supply must remain maintained.

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**Switch off the hand welding extruder**

Bring the potentiometer of the air heater in position 0 and pull after ca. 2 minutes the power supply plug.

**Note: Also after 15 minutes still exists on bright metal parts burn danger.**

No water or other materials for accelerating the cooling procedure must be used.

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**Maintenance**

Before maintenance work on the equipment, pull power supply plug!

Maintenance work may be accomplished only by electrical specialists.

**Consider the security chapter!**

After approximately 500 operation hours the hand welding extruder, including the drive unit must be cleaned, greased and controlled. These work may be implemented only by electrical specialists.
Drive

The carbon brushes conductors of the drive must be examined approx. every 200 operation hours and renewed if necessary.

Deep groove ball thrust bearing /barrel extruder

The deep groove thrust bearing and the barrel extruder should be cleaned approx. every 200 operation hours and again be greased

Note: Only high temperature grease can be used. Our art. no.: D-0581
View - controller front - steering box

Controller mass temperature
Art.No.: D - 0855

Potentiometer
Engine speed

Display and control elements of the controller front

Temperature unit
Actual value temperature
AL (Alarm)
Shines if the alarm exit is on
Desired value temperature
Upward - key
Downward - key
Controller – desired value setting

All controllers can be changed only in the desired value and are electronically locked against wrong inputs.

Change the desired value

The controller indicates actual and desired value temperature at the same time.

To change the desired value temperature proceed as follows:

Do not press these keys

Downward – key
By every press of this key, the value becomes smaller, which is indicated on the desired value display. If this key is kept constantly pressed, then the value sequentially becomes smaller.

Upward – key
By every press of this key, the value increases, which is indicated on the desired value display. If this key is kept constantly pressed, then the value sequentially becomes higher.
## Error tracing

### Malfunctioning | Error– Nr.
--- | ---
Driving motor does not start | 01, 02, 08, 09, 10, 11, 12
Driving motor switches off | 03, 08, 09, 10
Extruder remains cold | 09,
Hot air remains cold | 08, 09, 12
Hot air temperature is under desired value | 13
Extrusion temperature is under desired value | 11

### Error– Nr. possible cause | Elimination of error
--- | ---
01 | no current supply | provide current supply
02 | wrong rated voltage | leave examine from specialist/expert
03 | extension cord becomes hot | examine line cross section unroll completely cable drum
08 | On/off switch on OFF | Switch on ON
09 | defect on cable connection | leave examine from specialist/expert
10 | Carbon brushes of drive motor worn pre-heating time too short | Replace the carbon brushes Heat up the extruder
12 | external air supply not connected | Connect external air supply
13 | Air flow too high when using | reduce to prescribed quantity