

Ⓒ Operating Instructions  
Right-angle Grinder

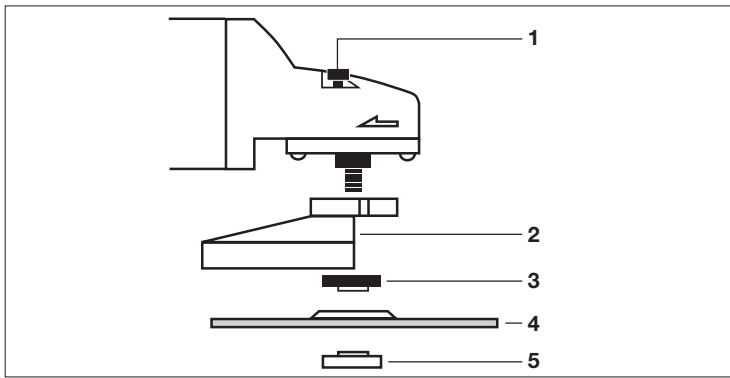
**Einhell**  
↔ **bavaria**

**CE**

Art.-Nr.: 44.302.37

I.-Nr.: 01023

**BWS 115/850-2**



©

- 1 Spindle catch
- 2 Guard
- 3 Clamping flange \*
- 4 Grinding wheel
- 5 Flange nut \*

\* Flange arrangement see page 5

**GB****General safety and accident prevention regulations**

To work safely with this machine and to prevent accidents it is imperative to read the following safety regulations and operating instructions in full and to put all the information into practice.

- Always check the machine, the power cable and the plug before use. Only ever use the machine if it is in perfect, undamaged condition. Damaged parts are to be repaired or replaced immediately by a qualified electrician.
- Always pull the plug out of the power socket before carrying out any work on the machine, before changing the grinding tool and in periods of non-use.
- Always run the power cable away from the back of the machine to guard it from damage.
- For outdoors work use only suitably approved extension cables with a minimum conductor cross section of 1.5 mm<sup>2</sup>. The plug connectors must have earthing contacts and be rain-water-proof.
- Keep the machine in a safe place and out of the reach of children.
- Always wear goggles, safety gloves and ear muffs when using the machine for grinding, brushing and cutting purposes. Wear a breathing mask on dusty jobs.
- For safety reasons the right-angle grinder is only to be used with the guard hood and the additional handle fitted in place.
- Secure the workpiece (with a clamp) so that it cannot slip.
- It is imperative to use a dust extractor when working on stone (cutting or grinding). Make sure the dust extractor is approved for stone dust.
- **It is prohibited to use the machine on asbestos materials.**  
Please note the accident prevention regulations in force in your country.
- **Caution! Risk of fire!** Make sure there are no combustible materials within the maximum radius of flying sparks when you are cutting and grinding materials.
- Use only original spare parts.
- Repairs are to be carried out by qualified electricians only.
- The level of noise at the workplace may exceed 85 dB(A). In this case you will need to introduce noise protection measures for the user. The noise produced by this electric tool is measured in accordance with IEC 59 CO 11, IEC 704, DIN 45635 Part 21, NFS 31-031 (84/537/EEC).
- Make sure of your footing. Avoid abnormal working positions.
- Keep your electric tool out of the rain. Never use electric tools in wet or damp conditions, and never use them near inflammable liquids.
- Never carry the machine by its power cable. Keep the power cable safe from damage. Oil, solvent and sharp edges can damage cables.
- Keep your workplace tidy.
- Make sure the power switch is off before inserting the plug in the socket.
- Wear suitable clothing. Never wear loose-fitting clothes or jewelry. Use a hair-net on long hair.
- For your own safety, use only the manufacturer's accessories and attachments.
- Vibration measured according ISO 5349.

## Operating instructions for right-angle grinders

The machine is light, handy, totally insulated and designed in compliance with the international specifications CEE 20. Provided it is serviced as described in these instructions, the machine will serve you for a long time.

### VOLTAGE

Before you use the machine for the first time, check that the voltage marked on the rating plate is the same as your mains voltage. Under no circumstances is the mains voltage to differ from the rated voltage by more than 10%.

### SWITCH

To help prevent accidents, the right-angle grinder is equipped with a safety switch. To turn on the machine, push the switch forward and push down until it latches in place. To turn the right-angle grinder off, push the switch down. It will then jump back to its original position.

### REPLACING THE GRINDING WHEEL

**Pull out the power plug.**



Simple wheel change by spindle lock: Press the spindle lock and allow the grinding wheel to latch in place. Open the flange nut with the face spanner. Change the grinding or cutting wheel and tighten the flange nut with the face spanner.

**Important! Only ever press the spindle lock when the motor and grinding spindle are at a standstill!**

**You must keep the spindle lock pressed while you change the wheel!**

For grinding or cutting wheels up to approx. 3 mm thick, screw on the flange nut with the flat side facing the grinding or cutting wheel.

### TEST RUN FOR NEW GRINDING WHEELS

Allow the right-angle grinder to run in idle for at least 1 minute with the grinding or cutting wheel fitted in place. Vibrating wheels are to be replaced immediately.

### MOTOR

It is vital for the motor to be well ventilated during operation. Be sure, therefore, to keep the ventilation holes clean at all times.

### CARBON BRUSHES

Carbon brushes that are burned, broken or shorter than 5 mm are to be replaced by original replacement brushes. Always replace the carbon brushes in pairs.

### GRINDING WHEELS

Never use a grinding or cutting wheel bigger than the specified diameter.

Before using a grinding or cutting wheel, check its rated speed. The wheel's rated speed must be higher than the idle speed of the right-angle grinder.

Use only grinding and cutting wheels that are approved for a minimum speed of 11,000 rpm and a peripheral speed of 80 m/sec.

### OPERATING MODES

#### Rough grinding:

For the best rough grinding results, hold the grinding wheel at an angle of between 30° and 40° to the workpiece surface and guide back and forth over the workpiece in steady movements.

#### Cutting:

When you use the right-angle grinder for cutting purposes, avoid tilting it in the cutting plane. The cutting wheel must have a clean cutting edge. A diamond cutting wheel is best used to cut hard stone.

It is prohibited to use the machine on asbestos materials!

Never use a cutting wheel for rough grinding.

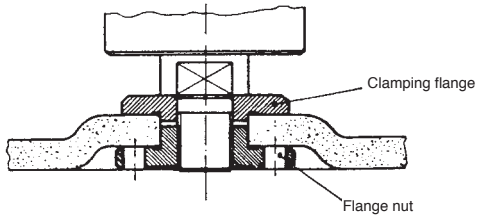
### TECHNICAL DATA

Nominal voltage:	230 V ~ 50 Hz
Power consumption:	850 W
Idle speed:	11.000 rpm
Max. wheel diameter:	115 mm
Drive spindle thread:	M 14
Sound pressure level LPA:	85,9 dB(A)
Sound power level LWA:	98,9 dB(A)
Vibration $\bar{a}_w$	8,9 m/s <sup>2</sup>
Weight	2,3 kg
Totally insulated	II /

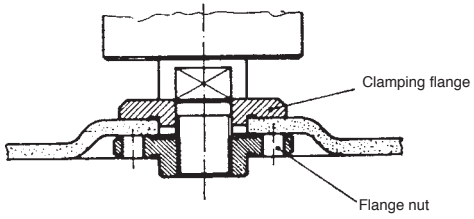
**GB**

**Flange arrangements when using grinding wheels and cutting wheels**

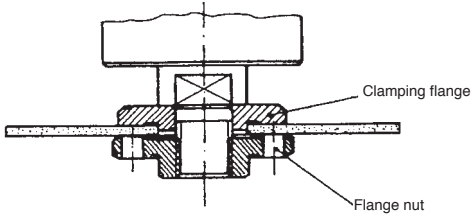
**1** Flange arrangement when using a depressed-centre or straight grinding wheel



**2** Flange arrangement when using a depressed-centre cutting wheel



**3** Flange arrangement when using a straight cutting wheel



- D EG Konformitätserklärung
- GB EC Declaration of Conformity
- F Déclaration de Conformité CE
- NL EC Conformiteitsverklaring
- E Declaracion CE de Conformidad
- P Declaração de conformidade CE
- S EC Konformitetsförklaring
- FIN EC Yhdenmukaisuusilmoitus
- N EC Konformitetserklæring
- RUС EC Заявление о соответствии
- HR Dichiarazione di conformità CE
- RO Declarație de conformitate CE
- TR AT Uygunluk Deklarasyonu



- GR EC Δήλωση περί της ανταπόκρισης
- I Dichiarazione di conformità CE
- DK EC Overensstemmelseserklæring
- CZ EU prohlášení o konformitě
- H EU Konformitijelentés
- SLJ EU Izjava o skladnosti
- PL Oświadczenie o zgodności z normami Europejskiej Wspólnoty
- SK Vyhásenie EU o konformite



**Winkelschleifer BWS 115/850-2**

Der Unterzeichnende erklärt in Namen der Firma die Übereinstimmung des Produktes.

The undersigned declares in the name of the company that the product is in compliance with the following guidelines and standards.

Le soussigné déclare au nom de l'entreprise la conformité du produit avec les directives et normes suivantes.

De ondertekenaar verklaart in naam van de firma dat het product overeenstemt met de volgende richtlijnen en normen.

El abajo firmante declara, en el nombre de la empresa, la conformidad del producto con las directrices y normas siguientes.

O signatário declara em nome da firma a conformidade do produto com as seguintes directivas e normas.

Underteknad förklarar i firmans namn att produkten överensstämmer med följande direktiv och standarder.

Allakirjittanut ilmoittaa liikkeen nimissä, että tuote vastaa seuraavia direktiivejä ja standardeja:

Undertegnede erklærer på vegne av firmaet at produktet samsvarer med følgende direktiver og normer.

Подписавшийся подтверждает от имени фирмы что настоящее изделие соответствует требованиям следующих нормативных документов.

Az aláíró kijelenti, a cég nevében a termék megegyezését a következő irányvonalakkal és normákkal.

Subsemnatul declară în numele firmei că produsul corespunde următoarelor directive și standarde.

Imzalayan kiji, firma adina ürünüñ esajjida anılan yönetmeliklere ve normlara uygun olduđunu beyan eder.

En ονόματι της εταιρείας δηλώνει ο υπογεγραμμένος την συμφώνια του προϊόντος προς τους ακόλουθους κανονισμούς και τα ακόλουθα πρότυπα.

Il sottoscritto dichiara a nome della ditta la conformità del prodotto con le direttive e le norme seguenti.

På firmaets vegne erklærer undertegnede, at produktet imødekommer kravene i følgende direktiver og normer.

Niže podepsani jmenem firmy prohlašuje, že výrobek odpovídá následujícím směrnici a normám.

Az aláíró kijelenti, a cég nevében a termék megegyezését a következő irányvonalakkal és normákkal.

Podpisani izjavjam v imenu podjetja, da je proizvod v skladnosti s sledečimi smernicami in standardi.

Niżej podpisany oświadcza w imieniu firmy, że produkt jest zgodny z następującymi wytycznymi i normami.

Podpisujući zavezane prehlásuje v mene firme, že tento výrobek je v súlade s nasledovnými smernicami a normami.

- |  |   |  |
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EN 50144-1; EN 50144-2-3; EN 5014-1; EN 55014-2; EN 61000-3-2; EN 61000-3-3

Landau/sar, den 13.08.2003

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### ® WARRANTY CERTIFICATE

The guarantee period begins on the sales date and is valid for 2 years.

Responsibility is assumed for faulty construction or material or functional defects.

Any necessary replacement parts and necessary repair work are free of charge.

We do not assume responsibility for consequential damage.

Your customer service partner

Technical changes subject to change

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