



**HOLZMANN MASCHINEN GmbH**  
Marktplatz 4 · A-4170 Haslach  
Tel. +43 7289 71 562-0  
info@holzmann-maschinen.at  
[www.holzmann-maschinen.at](http://www.holzmann-maschinen.at)

Originalfassung

**DE BETRIEBSANLEITUNG**

Übersetzung / Translation

**EN USER MANUAL**

**FR MODE D'EMPLOI**

**CZ NÁVOD K POUŽITÍ**

**IT ISTRUZIONI PER L'USO**

**NL GEBRUIKSAANWIJZING**

**SE BRUKSANVISNING**

**ES MANUAL DE INSTRUCCIONES**

**DRECHSELBANK**

**WOOD TURNING LATHE**

**TOUR À BOIS**

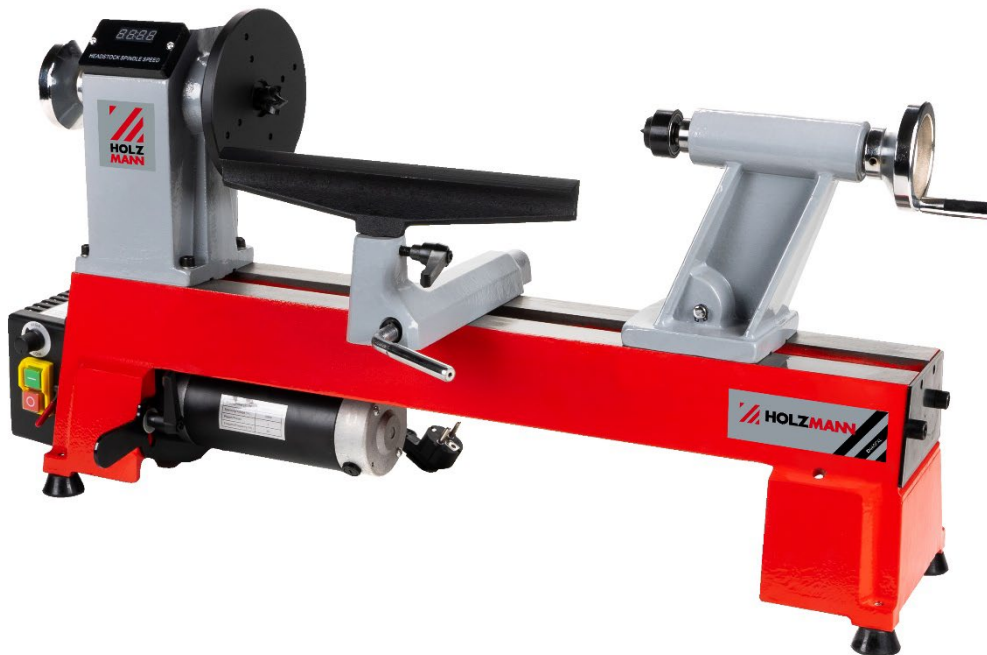
**SOUSTRUHU NA DŘEVO**

**TORNIO**

**DRAAIBANK**

**SVARV**

**TORNO DE MADERA**



**D460FXL\_230V**





## 2 SICHERHEITSZEICHEN / SAFETY SIGNS

### SYMBOLES DE SÉCURITÉ / BEZPEČNOSTNÍ ZNAČKY / SEGNALI DI SICUREZZA / VEILIGHEIDSSYMBOLEN / SÄKERHETSTECKEN / SEÑALES DE SEGUR

|           |                                             |           |                                                 |           |                                                      |
|-----------|---------------------------------------------|-----------|-------------------------------------------------|-----------|------------------------------------------------------|
| <b>DE</b> | SICHERHEITSZEICHEN<br>BEDEUTUNG DER SYMBOLE | <b>EN</b> | SAFETY SIGNS<br>DEFINITION OF SYMBOLS           | <b>FR</b> | SIGNALISATION DE SÉCURITÉ<br>DÉFINITION DES SYMBOLES |
| <b>CZ</b> | BEZPEČNOSTNÍ SYMBOLY<br>VÝZNAM              | <b>IT</b> | SEGNALI DI SICUREZZA<br>SIGNIFICATO DEI SIMBOLI | <b>NL</b> | VEILIGHEIDSSYMBOLEN<br>BETEKENIS VAN DE<br>SYMBOLEN  |
| <b>SE</b> | SÄKERHETSTECKEN<br>SYMBOLERNAS BETYDELSE    | <b>ES</b> | SEÑALES DE SEGURIDAD<br>DEFINICIÓN DE SÍMBOLOS  |           |                                                      |



**DE** CE-KONFORM: Dieses Produkt entspricht den EU-Richtlinien.

**EN** EC-CONFORM: This product complies with the EC-directives.

**FR** CE-CONFORME: Ce produit est conforme aux Directives CE.

**CZ** CE-SHODA: Tento výrobek odpovídá směrnicím ES.

**IT** CONFORMITA' CE: Questo prodotto è conforme alle direttive CE.

**NL** CE-KONFORM: Dit product voldoet aan de EG-Richtlijnen.

**SE** CE-KONFORM: Denna produkt uppfyller kraven i EG-direktiven

**ES** CONFORME-CE: Este producto cumple con las Directivas CE.

**DE** **BETRIEBSANLEITUNG LESEN!** Lesen Sie die Betriebs- und Wartungsanleitung Ihrer Maschine aufmerksam durch und machen Sie sich mit den Bedienelementen der Maschine gut vertraut, um die Maschine ordnungsgemäß zu bedienen und so Schäden an Mensch und Maschine vorzubeugen.

**EN** **READ THE MANUAL!** Read the user and maintenance carefully and get familiar with the controls in order to use the machine correctly and to avoid injuries and machine defects.

**FR** **LIRE LE MANUEL!** Lire le manuel d'utilisateur et de maintenance avec soin et vous familiariser avec les contrôles en vue d'utiliser la machine correctement et pour éviter les blessures et les défauts de l'appareil.

**CZ** **PŘEČTĚTE SI TENTO NÁVOD!** Přečtěte si řádně návod na obsluhu a údržbu Vašeho stroje a dobře se seznámte s ovládacími prvky stroje, aby byl tento řádně obsluhován a předešlo se ke škodám na stroji a zraněním osob.

**IT** **LEGGERE LE ISTRUZIONI!** Leggere attentamente le istruzioni d'uso e di manutenzione della vostra macchina e familiarizzare con gli elementi di comando della macchina per utilizzarla correttamente e per evitare di danneggiare le persone e la macchina stessa.

**NL** **HANDLEIDING LEZEN!** Lees de gebruiks- en onderhoudsaanwijzingen van uw machine zorgvuldig door en maak u vertrouwd met de bedieningselementen van de machine, om de machine correct te bedienen en zo lichamelijke letsels en materiële schade te voorkomen.

**SE** **LÄS ANVISNINGARNA!** Läs igenom maskinens drifts- och underhållsanvisning noga och gör dig väl förtrodd med maskinens manöverelement för att kunna hantera maskinen på ett korrekt sätt och på så sätt undvika skador på människor och maskiner.

**ES** **¡LEA EL MANUAL!** Lea el manual de uso y mantenimiento cuidadosamente y familiarícese con los controles con el fin de utilizar la máquina correctamente, para evitar lesiones y defectos de la máquina.





**DE** Persönliche Schutzausrüstung tragen!

**EN** Wear protective equipment!

**FR** Porter un équipement de protection!

**CZ** Ochranné prostředky

**IT** Dispositivi di protezione

**NL** Beschermende uitrusting!

**SE** Använd skyddsutrustning!

**ES** ¡Use equipos de protección!

**DE** Maschine vor Wartung und Pausen ausschalten und Netzstecker ziehen!

**EN** Stop and pull out the power plug before any break and engine maintenance!

**FR** Éteignez la machine avant l'entretien et les pauses et débranchez la fiche secteur!

**CZ** Zastavte a před každým přerušením a motorů údržba vytáhněte zástrčku ze zásuvky!

**IT** Spegner la macchina prima della manutenzione e delle pause e scollegare la spina di rete!

**NL** Machine vóór onderhoud en pauzes uitschakelen en stekker uittrekken!

**SE** Stäng av maskinen och dra ur stickproppen innan underhåll och pauser!

**ES** ¡Apague y desconecte la máquina antes de hacer mantenimiento o pausa!

**DE** Warnung vor wegschleudernden Teile!

**EN** Warning against thrown-off items!

**FR** Attention pour objets qui peuvent être jetés!

**CZ** Pozor na vymrštěné části!

**IT** Attenzione alle parti che sbalzano via!

**NL** Waarschuwing voor weggeslingerde onderdelen!

**SE** Varning för ivägslungande delar!

**ES** ¡Cuidado con las piezas que pueden ser expulsadas!

**DE** Warnung vor Hand- und Schnittverletzungen!

**EN** Warning of hand and cut injuries!

**FR** Avertissement de blessures aux mains et par coupure !

**CZ** Varování před úrazy rukou a řeznými zraněními!

**IT** Attenzione alle ferite da taglio e lesioni alle mani!

**NL** Waarschuwing voor hand- en snijwonden!

**SE** Varning för hand- och skärsador!

**ES** ¡Advertencia de lesiones en las manos y cortes!

**DE** Warnung vor gefährlicher elektrischer Spannung!

**EN** Beware of dangerous electrical voltage!

**FR** Avertissement de tension électrique dangereuse !

**CZ** Varování před nebezpečným elektrickým napětím!

**IT** Avvertimento: tensione elettrica pericolosa!

**NL** Waarschuwing voor gevaarlijke elektrische spanning!

**SE** Varning för farlig elektrisk spänning!

**ES** ¡Advertencia de tensiones eléctricas peligrosas!



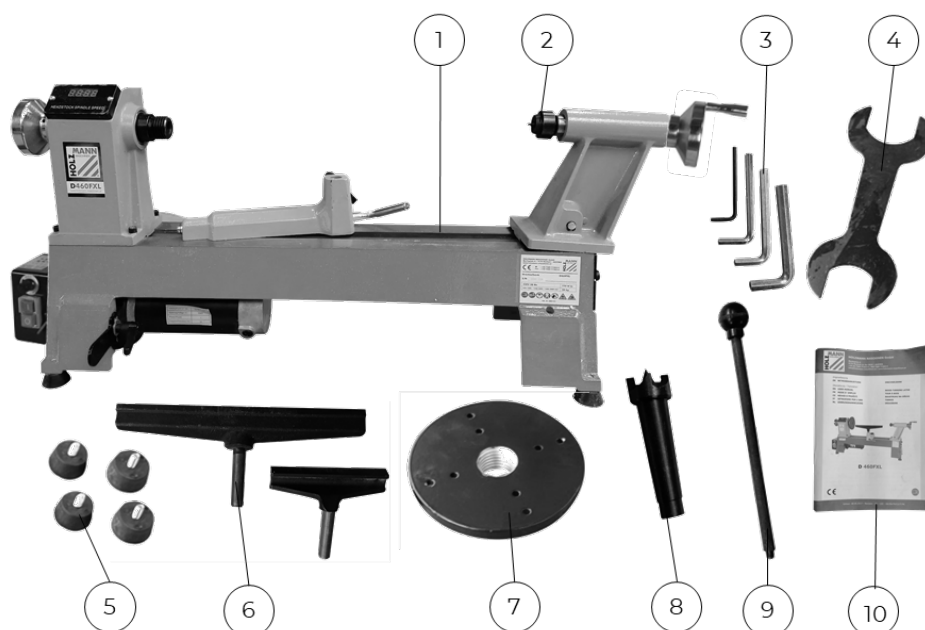
- DE** Bedienen mit Handschuhen verboten!  
**EN** Operation with gloves forbidden!  
**FR** L'utilisation avec des gants est interdite!  
**CZ** Nepoužívejte při práci rukavice!  
**IT** Vietato l'uso con i guanti!  
**NL** Bediening met handschoenen verboden!  
**SE** Drift med handskar är förbjudet!  
**ES** ¡La operación con guantes está prohibida!

- DE** **Warnschilder und/oder Aufkleber an der Maschine, die unleserlich sind oder entfernt wurden, sind umgehend zu erneuern.**
- EN** **Missing or non-readable security stickers have to be replaced immediately.**
- FR** **Les panneaux d'avertissement et/ou autocollants d'avertissement illisibles ou retirés sur la machine doivent être remplacés immédiatement !**
- CZ** **Výstražné štítky a/nebo nálepky na stroji, které jsou nečitelné či byly odstraněny, je nutné ihned obnovit!**
- IT** **I segnali di avvertimento e/o le etichette applicate sulla macchina, che sono illeggibili o sono stati rimossi, devono essere sostituiti immediatamente!**
- NL** **Waarschuwborden en/of etiketten aan de machine welke niet meer leesbaar zijn of werden verwijderd moeten onmiddellijk worden vervangen!**
- SE** **Varningsskyltar eller etiketter på maskinen som blivit oläsliga eller som avlägsnats skall omgående bytas ut!**
- ES** **¡Deben sustituirse inmediatamente los letreros de advertencia y/o las pegatinas que haya en la máquina, que se hayan vuelto ilegibles o se hayan retirado!**



### 3 **TECHNIK / TECHNICS** **TECHNIQUE / TECHNICKÁ ČÁST / TECNOLOGIA / TECHNIEK / TEKNISKT / TECNICA**

#### 3.1 **Lieferumfang / Delivery content** **Contenu de la livraison / Rozsah dodávky / Dotazione di fornitura / Leveringsomvang / Leveransomfång / Volumen de suministro**

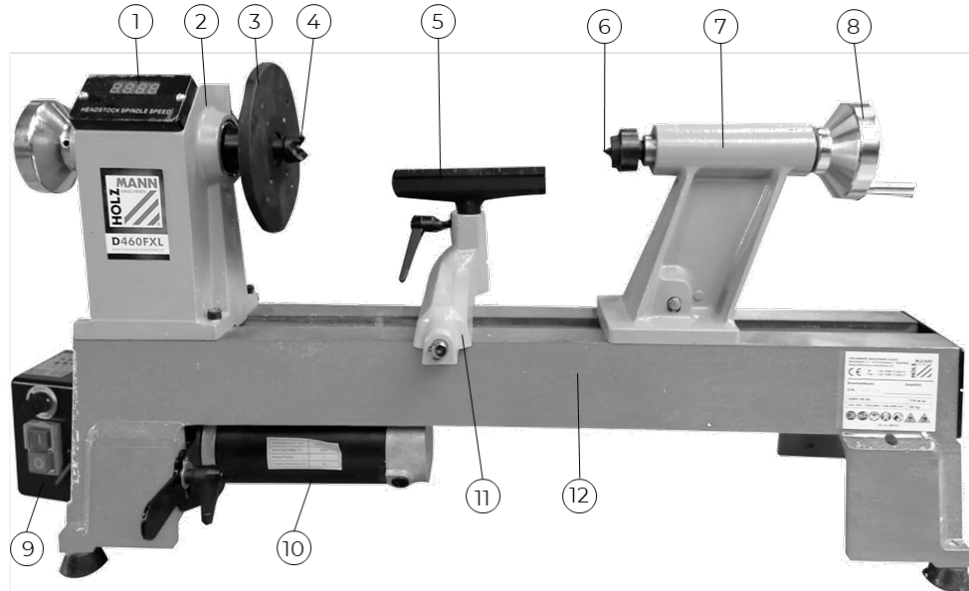


|          | Bezeichnung / Description                                                                                                              | Qty. |           | Bezeichnung / Description                                                                                                                                                                                                                                                     | Qty. |
|----------|----------------------------------------------------------------------------------------------------------------------------------------|------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>1</b> | Maschinenbett / machine bed / Banc de machine / Lože stroje / Piastra della macchina / Machinebed / Maskinbädd / Bancada de la máquina | 1    | <b>6</b>  | Werkzeugaufklage breit & schmal / tool rest large & small / Support d'outils de forme large et étroite / Opěrka nástroje široká a úzká / Poggiautensili largo e stretto / Gereedschapssteun breed & smal / Verktygsstöd, brett och smalt / Portaherramientas ancho y estrecho | 2    |
| <b>2</b> | Körnerspitze / centre punch tip / Contrepointes / Upínací hrot / Punzone centrale / Centerpunt / Körnarspets / Punta de centrado       | 1    | <b>7</b>  | Planscheibe / face plate / Plateau porte-outil / Lícni deska / Disco portapezzo / Stelplaat / Planskiva / Plato de refrentar                                                                                                                                                  | 1    |
| <b>3</b> | Inbusschlüssel / Allen key / Clé Allen / Inbusový klíč / Chiave esagonale / Inbussleutel / Insexnyckel / Llave allen                   | 4    | <b>8</b>  | 4-Zack-Mitnehmer / spur center / Entraîneur à 4 taquets / Čtyřzubý unašeč / Brida a 4 denti / Meenemer Z4 / Medbringare med 4 spetsar / Arrastrador de 4 dientes                                                                                                              | 1    |
| <b>4</b> | Gabelschlüssel / open end wrench / Clé à fourche / Vidlicový klíč / Chiave fissa / Vorksleutel / U-nyckel / Llave fija                 | 1    | <b>9</b>  | Fixierstange / fixing rod / Tige de blocage / Fixační tyč / Asta di fissaggio / Fixeerstang / Fästpinne / Barra de fijación                                                                                                                                                   | 1    |
| <b>5</b> | Standfüße / rubber washer / Pieds de support / Patky / Piedi di supporto / Steunvoeten / Fot / Patas                                   | 4    | <b>10</b> | Betriebsanleitung / manual / Mode d'emploi / Návod k použití / Istruzioni per l'uso / Gebruiksaanwijzing / Bruksanvisning / Instrucciones de servicio                                                                                                                         | 1    |



## 3.2 Komponenten / Components

Composants / Komponenty / Componenti / Componenten / Komponenter / Componentes



|          | Bezeichnung / Description                                                                                                                                        |           | Bezeichnung / Description                                                                                                                                                                                        |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b> | Digitale Anzeige / display / Affichage numérique / Digitální displej / Display digitale / Digitale weergave / Display / Pantalla digital                         | <b>7</b>  | Reitstock / tailstock / Contrepoupée / Koník / Contropunta / Losse kop / Dubbdocka / Contrapunto                                                                                                                 |
| <b>2</b> | Spindelstock / headstock / Poupée fixe / Vřeteník / Supporto del mandrino / Vaste kop / Spindeldocka / Cabezal                                                   | <b>8</b>  | Handrad / handwheel / Volant / Ruční kolo / Volantino / Handwiel / Ratt / Volante manual                                                                                                                         |
| <b>3</b> | Planscheibe / face plate / Plateau porte-outil / Lícni deska / Disco portapezzo / Stelplaat / Planskiva / Plato de refrentar                                     | <b>9</b>  | Schalteneinheit / switch unit / Unité de commutation / Spínací jednotka / Unità di commutazione / Schakeleenheid / Kopplingsenhet / Unidad de conmutación                                                        |
| <b>4</b> | 4-Zack-Mitnehmer / spur center / Entraîneur à 4 taquets / Čtyřzubý unašeč / Brida a 4 denti / Meenemer Z4 / Medbringare med 4 spetsar / Arrastrador de 4 dientes | <b>10</b> | Motor / motor / Moteur / Motor / Motore / Motor / Motor / Motor                                                                                                                                                  |
| <b>5</b> | Werkzeugaufklage / tool rest / Support d'outil / Opěrka nástroje / Poggiautensili / Gereedschapssteun / Verktysstöd / Portaherramientas                          | <b>11</b> | Werkzeugaufklage Halterung / tool rest base / Fixation du support d'outil / Základna pro opěrku nástroje / Poggiautensili supporto / Gereedschapssteun houder / Verktysstöd, hållare / Soporte portaherramientas |
| <b>6</b> | Körnerspitze / centre punch tip / Contrepointes / Upínací hrot / Punzone centrale / Centerpunt / Körnarspets / Punta de centrado                                 | <b>12</b> | Maschinenbett / machine bed / Banc de machine / Lože stroje / Piastra della macchina / Machinebed / Maskinbädd / Bancada de la máquina                                                                           |



### 3.3 Technische Daten / Technical Data Données techniques / Technické údaje / Dati tecnici / Technische gegevens / Tekniska data / Datos técnicos

| Spezifikation / Specification                                                                                                                                                                                                                                                                                                         |                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Spannung / voltage / Voltage, fréquence / Provozní napětí / Tensione nominale / Nominale spanning / Märkspänning /<br>Voltage                                                                                                                                                                                                         | 230 V / 1 / 50 Hz                                                                        |
| Motorleistung S1 (100 %) / S6 (40 %) /<br>Motor power / Puissance du moteur / Výkon motoru / Potenza motore /<br>Motorvermogen / Motoreffekt / Potencia del motor                                                                                                                                                                     | S1 ... 550 W<br>S6 ... 770 W                                                             |
| Spindeldrehzahl / Spindle speed / Vitesse de broche (variable) / Otáčky<br>vřetene / numero di giri mandrino / Spindeltoerental / Spindelvarvtal /<br>Velocidades (variable)                                                                                                                                                          | 650–1450 min <sup>-1</sup><br>1250–2800 min <sup>-1</sup><br>1600–3800 min <sup>-1</sup> |
| Spitzenweite / distance between centers / Distance entre pointes /<br>Vzdálenost mezi hroty / Distanza tra le punte / Draailengte /<br>Dubavstånd / Distancia entre puntos                                                                                                                                                            | 460 mm                                                                                   |
| Spitzenhöhe über Maschinenbett / Center height above machine bed /<br>Hauteur de pointes au-dessus du lit / Výška hrotu nad ložem /<br>Diametro massimo eseguibile con la piastra macchina / Draaihoogte<br>boven machinebed / Dubbhöjd över maskinbädd / Altura del punto<br>sobre la bancada                                        | 153 mm                                                                                   |
| Spindelstock Gewindeaufnahme / headstock norm spindle / Poupée,<br>broche standard / Upínací závit vřetene / Supporto del mandrino,<br>attacco filettato / Vaste kop, schroefdraadopname / Spindeldocka,<br>gångfäste / Eje del cabezal                                                                                               | M33                                                                                      |
| Morsekonusaufnahme / morse taper / Cône morse / Morse kužel /<br>Attacco cono morse / Morseconusopname / Morsekonafäste / Cono<br>morse                                                                                                                                                                                               | MK2                                                                                      |
| Pinolenweg / tail spindle travel / Course arbre de contrepoint / Vysunutí<br>pinoly / Percorso bussola / Rijweg pinole / Pinolväg / Recorrido<br>contrapunto                                                                                                                                                                          | 55 mm                                                                                    |
| Planscheibe / face plate / Plateau porte-outil / Lícni deska / Disco<br>portapezzo / Stelplaat / Planskiva / Plato de refrentar                                                                                                                                                                                                       | Ø 145 mm                                                                                 |
| Werkzeugaufnahme schmal/breit / tool rest small/wide / Support d'outils<br>de forme étroite/large / Opěrka nástroje úzká/šíroká / Poggiautensili<br>stretto / Gereedschapssteun smal/breed / Verktögsstöd, smalt/brett /<br>Portaherramientas estrecho/ancho                                                                          | 150 mm /<br>300 mm                                                                       |
| Maschinenmaße (L×B×H) / machine dimensions (L×W×H) / Dimensions<br>de la machine (L×l×H) / Rozměry stroje (d×š×v) / Dimensioni macchina<br>(L×P×A) / Afmetingen machine (L×B×H) / Maskindimensioner (L×B×H) /<br>Dimensiones de la máquina (L×A×H)                                                                                    | 830(970)×210(320)×430 mm                                                                 |
| Verpackungsmaße (L×B×H) / packaging dimensions (L×W×H) /<br>Dimensions d'emballage (L×l×H) / Rozměry obalu (d×š×v) / Dimensioni<br>(L×P×A) / Afmetingen verpakking (L×B×H) / Förpackningens<br>dimensioner (L×B×H) / Dimensiones del embalaje (L×A×H)                                                                                 | 880×460×330 mm                                                                           |
| Gewicht Brutto / weight gross / Poids brute / Hmotnost brutto / Peso<br>lordo / Gewicht brutto / Vikt Brutto / Peso bruto                                                                                                                                                                                                             | 36 kg                                                                                    |
| Gewicht Netto / weight net / Poids net / Hmotnost netto / Peso netto /<br>Gewicht netto / Vikt Netto / Peso neto                                                                                                                                                                                                                      | 34 kg                                                                                    |
| Schalldruckpegel L <sub>PA</sub> / sound pressure level L <sub>PA</sub> / Niveau de pression<br>acoustique L <sub>PA</sub> / Hladina akustického tlaku L <sub>PA</sub> / Livello di pressione<br>sonora L <sub>PA</sub> / Geluidsdrumniveau L <sub>PA</sub> / Bullernivå L <sub>PA</sub> / Nivel de presión<br>sonora L <sub>PA</sub> | < 70 dB(A)                                                                               |





## 11 PREFACE (EN)

### Dear Customer!

This manual contains information and important instructions for the commissioning and handling of the wood turning lathe D460FXL\_230V, hereinafter referred to as the "machine" in this document.



The manual is an integral part of the machine and must not be removed. Keep it in a suitable place easily accessible to users (operators) for future reference and enclose it with the machine if it is passed on to third parties!

### **Please read and note the safety instructions!**

Before first use read this manual carefully. It eases the correct use of the machine and prevents misunderstanding and damages of machine.

Due to constant advancements in product design, construction, illustrations and contents may deviate slightly. If you notice any errors, please inform us.

We reserve the right to make technical changes!

**Check the goods immediately after receipt and note any complaints on the consignment note when taking over the goods from the deliverer!**

**Transport damage must be reported to us separately to us within 24 hours.**

**HOLZMANN MASCHINEN GmbH cannot accept any liability for transport damage that has not been reported.**

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The place of jurisdiction is the regional court Linz or the court responsible for 4170 Haslach is valid.

### Customer service contact

**HOLZMANN MASCHINEN GmbH**

4170 Haslach, Marktplatz 4  
AUSTRIA

Tel +43 7289 71562-0  
info@holzmann-maschinen.at





## 12 SAFETY

This section contains information and important notes on the safe commissioning and handling of the machine.



For your safety, read this manual carefully before commissioning. This will enable you to handle the machine safely and thus prevent misunderstandings as well as personal injury and damage to property. Pay special attention to the symbols and pictograms used on the machine as well as the safety information and danger warnings!

### 12.1 Intended use of the machine

The machine is intended exclusively for the following activities:

For turning wood or materials with similar physical properties, such as horn, bone or plastic, within the technical limits.

#### NOTE



HOLZMANN MASCHINEN GmbH assumes no responsibility or warranty for any other use or use beyond this and for any resulting damage to property or injury.

#### 12.1.1 Technical restrictions

The machine is designed for the work under the following conditions:

|                                  |                  |
|----------------------------------|------------------|
| relative humidity                | max. 70 %        |
| temperature (operation)          | +5 °C to +40 °C  |
| temperature (storage, transport) | -25 °C to +55 °C |

#### 12.1.2 Prohibited applications / Dangerous misuse

- Operating the machine outdoors.
- Operating the machine without adequate physical and mental fitness.
- Operating the machine without knowledge of the manual.
- Modifying the machine design.
- Operating the machine under fire or explosion hazardous conditions (machine can generate ignition sparks during operation).
- Operating the machine outside the technical limits specified in this manual.
- Removing of the safety labels attached to the machine.
- Cleaning the machine with water, neither with the power switched on nor with the power switched off.
- Modifying, circumventing or disabling the safety devices of the machine.

The non-intended use or the disregard of the explanations and instructions described in this manual will result in the expiration of all warranty claims and compensation claims for damages against HOLZMANN MASCHINEN GmbH.

### 12.2 Requirements for user

The machine is designed to be operated by one person. The prerequisites for operating the machine are physical and mental fitness as well as knowledge and understanding of the manual. Persons who, due to their physical, sensory or mental capabilities, inexperience or lack of knowledge, are unable to operate the machine safely must not use the machine without supervision or instruction by a responsible person.

Put on your personal protective equipment before working on the machine.

**Please note that locally applicable laws and regulations determine the minimum age of the operator and may restrict the use of this machine!**

**Work on electrical components or equipment may only be carried out by a qualified electrician or under the guidance and supervision of a qualified electrician.**



### 12.3 Safety device

If the machine is overloaded, due to e.g. overheating, the overload protection is triggered and the power supply to the motor is interrupted. The overload protection is reactivated by pressing the reset button.



- The reset button of the overload protection is located on the backside of the switch unit (I).

### 12.4 General safety instructions

To avoid malfunctions, damage and health impairments when working with the machine, the following points must be observed in addition to the general rules for safe working:

- Check the machine for completeness and function before starting. Only use the machine if the separating and other non-separating protective devices required for machining have are fitted.
- Make sure that the guards are in good working order and properly maintained.
- Select a level, vibration-free surface as the installation area.
- Ensure sufficient space around the machine. Keep the area around the machine free of obstacles (e.g. dust, chips, cut-off workpiece parts, etc.).
- Ensure sufficient lighting conditions at the workplace to avoid stroboscopic effects.
- Make sure you have a secure footing when working.
- Ensure a clean working environment.
- Only use tools that are in perfect condition and free of cracks and other defects (e.g. deformations).
- Remove tool keys and other setting tools before switching on the machine.
- Check the machine's connections for strength before each use.
- Never leave the running machine unattended. Switch off the machine before leaving the working area and secure it against unintentional or unauthorized restarting.
- The machine may only be operated, maintained or repaired by persons who are familiar and who have been informed about the dangers arising from this work.
- Ensure that unauthorized persons keep a safety distance from the machine and keep children away from the machine.
- Always work with care and the necessary caution and never use excessive force.
- Do not overload the machine.
- Only work in well-ventilated rooms.
- Hide long hair under hair protection.
- Wear close fitting protective work clothing and suitable protective equipment (eye protection, dust mask, ear protection, safety shoes).
- Never wear loose jewellery, loose clothing or accessories (e.g. tie, scarf).
- Do not work on the machine if you are tired, not concentrated or under the influence of medication, alcohol or drugs!
- Ensure proper connection to the dust extraction system.
- Do not use the machine in areas where vapors of paints, solvents or flammable liquids represent a potential danger (danger of fire or explosion!).
- Shut down the machine and disconnect it from the power supply, before adjustment, changeover, cleaning, maintenance or repair work, etc. Before starting work on the machine, wait until all tools or machine parts have come to a complete standstill and secure the machine against unintentional restart.
- Warning signs and/or stickers on the machine that are illegible or have been removed must be replaced immediately!

### 12.5 Electrical safety

- Make sure that the machine is grounded.
- Only use suitable extension cables.



- A damaged or tangled cable increases the risk of electric shock. Handle the cable with care. Never use the cable to carry, pull or disconnect the machine. Keep the cable away from heat, oil, sharp edges or moving parts.
- Proper plugs and sockets reduce the risk of electric shock.
- Water entry into the machine increases the risk of electric shock. Do not expose the machine to rain or moisture.
- The machine may only be used if the power supply is protected by a residual current circuit breaker.
- Before connecting the machine always make sure that it is switched off.
- Use the machine only when the ON-OFF switch is in good working order.

## 12.6 Special safety instructions for this machine

- Never reach into the running machine!
- Never open covers or safety devices when the machine is running.
- Do not wear safety gloves when working (rotating parts).
- Remove chips and workpieces when the machine is at a standstill.
- Never brake the machine by hand when it is running down.
- Never take measurements on rotating workpieces.
- Always machine unshaped workpieces at low spindle speed to a round shape.
- Only work on safely clamped workpieces.
- Before clamping the workpiece between two centers, provide it with a centring hole on both sides.
- Remove nails and other foreign substances from the workpiece before machining.

## 12.7 Hazard warnings

### 12.7.1 Residual risks

Despite intended use, certain risk factors cannot be completely eliminated:

- Risk of injury to hands/fingers from freely rotating workpiece during operation and overrun until the machine comes to a complete standstill.
- Risk of injury from contact with moving machine parts.
- Risk of injury from sharp edges of the workpiece.
- Risk of injury from contact with live components.
- Risk of injury due to tipping of the machine.
- Risk of injury to hands or eyes from wood splinters.
- Risk of injury due to incorrect installation of the tool or ejection of tool inserts.
- Risk of injury due to dust emissions from workpieces treated with harmful agents.
- Risk of injury to the eye from flying parts, even with protective goggles.
- Risk of injury from kickback due to the tool.

### 12.7.2 Hazardous situations

Due to the design and construction of the machine, hazardous situations may occur which are identified in this manual as follows:

#### DANGER



A safety instruction designed in this way indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

#### WARNING



A safety instruction of this type indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION**

A safety instruction designed in this way indicates a possibly hazardous situation which, if not avoided, may result in minor or moderate injury.

**NOTE**

A safety notice designed in this way indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Regardless of all safety regulations, your common sense and your appropriate technical aptitude/training are and remain the most important safety factor in the error-free operation of the machine. **Safe working depends on you!**

## 13 TRANSPORT

For proper transport, follow the instructions and information on the transport packaging regarding center of gravity, slinging points, weight, means of transport to be used and prescribed transport position, etc.

Transport the machine in its packaging to the place of installation. Ensure the correct body posture when lifting, carrying and setting down the load.

### Lifting/Setting down

- When lifting/setting down, ensure that you are standing firmly (legs hip-width).
- Lift/set down load with knees bent and back straight.
- Do not lift/set down load with a jerk.

### Carrying

- Carry load with both hands as close to body as possible.
- Carry load with straight back.
- When transporting the assembled machine, ensure to lift it only by the machine body and not by the attachments.

If you transport the machine with a vehicle, ensure that the load is secured appropriately!

## 14 ASSEMBLY

### 14.1 Preparation

#### 14.1.1 Delivery content

Check the delivery immediately for transport damage and missing parts. Report any damage or missing parts to your dealer or the shipping company immediately. Visible transport damage must also be noted immediately on the delivery note in accordance with the provisions of the warranty, otherwise the goods are deemed to have been properly accepted.

#### 14.1.2 Requirements for the installation site

The chosen installation site must ensure a suitable connection to the electrical power supply and have a connection to the extraction system. The installation site must meet the required safety regulations and ergonomic operating conditions, such as lighting, space requirements and working position. Place the machine on a level solid base with appropriate load-bearing capacity for machine and workpiece. When dimensioning the required space, take into account that the operation, maintenance and repair of the machine must be possible without restriction at all times.



### 14.1.3 Preparation of the surface

Remove the preservative applied to protect the parts against corrosion without painting. This can be done with the usual solvents. Do not use nitro solvents or similar agents and in no case water.

#### NOTE



The use of paint thinners, petrol, aggressive chemicals or scouring agents will cause damage to the surfaces!

Therefore: Use only mild cleaning agents for cleaning.

### 14.2 Electrical connection

#### WARNING



##### **Dangerous electrical voltage!**

Risk of injury due to dangerous electrical voltage!

- Connecting the machine to the power supply and the associated checks may only be carried out by a qualified electrician or under the guidance and supervision of a qualified electrician!

- Check, whether the neutral connection and the protective grounding are working properly.
- Check, whether the supply voltage and the frequency correspond to the specifications of the machine.

#### NOTE



##### **Deviation of the supply voltage and frequency!**

A deviation from the value of the supply voltage of  $\pm 5\%$  is permissible.

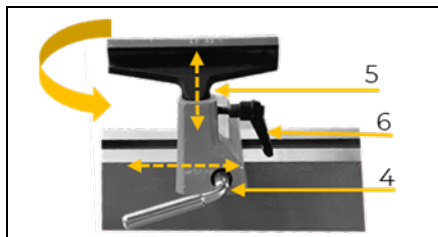
A short-circuit fuse must be provided in the power supply system of the machine!

- Use a supply cable of type H07RN (WDE282) or take the required cross-section of the supply cable from a current carrying capacity table. Pay attention to the measures for protection against mechanical damage.
- Make sure that the power supply is protected by a residual current circuit breaker.
- Connect the machine only to a properly grounded socket.
- When using an extension cable, make sure that the dimension matches the connected load of the machine. The connection power can be found in the technical data, the correlation of cable cross-section and cable lengths can be found in the technical literature or obtain information from a specialist electrician.
- A damaged cable must be replaced immediately.

### 14.3 Assemble

Parts of the machine have been disassembled for transport and must be reassembled before use. Follow the instructions below:

|  |                                                                                                                                                                                                                                                               |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Rubber washer</b> <ul style="list-style-type: none"><li>• Screw the 4 rubber washer to the holes in the corners (1).</li></ul>                                                                                                                             |
|  | <b>Switch unit</b> <ul style="list-style-type: none"><li>• Position the switch unit on the side of the machine body between the hinges and fix it with the pin (2).</li><li>• Fix the switch unit with the bracket to the front (3) of the machine.</li></ul> |

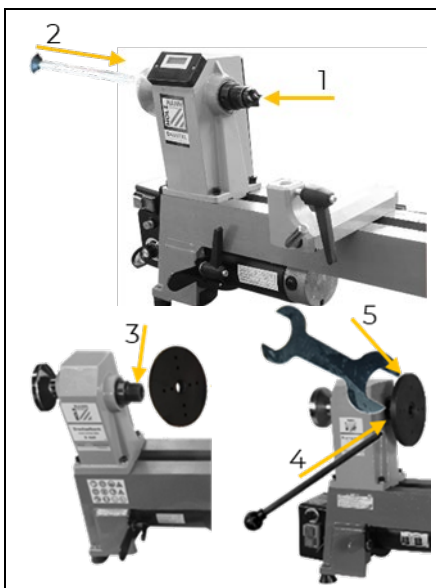


#### Tool rest

- Position the tool rest base along the machine bed and fix it with the locking lever (4).
- Position the tool rest into the opening provided (5), set the desired height and fix it with the locking handle (6).
- If necessary, turn the tool rest.

## 14.4 Settings

### 14.4.1 Headstock



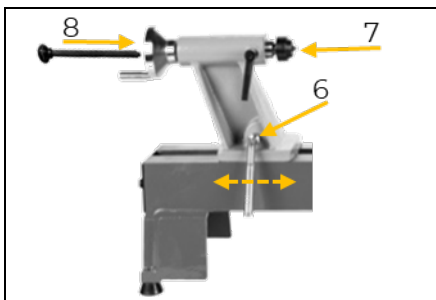
#### Spur center

- Push the spur center into the headstock receptacle (1) with a jerk.
- To remove it, push the fixing rod into the rear end of the headstock shaft (2). The spur center comes out of the headstock receptacle.

#### Face plate

- Screw the face plate onto the thread of the headstock shaft (3).
- To loosen the face plate, fix the headstock shaft (4) with the fixing rod and at the same time unscrew the face plate with the open end wrench (5).

### 14.4.2 Tailstock



#### Position

- Open the locking handle (6) and move the tailstock along the machine bed, depending on the workpiece size.
- Fix the locking handle (6) again.

#### Centre punch tip

- Push the centre punch tip into the tailstock receptacle (7) with a jerk.
- To remove it, push the fixing rod into the end of the tailstock shaft (8).

### 14.4.3 Spindle speed

## CAUTION

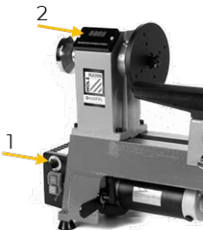


#### Risk of injury from flying parts!

- Always set the lowest spindle speed for unknown types of wood, for new workpieces and for large workpieces!
- Carefully increase the spindle speed!

The machine has a 3-step pulley arrangement for positioning the drive belt.



|                                                                                   |                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Spindle speed range</b><br/> A: 650–1450 rpm<br/> B: 1250–2800 rpm<br/> C: 1600–3800 rpm</p>                                                                                                                                          |
|  | <ul style="list-style-type: none"> <li>• Set the spindle speed, depending on the drive belt position, with the rotary regulator of the switch unit (1).</li> <li>• Digital display for reading the respective spindle speed (2).</li> </ul> |

### Change drive belt position

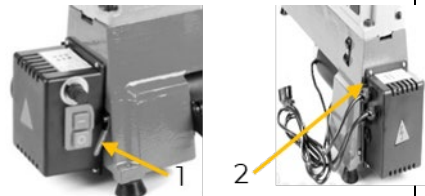
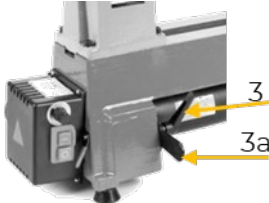
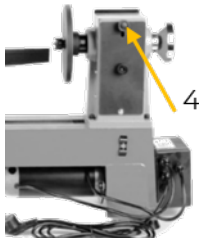
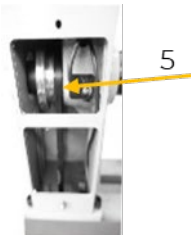
Adjust the appropriate drive belt position as described below.

## WARNING

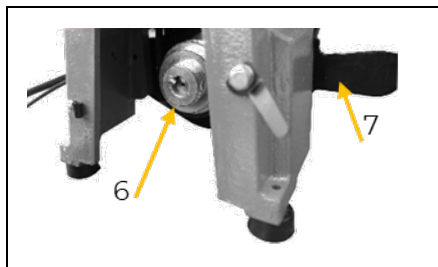


### Risk of injury due to unintentional switching on the machine!

- Always disconnect the machine from the power supply before carrying out setting, maintenance or servicing work and secure it against unintentional connection.

|                                                                                     |                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Open the bracket of the switch unit (1).</li> <li>• Remove the pin from the hinge (2) and place the switch unit next to it.</li> </ul> |
|  | <ul style="list-style-type: none"> <li>• Release the locking lever of the motor plate (3).</li> <li>• Lift the motor by the belt tensioning handle (3a).</li> </ul>             |
|  | <ul style="list-style-type: none"> <li>• Loosen the screw of the cover on the back of the headstock (4) and remove it.</li> </ul>                                               |
|  | <ul style="list-style-type: none"> <li>• Position the drive belt on the desired spindle pulley (5).</li> </ul>                                                                  |





- Position the lower part of the drive belt against the desired motor belt pulley (6). Make sure that the drive belt runs parallel.
- Tighten the motor belt pulley with the belt tensioning handle (7). This tightens the drive belt.
- Fix the locking lever of the motor plate.
- Fix the switch unit with the pin on the hinge and the bracket. Fix the cover to the back of the headstock.

When switching on the machine, listen for loud or unusual noises; if necessary, check and adjust the drive belt again.

## 15 OPERATION

Only operate the machine when it is in a perfect condition. A visual inspection of the machine must be carried out before each operation. Safety devices, electrical cables and operating elements must be checked carefully. Check screw connections for damage and tight fit.

### 15.1 Operating instructions

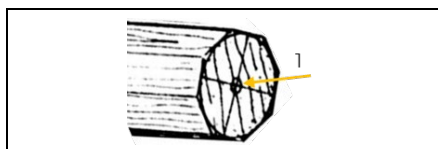
When operating the machine, be sure to observe the following instructions:

- Take time to familiarise yourself with how the machine works, the tools and the types of wood.
- Ensure that the machine has a stable base.
- Before switching on, turn the workpiece by hand to ensure that it runs freely and does not touch the tool rest.
- Check, that the workpiece is centered and firmly clamped.
- Check the tool rest for firmly seating before starting.
- Check the tailstock and centre punch tip for tight fit before starting! The centre punch tip should penetrate the workpiece by up to a few mm, depending on the size of the workpiece.
- Check the face plate and, if used, the spur center for tight fit before starting.
- Hold and guide the woodturning tool securely and firmly when working!
- Only work with sharp turning tools!
- Only work on large and unbalanced workpieces at low spindle speed.
- Use the face plate for large and unbalanced workpieces.
- Adjust the spindle speed to the material properties.
- Observe the specifications regarding workpiece dimensions.
- Only work on selected woods without defects.

### 15.2 Handling

#### 15.2.1 Mark the centre of the workpiece

The marking of the centre of the material enables exact clamping of the workpiece.



- Mark the centre (1) on both faces of the workpiece.

#### 15.2.2 Clamp workpiece

##### Longitudinal machining

For longitudinal machining, the workpiece is clamped centred.



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Spur center</b></p> <ul style="list-style-type: none"> <li>• Attach the workpiece by drilling the claws of the spur center into the workpiece (2).</li> </ul> <p><b>Centre punch tip</b></p> <ul style="list-style-type: none"> <li>• Loosen the locking handle (3).</li> <li>• Turn the handwheel (4) until the centre punch tip has bored a few mm into the workpiece (5).</li> <li>• Fix the locking handle again (3).</li> </ul> |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Front machining

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Face plate</b></p> <ul style="list-style-type: none"> <li>• Fix the workpiece with suitable Spax screws, which are drilled into the workpiece through the holes in the face plate (6).</li> </ul> <p><b>NOTE:</b> The Spax screws are not included in delivery content!</p> <p>Make sure that the Spax screws do not penetrate the area of the workpiece where material is to be removed.</p> <ul style="list-style-type: none"> <li>• Screw the face plate with the attached workpiece onto the thread of the headstock shaft.</li> </ul> |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

With optionally available clamping devices you can clamp larger workpieces securely and firmly, see chapter ACCESSORIES.

### 15.2.3 Position the tool rest

- Position the tool rest, depending on the turning tool, just above or just below the centre line of the workpiece at a distance of 1–3 mm.
- Use the tool rest to safely guide and support the turning tool.

### 15.2.4 Switch the machine on and off

## WARNING



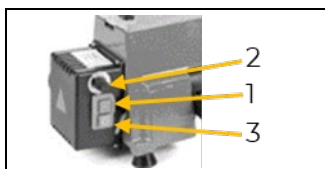
### Risk of injury from parts flying off!

- Before switching on the machine, check, whether the face plate and/or the spur center, the tailstock, the centre punch tip and the tool rest are fixed.
- Make sure that the workpiece is firmly clamped!

## NOTE



- Do not machine the workpiece with the tool until the machine has reached the set spindle speed.
- Do not increase the spindle speed until the workpiece has reached a regular runout in its basic shape.



### Switch on

- Press the switch-on button (1) of the switch unit.

### Switch off

- Set the lowest spindle speed with the rotary regulator (2).
- Press the switch-off button (3) of the switch unit.

**CAUTION****Machine overruns!**

- After switching off, stay with the machine until the workpiece comes to a standstill. Never stop the rotation by hand!

**16 CLEANING, MAINTENANCE, STORAGE, DISPOSAL****WARNING****Danger due to electrical voltage!**

Handling the machine with connected power supply may result in serious injury or death.

- Always disconnect the machine from the power supply before cleaning, maintenance or repair work and secure it against unintentional reconnection.

**16.1 Cleaning**

Regular cleaning guarantees the long service life of your machine and is a prerequisite for its safe operation.

**NOTE**

Incorrect cleaning products can attack the finish of the machine. Do not use any solvents, nitro thinners or other cleaning products that could damage the machine's finish.

Observe the specifications and instructions of the cleaning agent manufacturer.

- Remove chips and dirt particles from the machine after each use with compressed air and a soft brush.
- Prepare the surfaces and lubricate the bare machine parts with an acid-free lubricating oil (e.g. WD40 rust inhibitor).

**16.2 Maintenance**

The machine is low-maintenance and only a few parts need to be serviced. Malfunctions or defects that could affect your safety must be repaired immediately!

- Before each operation, check the perfect condition of the safety devices.
- Regularly check the perfect and legible condition of the warning and safety labels of the machine.
- Use only original spare parts recommended by the manufacturer.

**16.2.1 Maintenance plan**

The type and degree of machine wear depends to a large extent on the operating conditions. The following intervals apply when the machine is used within the technical limits:

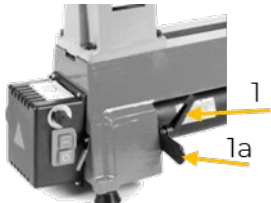
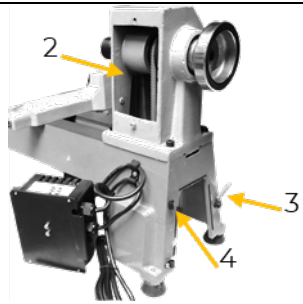
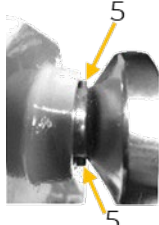
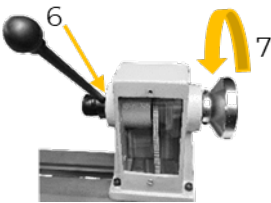
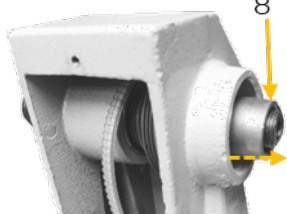
| Interval                    | Component                          | Activity                                                                                 |
|-----------------------------|------------------------------------|------------------------------------------------------------------------------------------|
| <b>before starting work</b> | • guide paths                      | • oil                                                                                    |
|                             | • centre punch tip and spur center | • Keep the tool, especially the thread cone, free of dust and apply a thin layer of oil. |
|                             | • motor                            | • Check that the ventilation slots are free of contamination.                            |
|                             | • cable connection                 | • Check, replace if damaged.                                                             |



|                                 |                                                                  |                                                                                                                                          |
|---------------------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | <ul style="list-style-type: none"> <li>turning tool</li> </ul>   | <ul style="list-style-type: none"> <li>Check for defects and sharpness; sharpen or replace if necessary.</li> </ul>                      |
| <b>after 50 operating hours</b> | <ul style="list-style-type: none"> <li>drive belt</li> </ul>     | <ul style="list-style-type: none"> <li>Check for tight fit and defects (e.g. cracks); replace if necessary, see next chapter.</li> </ul> |
|                                 | <ul style="list-style-type: none"> <li>carbon brushes</li> </ul> | <ul style="list-style-type: none"> <li>Check, replace if necessary; see chapter after next</li> </ul>                                    |

### 16.2.2 Replace drive belt

Expanded or cracked drive belts should be replaced as follows:

|                                                                                     |                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <ul style="list-style-type: none"> <li>Disconnect the machine from the power supply.</li> <li>Release the locking lever of the motor plate (1).</li> <li>Lift the motor by the belt tensioning handle (1a), the drive belt is slackened.</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Remove the back cover (2) on the headstock.</li> <li>Loosen the switch unit with the bracket (3) and remove the pin from the hinge (4).</li> </ul>                                                           |
|  | <ul style="list-style-type: none"> <li>Loosen the 2 opposite worm screws on the handwheel (5). Do not remove the screws completely.</li> </ul>                                                                                                      |
|  | <ul style="list-style-type: none"> <li>Fix the spindle shaft with the fixing rod (6).</li> <li>At the same time, turn the handwheel counter clockwise from the spindle (7).</li> </ul>                                                              |
|  | <ul style="list-style-type: none"> <li>Remove the spacer sleeve of the spindle (8).</li> </ul>                                                                                                                                                      |



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Lift the drive belt from the motor pulley (9).</li> <li>• Replace the drive belt through the opening of the spindle shaft (10).</li> <li>• Place the new drive belt on the spindle pulley and the motor pulley.</li> </ul> <p>Carry out the previously executed operations in reverse order:</p> <ul style="list-style-type: none"> <li>• Place the lower part of the drive belt in the motor pulley (9).</li> <li>• Place the spacer sleeve on the spindle (8).</li> <li>• Fix the handwheel on the thread of the spindle (7).</li> <li>• Fix the handwheel with the two worm screws (5).</li> <li>• Fix the switch unit with the hinge (4) and the bracket (3).</li> <li>• Fix the back cover of the headstock (2).</li> <li>• Tension the drive belt with the belt tensioning handle (1a) and fix the locking lever of the motor plate (1).</li> </ul> |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 16.2.3 Check/replace the carbon brushes

Check the carbon brushes for proper function after 50 operating hours of the new machine, subsequently every 10 operating hours. If the carbon is worn or the spring is damaged, replace the carbon brushes as described below.

## CAUTION



The carbon brushes may only be replaced by trained personnel!

|  |                                                                                                                                                                                                                                                                                                                                                                                                               |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Disconnect the machine from the power supply.</li> <li>• Remove the cover (1) of the carbon brush on the motor and remove the carbon brush.</li> <li>• Insert the new carbon brush into the sleeve (2).</li> <li>• Fix the carbon brush by compressing the spring and closing the cover.</li> <li>• Repeat this procedure with the opposite carbon brush.</li> </ul> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 16.3 Storage

Store the machine including accessories in a dry, frost-proof and lockable place when not in use. Cover the machine or store it in the original box to protect it from dust. Make sure that unauthorized persons and especially children do not have access to the machine. Disconnect the machine from the power supply and slacken the drive belt, see chapter Replace drive belt.

## NOTE



Improper storage can damage and destroy important components. Only store packed or already unpacked parts under the intended ambient conditions!



## 16.4 Disposal



Observe the national waste disposal regulations. Never dispose of the machine, machine components or operating equipment in the residual waste. If necessary, contact your local authorities for information regarding available disposal options. If you purchase a new machine or equivalent equipment from your specialist dealer, he is obliged in certain countries to dispose of your old machine properly.

## 17 TROUBLESHOOTING

### WARNING



#### Danger due to electrical voltage!

Handling the machine with connected power supply may result in serious injury or death.

- Always disconnect the machine from the power supply before starting work to repair defects and secure it against unintentional reconnection.

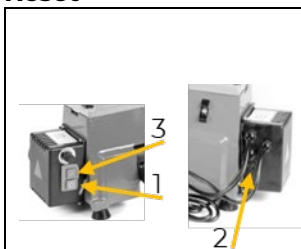
Many possible sources of error can be eliminated in advance if the machine is properly connected to the power supply. If you are unable to carry out the necessary repairs properly and/or do not have the required training, always consult a specialist to solve the problem.

| Trouble                     | Possible cause                           | Solution                                                             |
|-----------------------------|------------------------------------------|----------------------------------------------------------------------|
| <b>machine does not run</b> | • switch defective                       | • repair switch                                                      |
|                             | • power supply switched off              | • Check power supply, replace fuse or switch contactor if necessary. |
|                             | • overload protection has been triggered | • reset overload protection                                          |
| <b>strong vibration</b>     | • warped workpiece                       | • replace material                                                   |
|                             | • workpiece badly centered               | • measure centre point accurately                                    |
|                             | • loose belt pulley                      | • tighten drive belt                                                 |
|                             | • worn drive belt                        | • replace drive belt                                                 |
|                             | • machine is on uneven surface           | • place machine on level surface                                     |
|                             | • tailstock loose                        | • fix tailstock                                                      |
| <b>poor turning result</b>  | • spindle speed too high                 | • reduce spindle speed                                               |
|                             | • blunt turning iron                     | • sharpen turning tool                                               |
|                             | • wrong turning tool for the job         | • choose the right turning tool                                      |
|                             | • wrong tool rest setting                | • reposition tool rest distance and height                           |

### 17.1 Overload protection

If the machine is overloaded, the overload protection is triggered and the power supply to the motor is interrupted.

#### Reset



1. Press the switch-off button of the switch unit (1).
2. Wait for the machine to cool down.

#### NOTE



Overheating can be caused by incorrectly adjusted machine parts or blunt tools.

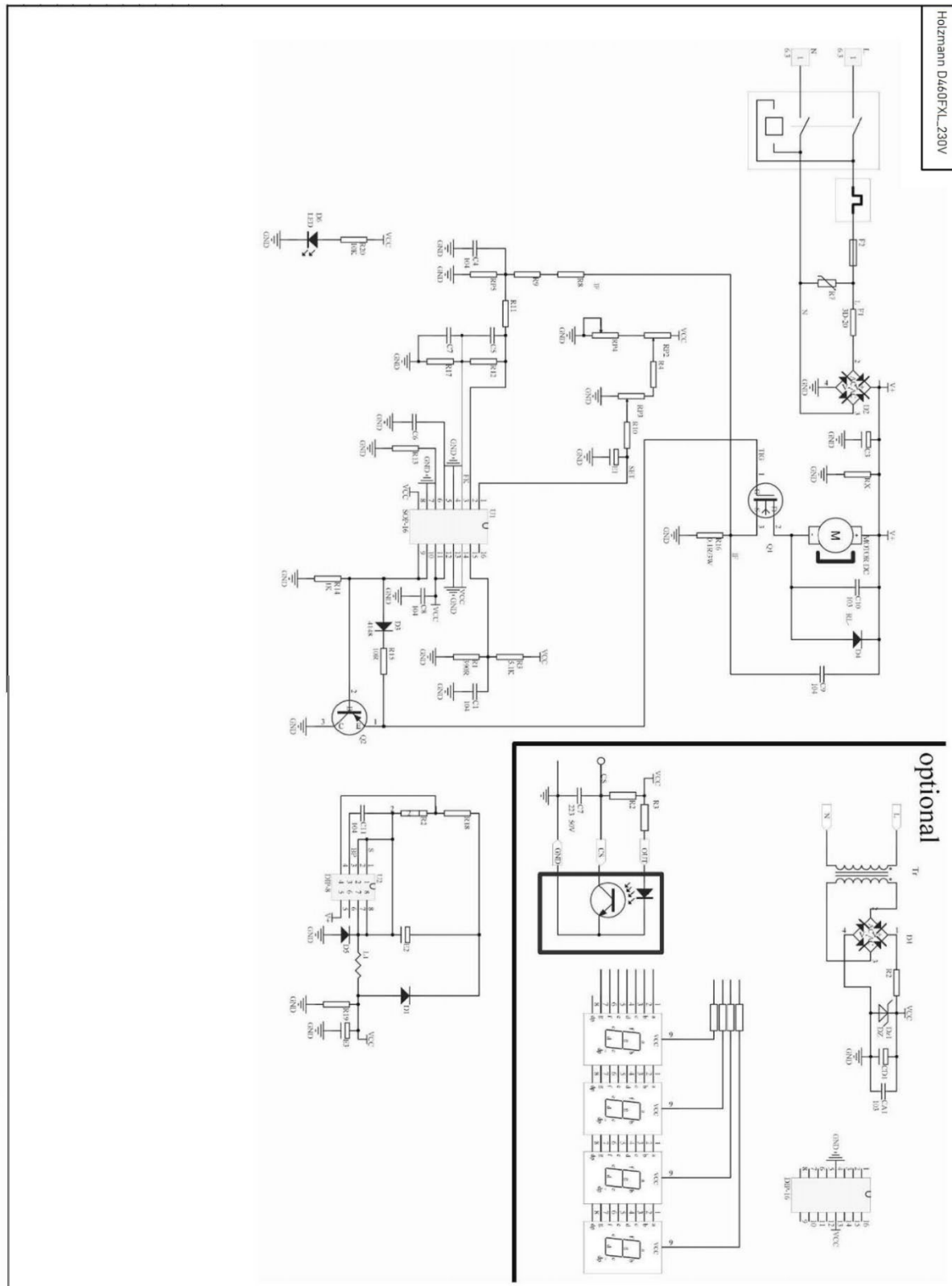
- Check the setting of the machine parts and the tool used before switching on the machine!

3. Press the reset button on the back of the switch unit (2).
4. Press the switch-on button of the switch unit (3).



# 61 ELEKTRISCHER SCHALTPLAN / WIRING DIAGRAM

SCHÉMA ÉLECTRIQUE / SCHÉMA ELEKTRICKÉHO ZAPOJENÍ / SCHEMA ELETTRICO / ELEKTRISCH SCHAKELSCHEMA / ELEKTRISKT KOPPLINGSSHEMA / DIAGRAMA ELÉCTRICO

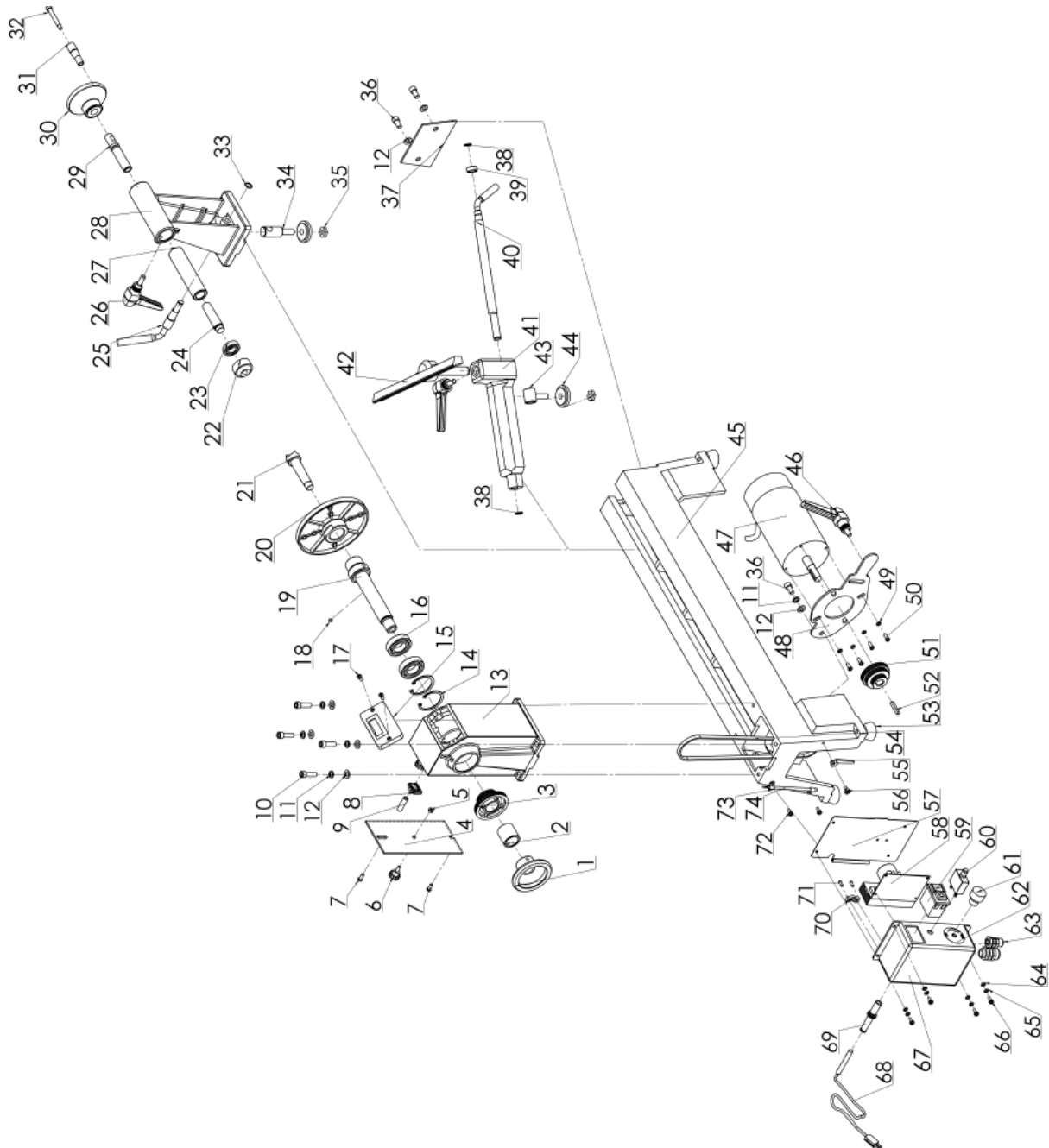






## 62.2 Explosionszeichnung / Exploded view

Vue éclatée / Výkres v rozloženém stavu / Disegno esploso / Explosietekening /  
Explosionsritning / Vista de despiece



**62.3 Ersatzteilliste / Spare part list**

**Liste des pièces de rechange / Seznam náhradních dílů / Lista parti di ricambio /  
Reserveonderdelenlijst / Reservdelslista / Listado de piezas de recambio**

| No. | Description                     | No. | Description             | No. | Description                 |
|-----|---------------------------------|-----|-------------------------|-----|-----------------------------|
| 1   | Handwheel                       | 26  | Locking screw (A)       | 51  | Motor pulley                |
| 2   | Spindle tube                    | 27  | Tail stock spindle      | 52  | Flat key 5×25               |
| 3   | Spindle pulley                  | 28  | Tail stock              | 53  | Rubber pad                  |
| 4   | Plastic plate                   | 29  | Tail stock threaded rod | 54  | V-ribbed belt               |
| 5   | Lock nut-M5                     | 30  | Tail stock wheel        | 55  | Steel fixing clip           |
| 6   | Knob                            | 31  | Wheel handle            | 56  | Bolt                        |
| 7   | Bolt M5×8                       | 32  | Bolt                    | 57  | Steel plate for switch unit |
| 8   | Plastic holder for sensor       | 33  | E-ring                  | 58  | Line board                  |
| 9   | Speed sensor                    | 34  | Connecting shaft        | 59  | Switch                      |
| 10  | Bolt M8×30                      | 35  | Locking nut-M10         | 60  | Circuit breaker             |
| 11  | Elastic washer                  | 36  | Bolt-M8×16              | 61  | Rotary regulator            |
| 12  | Flat washer                     | 37  | Rear plate              | 62  | Speed label                 |
| 13  | Head stock                      | 38  | Retaining ring          | 63  | Strain relief clamp         |
| 14  | Retaining ring                  | 39  | Tube                    | 64  | Flat washer                 |
| 15  | Display plate                   | 40  | Locking handle          | 65  | Elastic washer              |
| 16  | Ball bearing 6005               | 41  | Tool rest holder        | 66  | Bolt M4×6                   |
| 17  | Bolt M4×15                      | 42  | Tool rest               | 67  | Switch unit                 |
| 18  | Magnetic block for speed sensor | 43  | Fixing nut              | 68  | Cable                       |
| 19  | Spindle                         | 44  | Pressing plate          | 69  | Cable rubber tube           |
| 20  | Face plate                      | 45  | Wood lathe bed          | 70  | Cable fixing plate          |
| 21  | Spur center                     | 46  | Locking screw (B)       | 71  | Screw                       |
| 22  | Centre punch tip                | 47  | Motor                   | 72  | Bolt M5×8                   |
| 23  | Ball bearing 6002               | 48  | Flat washer             | 73  | Hinge for switch box        |
| 24  | Tapered spindle                 | 49  | Motor plate             | 74  | Pin for switch box          |
| 25  | Locking handle                  | 50  | Bolt M6×12              |     |                             |