Operator's manual

TruTool S 214 (1A1)

english

TRUMPF

Table of contents

1. Safety

USA/CAN

- Read the operator's manual and the general safety rules (material number 1239438, red document) completely before putting the machine into service. Follow precisely the instructions contained therein.

Other countries

- Read the operator's manual and the safety instructions (material number 125699, red document) completely before putting the machine into service. Follow precisely the instructions contained therein.
- Adhere to the safety regulations in accordance with DIN VDE, CEE, AFNOR and to the specific regulations of the respective countries.

Danger

Lethal danger due to electric shock!

- Pull the plug from plug socket before undertaking any maintenance work at the machine.
- Check the plug, cable and machine for damage each time before using the machine.
- Keep the machine dry and do not operate it in damp rooms.
- Connect the earth leakage (EL) circuit breaker with a maximum release current of 30 mA when using the electric tool outside.

Warning

Danger of injury due to improper handling!

- Wear safety glasses, hearing protection, protective gloves and work shoes when working at the machine.
- Do not insert the plug unless the machine is switched off. Pull the power plug after use.

Warning

Danger of injury to hands!

- Do not reach into the processing line with your hands.

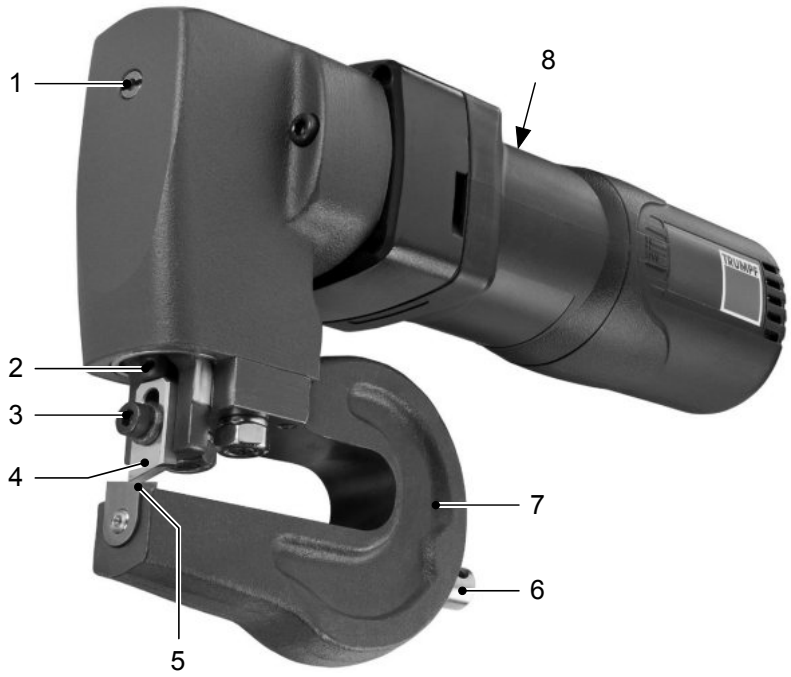
Caution

Damage to property due to improper handling!

The machine will be damaged or destroyed.

- Do not use the power cable to carry the machine.
- Always lay the electrical cable away from the back of the machine and do not pull it over sharp edges.
- Have hand-held electrical tools serviced and checked by qualified technicians. Only use original TRUMPF accessories.

2. Description



1	Eccentric shaft	4	Moving cutter blade	7	Fixed-blade carrier
2	Adjusting screw	5	Fixed blade	8	On/Off switch
3	Fixing screw	6	Clamping screw		

TruTool S 214 Fig. 38114

2.1 Intended use

Warning

Danger of injury!

- Only use the machine for the tasks and materials described in "Intended use".

The TRUMPF TruTool S 214 trimming shear is an electrical hand-held device used for the following applications:

- Shearing off edges on flanged sheets, bodies etc. A minimum distance of 6 mm is kept in the process.
- Separating plate-shaped workpieces of steel, aluminum, non-ferrous metal and plastic material if the distance to the edge is less than 70 mm.
- Separating straight or curved outer and inner cutouts.
- Separating along scribed lines.

2.2 Technical data

	Other countries			USA
	Values	Values	Values	Values
Voltage	230 V	120 V	110 V	120 V
Frequency	50/60 Hz	50/60 Hz	50 Hz	50/60 Hz
• Steel, 400 N/mm²	2.0 mm	2.0 mm	2.0 mm	0.079 in
• Steel, 600 N/mm²	1.6 mm	1.6 mm	1.6 mm	0.063 in
• Steel, 800 N/mm²	1.4 mm	1.4 mm	1.4 mm	0.055 in
• Aluminum, 250 N/mm²	2.5 mm	2.5 mm	2.5 mm	0.098 in
Working speed	5-7 m/min	5-7 m/min	5-7 m/min	16-23 ft/min
Nominal power consumption	500 W	500 W	500 W	500 W
No load speed	2190/min	2190/min	2080/min	2080/min
Weight	2.9 kg	2.9 kg	2.9 kg	6.4 lbs
Smallest radius with curved cutouts	20 mm	20 mm	20 mm	0.787 in
Protective insulation	Class II	Class II	Class II	Class II

Technical data Table 1

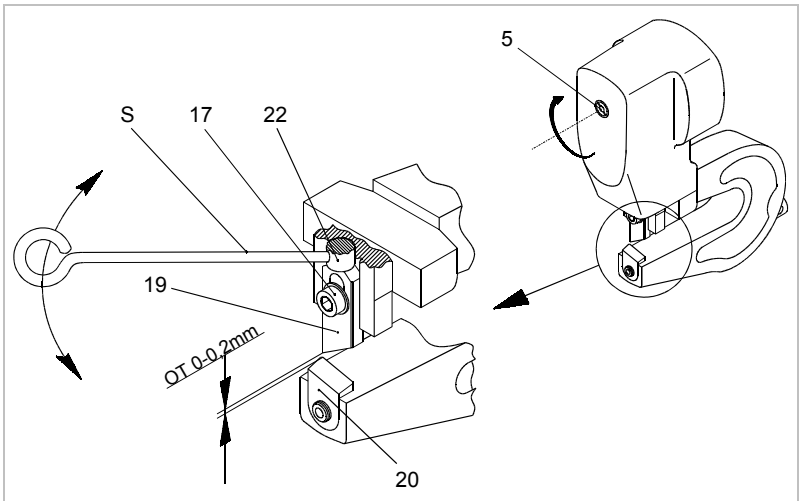
Noise and vibration	**Measured values in accordance with EN 60745**
A-classified sound pressure level	Typically 82 dB (A)
A-classified acoustic power level	Typically 85 dB (A)
Hand-arm vibration	Typically 2.6 m/s²

Measured values for noise and vibration Table 2

Note
The measured values specified above may be exceeded while working.

3. Tool assembly

3.1 Setting the penetration depth



5	Eccentric shaft	20	Fixed blade
17	Fixing screw	22	Adjusting screw
19	Moving cutter blade	S	Locking pin

Fig. 11366

1. Set the upper dead point by turning the eccentric shaft (5).
2. Undo the fixing screw (17).
3. Adjust the air gap.
   - When machining steel 0 to 0.2 mm, adjust the air gap.
   - When machining chrome steel 0.5 to 1.5 mm, adjust the blade overlap. This improves tool service life.
4. Set the air space with the adjusting screw (22) and locking pin (S).

Note
The moving cutter blade (19) must always be at the adjusting screw (22).

5. Tighten the fixing screw (17).

4. Operation

Operating the TruTool S 214

Switching on the TruTool S 214

➢ Shift the On/Off switch forwards.

Operating the TruTool S 214

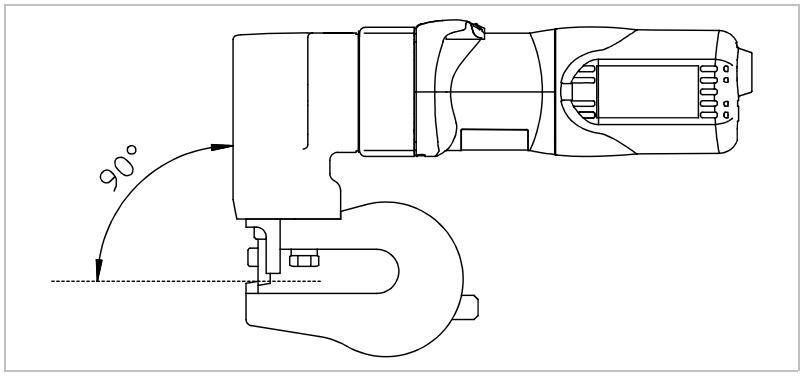


Fig. 37870

1. Do not move the machine towards the workpiece until it is at full speed.
2. Machine the material.
   – Operate the device at an angle of 90° to the sheet surface.

Requirements for cutting radiuses

- Do not tilt the machine.
- Only operate at a low feed rate.
-

Requirements for cutting at the edge

➢ Operate from left to right using the trimming shear.

Note
Do not burden the device to such an extent that it comes to a standstill.

Switching off the TruTool S 214

➢ Shift the On/Off switch to the rear.

5. Maintenance

Danger

Lethal danger due to electric shock!

- Pull the plug out of the socket whenever tools have to be replaced and prior to maintenance work at the machine.

Caution

Damage to property due to blunt tools!

Machine overload

- Check the cutting edge of the blade hourly for wear. Sharp blades cut well and are easier on the machine. Replace the blades in time.

Warning

Danger of injury due to improper repairs!

Machine does not work properly.

- Repair work may only be carried by a qualified specialist.

Maintenance point	Procedure and interval	Recommended lubricants	Order no. Lubricants
Moving cutter blade	Check hourly	-	-
Fixed blade	Check hourly	-	-
Ram guide	Every 20 operating hours	"G1" lubricating grease	139440
Gearbox and gear head (2)	Have them relubricated or the lubricating grease replaced by a qualified specialist every 300 operating hours.	"G1" lubricating grease	139440
Moving cutter blade	Regrind it as required	-	-
Fixed blade	Regrind it as required	-	-
Ventilation slots	Clean them as required	-	-

Maintenance table Table 3

5.1 Servicing blades

Danger

Lethal danger due to electric shock!

➢ Pull the plug out of the socket whenever tools have to be replaced or prior to maintenance work at the machine.

Caution

Damage to property due to the wrong blade selection!

The cutting quality will be severely impaired and the individual tools overloaded.

➢ Only use appropriate tools.

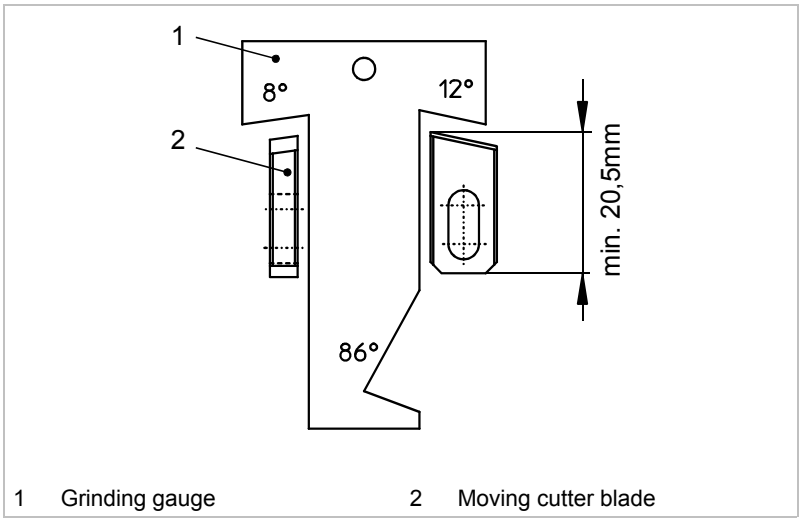
4 different types of blades are available:

- Moving cutter blade, right.
- Fixed blade, right.
- Moving cutter blade, left (optional).
- Fixed blade, left (optional).

5.2 Removing moving cutter blades

1. Undo the fixing screw.
2. Remove the moving cutter blade.

5.3 Regrinding moving cutter blades



1 Grinding gauge 2 Moving cutter blade

Fig. 37881

Note
The moving cutter blade can be regrinded a total of 5 mm. The minimum total length is 20.5 mm.

1. Ensure sufficient cooling when regrinding.
2. Sharpen the cutting edge with fine oil stone.

Note
Round off the cutting edges more when machining chrome steel. This improves tool service life.

3. Check the angle with a grinding gauge.

5.4 Installing moving cutter blades

1. Install the moving cutter blade.
2. Tighten the fixing screw.

5.5 Replacing the moving cutter blade

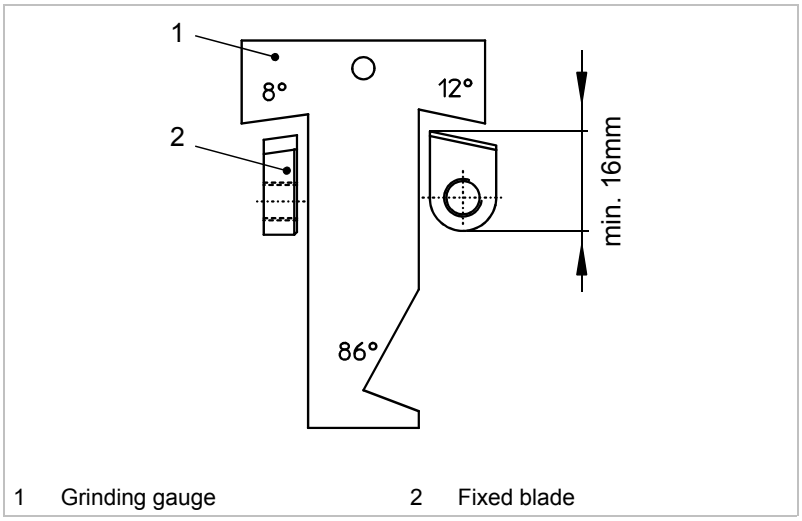
1. Undo the fixing screw.
2. Remove the moving cutter blade.

3. Install a new moving cutter blade.
4. Set the penetration depth.
5. Tighten the fixing screw.

5.6 Removing the fixed blade

1. Undo the clamping screw (26) with the locking pin.
2. Remove the fixed blade.

5.7 Regrinding the fixed blade



1 Grinding gauge 2 Fixed blade

Fig. 37882

Note
The fixed blade can be regrinded a total of 2 mm. The minimum total length is 16 mm.

1. Ensure sufficient cooling when regrinding.
2. Sharpen the cutting edge with fine oil stone.

Note

Round off the cutting edges more when machining chrome steel. This improves tool service life.

3. Check the angle with a grinding gauge.

5.8 Installing fixed blades

1. Install the fixed blade.
2. Tighten the fixing screw (26).

5.9 Replacing fixed blades

1. Undo the clamping screw (26) with the locking pin.
2. Remove the fixed blade.
3. Install a new fixed blade.
4. Set the penetration depth.
5. Tighten the fixing screw.

5.10 Replacing carbon brushes

The motor comes to a standstill whenever the carbon brushes are worn out.

- Have the carbon brushes checked and replaced as required by a qualified specialist.

Note
Only use original replacement parts and observe the specifications on the type plate.

6. Original accessories and wearing parts

Designation	Supplied accessories	Wearing parts	Options	Material number
Moving cutter blade	+	+		003860
Moving cutter blade, left		+		003821
Fixed blade	+	+		003871
Fixed blade, left		+		003858
Grinding gauge	+			039380
2.5 mm locking pin	+			023172
4.0 mm locking pin	+			023182
Allen key	+			067849
Case	+			0971396
Operator's manual	+			1275983
Safety information (red document), other countries	+			125699
Safety information (red document), USA	+			1239438

Original accessories, wearing parts and optional items Table 4

Ordering wearing parts

To ensure the correct and quick delivery of original parts and wearing parts:

1. Specify the order number.
2. Enter further order data:
   - Voltage data
   - Number of pieces
   - Machine type
3. Specify the complete shipping information:
   - Correct address.
   - Required delivery type (e.g. air mail, courier, express mail, ordinary freight, parcel post).
4. Send the order to your TRUMPF representative. Refer to the address list at the end of the document for TRUMPF service addresses.