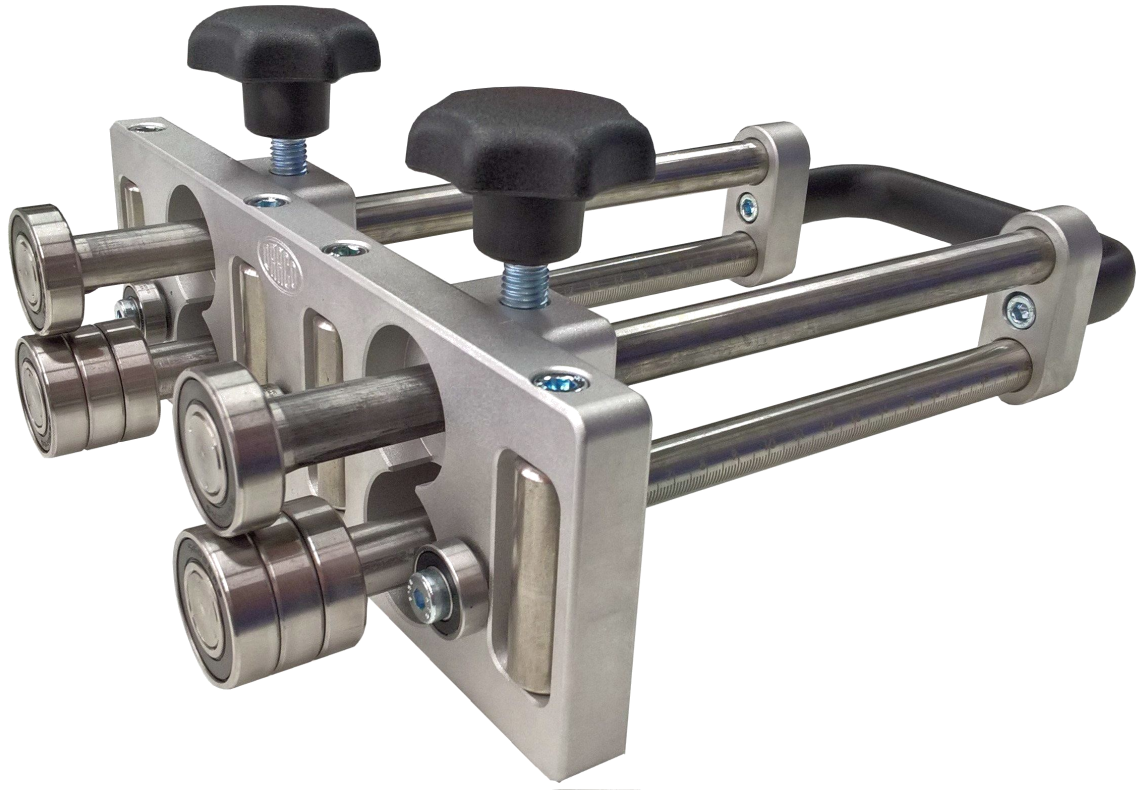
Manual
Duo-Mono-Bender

Engineered and Made in Germany

Read, observe and follow this manual and the other applicable documents, especially all safety instructions and warnings.

Always wear protective gloves!

Handle tool carefully and protect against dirt. If necessary lubricate shafts (e.g., sewing machine oil).



Item no.:	*Bending 0° - 90°*	*Bending height*	*kg*
91564	**Duo-Mono-Bender 200**	5 – 200 mm	2,9
91564S3	**Duo-Mono-Bender 350**	5 – 350 mm	3,1

Item no.:	*Bending 0° - 100°*	*Bending height*	*kg*
91564100	**Duo-Mono-Bender 200**	5 – 200 mm	2,9
91564100S3	**Duo-Mono-Bender 350**	5 – 350 mm	3,1

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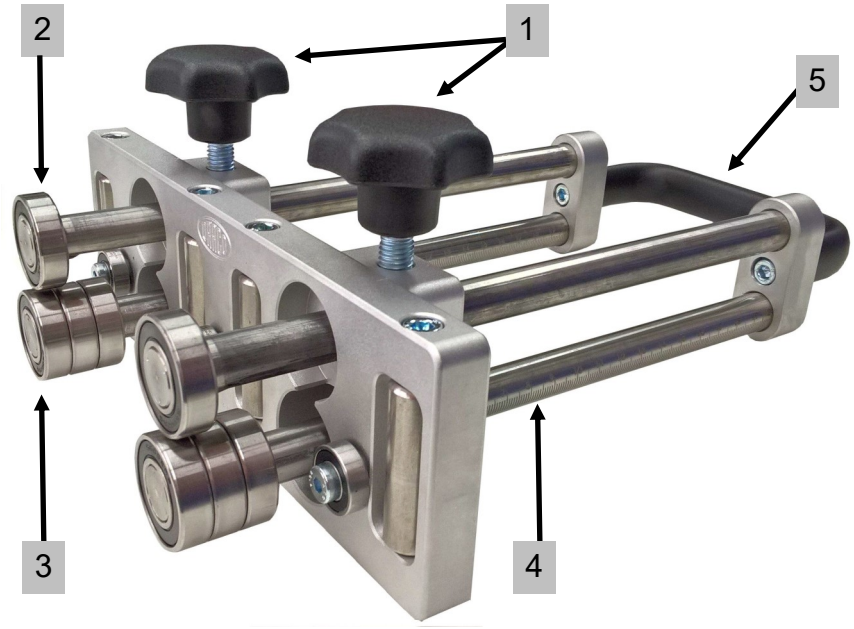
1. Tool elements



1	Set screws
2	One bending roller above
3	Three bending rollers below
4	Measuring scale (mm & inch)
5	Convenient grip when entirely extended

2. Operation method Duo-Mono-Bender

1) Unlock the set screws and adjust the desired bending height by using the integrated measuring scale and lock it with the set screws.
2) Place the metal between the bending rollers. The single roller is on top and shows in the bending direction (bending edge), the other three rollers carry the force to bend up.
3) First pass: Hold the bender in the most convenient way for you. Move the bender forwards and backwards and push up at an angle of 10-25°. The pressure should be held on the middle of the bending rolls and always move bender all to way to the edges. Depending on the material characteristics, proceed in the following way:
4) Move bender back at an angle of 20-45°.
5) Move bender forward at an angle of 60°.
6) Continue to move bender forthwards and backwards by pushing slightly up until the requested angle (max. 90°) is reached. .

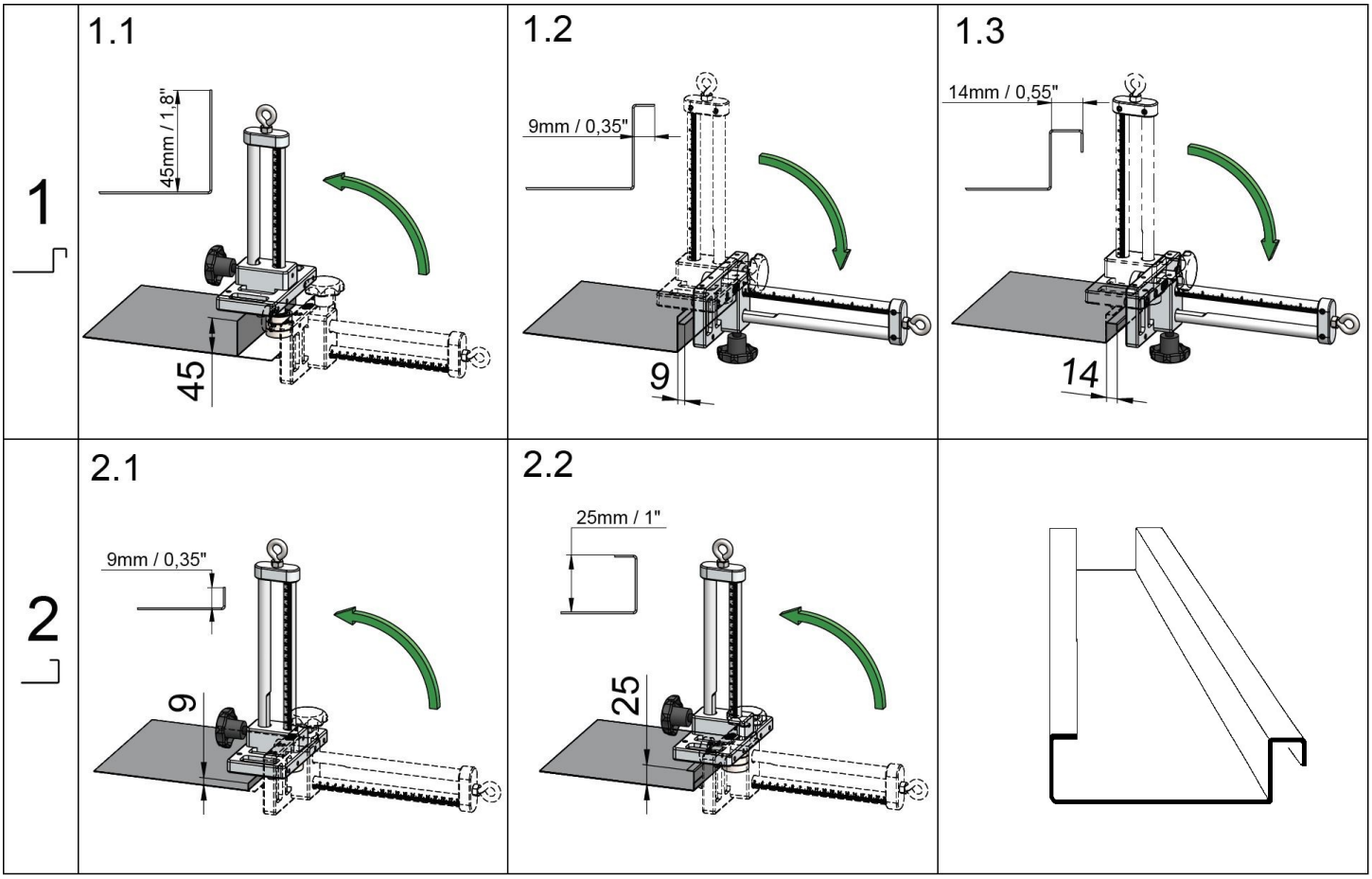
If necessary, depending on the material characteristics, repeat movement more often and in smaller steps.

3. Technical data

Max. thickness of materials:

Copper / zinc / aluminium	up to	1.00 mm (19 ga.)
Galvanized steel	up to	0.70 mm (22 ga.)
Stainless steel / Uginox	up to	0.50 mm (25 ga.)

4. Fabrication of standing seam profile (25 mm/1” height)



1 Female profile (over cloak)

1.1 Set the bending height to 45 mm (1.8”) and bend up to 90° in accordance with the “Operation Method“ explained on the previous page.

1.2 Set the height to 9 mm (0.35”), about the width of the upper bending roller, and bend up to 90° in the opposite direction. The single bending roller is always the bending edge, the 3 bending rollers are always the bending bar.

1.3 Set the height to 14 mm (0.55”) (depending on material specifications) and bend to 90° over the second bend downwards.

2 Male profile (under cloak)

2.1 Set the bending height to 9 mm (0.35”), about the width of the upper bending roller, and bend it to 90° in accordance with the “Operation Method“ explained on the previous page.

2.2 Set the height to 25 mm (1”) and bend up over the first profile to 90°.

Tip: for a final seam height higher than described dimension, add the necessary size.
For example a 35 mm high profile:

- sketch 1.1 = 55 mm / 2⅛“
- sketch 2.2 = 35 mm / 1⅜“

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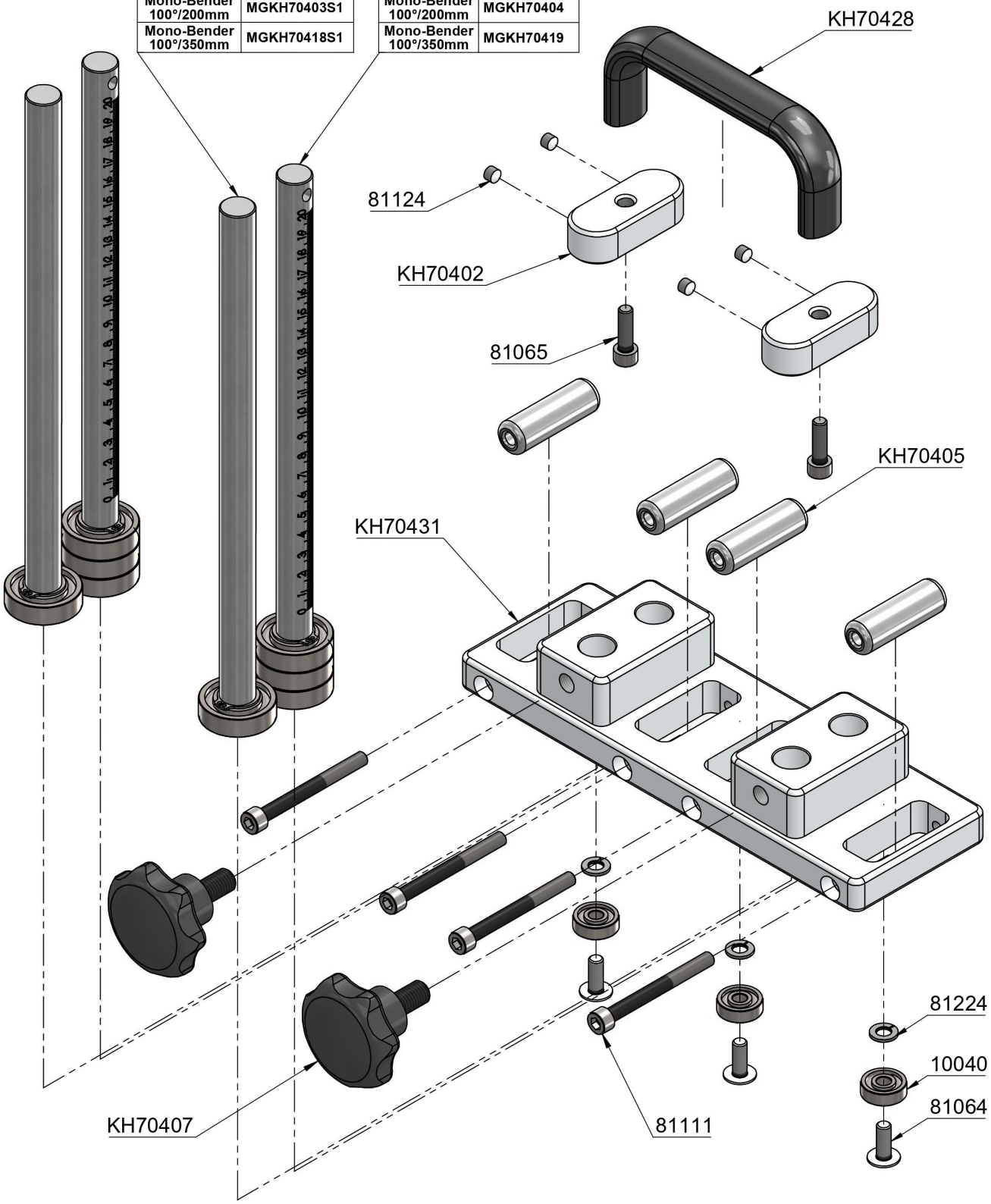
5. Spare parts

Mono-Bender 90°/200mm	MGKH70403
Mono-Bender 90°/350mm	MGKH70418
Mono-Bender 100°/200mm	MGKH70403S1
Mono-Bender 100°/350mm	MGKH70418S1

Mono-Bender 90°/200mm	MGKH70404
Mono-Bender 90°/350mm	MGKH70419
Mono-Bender 100°/200mm	MGKH70404
Mono-Bender 100°/350mm	MGKH70419



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