

BEND SHEET

Control box 2026-10-17

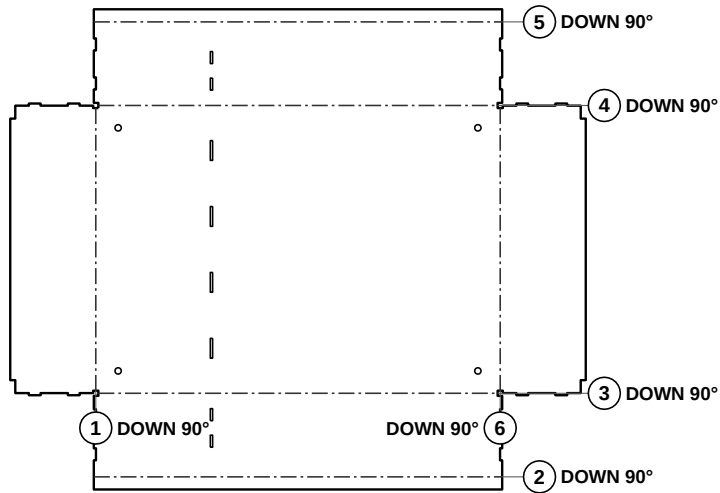
1 part 6 bends

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Control box enclosure

MATERIAL S235JR structural steel	THICKNESS 2.0 mm	DIE WILA OZU-012 V16 86° H55 V 16.0 mm, 86°	PUNCH Per step (see Tools by step)
MACHINE TRUMPF TruBend 7036	UNITS mm	FLAT SIZE 591.9 x 493.9 mm	BENDS 6

FLAT PATTERN



Seen from the top face: UP bends fold toward you.

Overall 591.9 x 493.9 mm

BEND TABLE (BEND ORDER; FLANGES: GAUGE SIDE / FRONT)

STEP	BEND	DIR	ANGLE	Ri (mm)	LENGTH (mm)	FLANGES (mm)	X (mm)	GAUGE	HANDLING	FORCE (kN)
1	B2	DOWN	90°	2.7	420.0	15.0 / 90.0	12.98	edge	Bottom face up	64.9
2	B5	DOWN	90°	2.7	420.0	15.0 / 90.0	12.98	edge	Turn end for end	64.9
3	B1	DOWN	90°	2.7	290.6	90.0 / 420.0	87.98	edge	Rotate 90° CCW	44.9
4	B6	DOWN	90°	2.7	290.6	90.0 / 420.0	87.98	edge	Turn end for end	44.9
5	B3	DOWN	90°	2.7	410.6	90.0 / 300.0	87.98	flange B2	Rotate 90° CW	63.4
6	B4	DOWN	90°	2.7	410.6	90.0 / 300.0	87.98	flange B5	Turn end for end	63.4

TOOLS BY STEP

STEP	PUNCH	DIE	SECTION CHECK
1	WILA BIU-016 90° R1.2 H120; 515 mm: 515	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)
2	WILA BIU-016 90° R1.2 H120; 515 mm: 515	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)
3	WILA BIU-016 90° R1.2 H120; 400 mm: 100L + 200 + 100R	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)
4	WILA BIU-023 86° R1 H163 gooseneck; 400 mm: 100L + 200 + 100R	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)
5	WILA BIU-023 86° R1 H163 gooseneck; 410 mm (0.62 mm short): 200 + 30 + 20 + 25 + 35 + 100R	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)
6	WILA BIU-023 86° R1 H163 gooseneck; 410 mm (0.62 mm short): 200 + 30 + 20 + 25 + 35 + 100R	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)

Control box enclosure (continued)

CHECKS

1. **Tool search:** No interference found in the sampled sections, the axial wall checks or the 3D check.
2. **3D check:** No contact with the punch, die or beam in 145 sampled poses of 6 steps (12.1 s).
3. No problems found in the available checks.
4. **Assumed:** beam: clamp of an equivalent maker (the machine maker publishes none).
5. **Assumed:** gauge: typical two-step finger (Delem DA-66T example).
6. **Assumed:** the back gauge stays at X during the bend (no retraction given).

SIDE VIEWS

The part on the die before each bend, back gauge on the right; red: the moment of a collision. Each view to its own scale.

Step 1: B2 DOWN 90° X = 12.98 mm



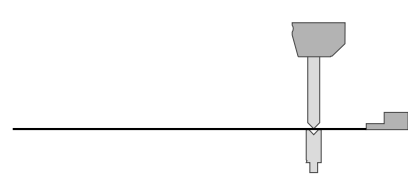
sampled clear

Step 2: B5 DOWN 90° X = 12.98 mm



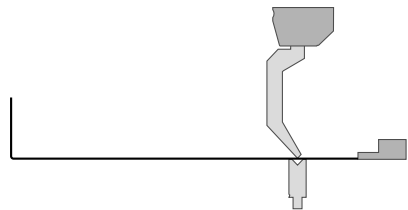
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Step 3: B1 DOWN 90° X = 87.98 mm



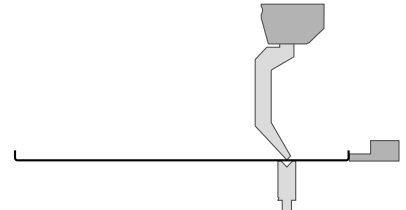
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Step 4: B6 DOWN 90° X = 87.98 mm



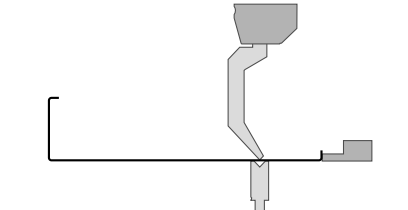
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Step 5: B3 DOWN 90° X = 87.98 mm



sampled clear

Step 6: B4 DOWN 90° X = 87.98 mm



sampled clear