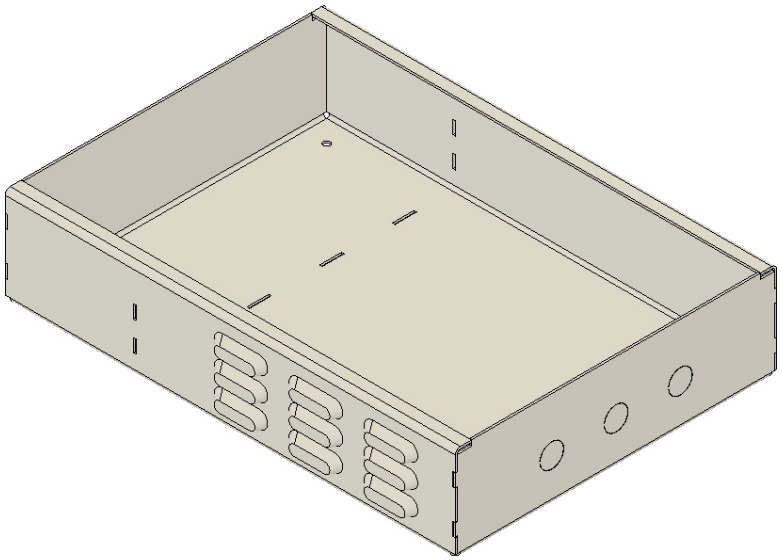
BEND SHEET

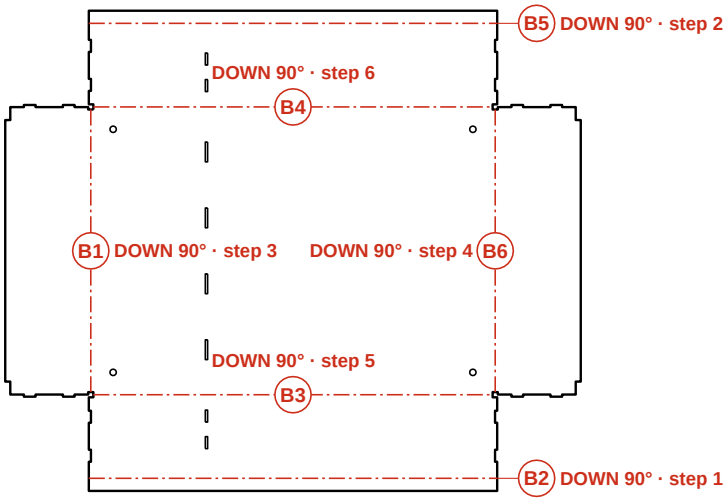
Control box enclosure

MATERIAL	THICKNESS	DIE	PUNCH
S235JR structural steel	**2.0 mm**	WILA OZU-012 V16 86° H55 V 16.0 mm, 86°	WILA BIU-023 86° R1 H163 gooseneck R 1.0 mm, H 163.0 mm
MACHINE	**UNITS**	**FLAT SIZE**	**BENDS**
TRUMPF TruBend 7036	mm	591.9 x 493.9 mm	6

3D VIEW



FLAT PATTERN



Seen from the top face: **UP** bends fold toward you, **DOWN** bends away.

Overall 591.9 x 493.9 mm

Control box enclosure (continued)

BEND TABLE (STEP: ORDER ON THE BRAKE; BEND: LINE ON THE FLAT; 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-023 86° R1 H163 gooseneck; 515 mm: 515	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)
2	WILA BIU-023 86° R1 H163 gooseneck; 515 mm: 515	WILA OZU-012 V16 86° H55; 515 mm: 515	Clear (sampled)
3	WILA BIU-023 86° R1 H163 gooseneck; 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)

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 (12.3 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



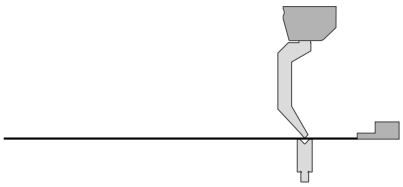
sampled clear

Step 2: B5 DOWN 90° X = 12.98 mm



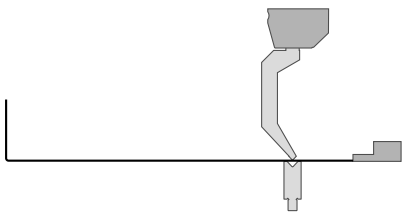
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Step 3: B1 DOWN 90° X = 87.98 mm



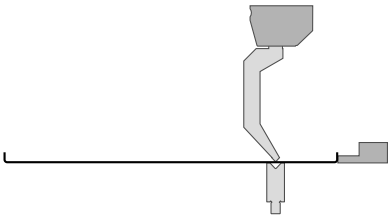
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Step 4: B6 DOWN 90° X = 87.98 mm



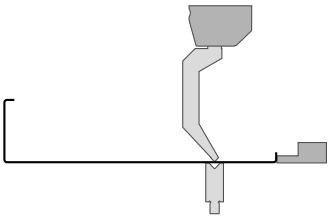
sampled clear

Step 5: B3 DOWN 90° X = 87.98 mm



sampled clear

Step 6: B4 DOWN 90° X = 87.98 mm



sampled clear