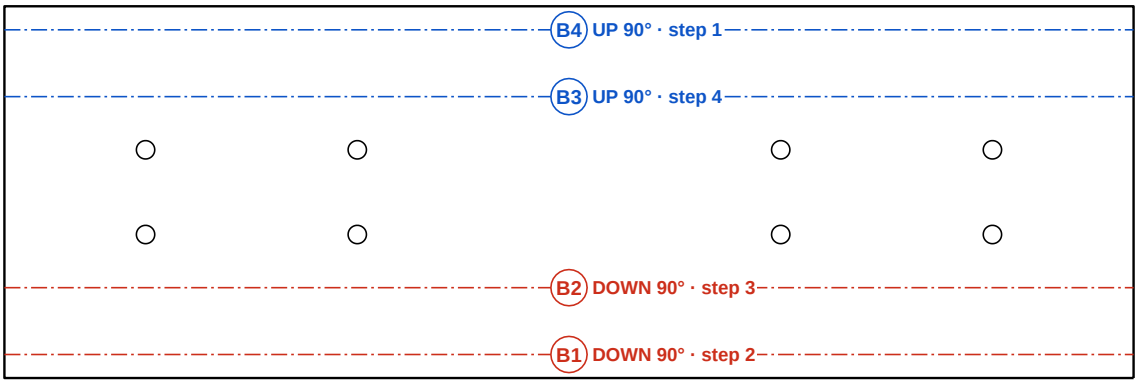
BEND SHEET

Z section with lips

MATERIAL	THICKNESS	DIE	PUNCH
S235JR structural steel	**2.0 mm**	UKB 20.516 / 835 mm V 16.0 mm, 85°	UKB 11.151 / 835 mm R 0.8 mm, H 104.5 mm
MACHINE	**UNITS**	**FLAT SIZE**	**BENDS**
Shop brake 40 t x 1250	mm	800.0 x 263.4 mm	4

FLAT PATTERN



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

Overall 800.0 x 263.4 mm

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	**B4**	**UP**	90°	2.7	800.0	18.7 / 51.4	**16.67**	edge	Top face up	123.5
2	**B1**	**DOWN**	90°	2.7	800.0	18.7 / 51.4	**16.67**	edge	Flip over	123.5
3	**B2**	**DOWN**	90°	2.7	800.0	51.4 / 139.4	**49.36**	flange B1	Same placement	123.5
4	**B3**	**UP**	90°	2.7	800.0	51.4 / 139.4	**49.36**	flange B4	Flip over	123.5

TOOLS BY STEP

STEP	PUNCH	DIE	SECTION CHECK
1	UKB 11.151 / 835 mm; 835 mm	UKB 20.516 / 835 mm; 835 mm	Clear (sampled)
2	UKB 11.151 / 835 mm; 835 mm	UKB 20.516 / 835 mm; 835 mm	Clear (sampled)
3	UKB 11.151 / 835 mm; 835 mm	UKB 20.516 / 835 mm; 835 mm	Clear (sampled)
4	UKB 11.151 / 835 mm; 835 mm	UKB 20.516 / 835 mm; 835 mm	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 97 sampled poses of 4 steps (4.1 s).
3. No problems found in the available checks.

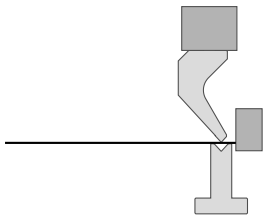
BEND SHEET

Z section with lips (continued)

SIDE VIEWS

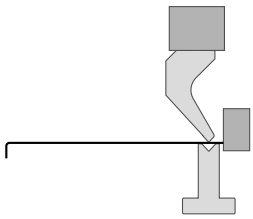
The part on the die before each bend, back gauge on the right; red: the moment of a collision. Each view to its own scale.

Step 1: B4 UP 90° X = 16.67 mm



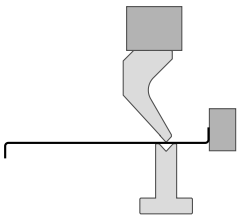
sampled clear

Step 2: B1 DOWN 90° X = 16.67 mm



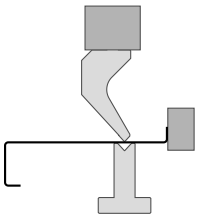
sampled clear

Step 3: B2 DOWN 90° X = 49.36 mm



sampled clear

Step 4: B3 UP 90° X = 49.36 mm



sampled clear