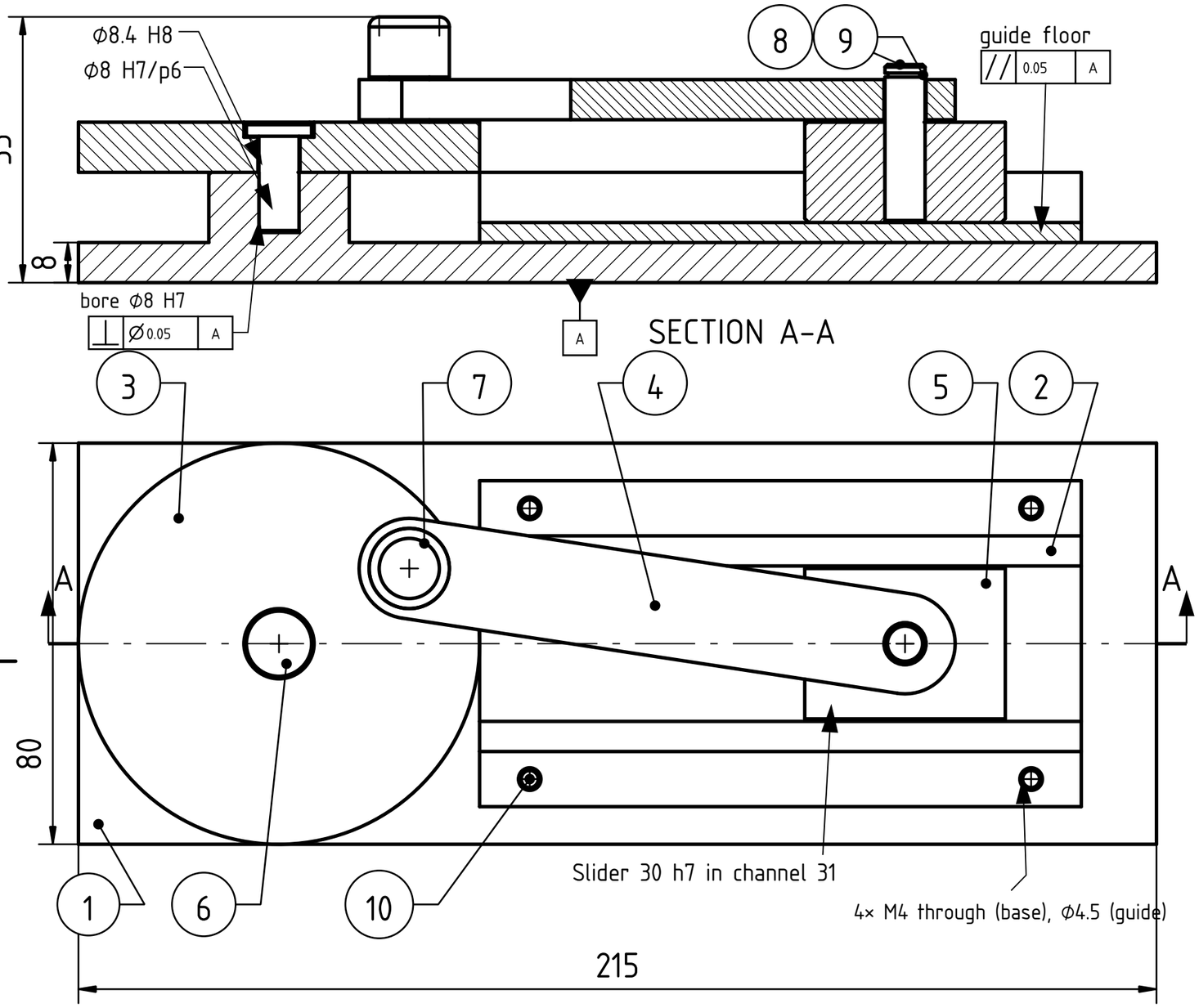
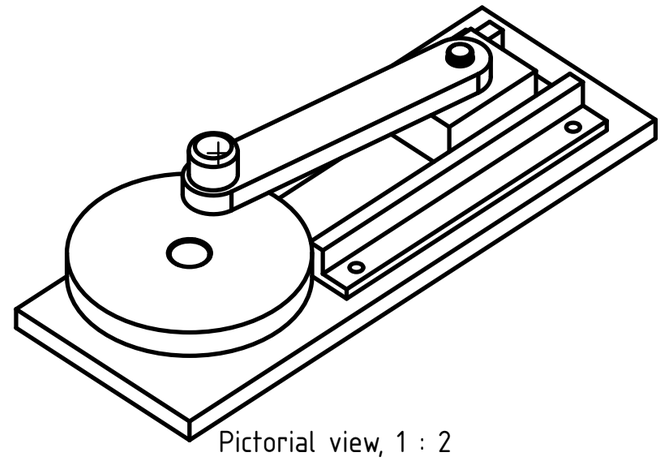




Pictorial view, 1 : 2

Item	Qty	Name	Material	Note
1	1	Base	EN AW-6082 T6	bore 8 H7, 4× M4
2	1	Guide	EN AW-6082 T6	channel 31
3	1	Crank	EN AW-6082 T6	8.4 H8 and 8 H7
4	1	Connecting rod	EN AW-6082 T6	2× 8.4 H8
5	1	Slider	Bronze CuSn8	width 30 h7, 8 H7
6	1	Pivot pin, head 13	Steel 1.4305	8 p6, ground
7	1	Crank pin with knob	Steel 1.4305	8 p6, ground
8	1	Wrist pin, clip groove	Steel 1.4305	8 p6, ground
9	1	E-clip, groove 6.8	Spring steel	bought, not drawn
10	4	Screw ISO 4762 M4 × 10	Steel 8.8	bought, not drawn

GD&T, ISO 1101:2017. Datum A: the underside of the base.
Perpendicularity ϕ0.05 to A, the pivot bore:
the crank turns flat on the base.
Parallelism 0.05 to A, the guide floor after assembly:
the slider runs level with the crank.

FITS, ISO 286-2 (mm). General tolerances ISO 2768-m. First angle projection.
Pins in base, crank, slider: ϕ8 H7 8.000 / 8.015, pin ϕ8 p6 8.015 / 8.024
interference 0 to 0.024: each pin is pressed in and stays.
Crank and rod on the pins: ϕ8.4 H8 8.400 / 8.422, pin ϕ8 p6: clearance 0.376 to 0.407.
Slider 30 h7 29.979 / 30.000 in channel 31 ± 0.3: clearance 0.700 to 1.321.
Break sharp edges 0.2.

Part Material: See item list
General tolerances: ISO 2768-m
Scale: 1 : 1

Title, supplementary title: Slider crank, crank 30, rod 100 Assembly drawing, crank at 30° FreeCAD course, slider crank	Created by: siwit.co/CAD1 Approved by: Dr. Sam Macharia		Owner: siliconwit.com	
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