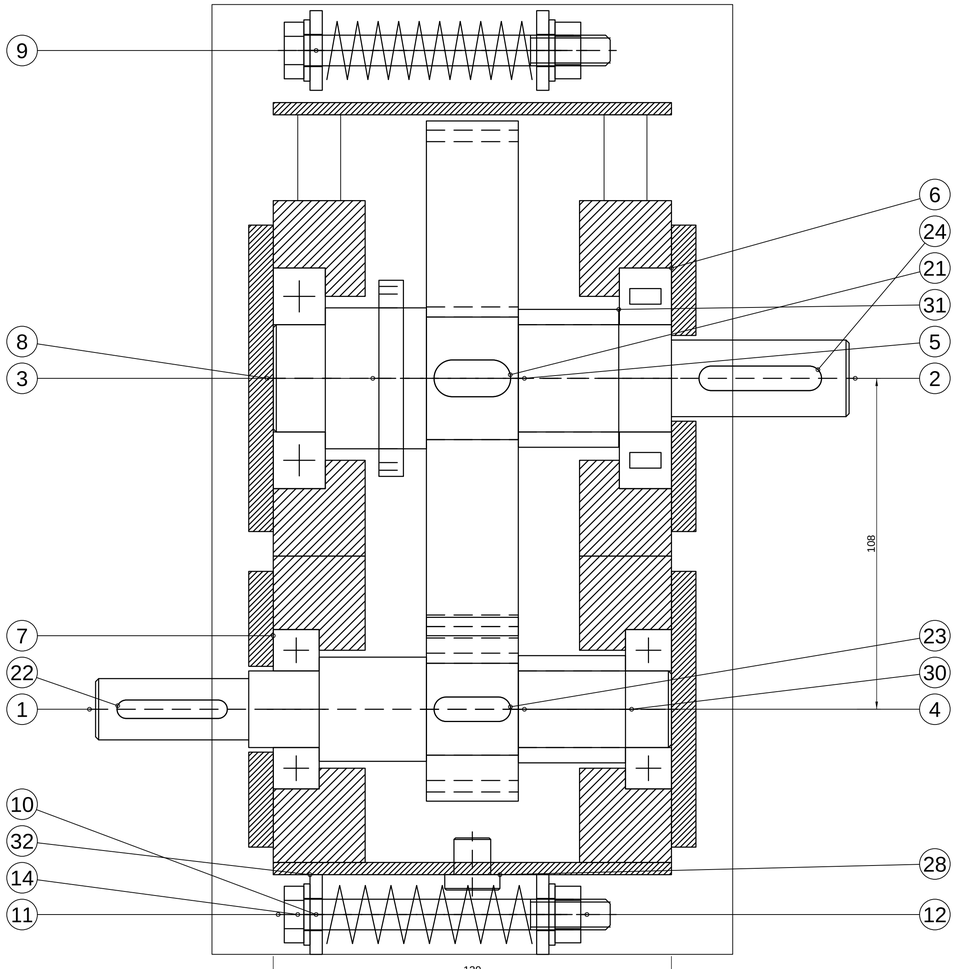
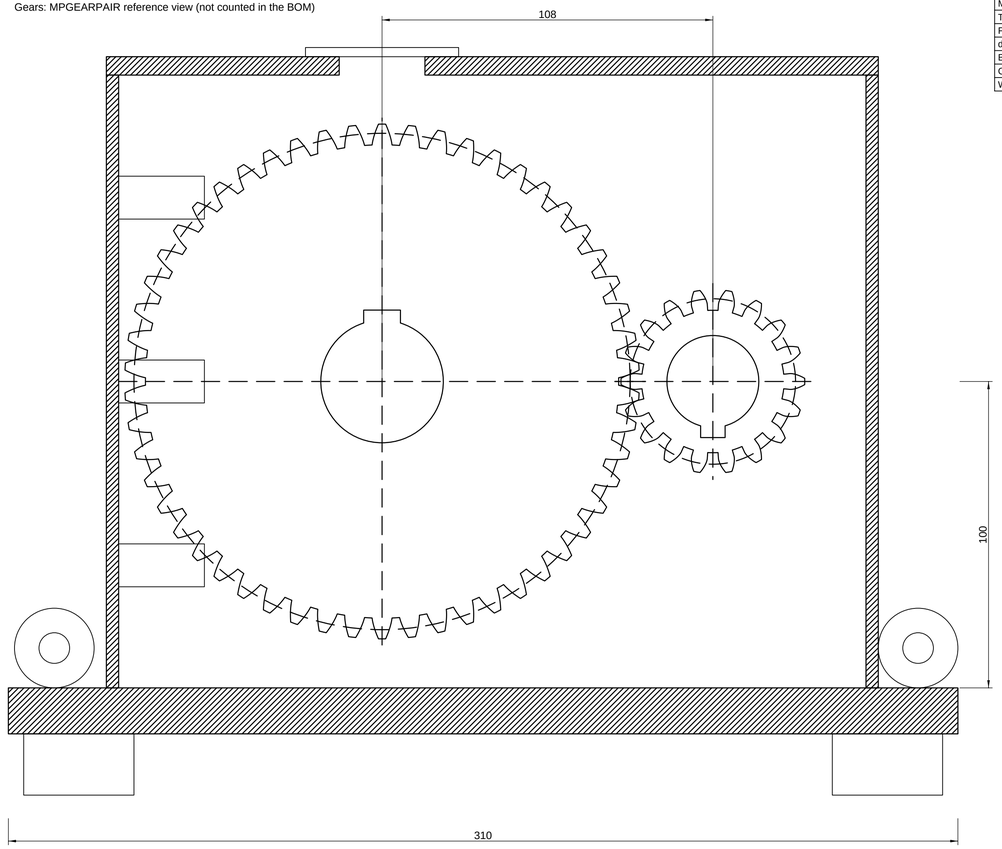
PLAN: PEDESTALS, COVERS AND SIDE PLATES IN SECTION, TOP COVER REMOVED



SECTION B-B ON THE GEAR MESH, LOOKING TOWARDS THE INPUT END

Gears: MPGEARPAIR reference view (not counted in the BOM)



GEAR DATA (MPGEARPAIR)

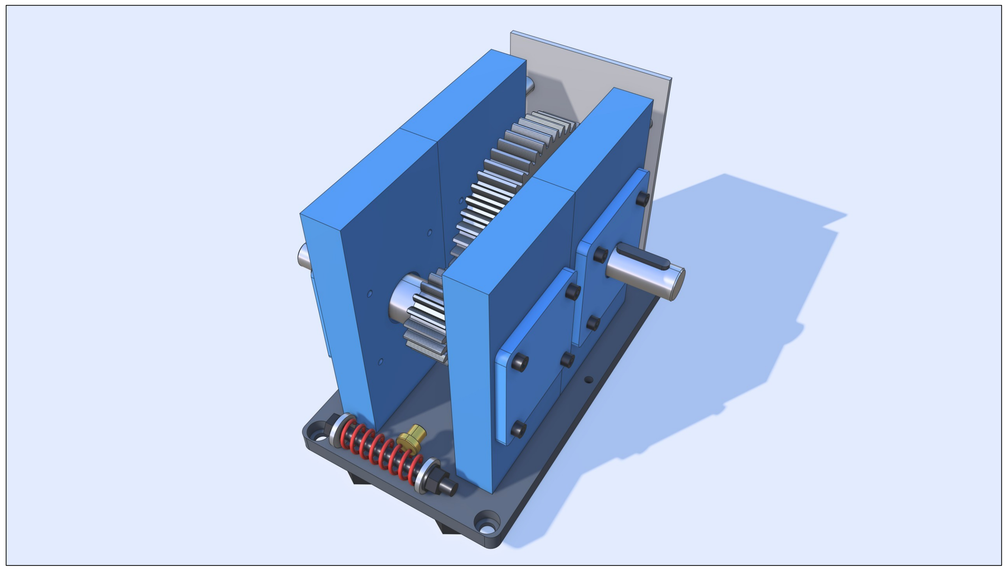
GEAR PAIR (MPGEARPAIR)	PINION	WHEEL
Module / pressure angle	3 / 20 deg	3 / 20 deg
Teeth	18	54
Face width	30	30
d / da / df (mm)	54 / 60 / 46.5	162 / 168 / 154.5
Bore / hub keyway (mm)	30 / 8 x 3.3	40 / 12 x 3.3
Centre distance / ratio	108 mm / 3	
Working PA / contact ratio	20 deg / 1.649	

BILL OF MATERIALS (MPTABLE BOM, PREFIX KD-)

Bill of materials

Item	Part number	Description	Material	Qty	Unit mass (kg)	Mass (kg)
1	KD-001	Shaft 20/25/34/30/25 x 188 with 2 keyways	Steel	1	0.8084	0.808
2	KD-002	Shaft 35/46/40/35/25 x 188 with 2 keyways	Steel	1	1.4351	1.435
3	KD-003	Spur gear m2 z30 PA20 x0 b8 bore 46	Steel	1	0.0708	0.071
4	KD-004	Spur gear m3 z18 PA20 x0 b30 bore 30 key 8 x 3.3	Steel	1	0.3511	0.351
5	KD-005	Spur gear m3 z54 PA20 x0 b30 bore 40 key 12 x 3.3	Steel	1	4.5193	4.519
6	KD-006	Cylindrical roller bearing NU 207 (35 x 72 x 17)	Bearing steel	1	0.2780 est.	0.278
7	KD-007	Deep groove ball bearing 6205 (25 x 52 x 15)	Bearing steel	2	0.1288 est.	0.258
8	KD-008	Deep groove ball bearing 6207 (35 x 72 x 17)	Bearing steel	1	0.2780 est.	0.278
9	KD-009	Compression spring d3 D19 L0 70 n8 closed steel	Spring steel	1	0.0331	0.033
10	KD-010	Compression spring d3 D19 L0 70 n8 open steel	Spring steel	1	0.0265	0.026
11	KD-011	Hex bolt ISO 4014 - M10 x 100	Steel	2	0.0728 est.	0.146
12	KD-012	Hex nut ISO 4032 - M10	Steel	2	0.0094 est.	0.019
13	KD-013	Hex screw ISO 4017 - M8 x 30	Steel	8	0.0179 est.	0.143
14	KD-014	Plain washer ISO 7089 - 10	Steel	4	0.0036 est.	0.014
15	KD-015	Plain washer ISO 7089 - 8	Steel	8	0.0018 est.	0.015
16	KD-016	Socket head cap screw ISO 4762 - M4 x 12	Steel	4	0.0023 est.	0.009
17	KD-017	Socket head cap screw ISO 4762 - M6 x 12	Steel	6	0.0059 est.	0.035
18	KD-018	Socket head cap screw ISO 4762 - M6 x 16	Steel	8	0.0067 est.	0.054
19	KD-019	Socket head cap screw ISO 4762 - M6 x 20	Steel	16	0.0076 est.	0.122
20	KD-020	Socket head cap screw ISO 4762 - M6 x 45	Steel	6	0.0132 est.	0.079
21	KD-021	Parallel key A 12 x 8 x 25	Steel	1	0.0169	0.017
22	KD-022	Parallel key A 6 x 6 x 36	Steel	1	0.0098	0.010
23	KD-023	Parallel key A 8 x 7 x 25	Steel	1	0.0102	0.010
24	KD-024	Parallel key A 8 x 7 x 40	Steel	1	0.0168	0.017
25	KD-DP-0830	KD dowels DP-8x30	Hardened steel	4	0.0117	0.047
26	KD-FT-3620	KD feet FT-36x20	Steel	4	0.1762	0.705
27	KD-IC-8050	KD inspection covers IC-80x50	Aluminium	1	0.0319	0.032
28	KD-PL-12	KD plugs PL-12	Brass	1	0.0223	0.022
29	KD-SO-0628	KD rings SO-6x28	Steel	6	0.0263	0.158
30	KD-SP-2535	KD rings SP-25x35	Steel	1	0.1295	0.129
31	KD-SP-3545	KD rings SP-35x45	Steel	1	0.1618	0.162
32	KD-SS-1026	KD rings SS-10x26	Steel	4	0.0140	0.056
33	KD-033	Bearing housing 100 x 200 x 30 for 6205	Cast iron	2	3.9649	7.930
34	KD-034	Bearing housing 116 x 200 x 30 for 6207	Cast iron	2	4.3024	8.605
35	KD-035	Plate 100 x 100 x 8 R6	Steel	2	0.6261	1.252
36	KD-036	Plate 130 x 200 x 4	Aluminium	2	0.2808	0.562
37	KD-037	Plate 138 x 252 x 6 R6	Aluminium	1	0.5629	0.563
38	KD-038	Plate 170 x 310 x 15 R8	Steel	1	6.1990	6.199
39	KD-039	Plate 90 x 90 x 8 R6	Steel	2	0.5067	1.013
		Total (known masses)		113		36.182

3D: CUTAWAY (TOP COVER AND FRONT PLATE HIDDEN), RENDERSTILL



NOTES

1. Fictional job: single-stage spur reducer 3:1, 4 kW at 1450 rpm, chain drive on the output. Sizes, loads and names are the demo's own.
2. Shafts, gears, keys, bearings, plates, housings, fasteners, springs, library parts, balloons, the BOM table and the gear data are Mechanical Parts objects and values.
3. Pedestals, covers and side plates in the plan and section B-B: hatched outlines drawn by the demo (core lines and hatch) where the plugin's top views do not give a section.
4. BOM masses marked est. are the plugin's estimates; the total counts known masses only.

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TITLE

KD-160 CONVEYOR DRIVE UNIT
GENERAL ARRANGEMENT AND BILL OF MATERIALS

PROJECT		DRAWN	
KD-160 conveyor drive unit (fictional)		Stratal CAD demo	
DRAWING NO.	SHEET	SCALE	SIZE
STR-MPT-001	1 of 6	1:1	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Mechanical Parts 0.9.0		12 Nov 2026	

STATUS

DEMONSTRATION DRAWING - NOT FOR MANUFACTURE

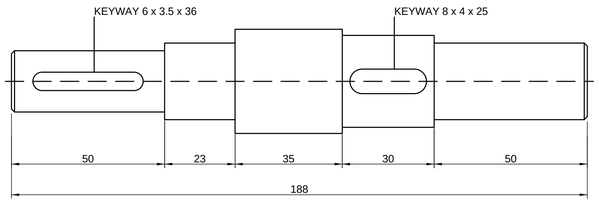
INPUT SHAFT (ITEM 1), REFERENCE VIEW

Ø25 H7/k6
(+0.021/0)/(+0.015/+0.002)

Ø25 H7/k6
(+0.021/0)/(+0.015/+0.002)

Ø20 H7/k6
(+0.021/0)/(+0.015/+0.002)

Ø30 H7/k6
(+0.021/0)/(+0.015/+0.002)



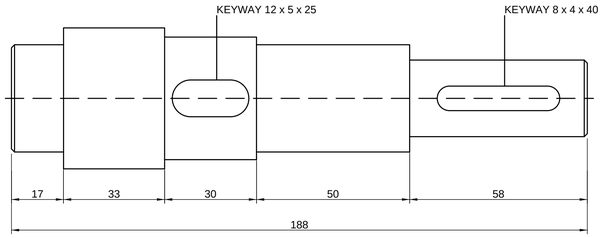
OUTPUT SHAFT (ITEM 2), REFERENCE VIEW

Ø40 H7/p6
(+0.025/0)/(+0.042/+0.026)

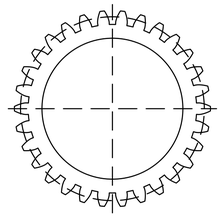
Ø25 H7/k6
(+0.021/0)/(+0.015/+0.002)

Ø35 H7/k6
(+0.025/0)/(+0.018/+0.002)

Ø35 H7/k6
(+0.025/0)/(+0.018/+0.002)



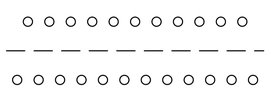
TARGET WHEEL (ITEM 3), FRONT VIEW



KEY A 12 x 8 x 25, SIDE VIEW



TAKE-UP SPRING, SECTION



SHAFT CALCULATIONS (MPCALC SHAFT)

MPCALC SHAFT	INPUT SHAFT (6205 + 6205)	OUTPUT SHAFT (6207 + NU 207)
Supports A, B (mm from left end)	65.5, 180.5	8.5, 121.5
Loads x: Fy / Fz (mm: N)	123: -355.1 / 975.6	65: 355.1 / -975.6; 159: -1317.0 / 0.0
Torque (N m), carried over (mm)	26.34, 25 to 123	79.03, 65 to 159
Reaction A / B (N)	519.1 / 519.1	784.7 / 1650.2
Max bending moment (N m) at (mm)	29.85 at 123.0	49.39 at 121.5
Max deflection (mm) at (mm)	0.0068 at 0.0	0.0163 at 188.0
Slope at A / B (mrad)	0.103 / 0.143	0.056 / 0.125
Twist (deg)	0.049	0.065
Critical speed, shaft alone (rpm)	316195	445465
Bearing life L10h A / B (h)	266375 / 266375	1404793 / 4363183

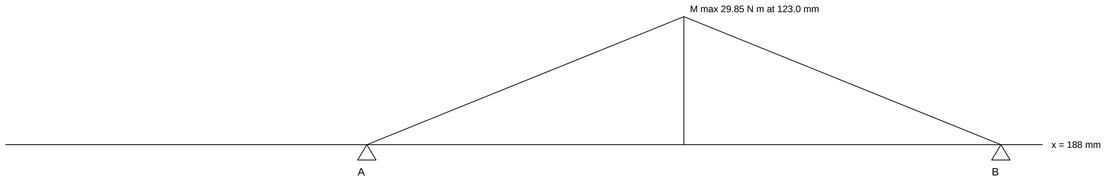
NOMINAL STRESSES PER STEP (MPCALC)

SHAFT	STEP	DIA	FROM-TO (mm)	M (N m)	BENDING	TORSION	VON MISES (MPa)
Input	1	20	0-50	0.00	0.00	16.77	29.04
Input	2	25	50-73	3.89	2.54	8.59	15.09
Input	3	34	73-108	22.06	5.72	3.41	8.22
Input	4	30	108-138	29.85	11.26	4.97	14.17
Input	5	25	138-188	22.06	14.38	0.00	14.38
Output	1	35	0-17	6.67	1.58	0.00	1.58
Output	2	46	17-50	32.56	3.41	0.00	3.41
Output	3	40	50-80	44.33	7.06	6.29	12.98
Output	4	35	80-130	49.39	11.73	9.39	20.05
Output	5	25	130-188	38.19	24.90	25.76	51.09

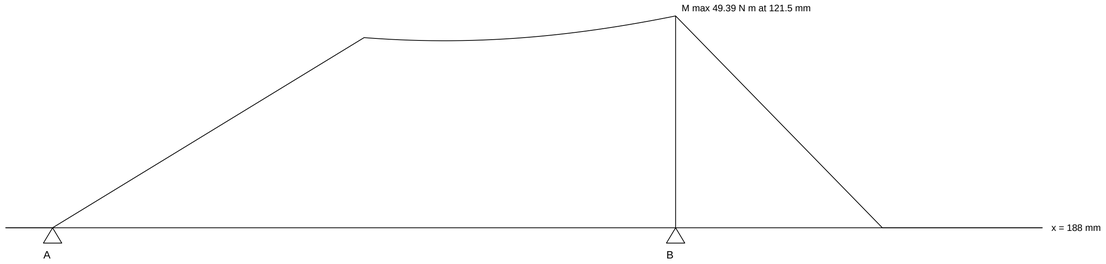
BEARING LIFE, OUTPUT SHAFT (MPCALC BEARING)

BEARING (MPCALC)	C (kN)	Fr (N)	Fa (N)	X / Y	TYPE	rpm	P (N)	L10 (Mrev)	L10h (h)
6207 output A	27.0	784.7	0	1.00 / 0.00	Ball	483.3	784.7	40736	1404793
NU 207 output B	56.0	1650.2	0	1.00 / 0.00	Roller	483.3	1650.2	126524	4363183
6207 A + 250 N axial	27.0	784.7	250	0.56 / 1.80	Ball	483.3	889.4	27974	964684

BENDING MOMENT, INPUT SHAFT (MPCALC CSV; 1 N m = 1.4 mm)



BENDING MOMENT, OUTPUT SHAFT (MPCALC CSV; 1 N m = 1.4 mm)



FIT TABLE (MPTABLE FITS)

Fit table (ISO 286, mm)

Fit	Hole	Shaft	Max clearance	Min clearance	Fit type
Ø20 H7/k6	+0.021/0	+0.015/+0.002	0.019	-0.015	transition
Ø25 H7/k6	+0.021/0	+0.015/+0.002	0.019	-0.015	transition
Ø30 H7/k6	+0.021/0	+0.015/+0.002	0.019	-0.015	transition
Ø25 H7/k6	+0.021/0	+0.015/+0.002	0.019	-0.015	transition
Ø35 H7/k6	+0.025/0	+0.018/+0.002	0.023	-0.018	transition
Ø40 H7/p6	+0.025/0	+0.042/+0.026	-0.001	-0.042	interference
Ø35 H7/k6	+0.025/0	+0.018/+0.002	0.023	-0.018	transition
Ø25 H7/k6	+0.021/0	+0.015/+0.002	0.019	-0.015	transition
Ø52 H7/h6	+0.030/0	0/-0.019	0.049	0.000	clearance
Ø72 H7/h6	+0.030/0	0/-0.019	0.049	0.000	clearance

TAKE-UP SPRINGS (MPSPRING)

TAKE-UP SPRING (MPSPRING)	RATE N/mm	SOLID AT	F / STRESS AT SOLID	F / STRESS AT 62 mm
d3 D19 L0 70 n8 open steel	14.632	27 mm	629.2 N / 1396 MPa	117.1 N / 260 MPa
d3 D19 L0 70 n8 closed steel	14.632	33 mm	541.4 N / 1201 MPa	117.1 N / 260 MPa

NOTES

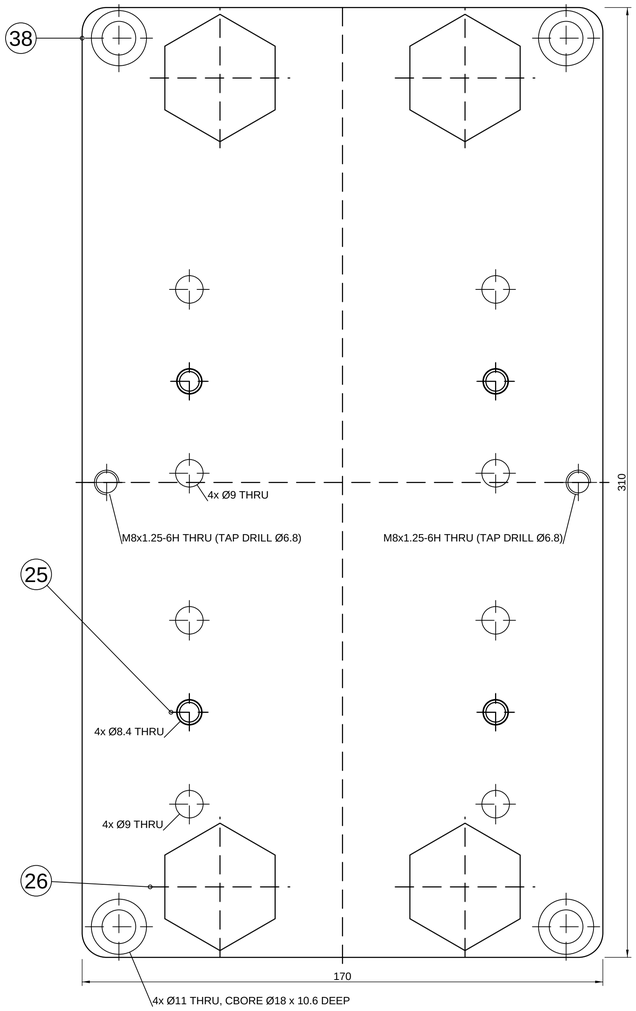
1. Shaft details: MPSHAFT reference views (not in the BOM) with their keyway callouts; fits by MPFIT; fit table by MPTABLE Fits.
2. Calculations by MPCALC: loads, torques and catalogue ratings C are the demo's example inputs. Nominal stresses, no notch factors: compare with the material's allowable stress.
3. Moment diagrams drawn by the demo from MPCALC's CSV (x, M).

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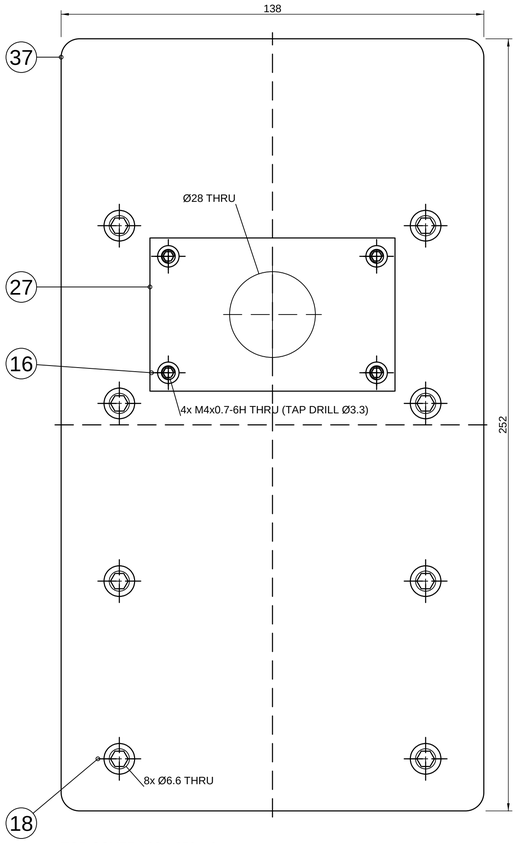
TITLE
KD-160 CONVEYOR DRIVE UNIT
SHAFTS, FITS AND DESIGN CALCULATIONS

PROJECT	DRAWN		
KD-160 conveyor drive unit (fictional)	Stratal CAD demo		
DRAWING NO.	SHEET	SCALE	SIZE
STR-MPT-002	2 of 6	1:1	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Mechanical Parts 0.9.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE

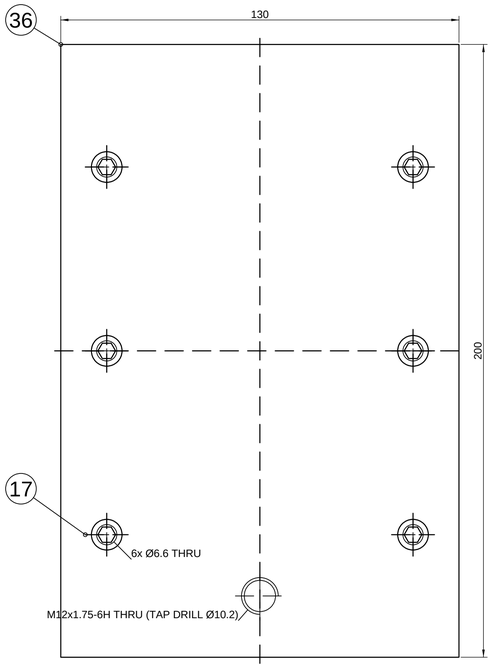


BASE PLATE 170 x 310 x 15, STEEL

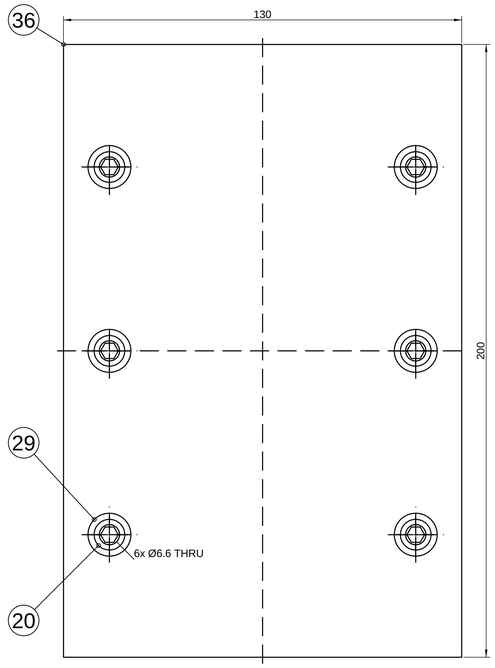


TOP COVER 138 x 252 x 6

Aluminium, with inspection cover



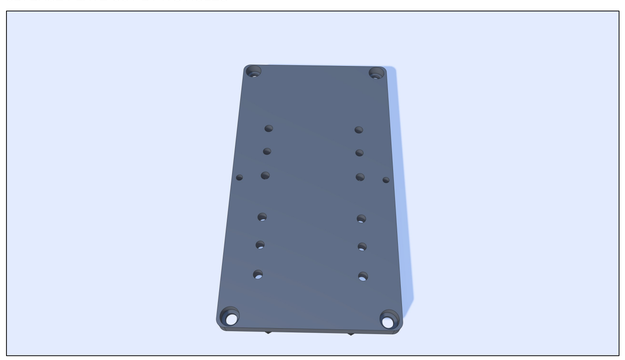
FRONT SIDE PLATE 130 x 200 x 4



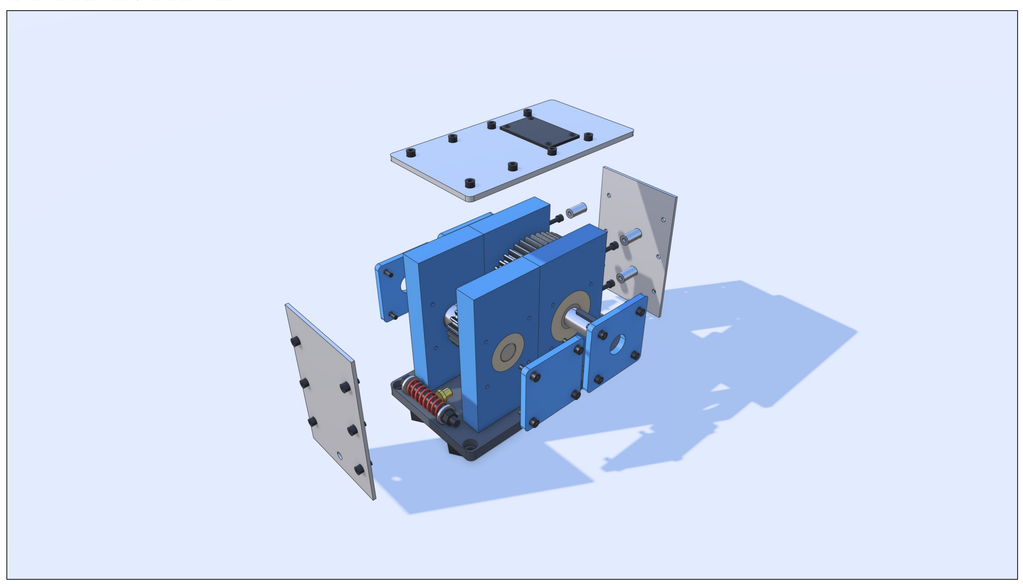
BACK SIDE PLATE 130 x 200 x 4

On 28 mm stand-offs

3D: BASE PLATE CUT BY ITS HOLES



3D: EXPLODED VIEW, RENDERSTILL



NOTES

1. Plates by MPPLATE; holes by MPPATTERN and MPHOLE in top view cut the plates' solids (MPRECUT re-cuts).
2. Hole callouts are the plugin's; some were moved with their grips to sit clear of other holes.
3. Hole positions: hole table on sheet 5 (MPTABLE Holes).

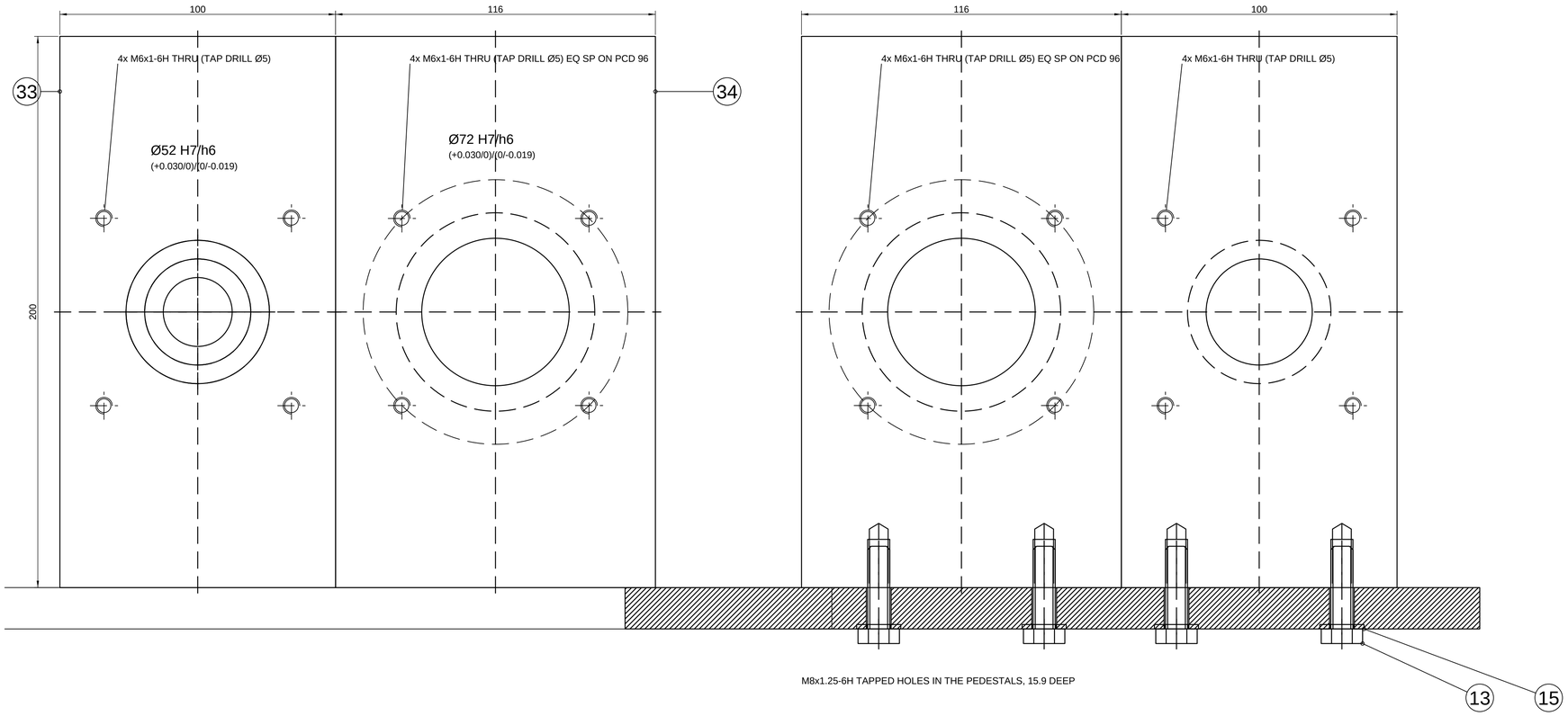
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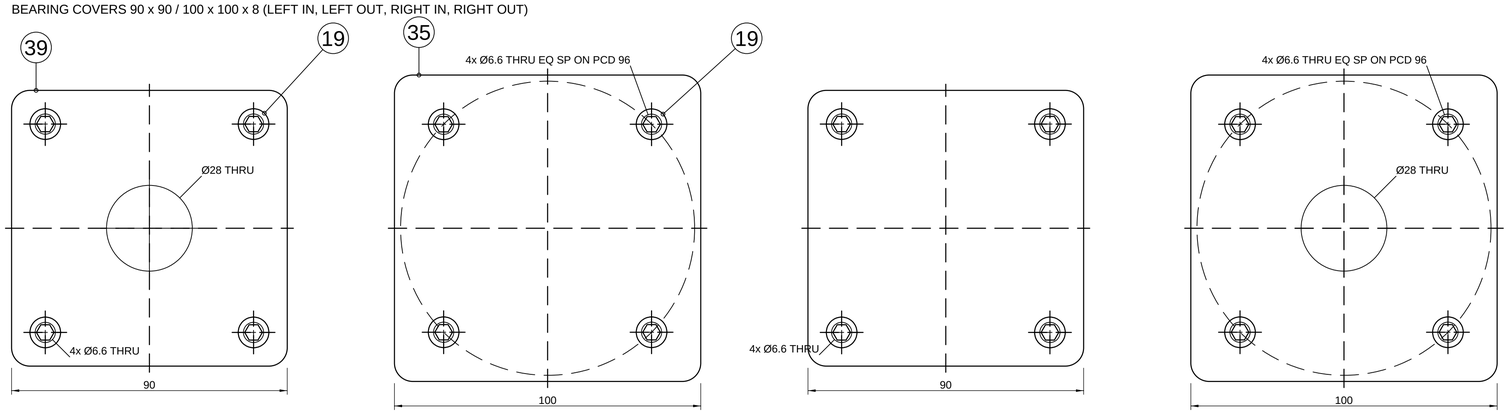
TITLE: KD-160 CONVEYOR DRIVE UNIT PLATES: BASE, TOP COVER AND SIDE PLATES			
PROJECT: KD-160 conveyor drive unit (fictional)		DRAWN: Stratal CAD demo	
DRAWING NO.: STR-MPT-003	SHEET: 3 of 6	SCALE: 1:1	SIZE: A1
SOFTWARE: Stratal CAD 0.1.8, Mechanical Parts 0.9.0		DATE: 12 Nov 2026	
STATUS: DEMONSTRATION DRAWING - NOT FOR MANUFACTURE			

LEFT PEDESTALS 6205 / 6207, SEEN FROM INSIDE

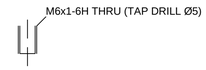
RIGHT PEDESTALS 6207 / 6205, SEEN FROM INSIDE



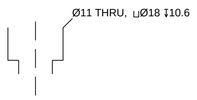
BEARING COVERS 90 x 90 / 100 x 100 x 8 (LEFT IN, LEFT OUT, RIGHT IN, RIGHT OUT)



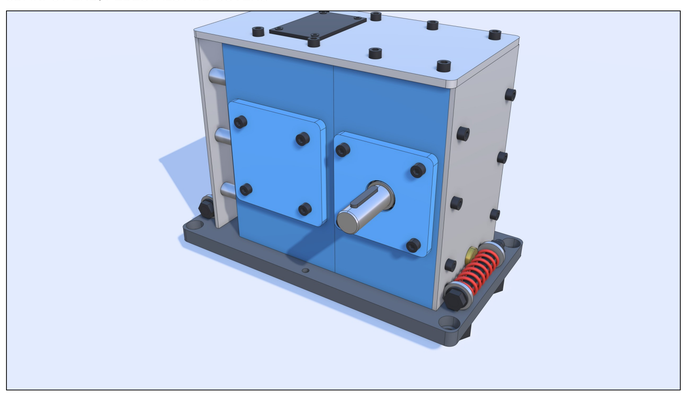
DETAIL C: COVER SCREW HOLE



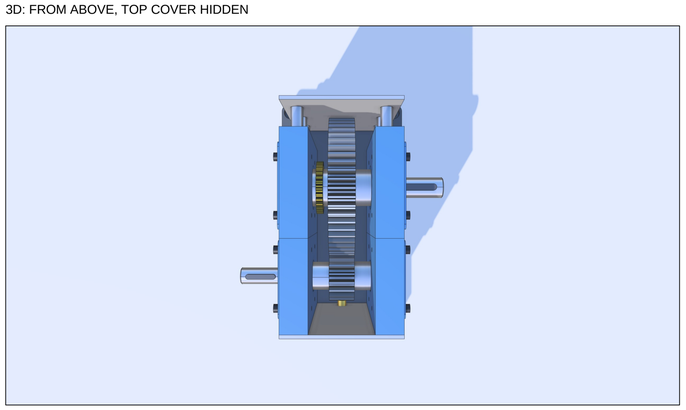
DETAIL D: FOUNDATION HOLE



3D: INPUT END, PEDESTALS AND COVERS



3D: FROM ABOVE, TOP COVER HIDDEN



NOTES

1. Pedestals by MPHOUSING (seat and bore for the bearing); covers by MPPLATE; the holes on them cut their solids.
2. Pedestals are seen from inside the gearbox. Right-hand pair shown on the base plate with the hold-down screws (MPSTACK into tapped holes, quantity 2 each: the left pair takes the same).
3. Details: MPHOLE in section (reference views), the counterbore in the Symbols style.

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TITLE
KD-160 CONVEYOR DRIVE UNIT
BEARING PEDESTALS, COVERS AND HOLE DETAILS

PROJECT	DRAWN		
KD-160 conveyor drive unit (fictional)	Stratal CAD demo		
DRAWING NO.	SHEET	SCALE	SIZE
STR-MPT-004	4 of 6	1:1	A1
SOFTWARE	DATE		
Stratal CAD 0.1.8, Mechanical Parts 0.9.0	12 Nov 2026		
STATUS			
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE			

PART LIST (MPTABLE)

Item	Designation	Qty
1	Shaft 20/25/34/30/25 x 188 with 2 keyways	1
2	Shaft 35/46/40/35/25 x 188 with 2 keyways	1
3	Spur gear m2 z30 PA20 x0 b8 bore 46	1
4	Spur gear m3 z18 PA20 x0 b30 bore 30 key 8 x 3.3	1
5	Spur gear m3 z54 PA20 x0 b30 bore 40 key 12 x 3.3	1
6	Cylindrical roller bearing NU 207 (35 x 72 x 17)	1
7	Deep groove ball bearing 6205 (25 x 52 x 15)	2
8	Deep groove ball bearing 6207 (35 x 72 x 17)	1
9	Compression spring d3 D19 L0 70 n8 closed steel	1
10	Compression spring d3 D19 L0 70 n8 open steel	1
11	Hex bolt ISO 4014 - M10 x 100	2
12	Hex nut ISO 4032 - M10	2
13	Hex screw ISO 4017 - M8 x 30	8
14	Plain washer ISO 7089 - 10	4
15	Plain washer ISO 7089 - 8	8
16	Socket head cap screw ISO 4762 - M4 x 12	4
17	Socket head cap screw ISO 4762 - M6 x 12	6
18	Socket head cap screw ISO 4762 - M6 x 16	8
19	Socket head cap screw ISO 4762 - M6 x 20	16
20	Socket head cap screw ISO 4762 - M6 x 45	6
21	Parallel key A 12 x 8 x 25	1
22	Parallel key A 6 x 6 x 36	1
23	Parallel key A 8 x 7 x 25	1
24	Parallel key A 8 x 7 x 40	1
25	KD dowels DP-8x30	4
26	KD feet FT-36x20	4
27	KD inspection covers IC-80x50	1
28	KD plugs PL-12	1
29	KD rings SO-6x28	6
30	KD rings SP-25x35	1
31	KD rings SP-35x45	1
32	KD rings SS-10x26	4
33	Bearing housing 100 x 200 x 30 for 6205	2
34	Bearing housing 116 x 200 x 30 for 6207	2
35	Plate 100 x 100 x 8 R6	2
36	Plate 130 x 200 x 4	2
37	Plate 138 x 252 x 6 R6	1
38	Plate 170 x 310 x 15 R8	1
39	Plate 90 x 90 x 8 R6	2
	Hole features	
	Clearance hole M24 coarse (Ø28)	3
	Clearance hole M6 medium (Ø6.6)	36
	Clearance hole M8 fine (Ø8.4)	4
	Clearance hole M8 medium (Ø9)	8
	Counterbored hole M10 medium (Ø11, Ø18)	4
	Tapped hole M12x1.75	1
	Tapped hole M4x0.7	4
	Tapped hole M6x1	16
	Tapped hole M8x1.25	6

HOLE TABLE (MPTABLE HOLES)

Hole table (X, Y from the datum, mm)

Hole	X (mm)	Y (mm)	Description
A1	35.00	50.00	Ø9 THRU
A2	135.00	50.00	Ø9 THRU
A3	35.00	110.00	Ø9 THRU
A4	135.00	110.00	Ø9 THRU
A5	35.00	158.00	Ø9 THRU
A6	135.00	158.00	Ø9 THRU
A7	35.00	218.00	Ø9 THRU
A8	135.00	218.00	Ø9 THRU
B1	12.00	10.00	Ø11 THRU, CBORE Ø18 x 10.6 DEEP
B2	158.00	10.00	Ø11 THRU, CBORE Ø18 x 10.6 DEEP
B3	12.00	300.00	Ø11 THRU, CBORE Ø18 x 10.6 DEEP
B4	158.00	300.00	Ø11 THRU, CBORE Ø18 x 10.6 DEEP
C1	35.00	80.00	Ø8.4 THRU
C2	135.00	80.00	Ø8.4 THRU
C3	35.00	188.00	Ø8.4 THRU
C4	135.00	188.00	Ø8.4 THRU
D1	8.00	155.00	M8x1.25-6H THRU (TAP DRILL Ø6.8)
D2	162.00	155.00	M8x1.25-6H THRU (TAP DRILL Ø6.8)
E1	225.00	71.00	Ø6.6 THRU
E2	325.00	71.00	Ø6.6 THRU
E3	225.00	129.00	Ø6.6 THRU
E4	325.00	129.00	Ø6.6 THRU
E5	225.00	187.00	Ø6.6 THRU
E6	325.00	187.00	Ø6.6 THRU
E7	225.00	245.00	Ø6.6 THRU
E8	325.00	245.00	Ø6.6 THRU
F1	275.00	216.00	Ø28 THRU
G1	241.00	197.00	M4x0.7-6H THRU (TAP DRILL Ø3.3)
G2	309.00	197.00	M4x0.7-6H THRU (TAP DRILL Ø3.3)
G3	241.00	235.00	M4x0.7-6H THRU (TAP DRILL Ø3.3)
G4	309.00	235.00	M4x0.7-6H THRU (TAP DRILL Ø3.3)
E9	390.00	120.00	Ø6.6 THRU
E10	490.00	120.00	Ø6.6 THRU
E11	390.00	180.00	Ø6.6 THRU
E12	490.00	180.00	Ø6.6 THRU
E13	390.00	240.00	Ø6.6 THRU
E14	490.00	240.00	Ø6.6 THRU
H1	440.00	100.00	M12x1.75-6H THRU (TAP DRILL Ø10.2)
E15	560.00	120.00	Ø6.6 THRU
E16	660.00	120.00	Ø6.6 THRU
E17	560.00	180.00	Ø6.6 THRU
E18	660.00	180.00	Ø6.6 THRU
E19	560.00	240.00	Ø6.6 THRU
E20	660.00	240.00	Ø6.6 THRU
I1	1006.00	146.00	M6x1-6H THRU (TAP DRILL Ø5)
I2	1074.00	146.00	M6x1-6H THRU (TAP DRILL Ø5)
I3	1006.00	214.00	M6x1-6H THRU (TAP DRILL Ø5)
I4	1074.00	214.00	M6x1-6H THRU (TAP DRILL Ø5)
I5	1181.94	213.94	M6x1-6H THRU (TAP DRILL Ø5)
I6	1114.06	213.94	M6x1-6H THRU (TAP DRILL Ø5)
I7	1114.06	146.06	M6x1-6H THRU (TAP DRILL Ø5)
I8	1181.94	146.06	M6x1-6H THRU (TAP DRILL Ø5)
I9	1391.00	146.00	M6x1-6H THRU (TAP DRILL Ø5)
I10	1459.00	146.00	M6x1-6H THRU (TAP DRILL Ø5)
I11	1391.00	214.00	M6x1-6H THRU (TAP DRILL Ø5)
I12	1459.00	214.00	M6x1-6H THRU (TAP DRILL Ø5)
I13	1350.94	213.94	M6x1-6H THRU (TAP DRILL Ø5)
I14	1283.06	213.94	M6x1-6H THRU (TAP DRILL Ø5)
I15	1283.06	146.06	M6x1-6H THRU (TAP DRILL Ø5)
I16	1350.94	146.06	M6x1-6H THRU (TAP DRILL Ø5)
E21	986.00	-79.00	Ø6.6 THRU
E22	1054.00	-79.00	Ø6.6 THRU
E23	986.00	-11.00	Ø6.6 THRU
E24	1054.00	-11.00	Ø6.6 THRU
F2	1020.00	-45.00	Ø28 THRU
E25	1183.94	-11.06	Ø6.6 THRU
E26	1116.06	-11.06	Ø6.6 THRU
E27	1116.06	-78.94	Ø6.6 THRU
E28	1183.94	-78.94	Ø6.6 THRU
E29	1246.00	-79.00	Ø6.6 THRU
E30	1314.00	-79.00	Ø6.6 THRU
E31	1246.00	-11.00	Ø6.6 THRU
E32	1314.00	-11.00	Ø6.6 THRU
E33	1443.94	-11.06	Ø6.6 THRU
E34	1376.06	-11.06	Ø6.6 THRU
E35	1376.06	-78.94	Ø6.6 THRU
E36	1443.94	-78.94	Ø6.6 THRU
F3	1410.00	-45.00	Ø28 THRU

BOLTED JOINTS: PRELOAD AND TIGHTENING TORQUE (MPCALC BOLT)

JOINT (MPCALC BOLT)	SIZE	HEAD	CLASS	muG/muK	UTIL.	aA	As mm2	PRELOAD kN	MIN kN	TORQUE N m	HEAD PRESS. MPa
Pedestal to base	M8	Hex	8.8	0.12/0.12	0.90	1.60	36.61	18.63	11.64	25.3	270
Bearing covers	M6	Cap screw	8.8	0.12/0.12	0.90	1.60	20.12	10.18	6.36	10.5	230
Base to frame	M10	Cap screw	12.9	0.10/0.10	0.90	1.60	57.99	52.16	32.60	75.0	492
Top cover	M6	Cap screw	A2-70	0.14/0.14	0.80	1.80	20.12	6.19	3.44	7.3	140

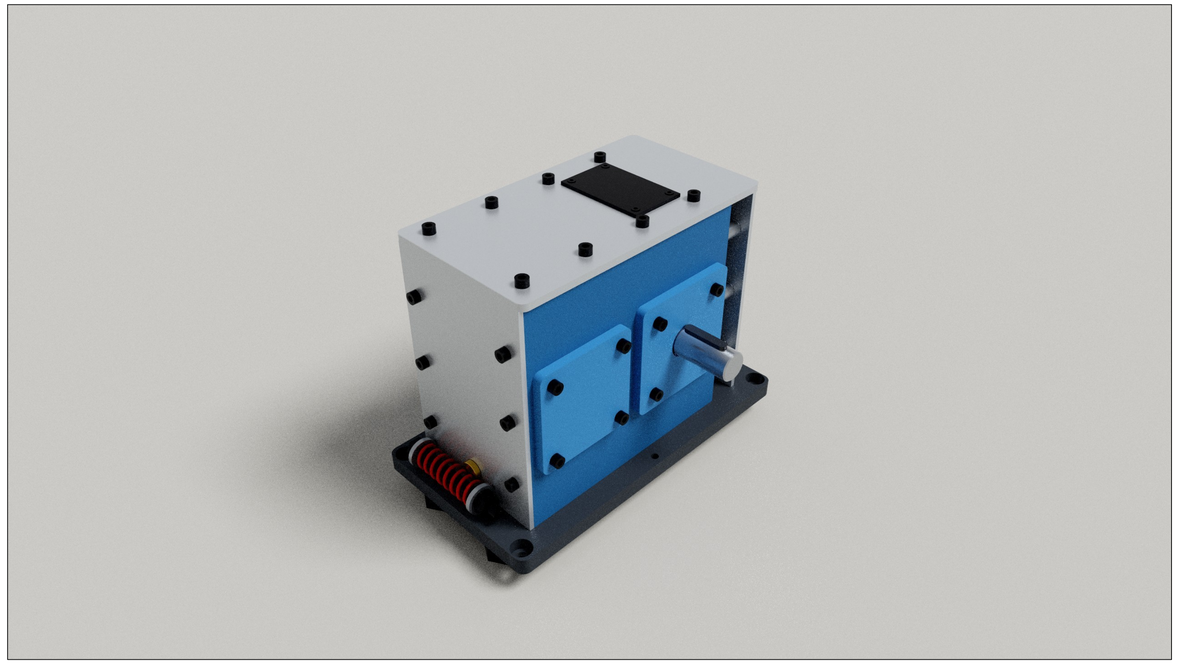
TOLERANCE STACK-UPS (MPCALC STACKUP)

STACK-UP (MPCALC)	LINKS	NOMINAL	WORST CASE	RSS	REQUIRED	RESULT
Output shaft end float	8	0.200	-0.150 to 0.790	0.148 to 0.492	0.05 to 0.60	Fail
Key 12 h9 in hub JS9	2	0.000	-0.021 to 0.065	-0.009 to 0.052	-	-
6207 in seat H7/h6	2	0.000	0.000 to 0.049	0.007 to 0.042	0.00 to 0.05	Pass

OUTPUT SHAFT END FLOAT: THE CHAIN

LINK	TYPED	NOMINAL	UPPER	LOWER	WC SHARE %	RSS SHARE %
1	+30 ±0.05	30.00	0.050	-0.050	10.6	8.4
2	+70 ±0.1	70.00	0.100	-0.100	21.3	33.7
3	+30 ±0.05	30.00	0.050	-0.050	10.6	8.4
4	-17 +0/-0.12	17.00	0.000	-0.120	12.8	12.1
5	-33 ±0.05	33.00	0.050	-0.050	10.6	8.4
6	-30 ±0.05	30.00	0.050	-0.050	10.6	8.4
7	-32.8 ±0.05	32.80	0.050	-0.050	10.6	8.4
8	-17 +0/-0.12	17.00	0.000	-0.120	12.8	12.1

3D: PATH-TRACED (RENDERPATH, 128 SAMPLES)



NOTES

1. Part list and hole table by MPTABLE (one numbering with the BOM and balloons).
2. Bolted joints and stack-ups by MPCALC; friction, utilisation and tightening factors are the demo's example inputs. Property-class values are the plugin's bundled data (print check pending).

Stratal CAD

cad.stratal.co.uk

TITLE
KD-160 CONVEYOR DRIVE UNIT
SCHEDULES: PARTS, HOLES, BOLTED JOINTS, STACK-UPS

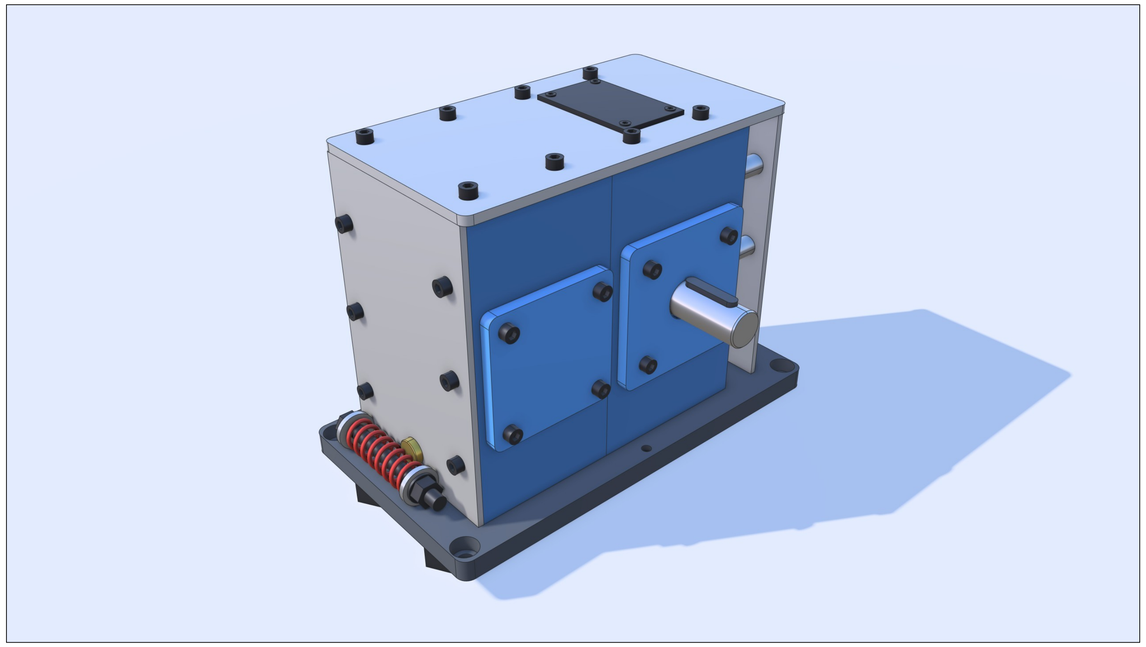
PROJECT	DRAWN
KD-160 conveyor drive unit (fictional)	Stratal CAD demo

DRAWING NO.	SHEET	SCALE	SIZE
STR-MPT-005	5 of 6	1:1	A1

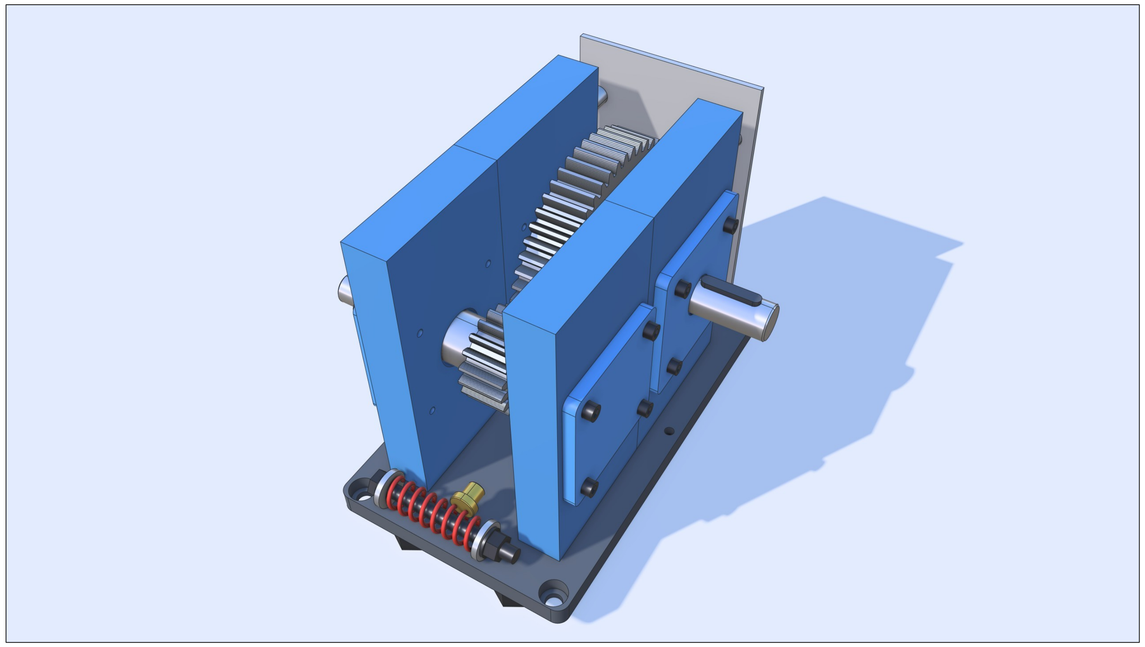
SOFTWARE	DATE
Stratal CAD 0.1.8, Mechanical Parts 0.9.0	12 Nov 2026

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE

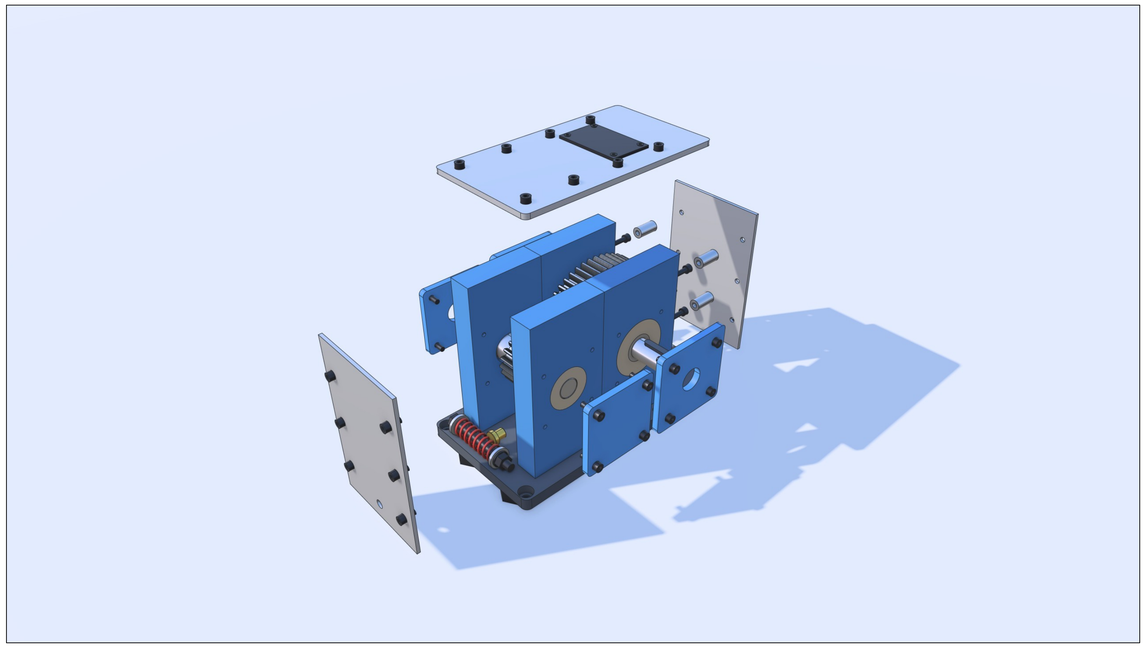
3D: THE DRIVE UNIT, OUTPUT END



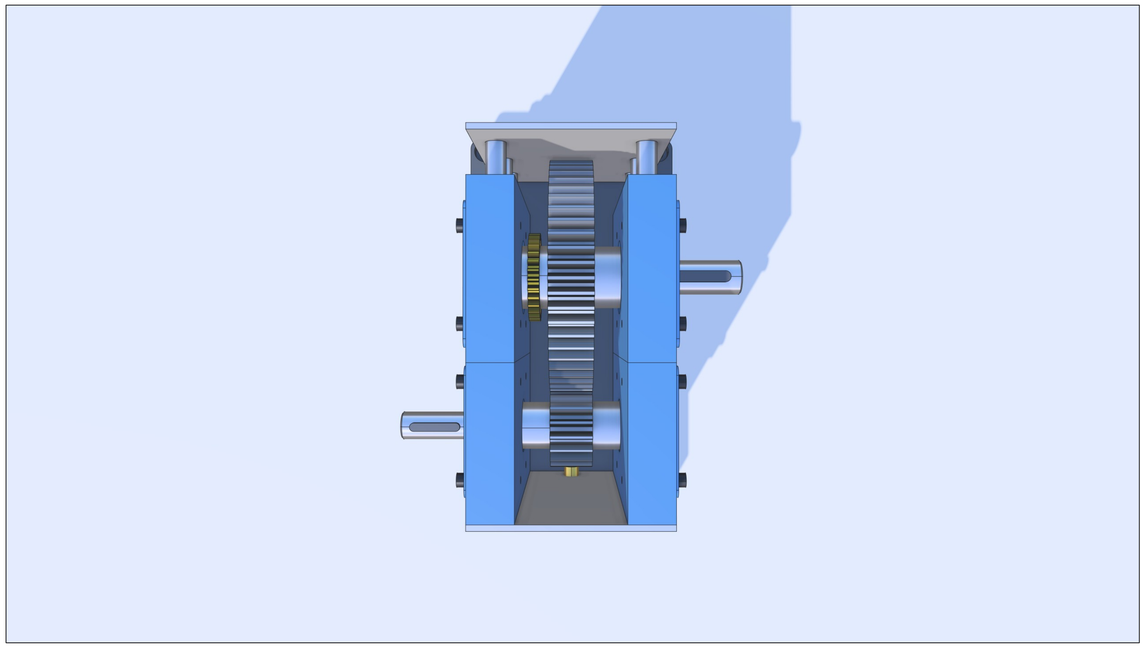
3D: CUTAWAY



3D: EXPLODED VIEW



3D: FROM ABOVE, TOP COVER HIDDEN



NOTES

1. RENDERSTILL images of the plugin's solids, as saved. Colours by APPEARANCE (the demo's choice).
2. Cutaway: top cover and front plate hidden. Exploded: parts moved apart by the demo for the picture only.

Stratal CAD

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TITLE
KD-160 CONVEYOR DRIVE UNIT
3D VIEWS

PROJECT		DRAWN	
KD-160 conveyor drive unit (fictional)		Stratal CAD demo	
DRAWING NO.	SHEET	SCALE	SIZE
STR-MPT-006	6 of 6	1:1	A1
SOFTWARE		DATE	
Stratal CAD 0.1.8, Mechanical Parts 0.9.0		12 Nov 2026	

STATUS
DEMONSTRATION DRAWING - NOT FOR MANUFACTURE