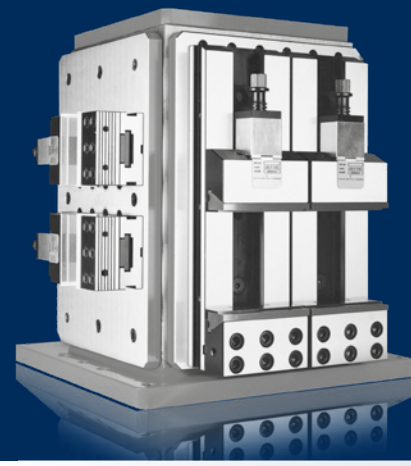
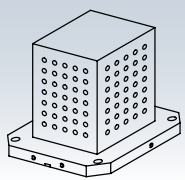




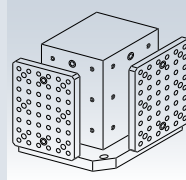
Modular Tombstone

1



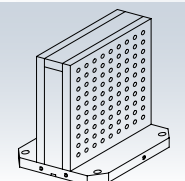
TOMBSTONE

Page 1.4



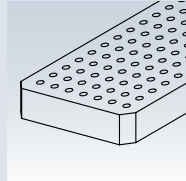
PLATES

Page 1.28



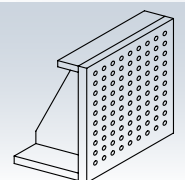
CRANKWEBS

Page 1.19



SUBPLATES

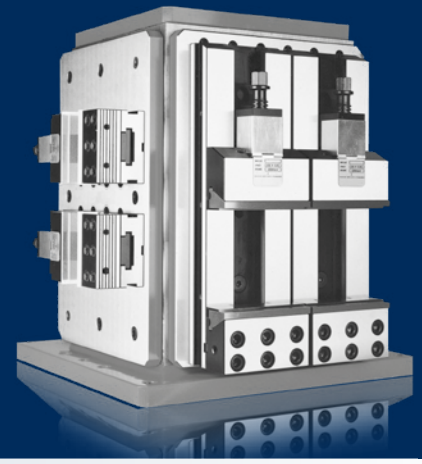
Page 1.30



ANGLE PLATES

Page 1.24

Modular Tombstones



The tombstones are...

Milling and finish machining of the steel and aluminium tombstones are completed with high precision machines using the highest quality tools available.

This ensures the highest possible accuracy and outstanding dimensional repeatability.

All tombstones are quality controlled using a coordinate measuring machine.

STEEL

The steel tombstones are manufactured from high resistance steel plate (50/55,5 kg.mm²). After welding, the steel is allowed a normalization period (800 degrees) in order to eliminate the inner stress.

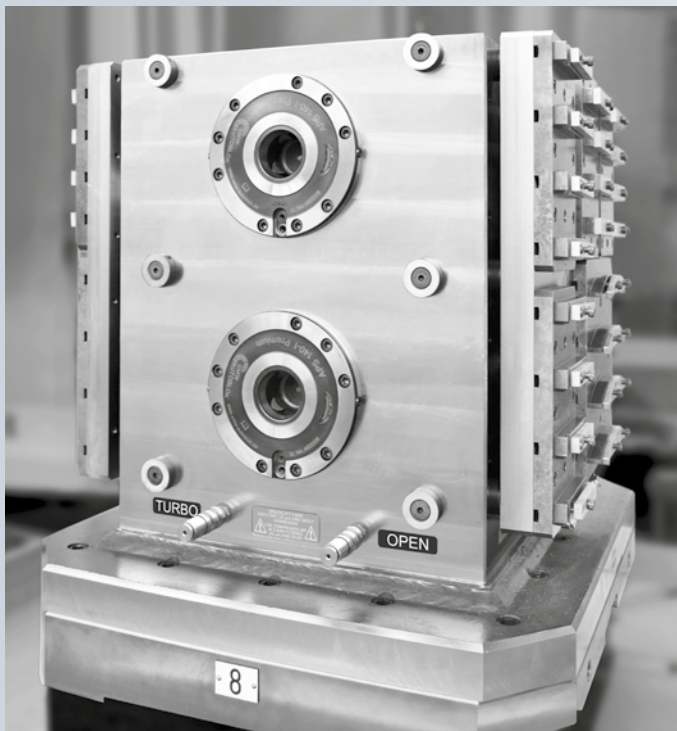
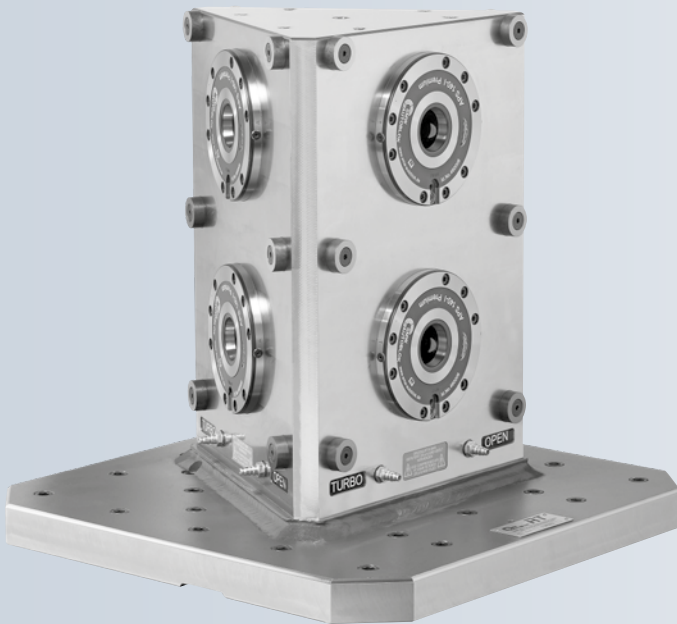
After the milling and finish machining, the tombstones are painted and dried in an oven at 60 degrees.

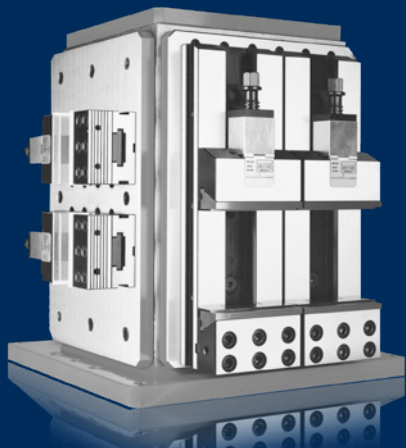
ALUMINIUM

The aluminium version tombstones are casted using the latest generation materials (AlCu4TiMGka) maintaining a high resistance (HB 90-115). After the milling and finish machining, the tombstones are anodized (type EN 12373/1 ex UNI 4522-66) in order to avoid the wear and tear of the surfaces.

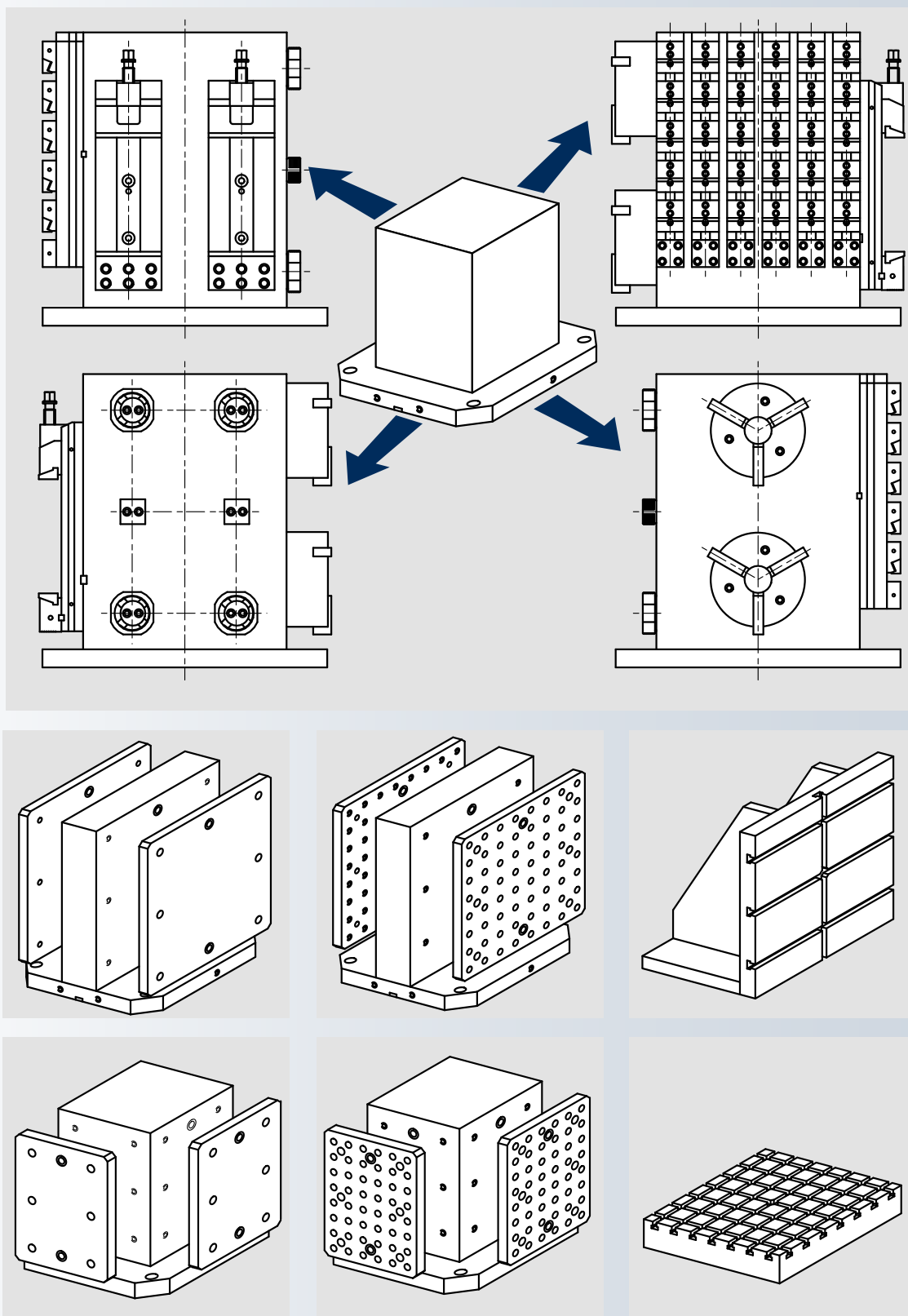
CAST IRON

Type UNI EN 1561 GJL - normalized at 500/550°C
- High resistance HB 180-220





The advantages of modularity

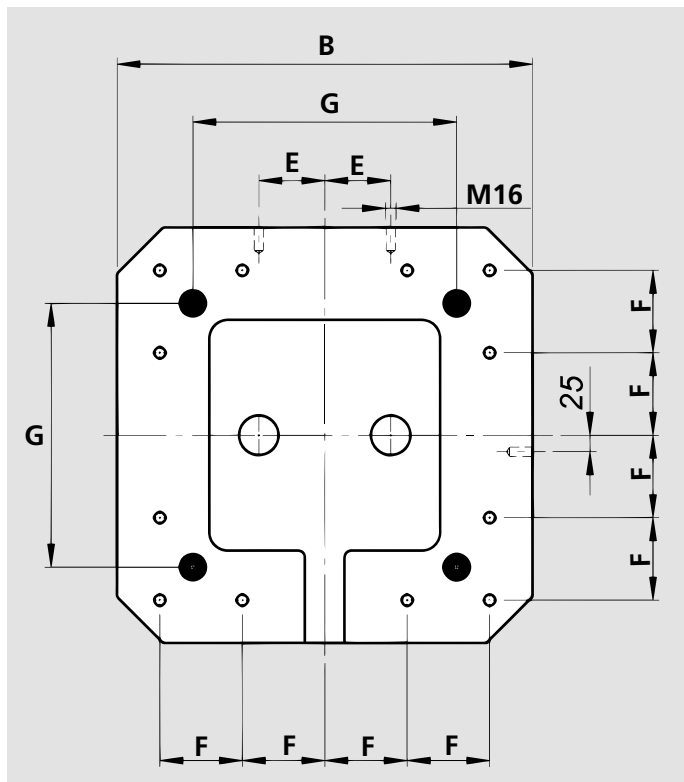


Modular Tombstone

Tombstones

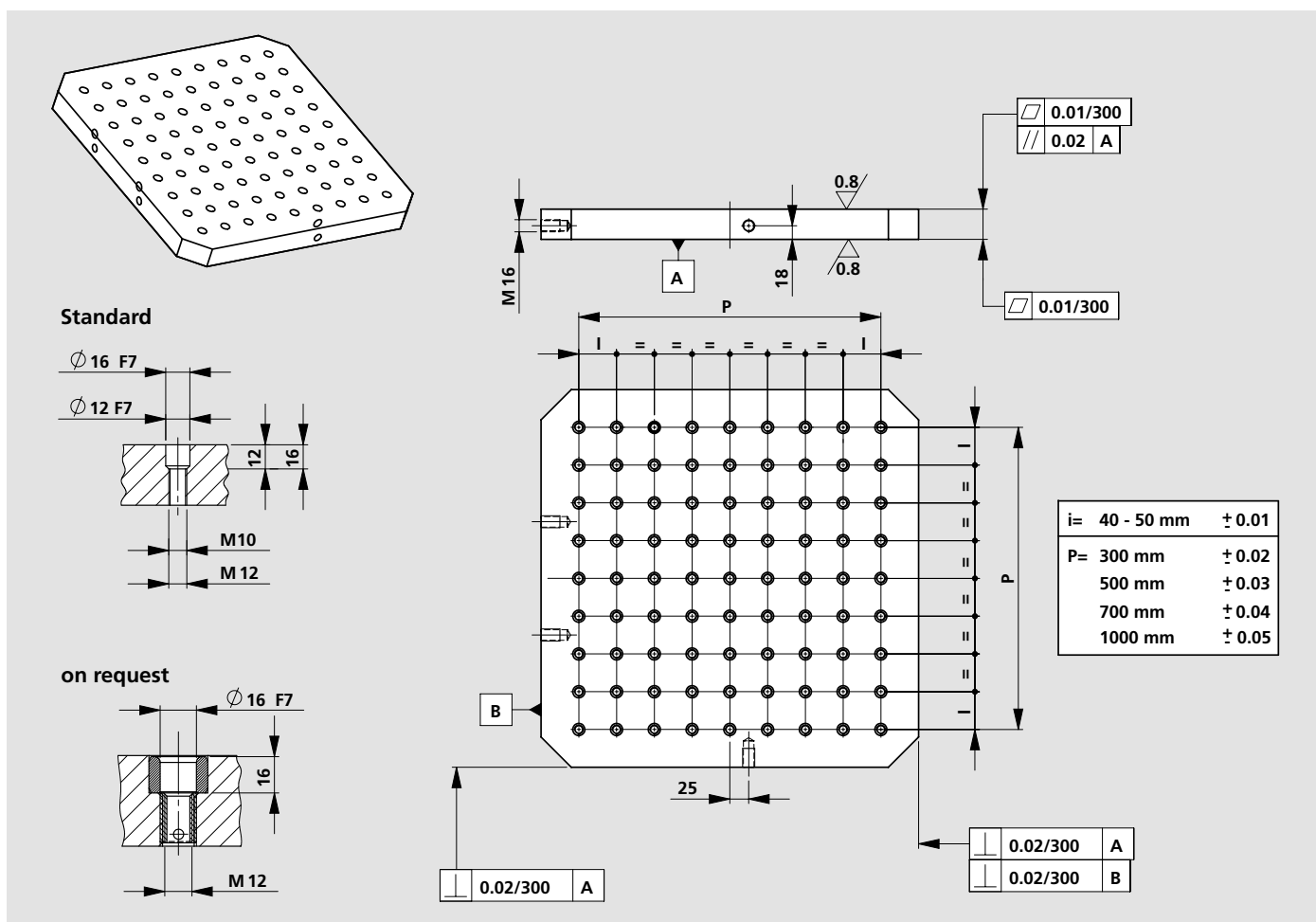
■ Standard adaptation for machine tools pallet

Our products (tombstones, crankwebs) are supplied standard with the base machined to the table of the machine tool as follows.



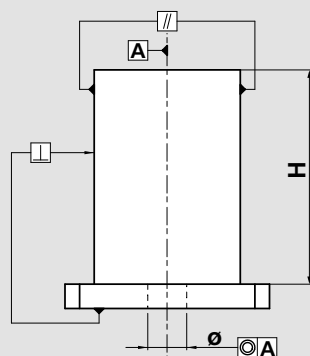
B mm	E mm	F mm	G mm
300	on request	on request	on request
400	55	80	250
500	75	100	250
630	100	125	420
800	135	160	420

Manufacturing tolerances



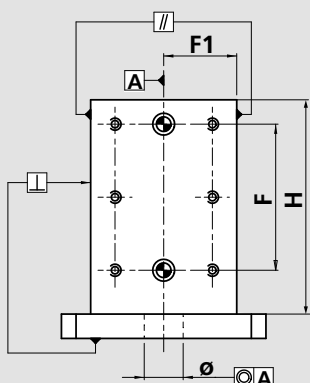
Tombstones only milled finished

1



H	$\perp$	//	$\odot$
500 mm	0.020	0.020	0.020
1000 mm	0.035	0.035	0.035

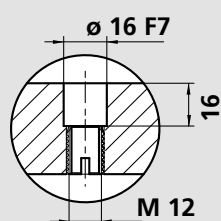
Tombstones for plates



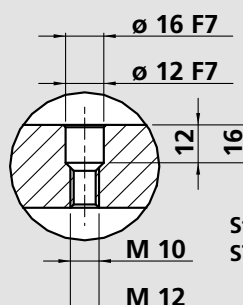
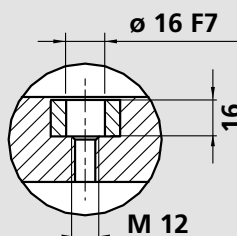
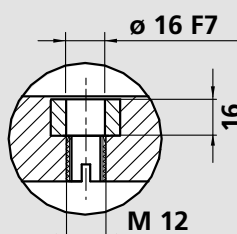
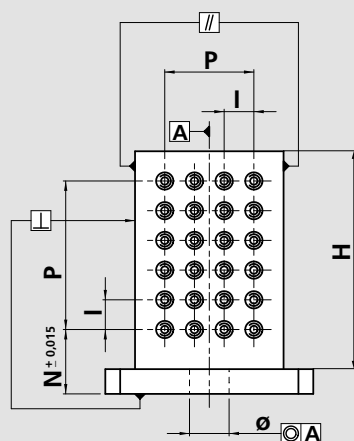
H	$\perp$	//	$\odot$
500 mm	0.020	0.020	0.020
1000 mm	0.035	0.035	0.035

F=	300 mm	± 0.02
	500 mm	± 0.03
	700 mm	± 0.04
F1=	500 mm	± 0.015
	1000 mm	± 0.025

Tombstones with grid



Standard for CAST IRON

Standard for
STEEL AND ALUMINIUMSpecial on request only
for ALUMINIUMSpecial on request only
for CAST IRON

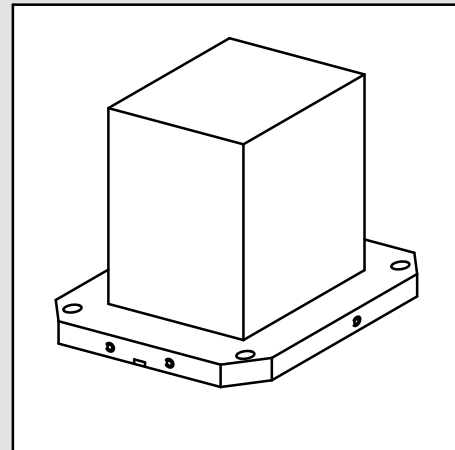
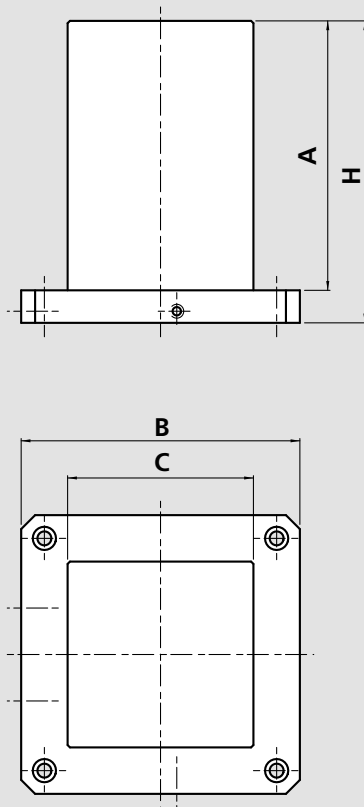
H	$\perp$	//	$\odot$
500 mm	0.020	0.020	0.020
1000 mm	0.035	0.035	0.035

i=	40 - 50 mm	± 0.01
P=	300 mm	± 0.02
	500 mm	± 0.03
	700 mm	± 0.04
	1000 mm	± 0.05

Modular Tombstone

Tombstones milled

- Steel, aluminium or cast iron
- Rough or finished



STEEL

Rough Id. No	Finished Id. No	A mm	B mm	C mm	H mm	Weight kg
57006006	57006005	415	300	160	455	81
57006036	57006035	620	400	250	660	205
57006056	57006055	660	500	350	700	318
57006091	57006090	815	630	450	860	524
57006121	57006120	945	800	550	1000	795

ALUMINIUM

Id. No	A mm	B mm	C mm	H mm	Weight kg
57306035	620	400	250	660	80
57306055	660	500	350	700	137
57306090	815	630	450	860	253

CAST IRON

Rough Id. No	Finished Id. No	A mm	B mm	C mm	H mm	Weight kg
57406036	57406035	615	400	250	660	208
57406056	57406055	655	500	350	700	329
57406091	57406090	810	630	450	860	607
57406121	57406120	945	800	550	1000	808

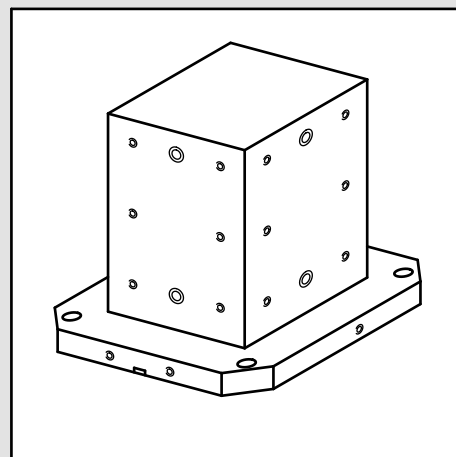
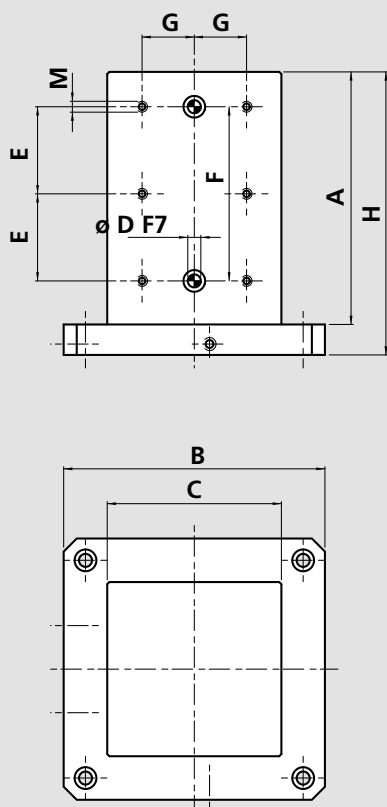
Special sizes on request.

Tombstones for plates

- Steel, aluminium or cast iron
- With grid holes for plates

Modular Tombstone

1



STEEL

Id. No	A mm	B mm	C mm	H mm	Ø D mm	M	E mm	F mm	G mm	Weight kg
57020015	415	300	160	455	12	M 10	150	300	40	81
57020045	620	400	250	660	16	M 12	250	500	75	205
57020065	660	500	350	700	16	M 12	250	500	125	318
57020100	815	630	450	860	16	M 12	350	700	175	524
57020130	945	800	550	1000	16	M 12	400	800	225	795

ALUMINIUM

Id. No	A mm	B mm	C mm	H mm	Ø D mm	M	E mm	F mm	G mm	Weight kg
57312045	620	400	250	660	16	M 12	250	500	75	80
57312065	660	500	350	700	16	M 12	250	500	125	137
57312100	815	630	450	860	16	M 12	350	700	175	253

CAST IRON

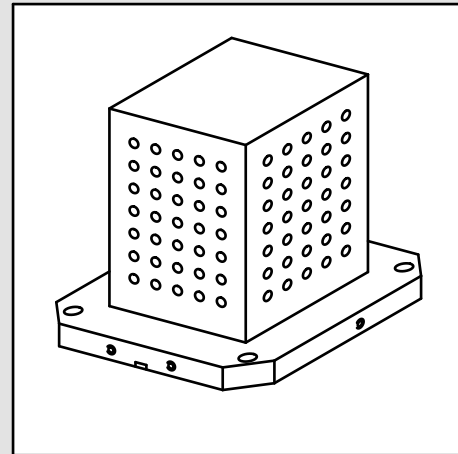
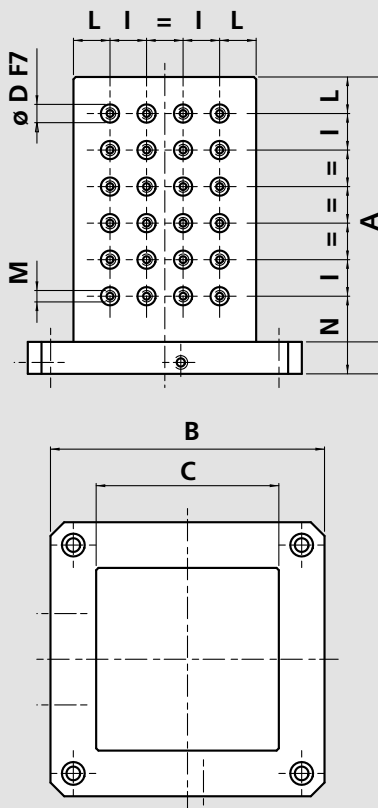
Id. No	A mm	B mm	C mm	H mm	Ø D mm	M	E mm	F mm	G mm	Weight kg
57412045	615	400	250	660	16	M 12	250	500	75	208
57412065	655	500	350	700	16	M 12	250	500	125	329
57412100	810	630	450	860	16	M 12	350	700	175	607
57412130	945	800	550	1000	16	M 12	400	800	225	808

Special sizes on request.

Modular Tombstone

Tombstones with grid

- Steel, aluminium or cast iron
- With grid holes for plates



STEEL

Id. No.	A mm	B mm	C mm	H mm	Ø D mm	M	I mm	L mm	N mm	Weight Kg
57030015	415	300	160	455	12	M 10	40	40	95	79
57030045	620	400	250	660	16	M 12	50	50	110	198
57030065	660	500	350	700	16	M 12	50	50	100	307
57030100	815	630	450	860	16	M 12	50	50	110	506
57030130	945	800	550	1000	16	M 12	50	50	100	768

ALUMINIUM

Id. No.	A mm	B mm	C mm	H mm	Ø D mm	M	I mm	L mm	N mm	Weight Kg
57313045	620	400	250	660	16	M 12	50	50	110	78
57313065	660	500	350	700	16	M 12	50	50	100	133
57313100	815	630	450	860	16	M 12	50	50	110	246

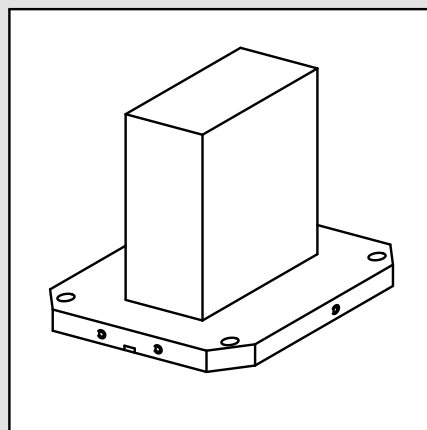
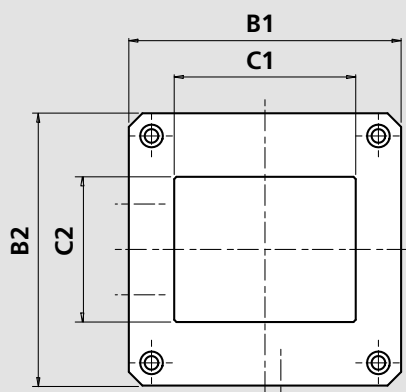
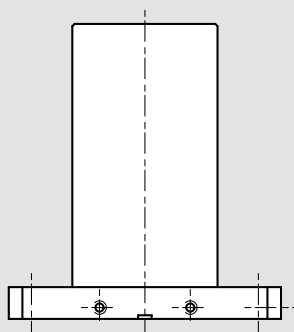
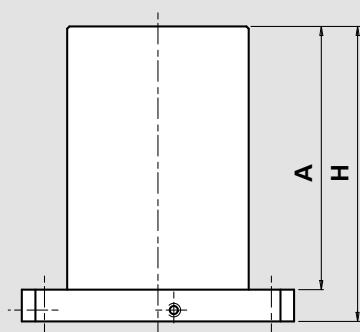
CAST IRON

Id. No.	A mm	B mm	C mm	H mm	Ø D mm	M	I mm	L mm	N mm	Weight Kg
57413045	615	400	250	660	16	M 12	50	50	110	208
57413065	655	500	350	700	16	M 12	50	50	100	329
57413100	810	630	450	860	16	M 12	50	50	110	522
57413130	945	800	550	1000	16	M 12	50	50	100	808

Special sizes on request.

■ Steel

1



STEEL

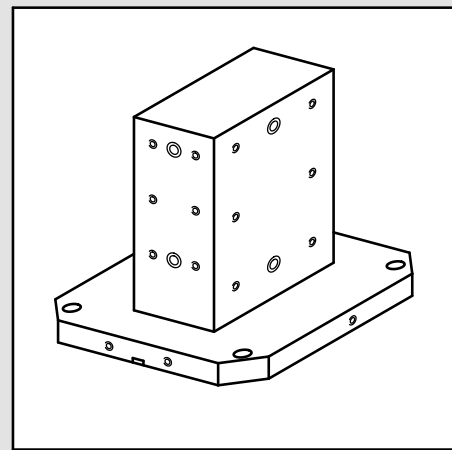
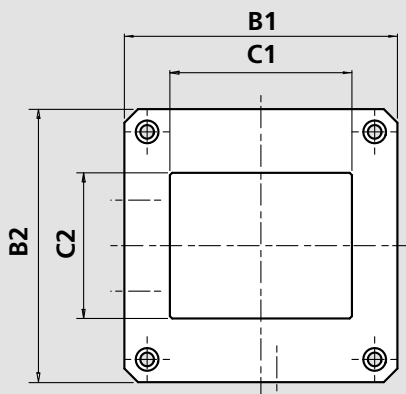
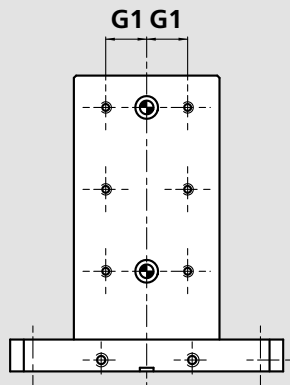
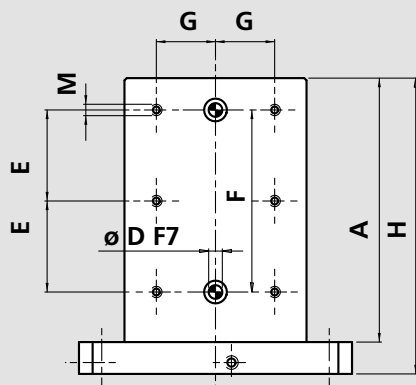
Id. No.	A mm	B1 mm	B2 mm	C1 mm	C2 mm	H mm	Weight Kg
57007005	615	500	400	350	250	655	250
57007010	615	500	500	350	250	655	265
57007025	615	630	500	450	350	660	367
57007030	615	630	630	450	350	660	395

Special sizes on request.

Modular Tombstone

Rectangular tombstones for plates

- Steel
- With grid holes for plates

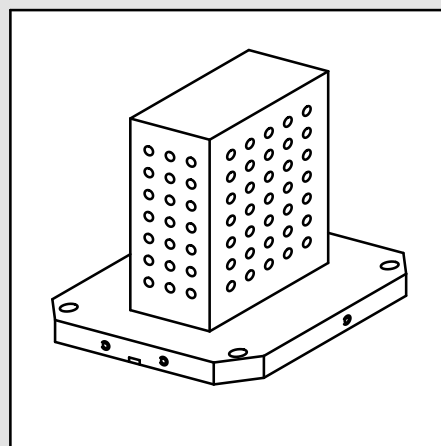
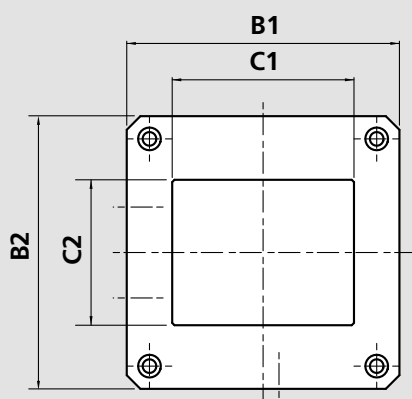
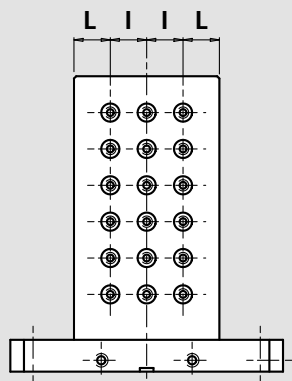
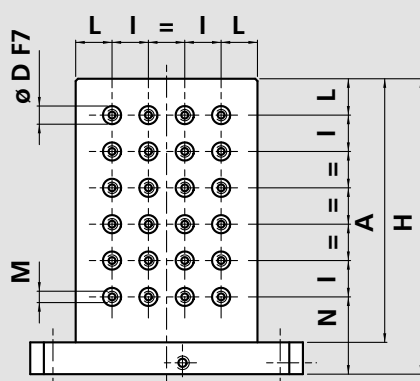


STEEL

Id. No.	A mm	B1 mm	B2 mm	C1 mm	C2 mm	H mm	Ø D mm	M	E mm	F mm	G mm	G1 mm	Weight kg
57070015	615	500	400	350	250	655	16	M 12	250	500	125	75	250
57070020	615	500	500	350	250	655	16	M 12	250	500	125	75	265
57070035	615	630	500	450	350	660	16	M 12	250	500	175	125	367
57070040	615	630	630	450	350	660	16	M 12	250	500	175	125	395

Special sizes on request.

- Steel
- With grid holes for plates



STEEL

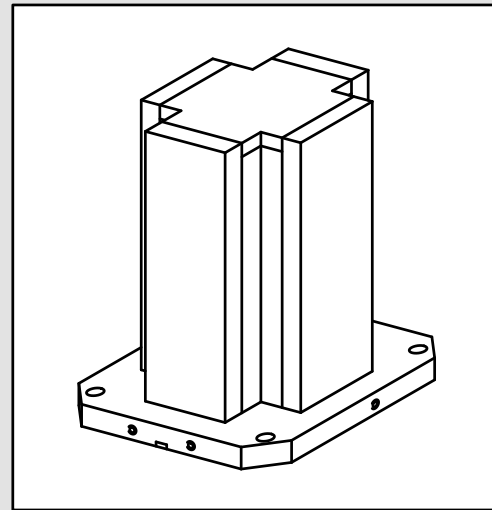
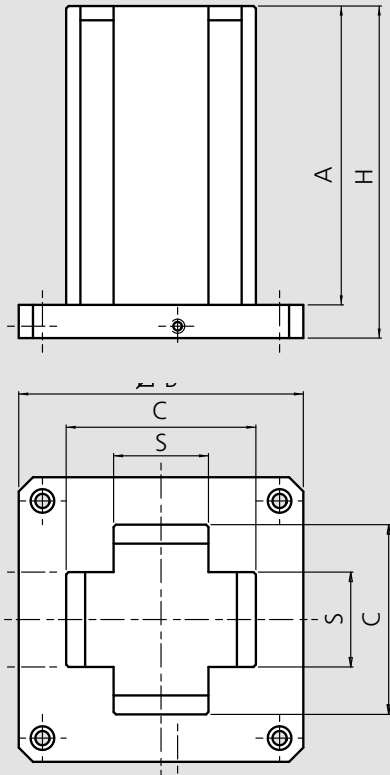
Id. No.	A mm	B1 mm	B2 mm	C1 mm	C2 mm	H mm	Ø D mm	M	I mm	L mm	N mm	Weight kg
57080015	615	500	400	350	250	655	16	M 12	50	50	105	242
57080020	615	500	500	350	250	655	16	M 12	50	50	105	257
57080035	615	630	500	450	350	660	16	M 12	50	50	110	355
57080040	615	630	630	450	350	660	16	M 12	50	50	110	383

Special sizes on request.

Modular Tombstone

Cross tombstones only milled

■ Steel or aluminium



STEEL

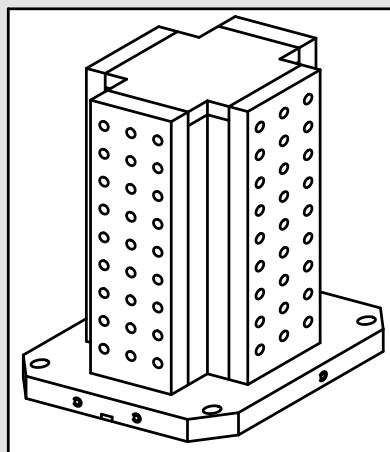
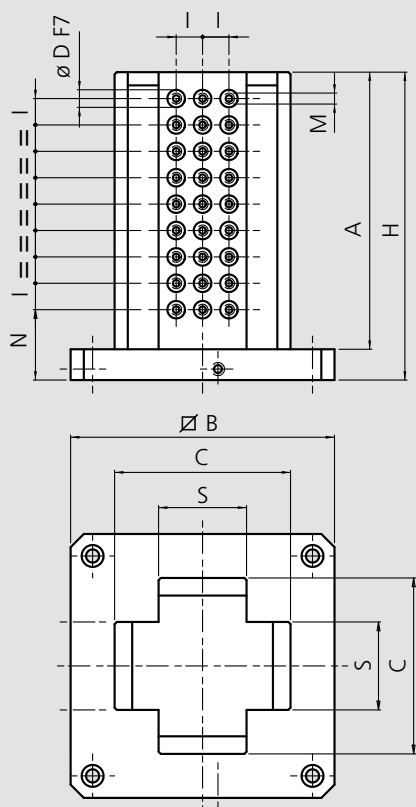
Id. No.	A mm	B mm	C mm	H mm	S mm	Weight kg
57061010	540	400	300	580	150	208
57061015	540	500	300	580	150	236
57061020	795	630	550	840	150	451
57061025	625	500	350	670	200	296
57061030	625	630	350	670	200	356
57061035	650	400	250	690	100	142
57061040	650	500	300	690	100	187

ALUMINIUM

Id. No.	A mm	B mm	C mm	H mm	S mm	Weight kg
57316110	540	400	300	580	150	82
57316115	540	500	300	580	150	92
57316135	650	400	250	690	100	79
57316140	650	500	250	690	100	88

Special sizes on request.

- Steel or aluminium
- With grid holes for plates



STEEL

Id. No.	A mm	B mm	C mm	H mm	Ø D mm	M	I mm	N mm	S mm	Weight kg
57060010	540	400	300	580	16	M12	50	85	150	208
57060015	540	500	300	580	16	M12	50	85	150	236
57060020	795	630	550	840	16	M12	50	100	150	451
57060025	625	500	350	670	16	M12	50	120	200	296
57060030	625	630	350	670	16	M12	50	120	200	356

ALUMINIUM

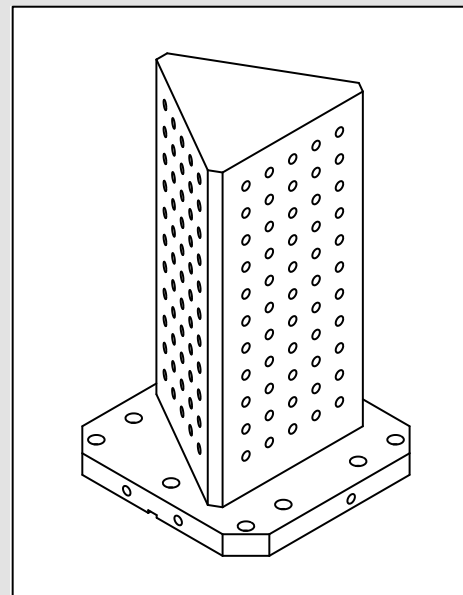
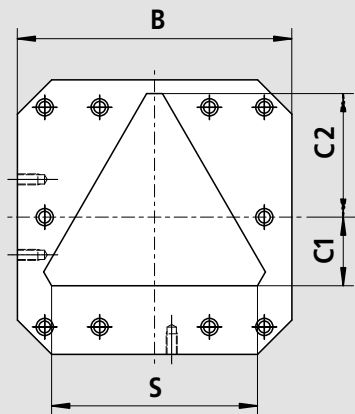
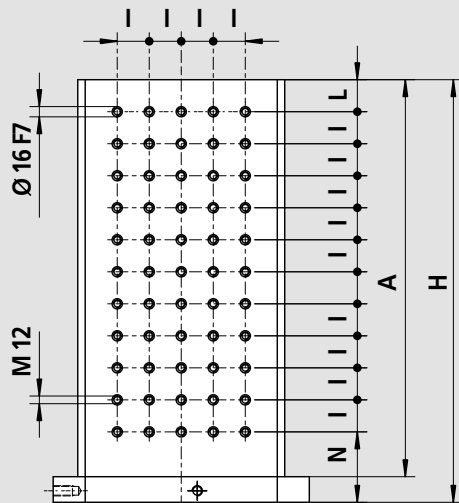
Id. No.	A mm	B mm	C mm	H mm	Ø D mm	M	I mm	N mm	S mm	Weight kg
57316010	540	400	300	580	16	M12	50	85	150	82
57316015	540	500	300	580	16	M12	50	85	150	92

Special sizes on request.

Modular Tombstone

Triangular tombstones with grid

- Steel
- With grid holes for plates

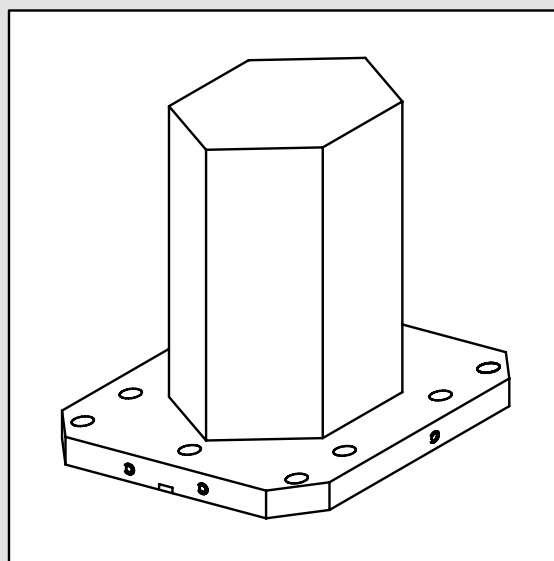
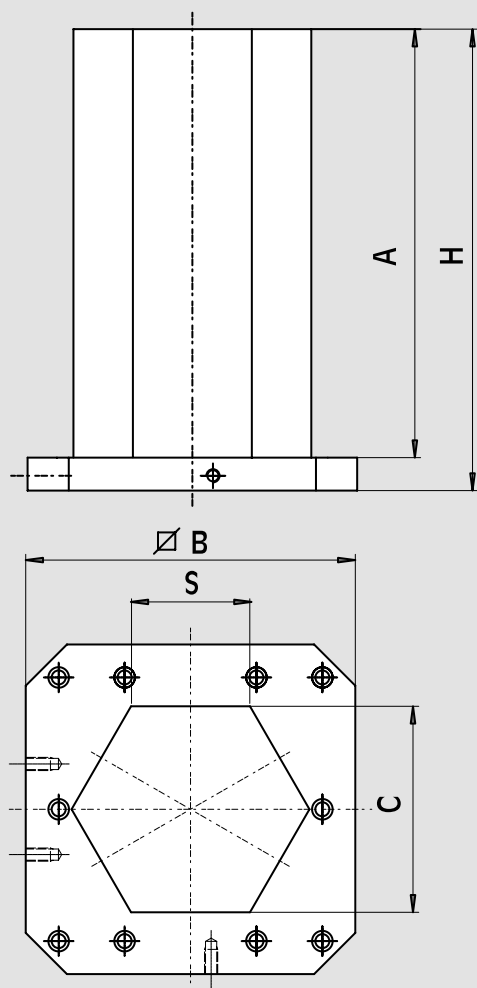


STEEL

Id. No.	A mm	B mm	C1 mm	C2 mm	H mm	I mm	L mm	N mm	S mm	Weight kg
57171010	620	400	100	180	660	50	50	110	300	200
57171020	620	500	100	180	660	50	50	110	300	227

Special sizes on request.

■ Steel or aluminium

**STEEL**

Id. No.	A mm	B mm	C mm	H mm	S mm	Weight kg
57003000	650	400	250	690	140	191
57003010	650	500	250	690	140	220
57003020	650	630	380	690	215	361

ALUMINIUM

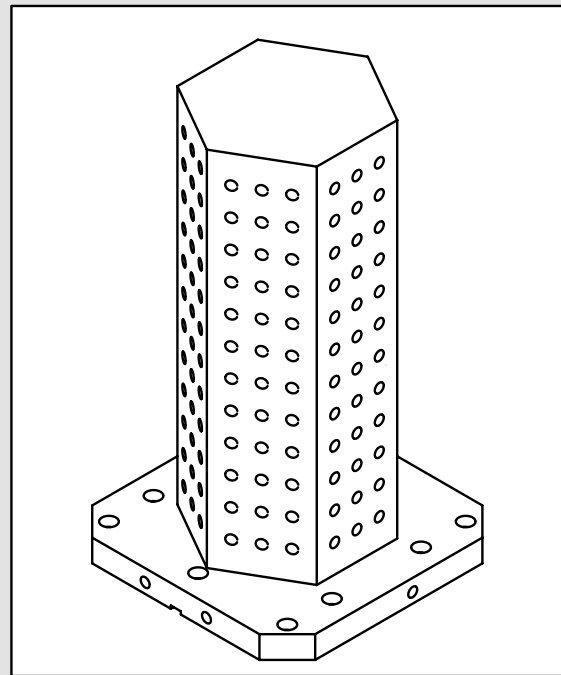
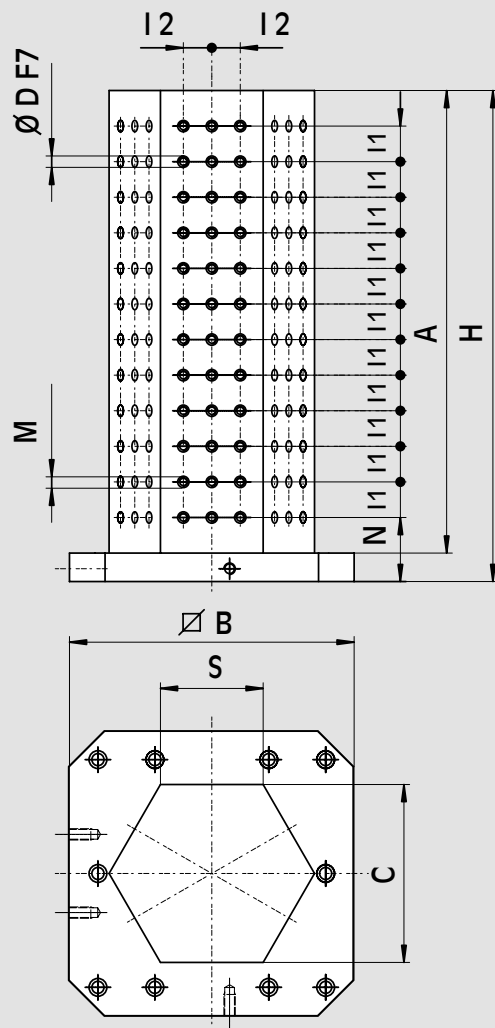
Id. No.	A mm	B mm	C mm	H mm	S mm	Weight kg
57303000	650	400	250	690	140	78
57303010	650	500	250	690	140	87
57303020	650	630	380	690	215	140

Special sizes on request.

Modular Tombstone

Hexagonal tombstones with grid

- Steel or aluminium
- With grid holes for plates



STEEL

Id. No.	A mm	B mm	C mm	H mm	Ø D mm	M	I 1 mm	I 2 mm	N mm	S mm	Weight kg
57172010	650	400	250	690	16	M 12	50	40	90	140	182
57172020	650	500	250	690	16	M 12	50	40	90	140	211
57172030	650	630	380	690	16	M 12	50	50	90	215	352

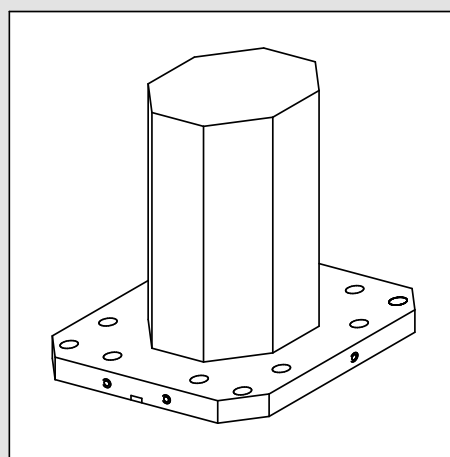
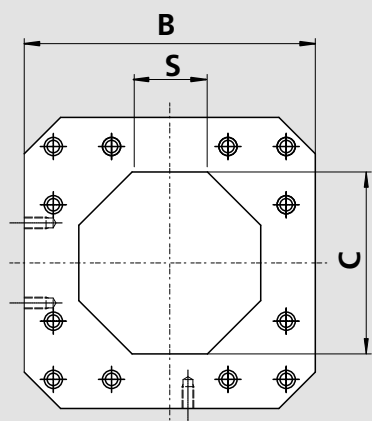
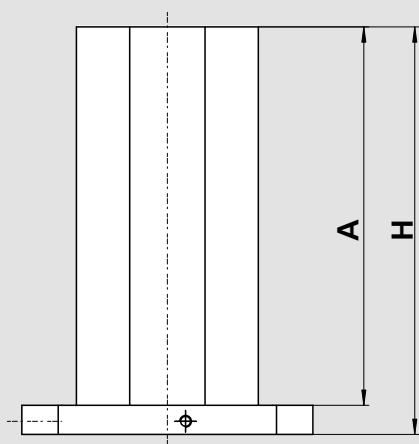
ALUMINIUM

Id. No.	A mm	B mm	C mm	H mm	Ø D mm	M	I 1 mm	I 2 mm	N mm	S mm	Weight kg
57335010	650	400	250	690	16	M 12	50	40	90	140	75
57335020	650	500	250	690	16	M 12	50	40	90	140	84
57335030	650	630	380	690	16	M 12	50	50	90	215	136

Special sizes on request.

■ Steel or aluminium

1



STEEL

Id. No.	A mm	B mm	C mm	H mm	S mm	Weight kg
57004000	650	400	250	690	100	185
57004010	650	500	250	690	100	213
57004020	650	630	380	690	155	351

ALUMINIUM

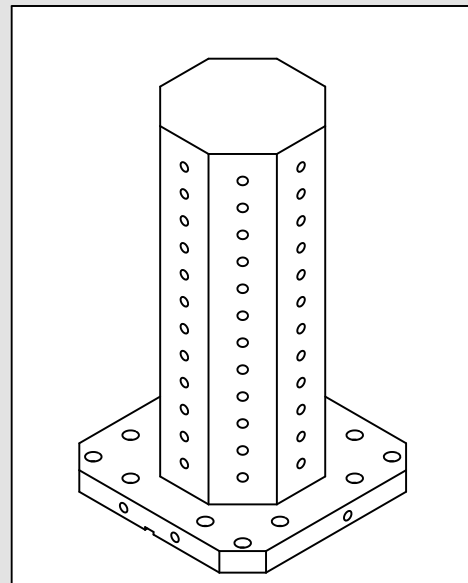
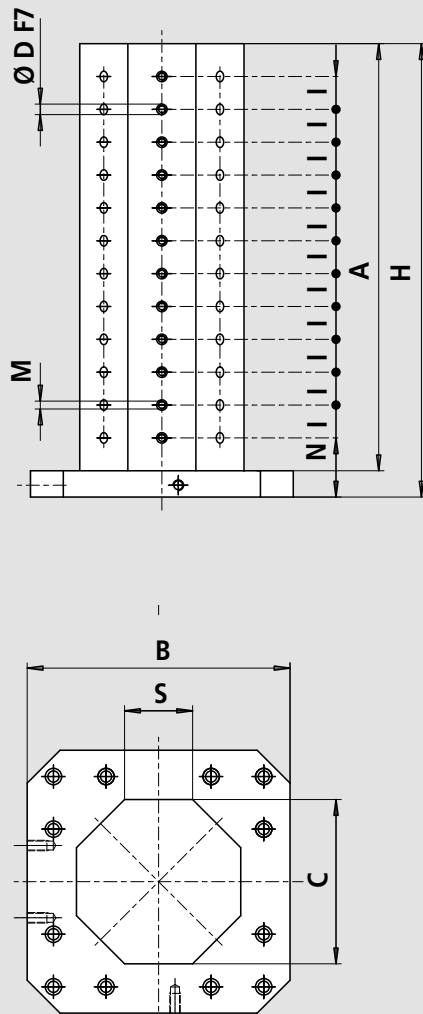
Id. No.	A mm	B mm	C mm	H mm	S mm	Weight kg
57304000	650	400	250	690	100	79
57304010	650	500	250	690	100	88
57304020	650	630	380	690	155	138

Special sizes on request.

Modular Tombstone

Octagonal tombstones with grid

- Steel or aluminium
- With grid holes for plates



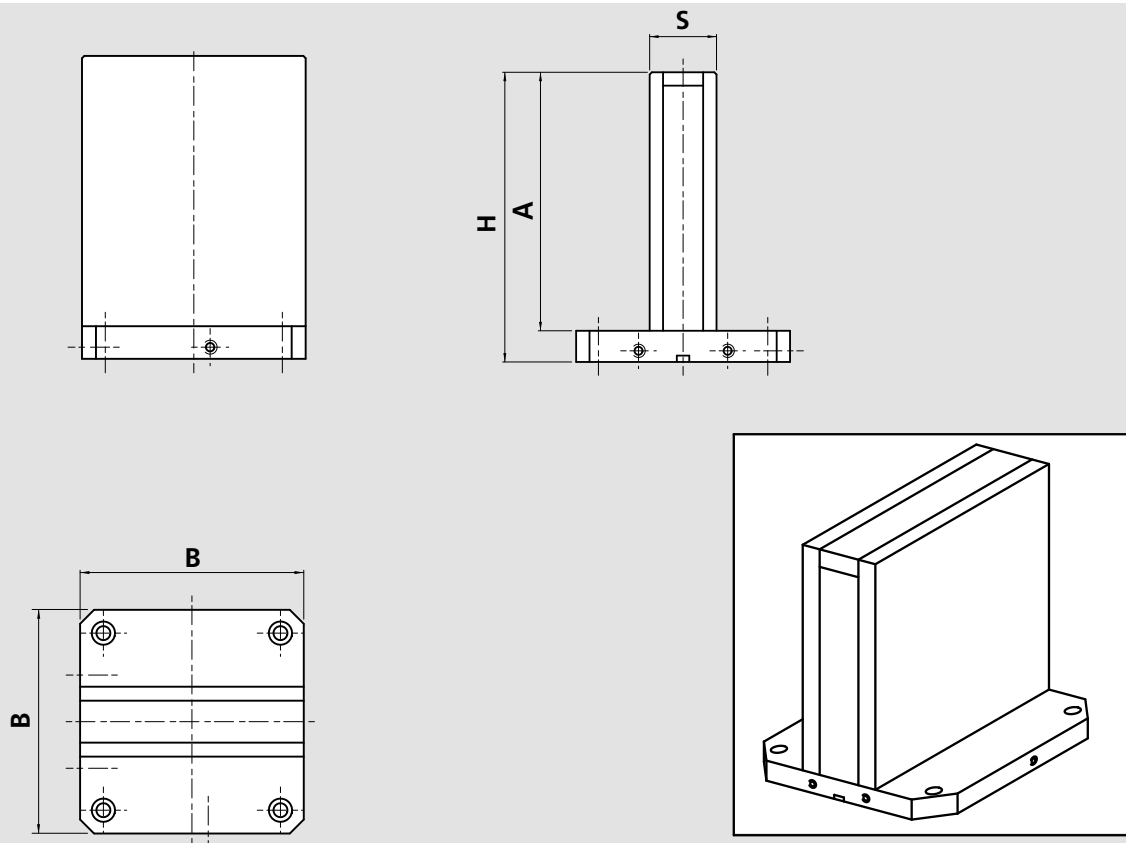
STEEL

Id. No.	A mm	B mm	C mm	H mm	$\varnothing D$ mm	M	I mm	N mm	S mm	Weight kg
57173010	650	400	250	690	16	M 12	50	90	100	181
57173020	650	500	250	690	16	M 12	50	90	100	209
57173030	650	630	380	690	16	M 12	50	90	155	339

ALUMINIUM

Id. No.	A mm	B mm	C mm	H mm	$\varnothing D$ mm	M	I mm	N mm	S mm	Weight kg
57336010	650	400	250	690	16	M 12	50	90	100	78
57336020	650	500	250	690	16	M 12	50	90	100	87
57336030	650	630	380	690	16	M 12	50	90	155	136

Special sizes on request.



STEEL

Rough Id. No.	Finished Id. No.	A mm	B mm	H mm	S mm	Weight kg
57009026	57009025	620	400	660	150	212
57009046	57009045	660	500	700	150	287
57009066	57009065	815	630	860	200	482
57009091	57009090	945	800	1000	260	810

ALUMINIUM

Cod.	A mm	B mm	H mm	S mm	Weight kg
57309025	620	400	660	150	77
57309045	660	500	700	150	103
57309065	815	630	860	200	172

CAST IRON

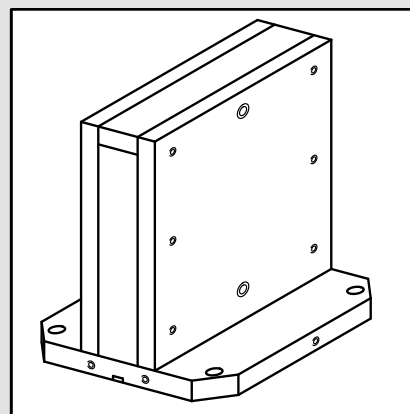
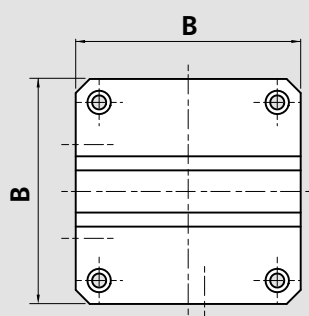
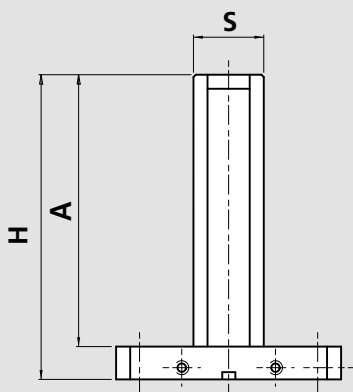
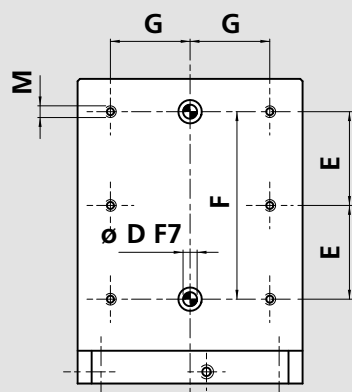
Rough Id. No.	Finished Id. No.	A mm	B mm	H mm	S mm	Weight kg
57409026	57409025	615	400	660	150	185
57409046	57409045	655	500	700	150	247
57409066	57409065	810	630	860	200	448
57409091	57409090	945	800	1000	300	810

Special sizes on request.

Modular Tombstone

Crankwebs for plates

■ Steel, aluminium or cast iron



STEEL

Id. No.	A mm	B mm	H mm	Ø D mm	M	E mm	F mm	G mm	S mm	Weight kg
57041035	620	400	660	16	M 12	250	500	150	150	212
57041055	660	500	700	16	M 12	250	500	200	150	287
57041075	815	630	860	16	M 12	350	700	250	200	482
57041100	945	800	1000	16	M 12	100	800	350	260	810

ALUMINIUM

Id. No.	A mm	B mm	H mm	Ø D mm	M	E mm	F mm	G mm	S mm	Weight kg
57328035	620	400	660	16	M 12	250	500	150	150	77
57328055	660	500	700	16	M 12	250	500	200	150	103
57328075	815	630	860	16	M 12	350	700	250	200	180

CAST IRON

Id. No.	A mm	B mm	H mm	Ø D mm	M	E mm	F mm	G mm	S mm	Weight kg
57428035	615	400	660	16	M 12	250	500	150	150	185
57428055	655	500	700	16	M 12	250	500	200	150	247
57428075	810	630	860	16	M 12	350	700	250	200	448
57428100	945	800	1000	16	M 12	400	800	350	300	810

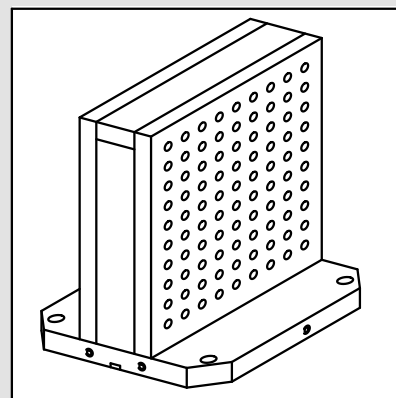
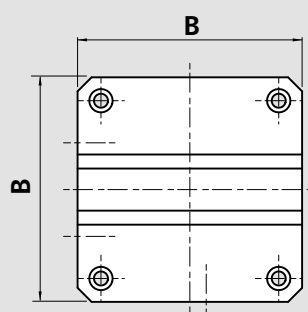
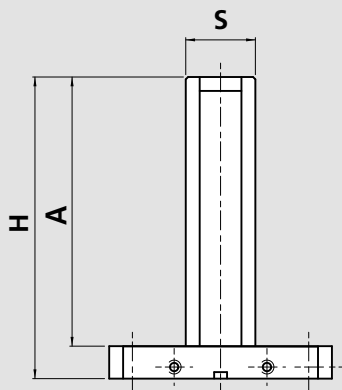
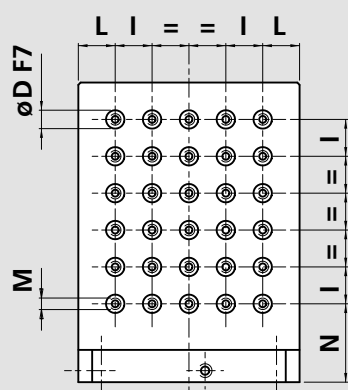
Special sizes on request.

Crankwebs with grid

- Steel, aluminium or cast iron
- With grid holes for plates

Modular Tombstone

1



STEEL

Id. No.	A mm	B mm	H mm	Ø D mm	M	I mm	L mm	N mm	S mm	Weight kg
57040035	620	400	660	16	M 12	50	50	110	150	206
57040055	660	500	700	16	M 12	50	50	100	150	279
57040075	815	630	860	16	M 12	50	40	110	200	468
57040100	945	800	1000	16	M 12	50	50	100	260	787

ALUMINIUM

Id. No.	A mm	B mm	H mm	Ø D mm	M	I mm	L mm	N mm	S mm	Weight kg
57314035	620	400	660	16	M 12	50	50	110	150	74
57314055	660	500	700	16	M 12	50	50	100	150	100
57314075	815	630	860	16	M 12	50	40	110	200	170

CAST IRON

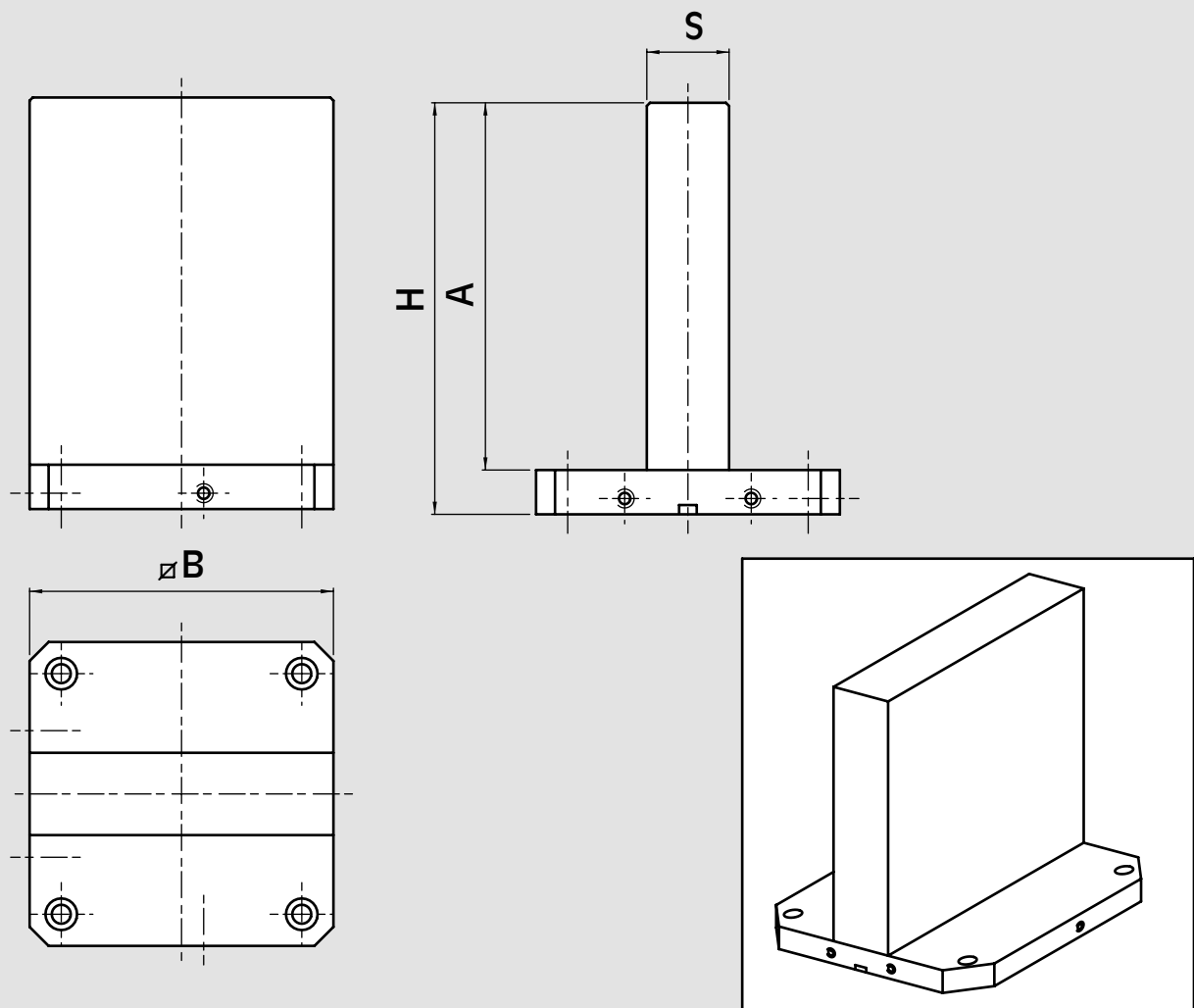
Id. No.	A mm	B mm	H mm	Ø D mm	M	I mm	L mm	N mm	S mm	Weight kg
57414035	615	400	660	16	M 12	50	50	110	150	180
57414055	655	500	700	16	M 12	50	50	100	150	240
57414075	810	630	860	16	M 12	50	40	110	200	440
57414100	945	800	1000	16	M 12	50	50	100	300	790

Special sizes on request.

Modular Tombstone

Full crankwebs only milled

■ Steel or aluminium



STEEL

Id. No.	A mm	B mm	H mm	S mm	Weight kg
57008030	370	320	410	80	107
57008040	480	400	520	100	201
57008050	580	500	620	100	306

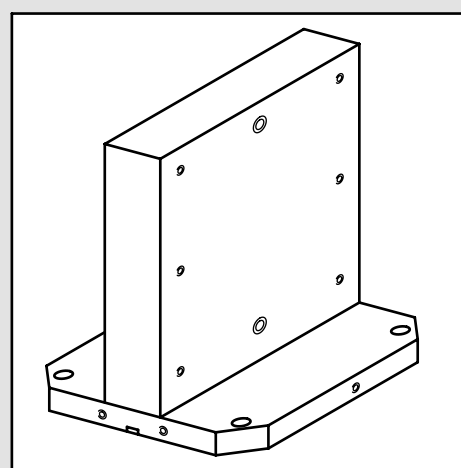
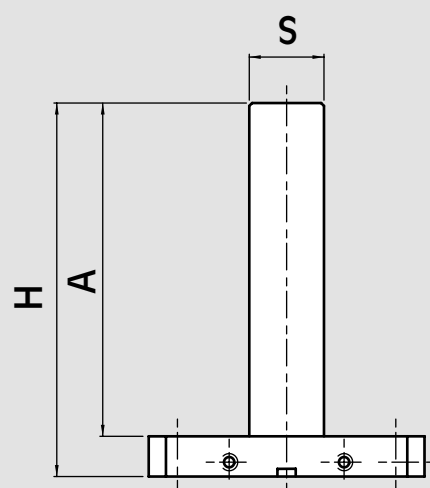
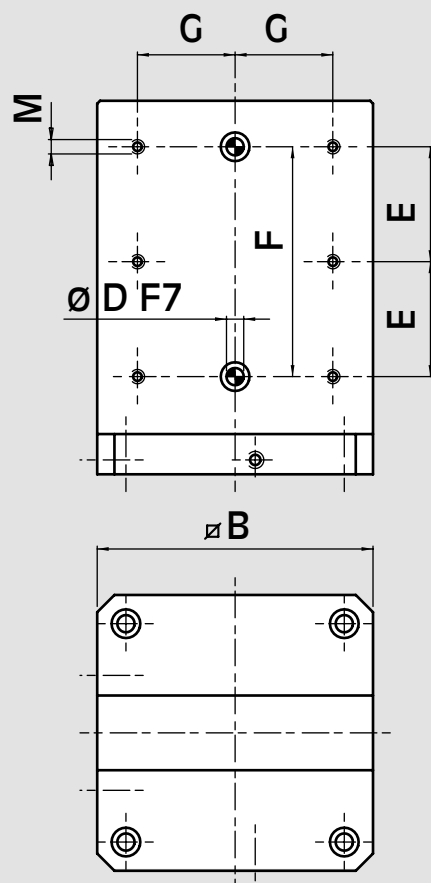
ALUMINIUM

Id. No.	A mm	B mm	H mm	S mm	Weight kg
57308020	270	250	310	80	23

Special sizes on request.

■ Steel or aluminium

1

**STEEL**

Id. No.	A mm	B mm	$\varnothing D$ mm	M	E mm	F mm	G mm	H mm	S mm	Weight kg
57090040	370	320	16	M 12	125	250	110	410	80	107
57090050	480	400	16	M 12	175	350	150	520	100	201
57090060	580	500	16	M 12	225	450	200	620	100	306

ALUMINIUM

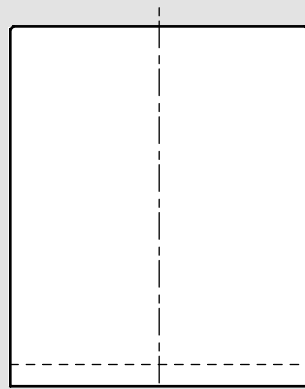
Id. No.	A mm	B mm	$\varnothing D$ mm	M	E mm	F mm	G mm	H mm	S mm	Weight kg
57319030	270	250	16	M 12	75	150	75	310	80	23

Special sizes on request.

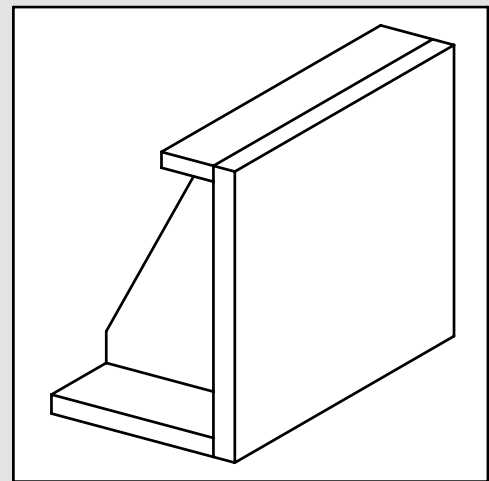
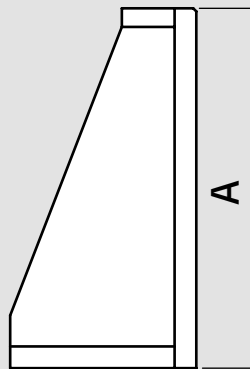
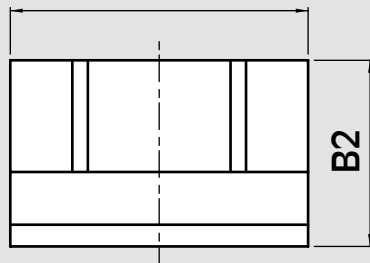
Modular Tombstone

Angle plates only milled

■ Steel



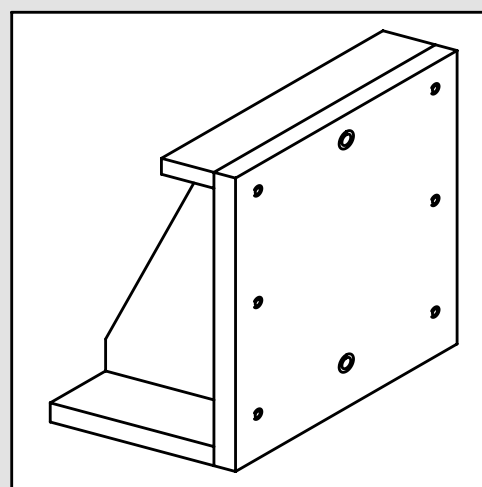
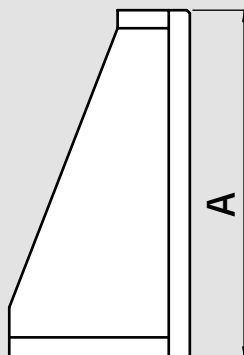
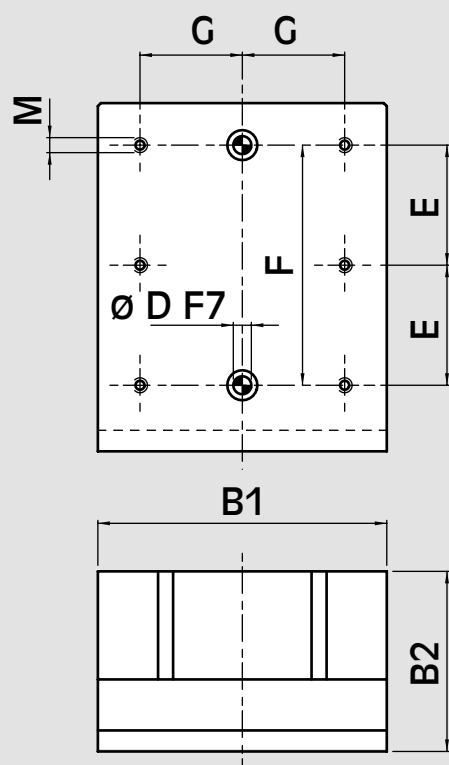
B1



STEEL

Id. No.	A mm	A mm	A mm	Weight kg
57005030	360	320	230	66
57005040	460	400	330	130
57005050	510	400	330	139
57005060	510	500	330	182
57005070	560	500	330	196
57005080	560	630	430	305
57005090	660	630	430	343

Special sizes on request.



STEEL

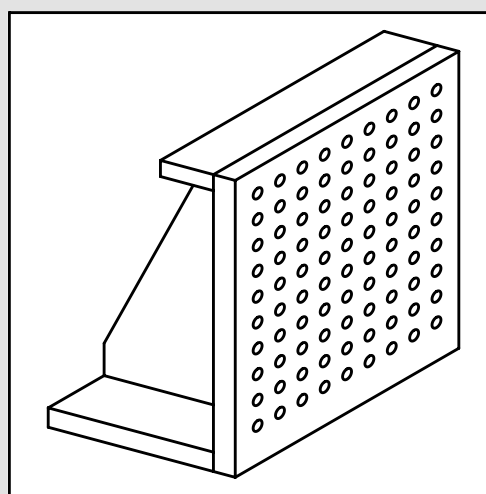
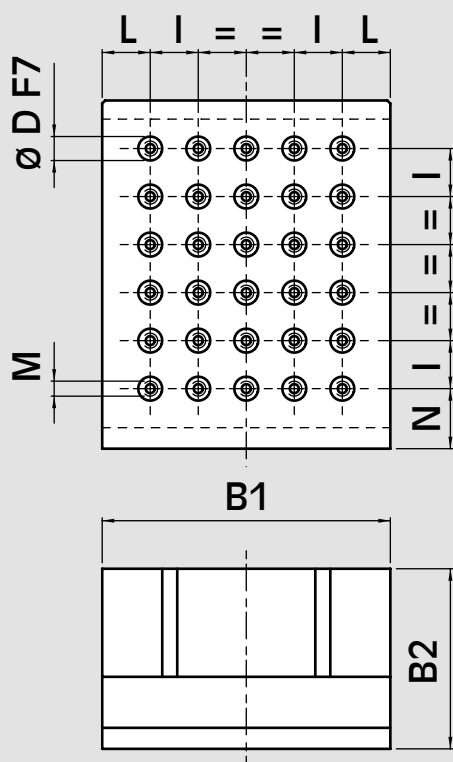
Id. No.	A mm	B1 mm	B2 mm	Ø D mm	M	E mm	F mm	G mm	Weight kg
57100040	360	320	230	16	M 12	125	250	100	66
57100050	460	400	330	16	M 12	175	350	150	130
57100060	510	400	330	16	M 12	200	400	150	139
57100070	510	500	330	16	M 12	200	400	200	182
57100080	560	500	330	16	M 12	225	450	200	196
57100090	560	630	430	16	M 12	225	450	250	305
57100000	660	630	430	16	M 12	275	550	250	343

Special sizes on request.

Modular Tombstone

Angle plates with grid

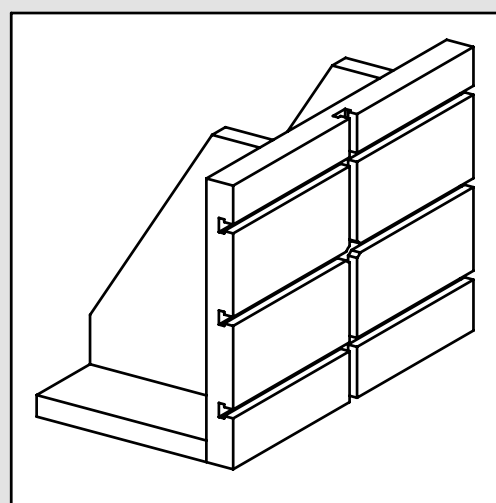
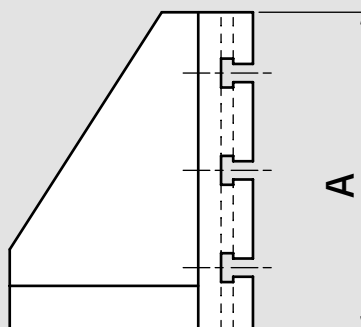
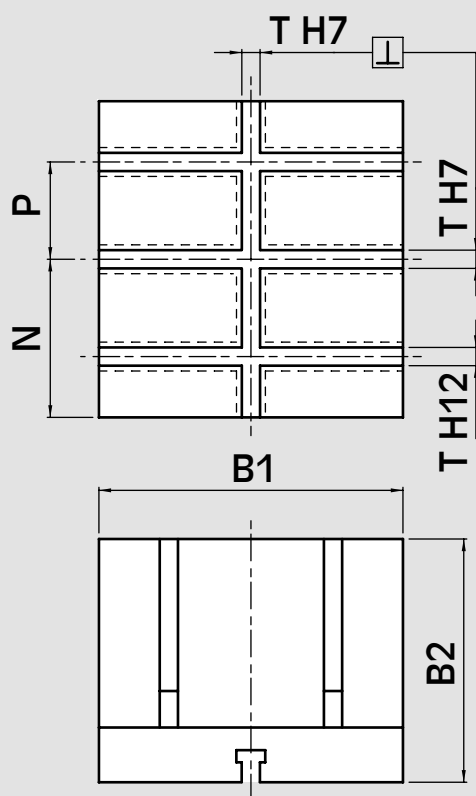
- Steel
- With grid holes for plates



STEEL

Id. No.	A mm	B1 mm	B2 mm	Ø D mm	M	I mm	L mm	N mm	Weight kg
57110040	360	320	230	16	M 12	50	35	60	65
57110050	460	400	330	16	M 12	50	50	60	129
57110060	510	400	330	16	M 12	50	50	60	137
57110070	510	500	330	16	M 12	50	50	60	180
57110080	560	500	330	16	M 12	50	50	60	193
57110090	560	630	430	16	M 12	50	40	60	302
57110100	660	630	430	16	M 12	50	40	60	339

Special sizes on request.



STEEL

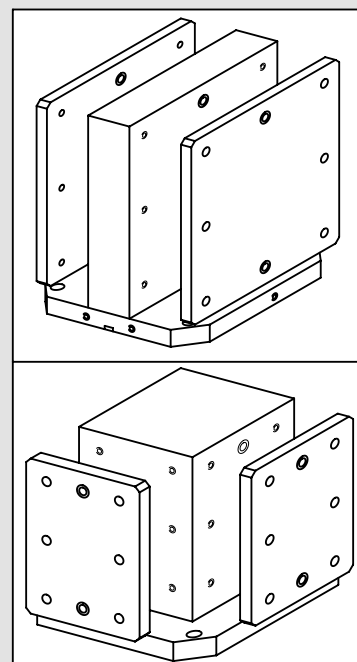
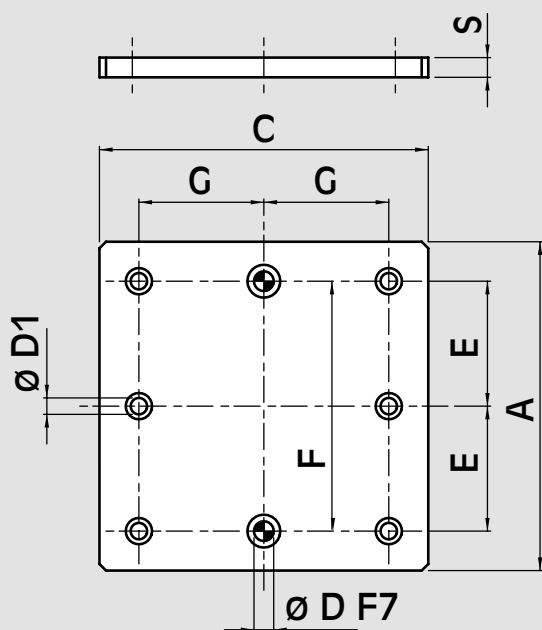
Id. No.	A mm	B1 mm	B2 mm	N mm	P mm	T mm	⊥ mm	Weight kg
57270010	360	350	230	180	120	12	0,01	76
57270020	500	350	330	250	160	12	0,02	125
57270030	460	450	330	230	150	12	0,02	145
57270040	600	450	330	300	190	14	0,025	176
57270050	350	500	230	175	100	14	0,02	102
57270060	500	550	330	250	160	14	0,02	197
57270070	800	550	400	400	260	14	0,025	318
57270080	450	600	330	225	130	16	0,02	193

Special sizes on request.

Modular Tombstone

Smooth ground plates

■ Steel

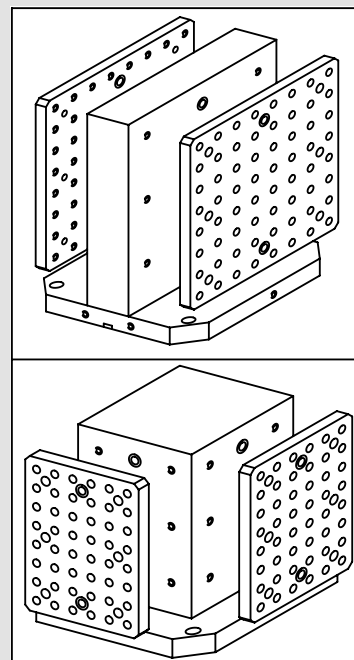
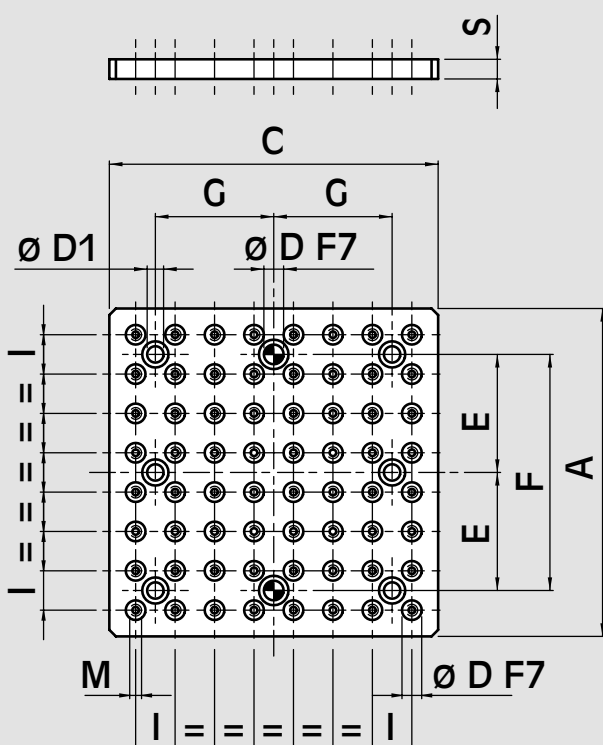


STEEL

Id. No.	C mm	A mm	Ø D mm	Ø D1 mm	E mm	F mm	G mm	S mm	Weight kg
57120025	160	400	12	11	150	300	40	20	10
57120090	250	600	16	13	250	500	75	25	29
57120130	350	600	16	13	250	500	125	25	41
57120155	400	600	16	13	250	500	150	25	47
57120175	450	800	16	13	350	700	175	25	70,5
57120195	500	600	16	13	250	500	200	25	58,5
57120210	550	800	16	13	350	700	225	25	86
57120235	630	800	16	13	350	700	250	25	98,5
57120250	800	800	16	13	350	700	350	30	149

Special sizes on request.

- Steel
- With grid holes for plates



STEEL

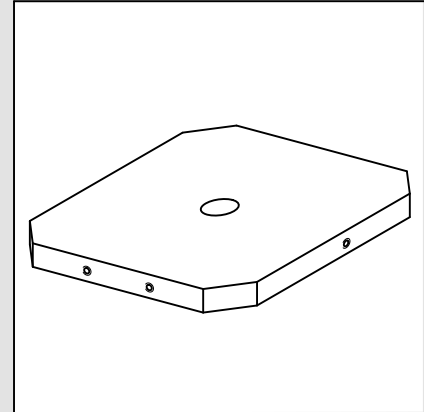
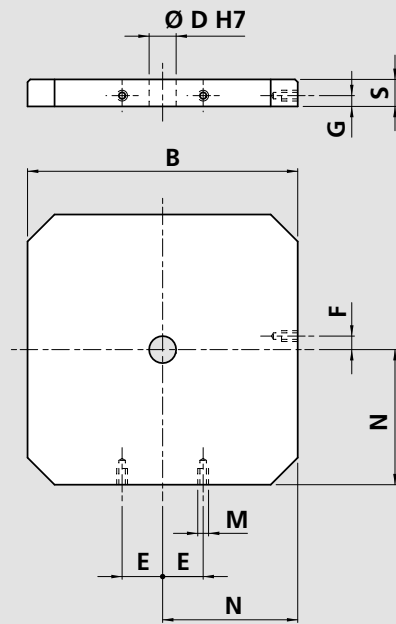
Id. No.	C mm	A mm	Ø D mm	Ø D1 mm	M	E mm	F mm	G mm	I mm	S mm	Weight kg
57050025	160	400	12	11	M 10	150	300	40	40	30	15
57050090	250	600	16	13	M 12	250	500	75	50	35	39
57050130	350	600	16	13	M 12	250	500	125	50	35	55
57050155	400	600	16	13	M 12	250	500	150	50	35	63
57050175	450	800	16	13	M 12	350	700	175	50	35	95
57050195	500	600	16	13	M 12	250	500	200	50	35	78
57050210	550	800	16	13	M 12	350	700	225	50	35	114
57050235	630	800	16	13	M 12	350	700	250	50	35	131
57050250	800	800	16	13	M 12	350	700	350	50	35	166

Special sizes on request.

Modular Tombstone

Smooth ground Subplates

- Steel
- Without grid holes



STEEL

Id. No.	B mm	Ø D mm	M	N mm	E mm	F mm	G mm	S mm	Weight kg
57130010	320	30	-	160	-	-	-	40	30
57130020	400	50	M 16	200	55	25	18	40	48
57130030	450	50	-	225	-	-	-	40	61
57130040	500	50	M 16	250	75	25	18	40	76
57130050	550	50	-	275	-	-	-	40	93
57130060	630	50	M 16	315	100	25	18	40	121

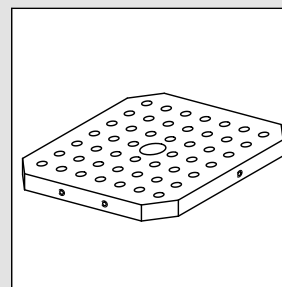
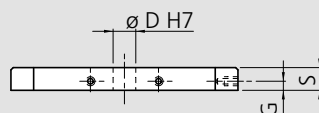
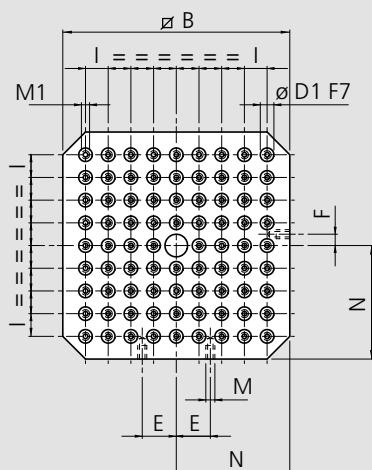
Special sizes on request.

Ground Subplates with grid

- Steel
- With grid holes

Modular Tombstone

1



STEEL

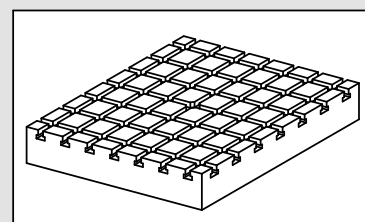
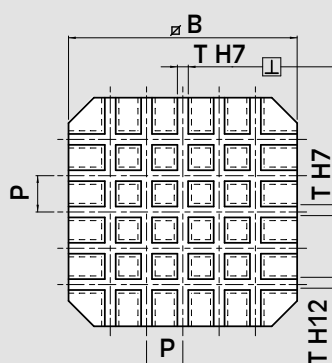
Id. No.	B mm	Ø D mm	M	E mm	F mm	G mm	Ø D1 mm	M1	I mm	N mm	S mm	Weight kg
57140010	320	30	-	-	-	-	16	M12	50	160	40	29
57140020	400	50	M16	55	25	18	16	M12	50	200	40	47
57140030	450	50	-	-	-	-	16	M12	50	225	40	59
57140040	500	50	M16	75	25	18	16	M12	50	250	40	74
57140050	550	50	-	-	-	-	16	M12	50	275	40	90
57140060	630	50	M16	100	25	18	16	M12	50	315	40	117

Special sizes on request.

Ground Subplates with T-slots

- Steel

Modular Tombstone



STEEL

Id. No.	B mm	P mm	S mm	T mm	l mm	Weight Kg
57340010	400	56	80	12	0.015	85
57340020	450	65	100	14	0.015	137
57340030	500	70	100	14	0.02	171
57340040	550	80	100	14	0.02	210
57340050	630	100	100	14	0.025	284

Special sizes on request.

TC

Modular clamping equipment

