

Printing pads



Silicone qualities
Pad shapes and hardnesses
Pad holders

Contents

General information	03
Printing pad qualities	04
Overview printing pad qualities	07
● ORBIX pad shapes	08
● ROUND conical	10
ROUND cylindrical with conical print surface	12
ROUND spherical	15
ROUND with a lip	15
ROUND with a waist	16
■ RECTANGULAR saddle	16
RECTANGULAR roofed	17
RECTANGULAR curved roof ridge	20
RECTANGULAR standard	21
RECTANGULAR with a waist	27
RECTANGULAR fish belly	28
RECTANGULAR with domed print surface	29
■ SQUARE	30
★ Special pads	31
Pad holders	32
Index of pad numbers	34



General information

The printing pad is one of the deciding factors for producing excellent print results. Teca-Print manufactures high-quality printing pads tailored to the needs of pad printers and backed by a qualified team for support. With a commitment to excellence, silicone qualities and pad shapes are continuously evaluated and improved.

Printing pads are made of silicone and are available in different qualities, shapes and hardnesses.

Pad families, silicone qualities and hardnesses (i.e. durometer)

The pad's ink transfer performance varies depending on the properties of the silicone.

There is a wide range of silicone types to choose from in order to find the ideal pad for each application and to optimize the print quality.

The hardness of the pads is measured in Shore. Teca-Print uses the scale according to the system 00 Si. The production tolerance is ± 2 Shore 00 Si. Generally speaking, pad durometers range from 39 Shore 00 Si (very soft) to 68 Shore 00 Si (very hard). In addition to the quality of the surface and shape of the part to be printed, the printing force of the machine and the size of the print image must also be taken into consideration when choosing the proper pad durometer.

Cleaning

The dust and ink residue left on the pad surface should be cleaned with adhesive tape only.

Activation

New printing pads must be de-oiled before using them for the first time, so that the pad is activated for printing. Great care is required during the activation. Use soft paper towels, soaked with ink thinner (e.g. VD, VM) to wash down the pad surface. Important: dry rubbing or scrubbing can create an eraser effect and damage the pad surface. Once the surface is matt and the thinner evaporated, the pad can be used to print.

Storage

Store pads in an area without sunlight and keep them away from direct contact with other parts (including other pads).

Pad bases and fastening

Both wood and aluminum are used as pad bases. All Teca-Print printing pads with a wooden base have a M6 thread in the middle (if size and form allow). Printing pads with this pad base can easily be mounted to the corresponding pad holder containing a M6 threaded pin.

You can find an overview on pages 32 and 33.

The golden rule of pad selection

The rule below should be followed when choosing a printing pad:

Always choose the hardest, most pointed and largest pad possible.

The hardness of the pad helps to print sharp contours and ensures perfect prints on structured surfaces.

The steeper the pad is, the better the air can escape (i.e. during ink pick up and transfer).

The largest pad volume possible minimizes image distortion, as larger pads deform less.

Printing pad qualities



- universal application
- widest range of shapes
- excellent fine-image transfer
- very good resistance to mechanical abrasion

Standard

Our "Standard" silicone range of printing pads covers a very broad spectrum of applications. They are available in a large variety of shapes and three different hardnesses.

Best transfer properties enable the printing of very fine detailed images. The silicone has a high level of resistance to mechanical abrasion and is therefore universal in application, even when used over a longer period the swell resistance is excellent. The good anti-static properties round off the benefits of the "Standard" pads.

In general we recommend our standard pads in the hardness "red" (medium-hard, 54 Shore 00 Si) as the first test option for a large variety of applications as long as no special silicone properties are required. This universal printing pad has an excellent price-performance ratio.

For special applications several shapes of the quality "Standard" are available with a cavity or with a net.



- highest level of ink transfer, suitable for the finest print images
- highest edge precision
- very good mechanical properties

MaxX

Our "MaxX" silicone offers the highest level of ink transfer possible, making the "MaxX" range of pads ideal for the most demanding applications, where very fine and precise images need to be printed.

This high quality silicone is user friendly and suitable for all types of production.

Outstanding mechanical resistance ensures long pad life. MaxX printing pads also have excellent anti static properties. The surface of the "MaxX" printing pads is glossy, but can be supplied in a matt finish on request.

"MaxX" printing pads are available in a large number of forms with a wood- or an aluminum base and also suitable for rotary pad printing.

Printing pad qualities



- excellent anti-static properties
- high resistance to mechanical abrasion
- swell resistant and easy to clean
- long lifetime

StarX

The high-performance printing pads "StarX" are ideal for a large variety of applications. They are available in different hardnesses from 39 - 64 Shore and can be ordered in various shapes. The field of application ranges from single-colour line prints to multi-colour halftone printing.

Only a very short activation time is required for new StarX pads compared to standard silicones. The anti-static properties of this unique silicone offer unrivalled and splash free ink transfer.

The extremely high swell resistance of "StarX" printing pads can be used continuously even with alternating print images. Resistance to mechanical abrasion is also very high. Where pads may be over-compressed around curves or have continual contact with a tooling fixture, StarX pads will outlast standard silicones in the most demanding production situations.



- superdry
- no marks on glossy surfaces
- highly tear-resistant
- very good mechanical abrasion properties

BriX

"BriX" printing pads contain only encapsulated oil which makes them "superdry". Due to this encapsulation the printing pads quality "BriX" stand out from all other silicone qualities. No unwanted marks remain on the printing surface, not even on glossy substrates.

Thanks to the special components used in "BriX" printing pads the mechanical resistance and hardness are especially high. They score excellently in terms of abrasion and anti-swelling.

"BriX" printing pads are available in various shapes and two different hardnesses (medium hard and hard). After a short activation time they are ready to use.

Printing pad qualities



transfer of pad printing ink
as well as watchmaker's ink

relief-effect possible

best fine-image transfer



ideal for full-surface prints

long lifetime

very good anti-swelling properties



"FDA"-conform

supplied with a certification

particularly suitable for medical
technology sectors

Dual

The quality "Dual" combines two different silicone types and offers exceptional printing pads for special applications. Best fine-image transfer and the possibility to transmit not only pad printing inks but also other media such as watchmaker's ink, make the printing pads "Dual" so special. In the watch industry "Dual" printing pads combined with watchmaker's ink demonstrate the desired relief-effect particularly well.

"Dual" printing pads are limited to smaller, mostly round pad shapes and are available with coloured anodized aluminum bases. They are produced in durometer 64 Shore 00 Si (hard).

Long-Life

Printing pads quality "Long-Life" are produced in a great shape diversity and in two hardnesses (soft and medium hard).

Apart from their good resistance to mechanical abrasion the printing pads "Long-Life" are ideal for full-surface prints. The printed ink film of full-surface prints shows outstanding homogeneity.

These printing pads are also often used in the watch industry.

FDA

"FDA" printing pads meet the stringent requirements of the American Food- and Drug Administration. Due to its characteristics "FDA" printing pads are mainly used in the sector medical technology and in the food industry.

The printing pads quality "FDA" always have an aluminum base and an airtight packaging.

"FDA" printing pads are available in two hardnesses (medium hard and hard) and convince with a high mechanical resistance.

Overview printing pad qualities

silicone type	hardness	description	appearance	example
Standard	39 Shore 00 Si	W	white	
	44 Shore 00 Si	G	green	
	54 Shore 00 Si	R	red	
MaxX	50 Shore 00 Si	-X50	grey	
	62 Shore 00 Si	-X62	blue	
	68 Shore 00 Si	-X68	blue	
StarX	39 Shore 00 Si	-39	grey	
	44 Shore 00 Si	-44		
	54 Shore 00 Si	-54		
	64 Shore 00 Si	-64		
BriX	54 Shore 00 Si	-B54	brick red	
	64 Shore 00 Si	-B64		
Dual	64 Shore 00 Si	-DL64	transparent/ grey	
Long-Life	44 Shore 00 Si	O	white	
	54 Shore 00 Si	M		
FDA	54 Shore 00 Si	-54-MT-FDA	brick red	
	64 Shore 00 Si	-64-MT-FDA		

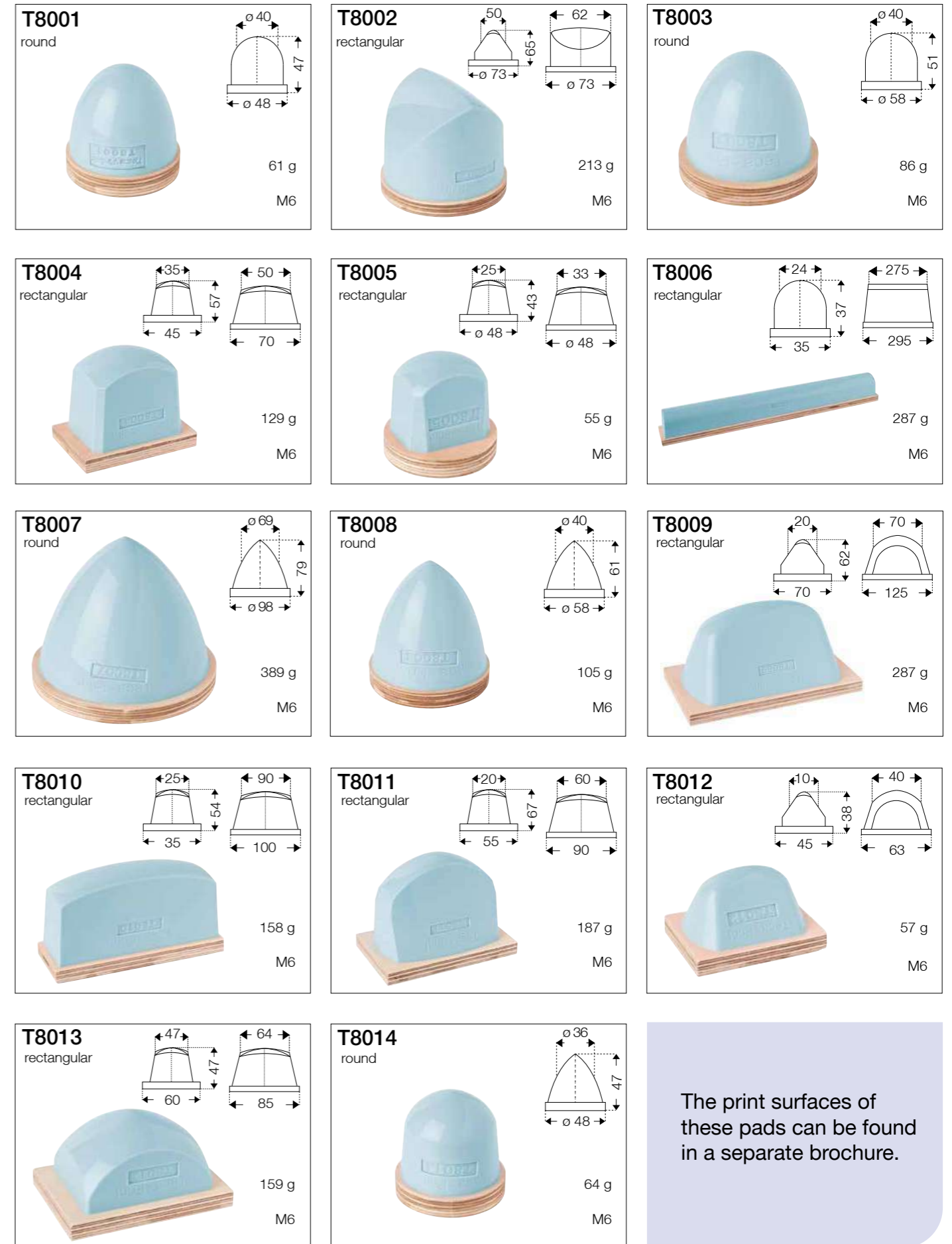
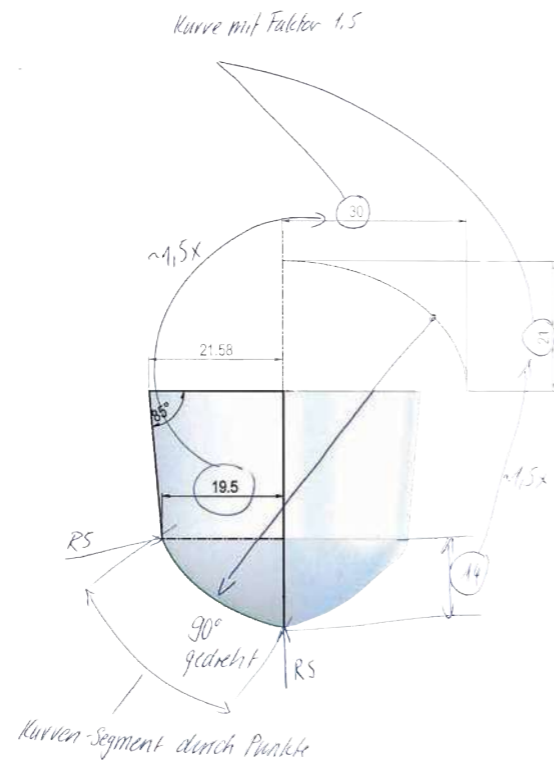
The perfect pad shape

Apart from the silicone that is used to make the pad, the shape is the decisive factor for optimal printing results. Nature provides the geometry to calculate the ideal pad shapes. The surface structures of the OrbiX printing pads are derived from shapes, similar to that of a parabola, which are often found in nature.

This unique combination of experience and inspiration from nature provides the basis of design for the perfect printing pad. With all printing pads of the OrbiX series this formula has been applied to the surface structure. The special pad surface design provides even pad compression during the ink transfer, which results in the visible improvement of print quality.

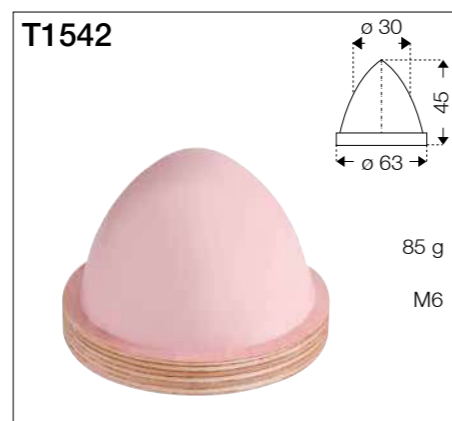
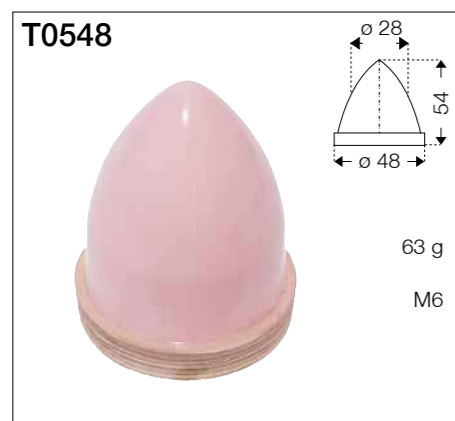
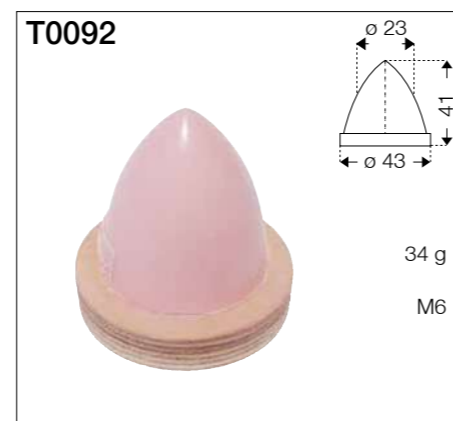
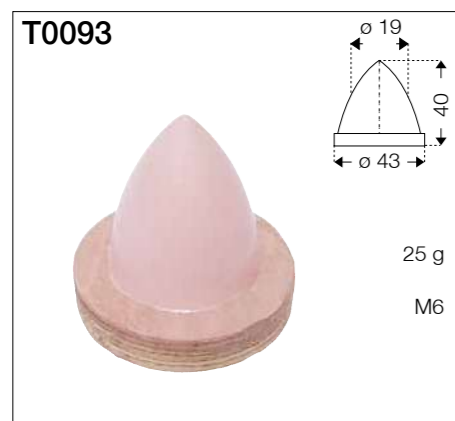
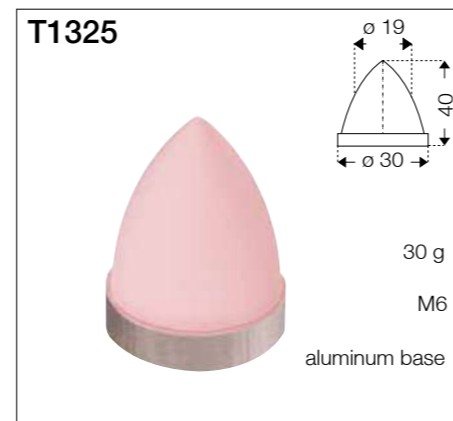
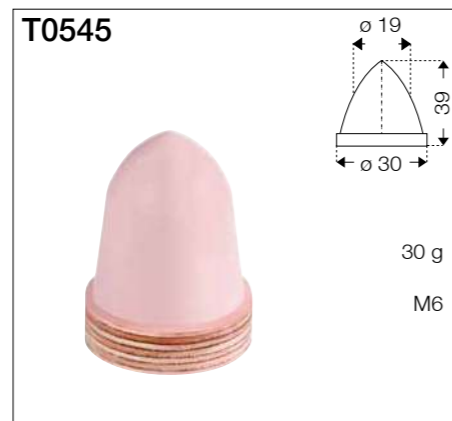
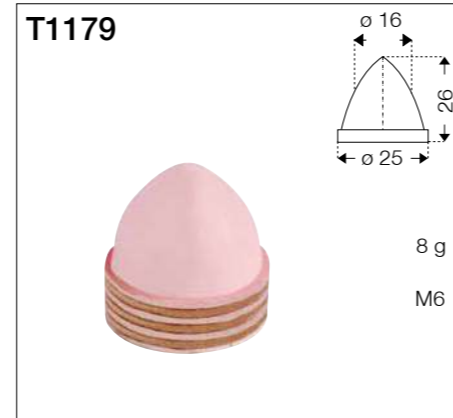
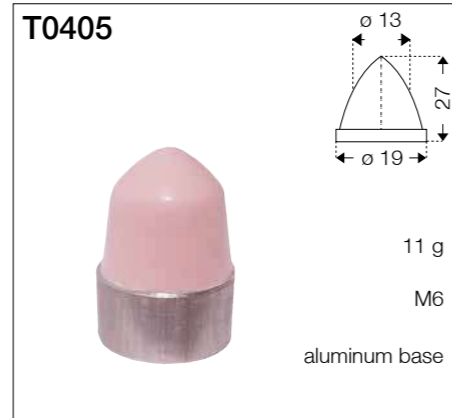
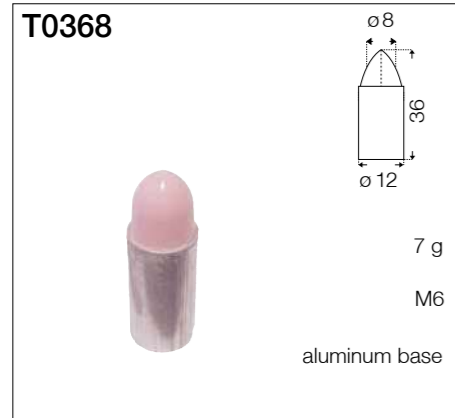
The results include:

- even pad pressure
- optimized unroll properties
- significant improvement in ink transfer
- improved print accuracy

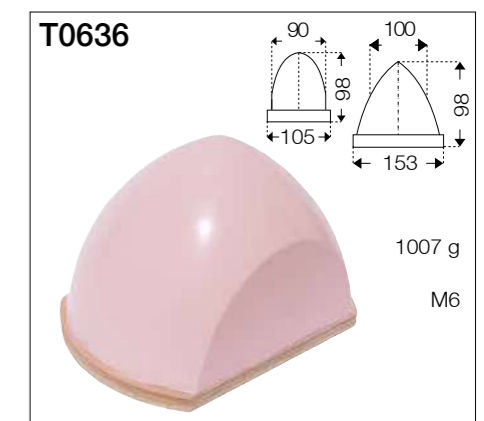
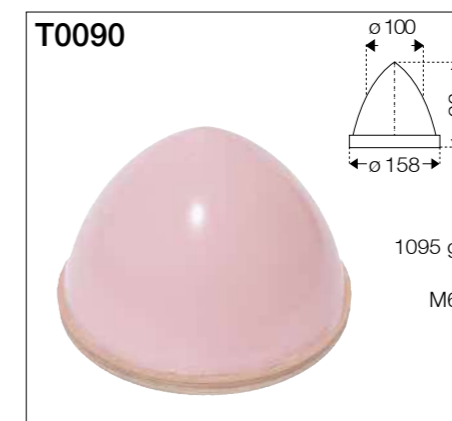
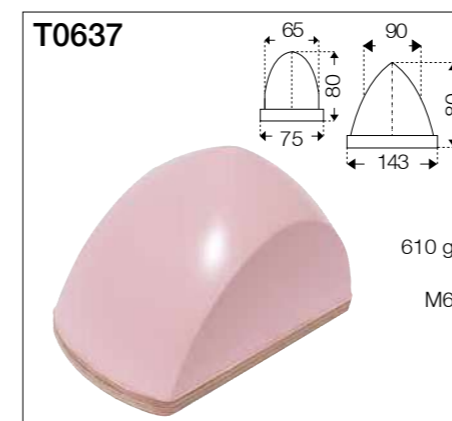
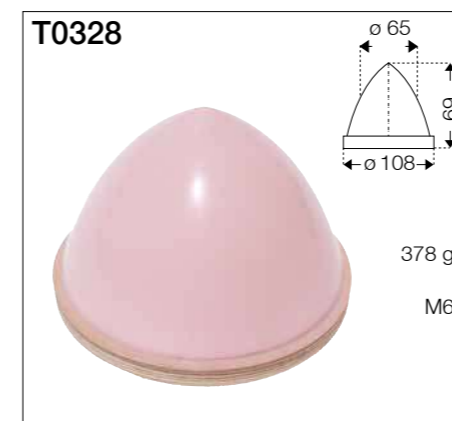
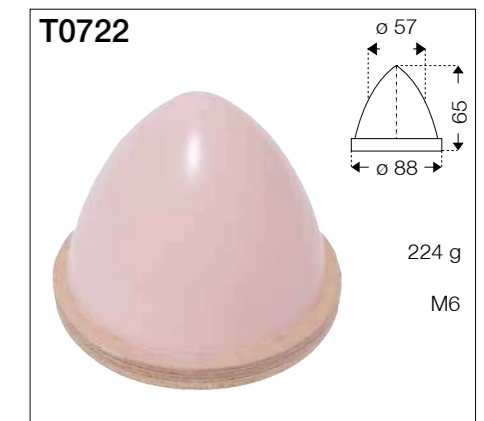
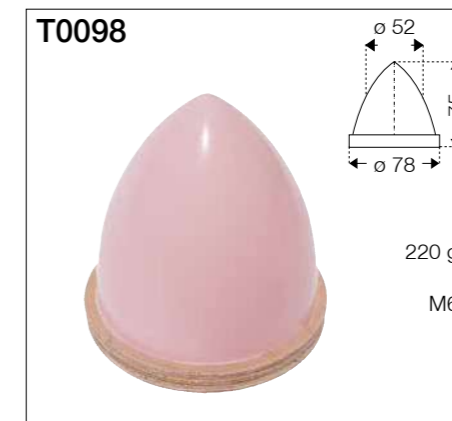
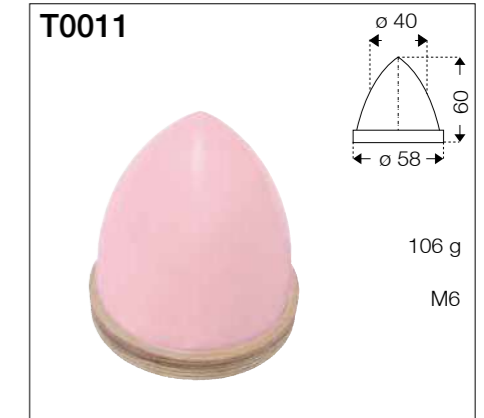
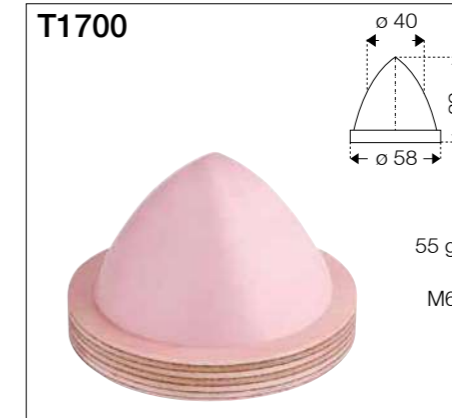


The print surfaces of these pads can be found in a separate brochure.

ROUND conical



ROUND conical



ROUND cylindrical with conical print surface

<p>T0426</p> <p>3 g M6 aluminum base</p>	<p>T0383</p> <p>6 g M6 aluminum base</p>	<p>T1189</p> <p>2 g M4 aluminum base</p>
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<p>T0363</p> <p>3 g M6 aluminum base</p>	<p>T0522</p> <p>6 g M6 aluminum base</p>	<p>T0605</p> <p>6 g M6 aluminum base</p>
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<p>T0539</p> <p>12 g M6 aluminum base</p>	<p>T0415</p> <p>11 g M6 aluminum base</p>	<p>T1213</p> <p>12 g M6 aluminum base</p>
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<p>T0525</p> <p>14 g M10 aluminum base</p>	<p>T0458</p> <p>12 g M6</p>	<p>T0095</p> <p>27 g M6</p>
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ROUND cylindrical with conical print surface

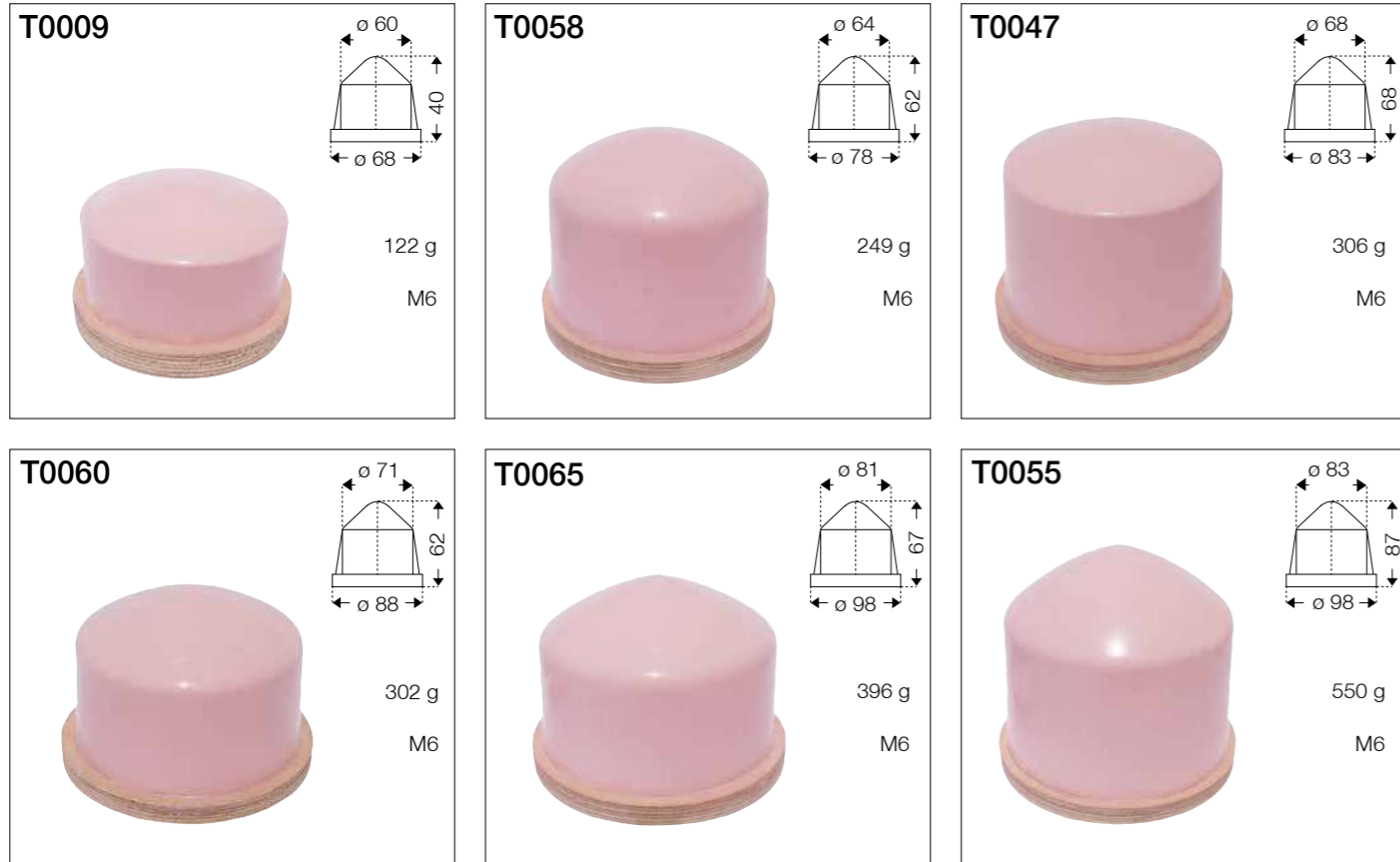
<p>T0526</p> <p>23 g M10 aluminum base</p>	<p>T0431</p> <p>25 g M6</p>	<p>T0600</p> <p>40 g M6 aluminum base</p>
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<p>T1144</p> <p>58 g M6</p>	<p>T0999</p> <p>154 g hollow</p>	<p>T0723</p> <p>77 g M6 aluminum base</p>
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<p>T0010</p> <p>72 g M6</p>	<p>T0003</p> <p>133 g M6</p>	<p>T1086</p> <p>175 g 2x M4 hollow aluminum base</p>
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<p>T0002</p> <p>120 g M6</p>	<p>T0120</p> <p>135 g M6</p>	<p>T0042</p> <p>179 g M6</p>
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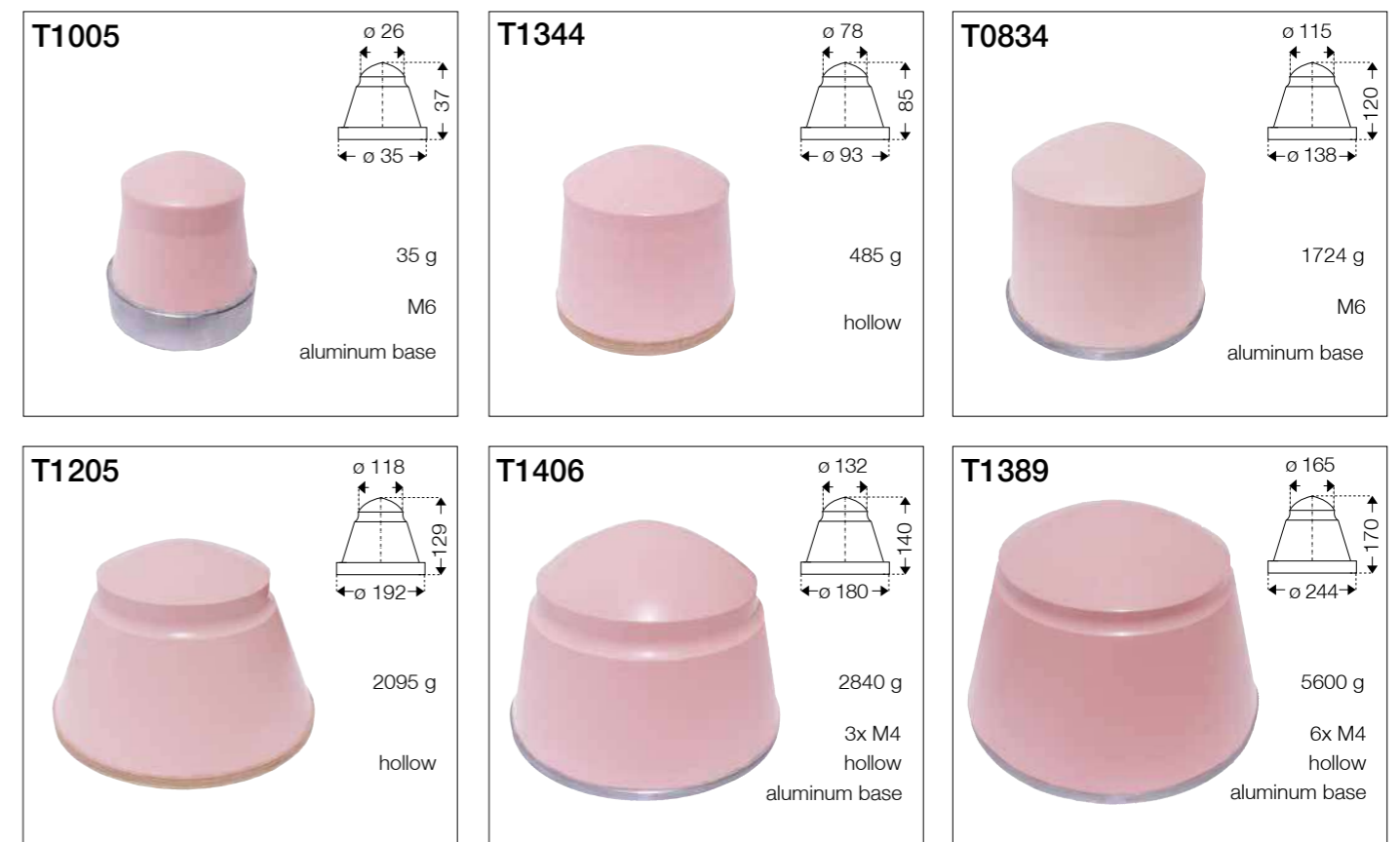
ROUND cylindrical with conical print surface



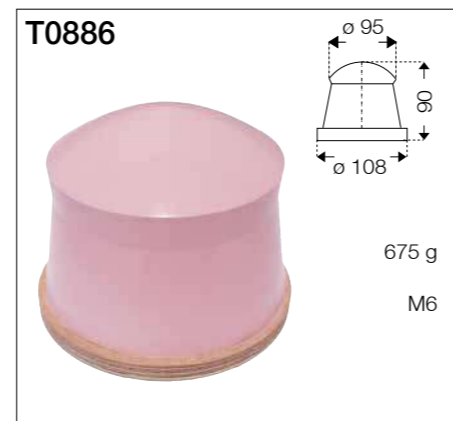
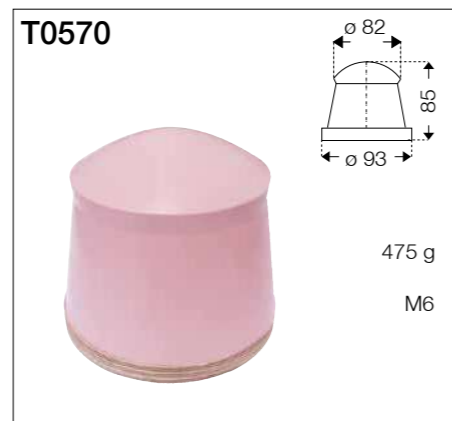
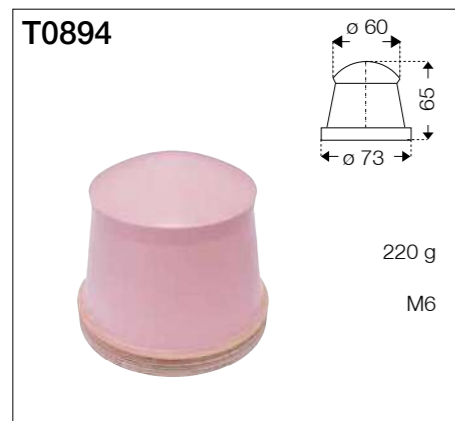
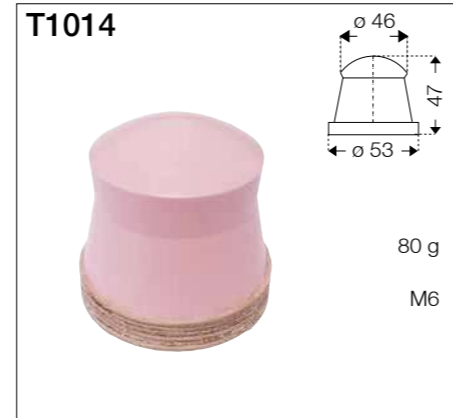
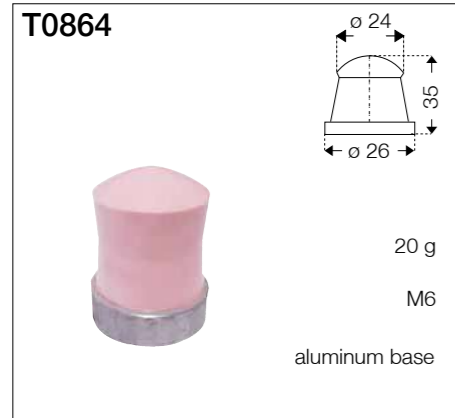
ROUND spherical



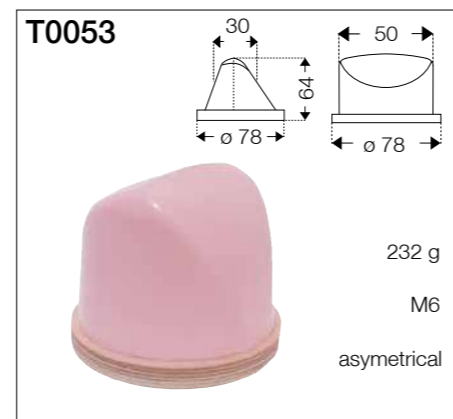
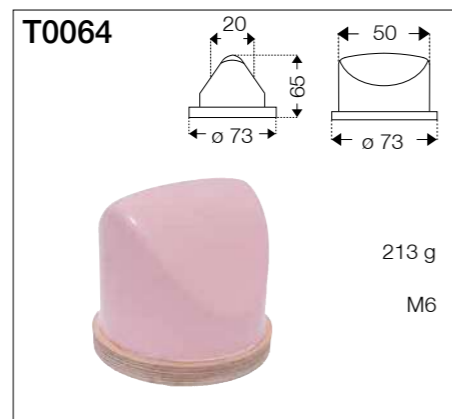
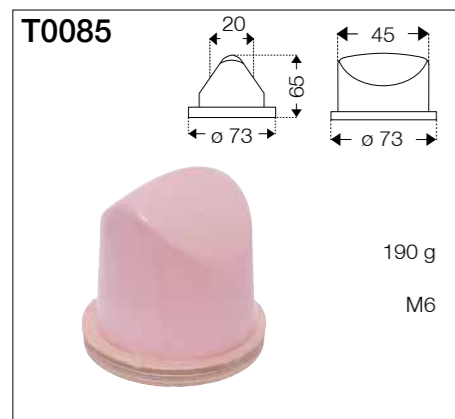
ROUND with a lip



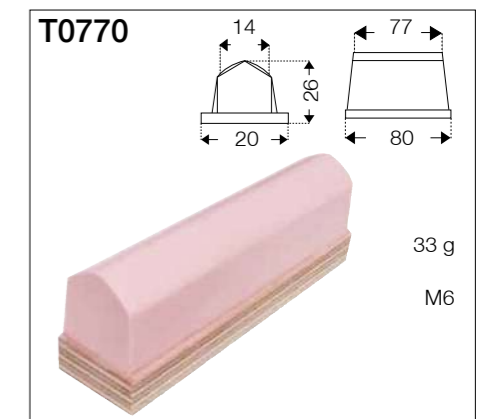
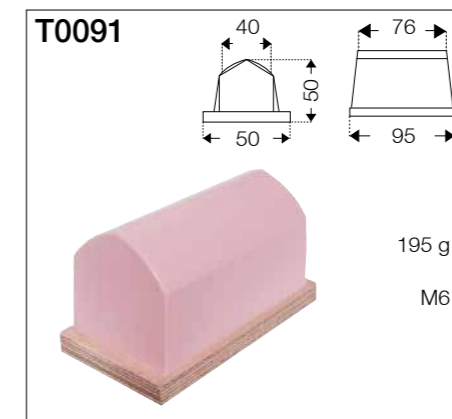
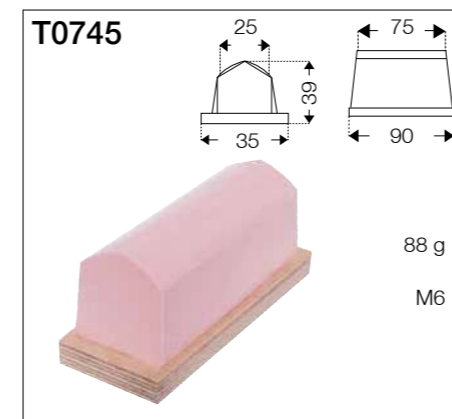
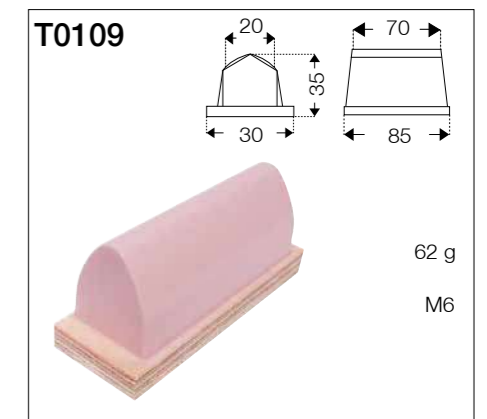
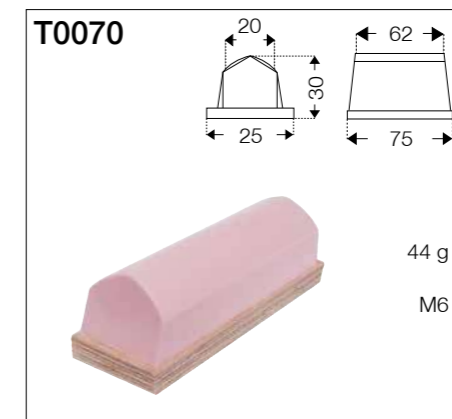
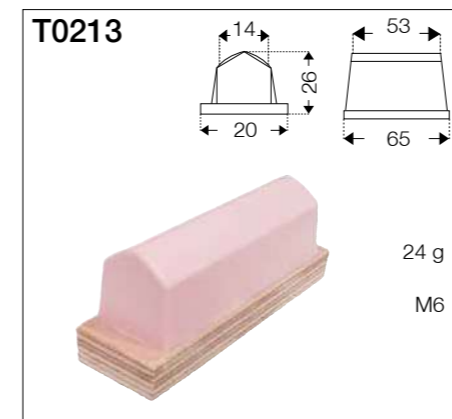
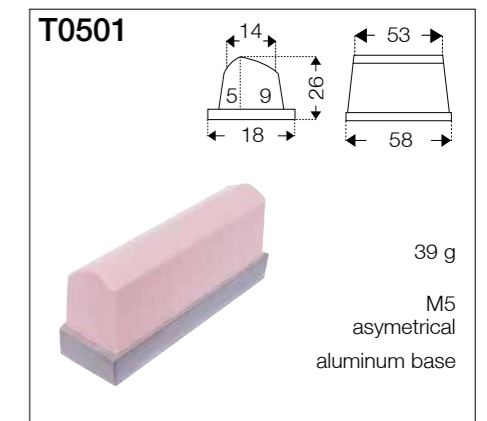
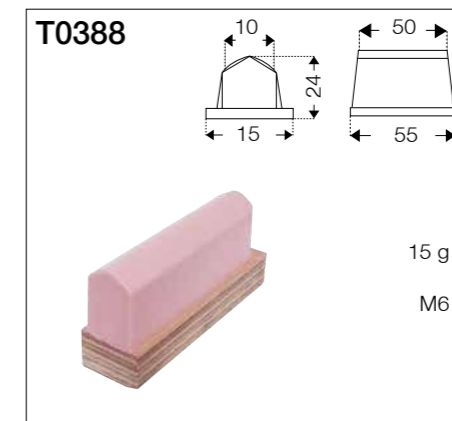
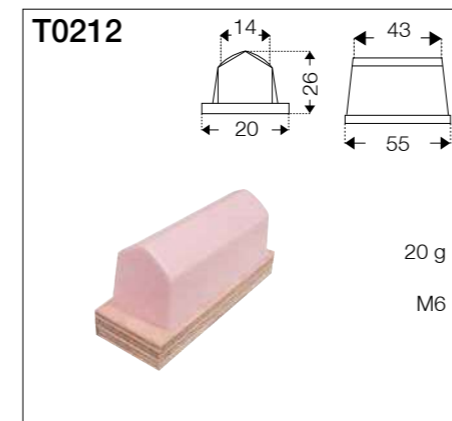
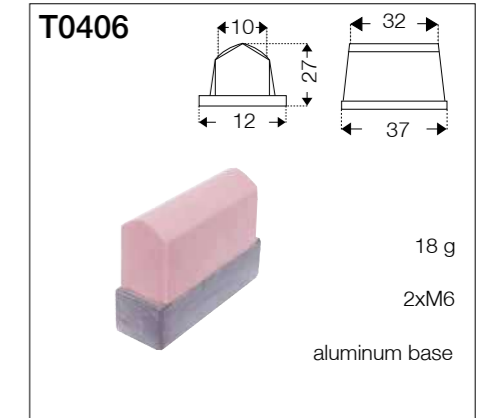
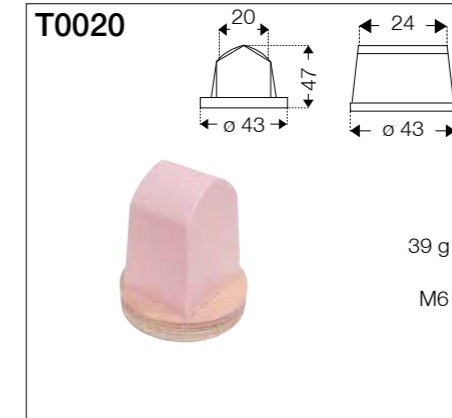
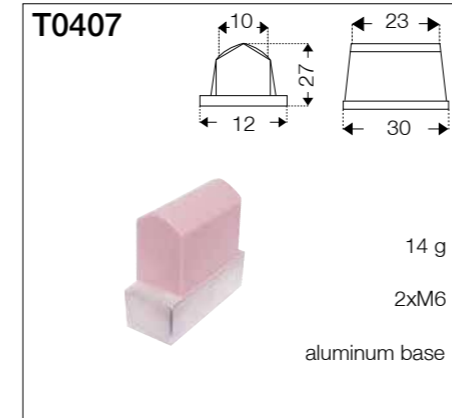
ROUND with a waist



RECTANGULAR saddle



RECTANGULAR roofed



RECTANGULAR roofed

T0457

160 g
M6

T0087

93 g
M6

T0118

46 g
M6

T0542

430 g
M6

T0416

44 g
M6
asymetrical

T0074

77 g
M6

T0918

170 g
M6

T0044

672 g
M6

T0401

59 g

T0021

63 g
M6

T0326

332 g
M6

T0646

203 g
M6

RECTANGULAR roofed

T0610

146 g
M6

T0579

90 g
M6

T0069

93 g
M6

T0088

287 g
M6

T0081

119 g
M6

T0097

346 g
M6

T0141

1030 g
3xM6
with a net

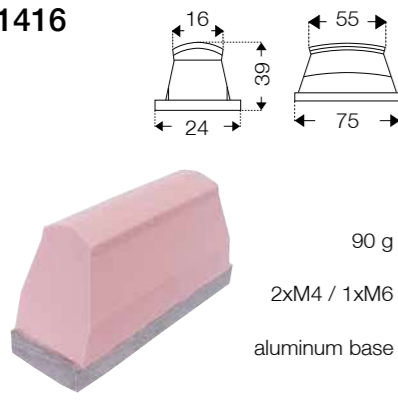
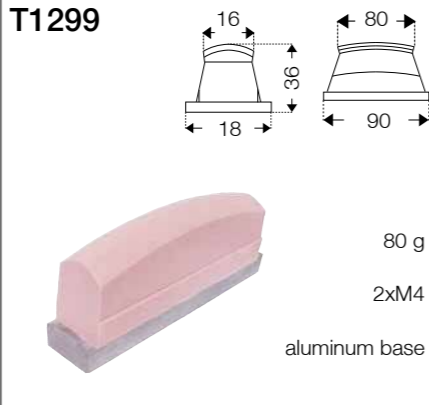
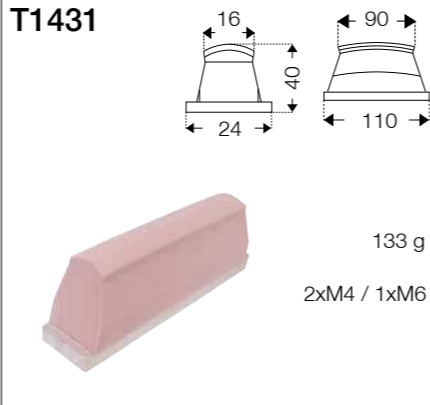
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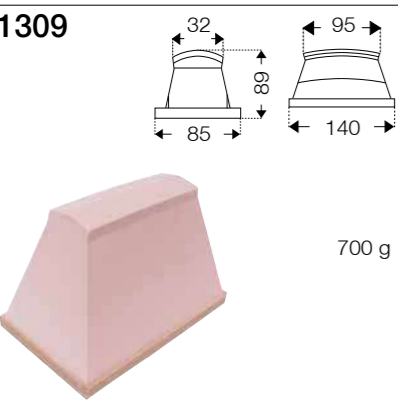
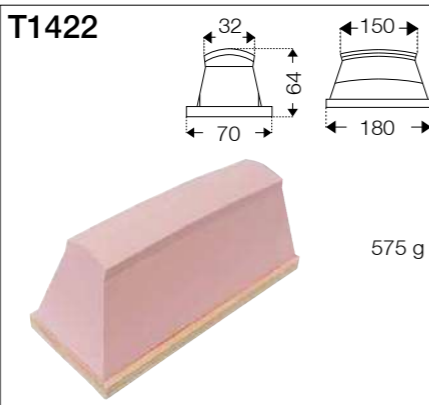
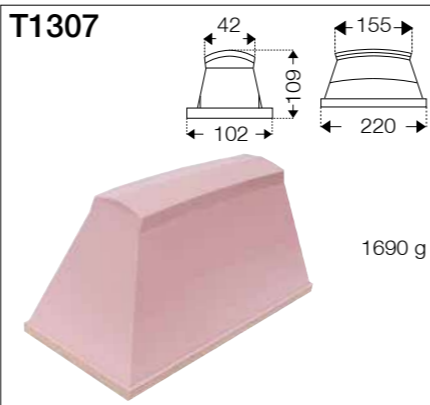
554 g
M6

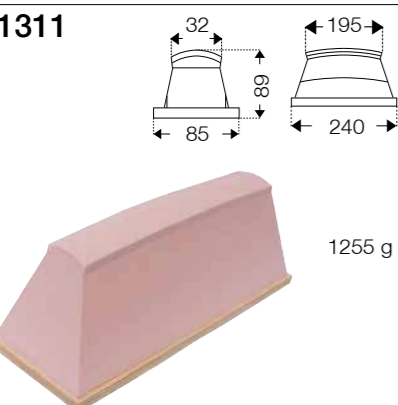
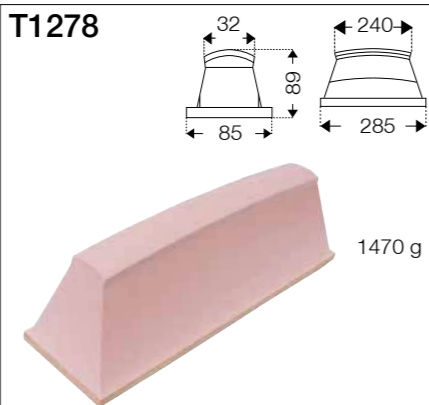
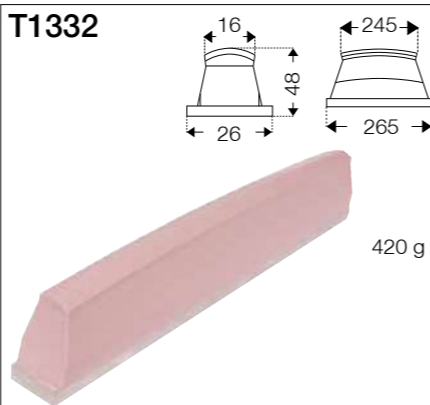
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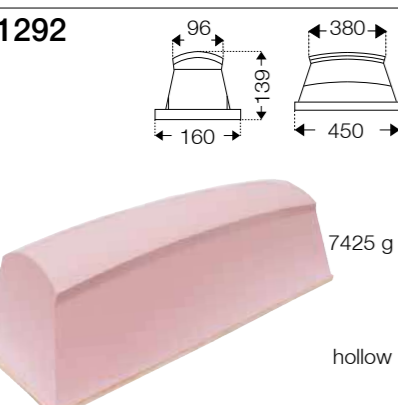
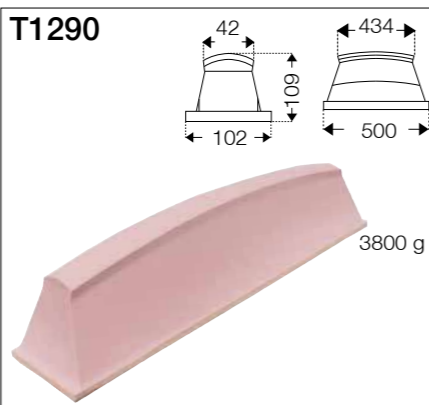
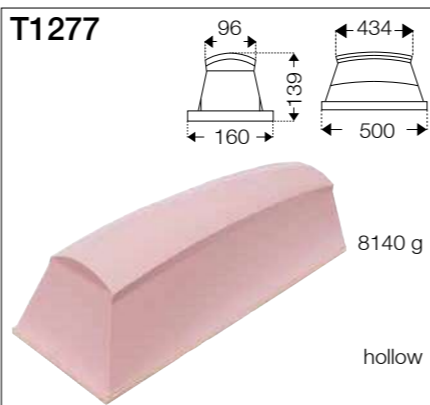
383 g

RECTANGULAR curved roof ridge

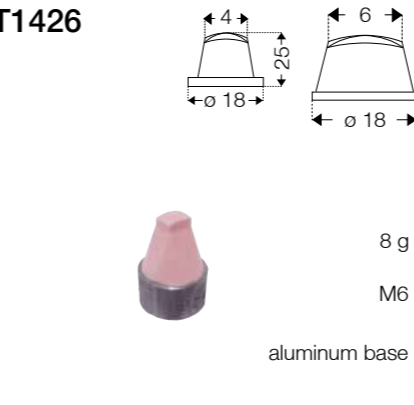
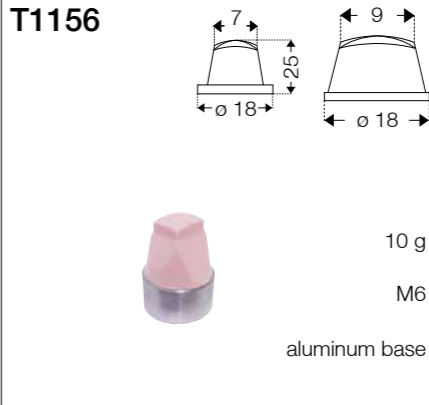
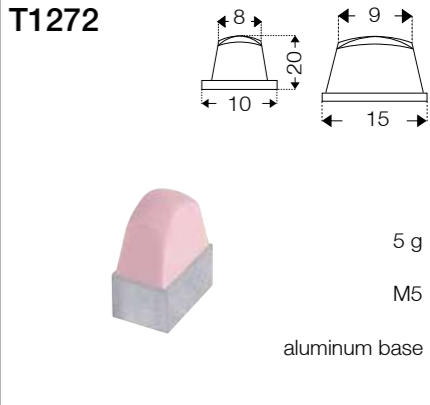
T1416  90 g 2xM4 / 1xM6 aluminum base	T1299  80 g 2xM4 aluminum base	T1431  133 g 2xM4 / 1xM6 aluminum base
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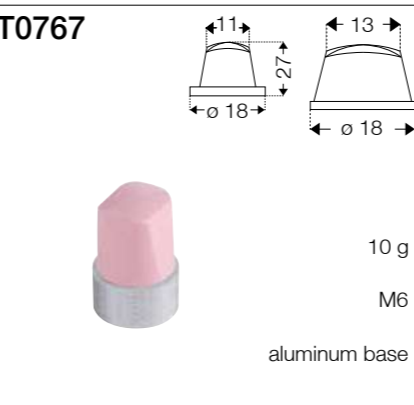
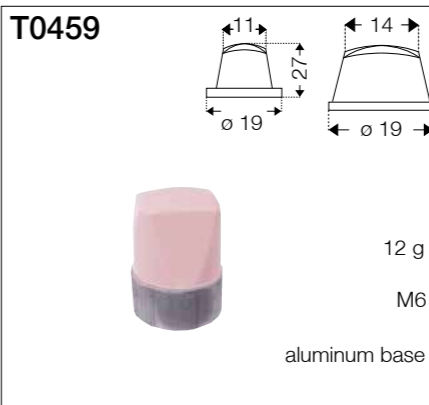
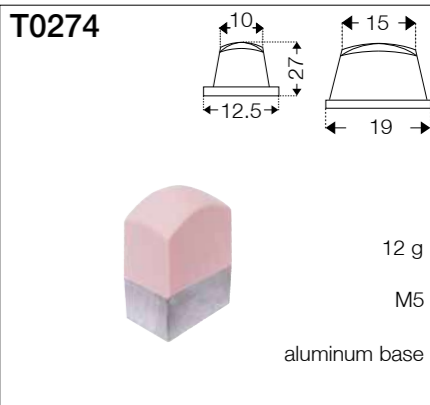
T1309  700 g	T1422  575 g	T1307  1690 g
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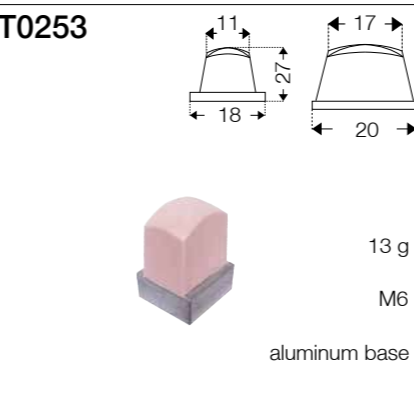
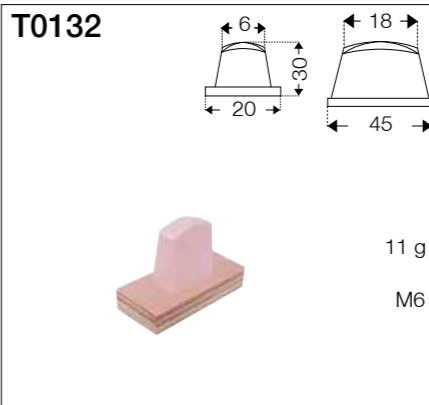
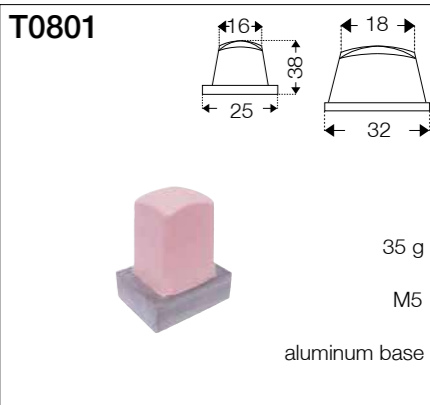
T1311  1255 g	T1278  1470 g	T1332  420 g
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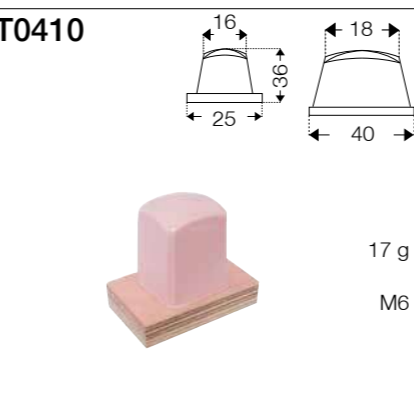
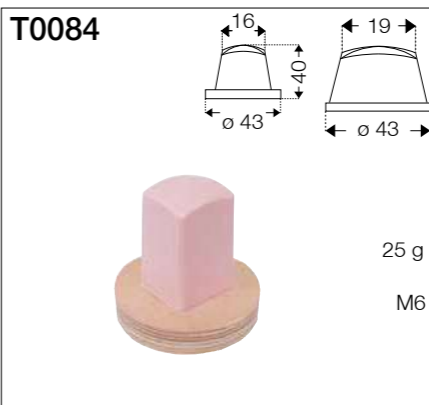
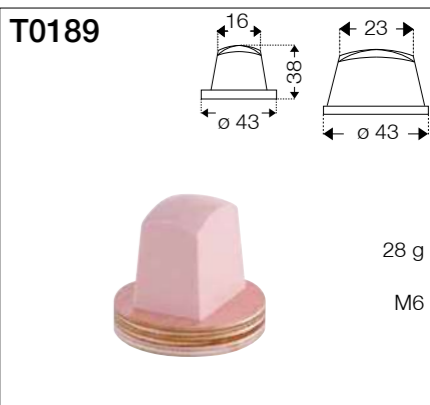
T1292  7425 g hollow	T1290  3800 g	T1277  8140 g hollow
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RECTANGULAR standard

T1426  8 g M6 aluminum base	T1156  10 g M6 aluminum base	T1272  5 g M5 aluminum base
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T0767  10 g M6 aluminum base	T0459  12 g M6 aluminum base	T0274  12 g M5 aluminum base
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T0253  13 g M6 aluminum base	T0132  11 g M6	T0801  35 g M5 aluminum base
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T0410  17 g M6	T0084  25 g M6	T0189  28 g M6
---	---	---

RECTANGULAR standard

T0885

38 g
M5
aluminum base

T0254

20 g
M6
aluminum base

T0040

39 g
M6
aluminum base

T0633

14 g
M6
aluminum base

T0844

25 g
M5
aluminum base

T0765

38 g
M6
aluminum base

T0156

25 g
M6
aluminum base

T1031

48 g
M6
aluminum base

T0346

140 g
M6
aluminum base

T0078

55 g
M6
aluminum base

T0072

45 g
M6
aluminum base

T0196

43 g
M6
aluminum base

RECTANGULAR standard

T1234

25 g
M5
aluminum base

T0395

53 g
M6
aluminum base

T0752

61 g
M6
with nose, depth 18mm

T0403

58 g
M6
aluminum base

T0077

129 g
M6
aluminum base

T0071

208 g
M6
aluminum base

T0119

161 g
M6
aluminum base

T0017

230 g
M6
aluminum base

T0303

145 g
M6
aluminum base

T0048

236 g
M6
aluminum base

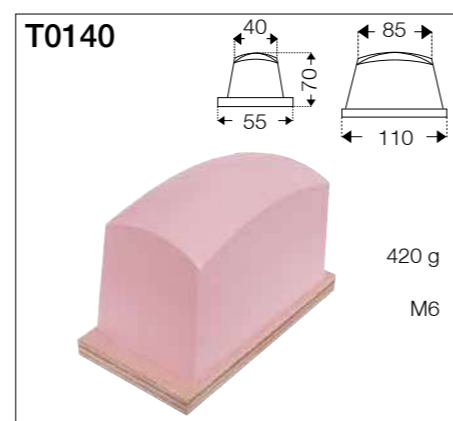
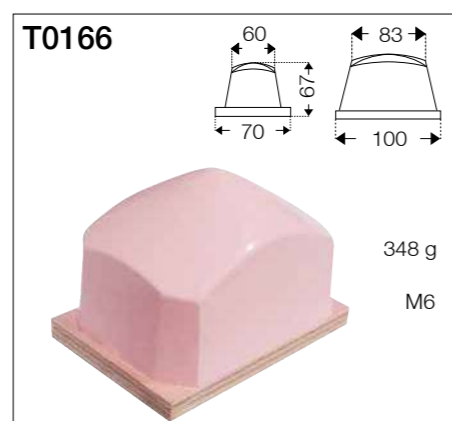
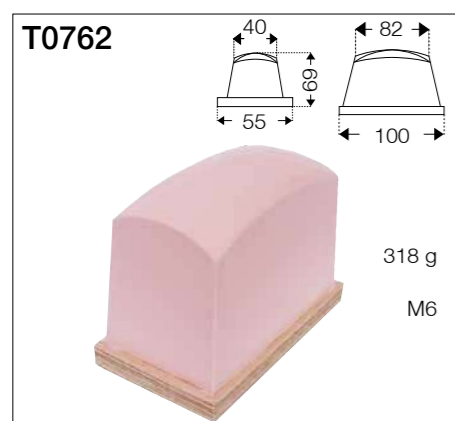
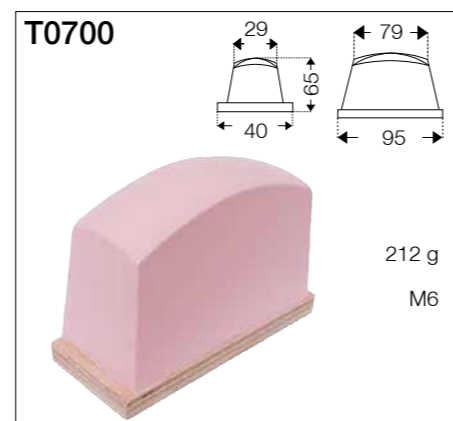
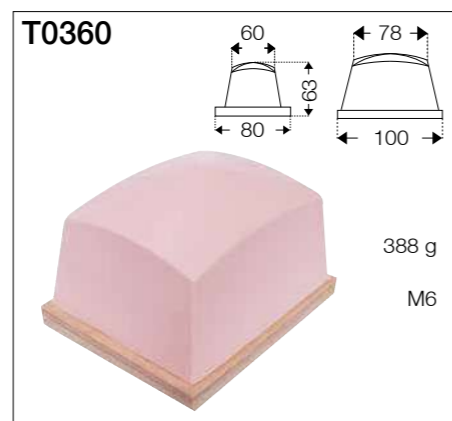
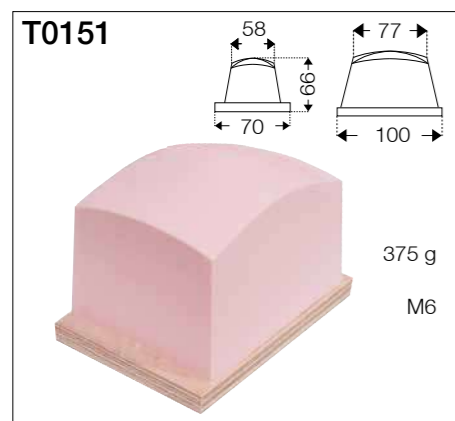
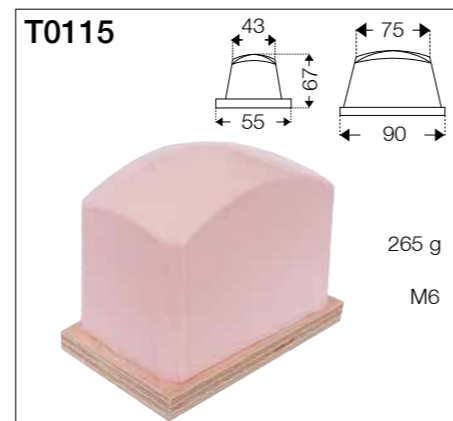
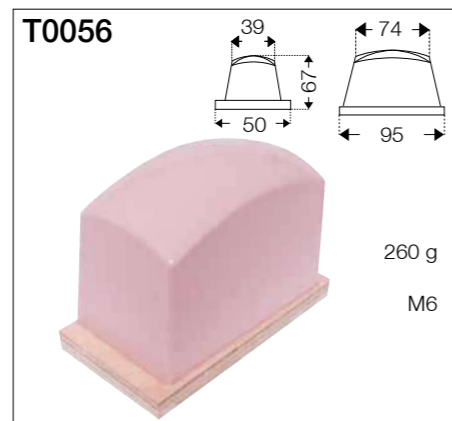
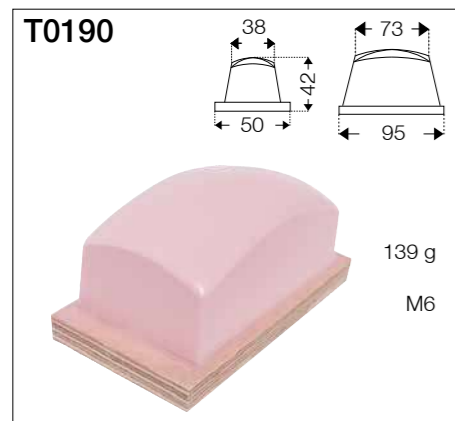
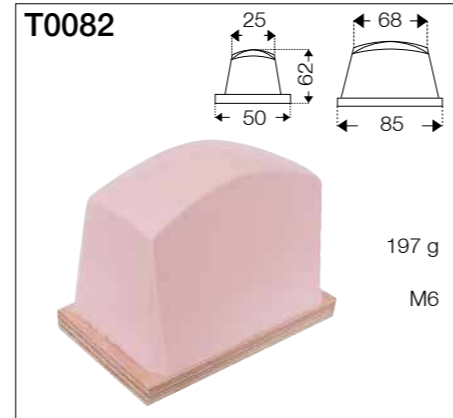
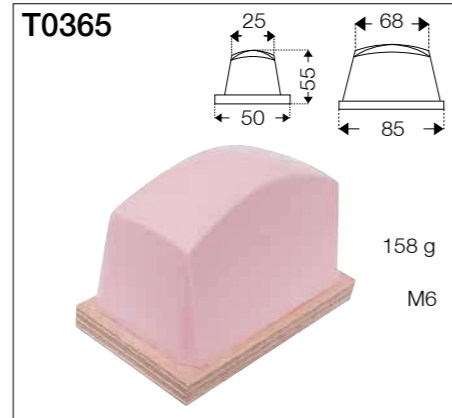
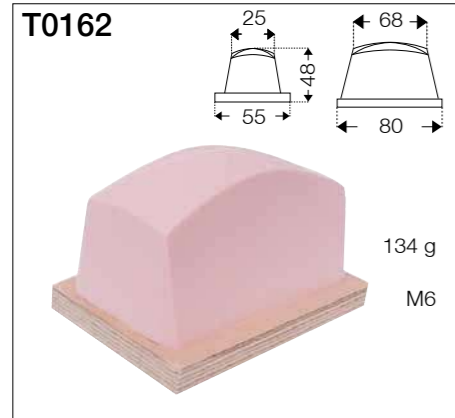
T0137

159 g
M6
aluminum base

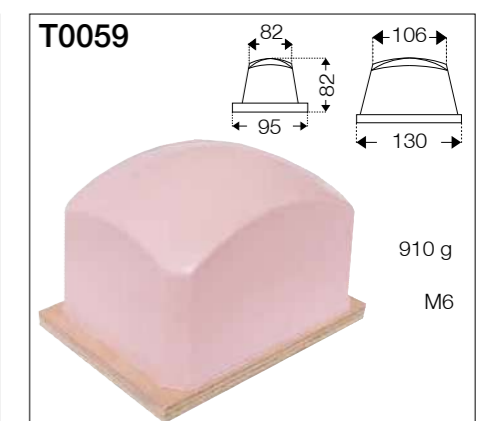
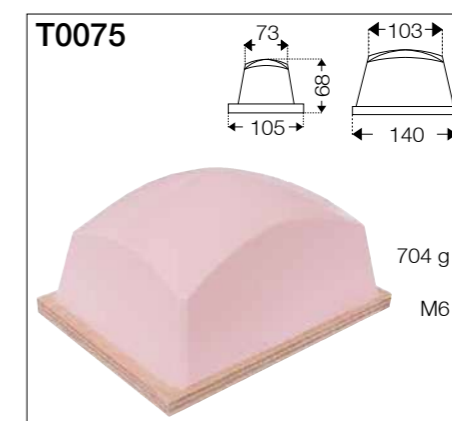
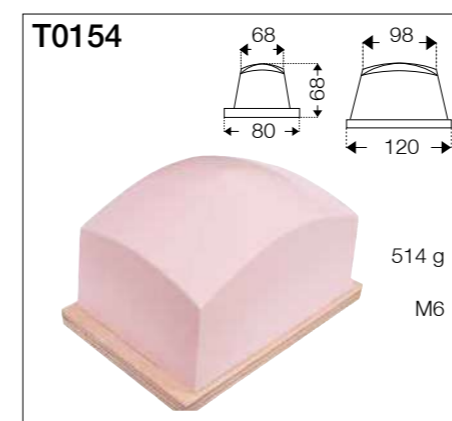
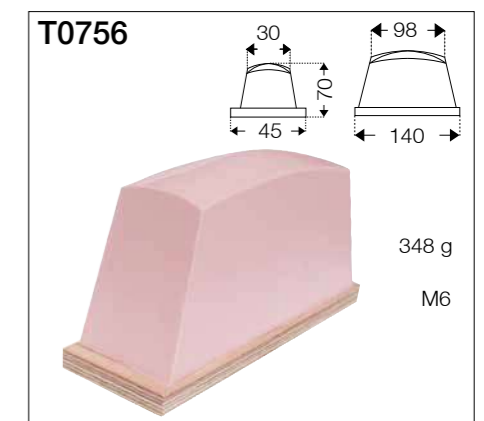
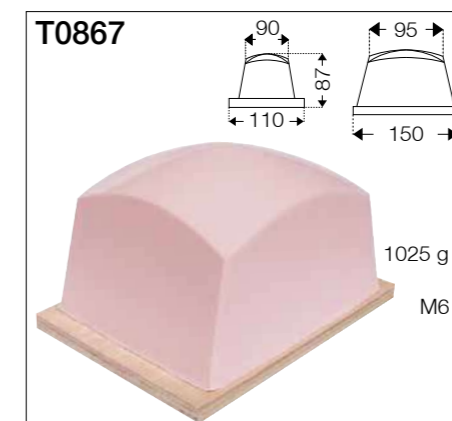
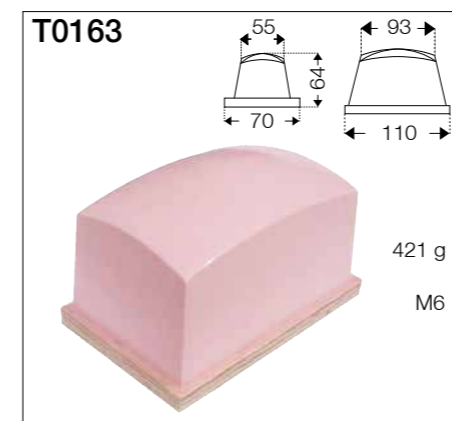
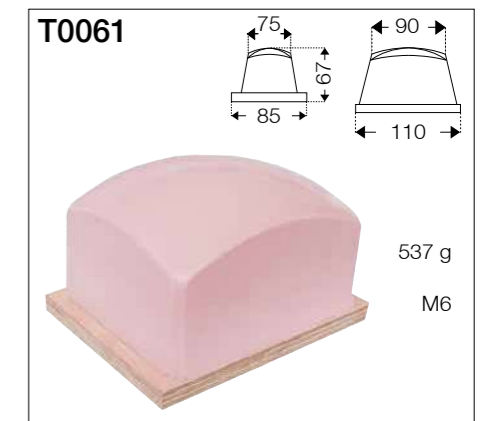
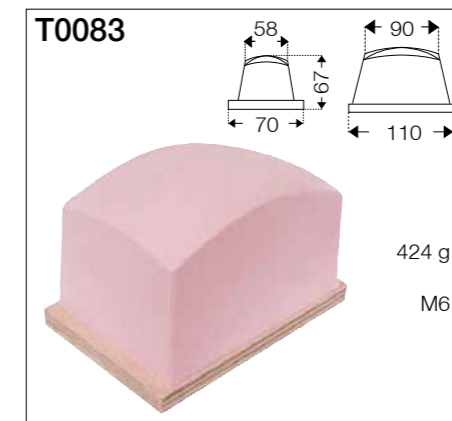
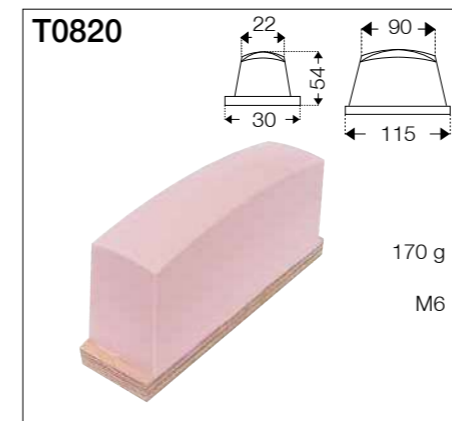
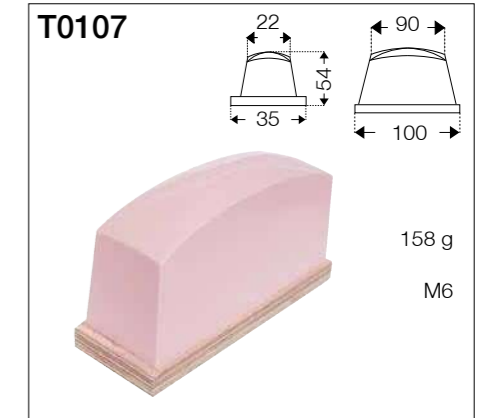
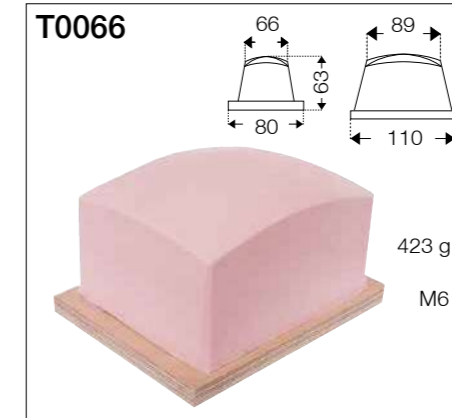
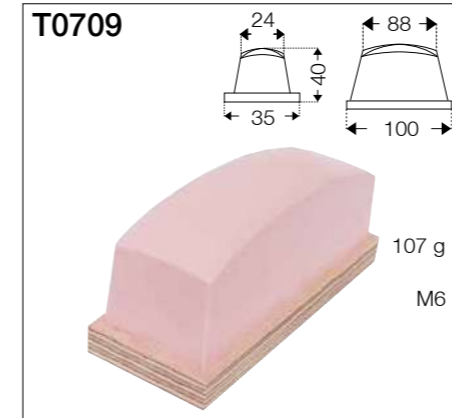
T0409

242 g
M6
aluminum base

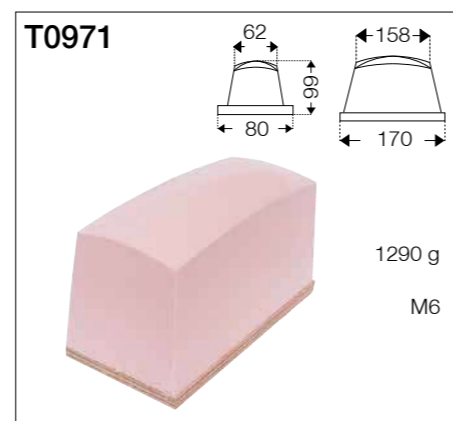
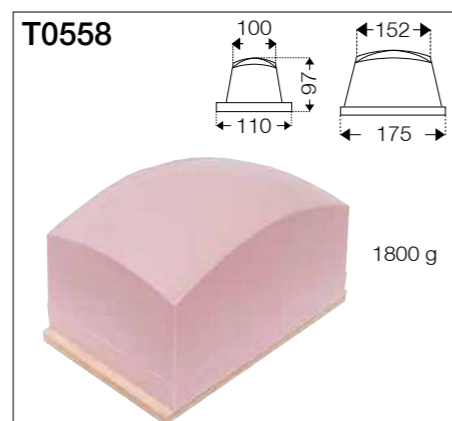
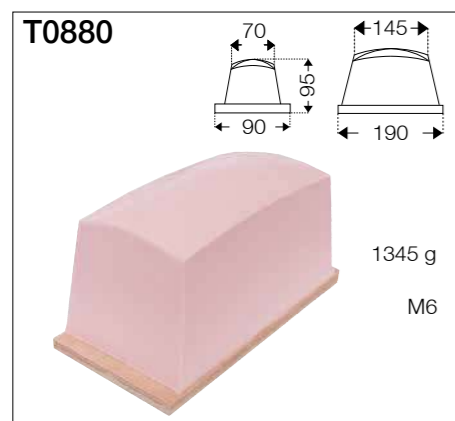
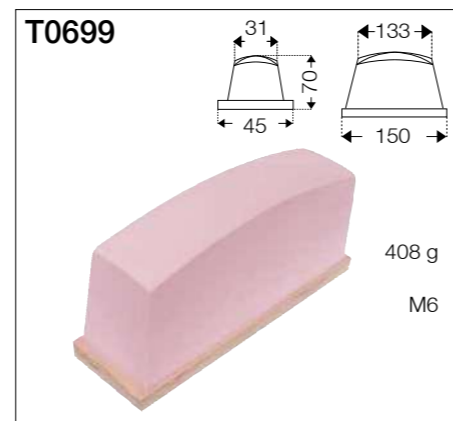
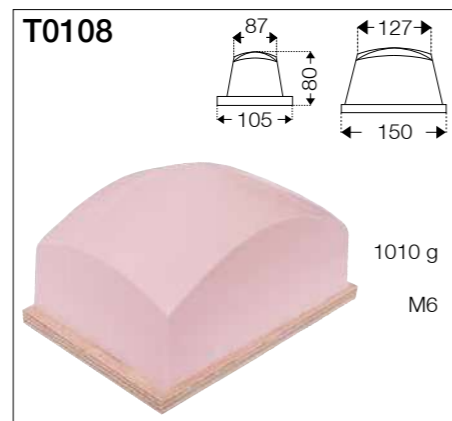
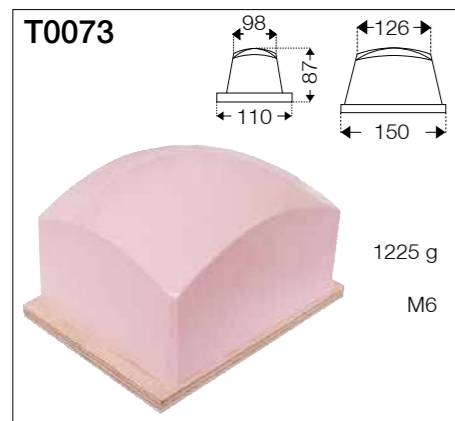
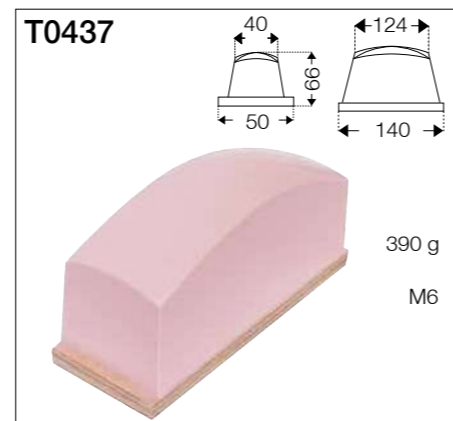
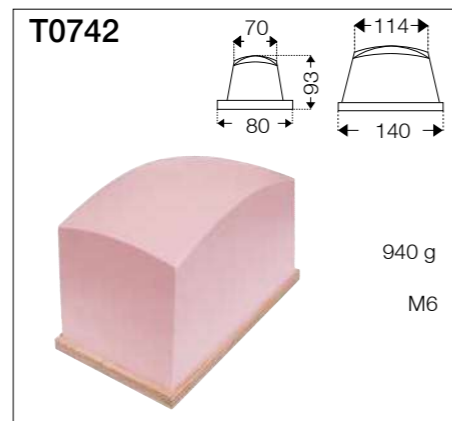
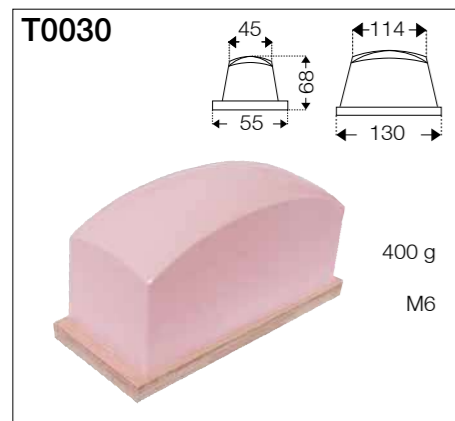
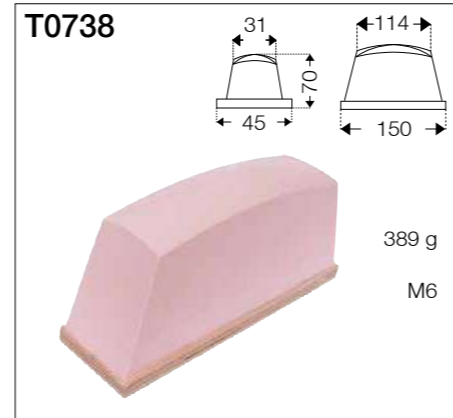
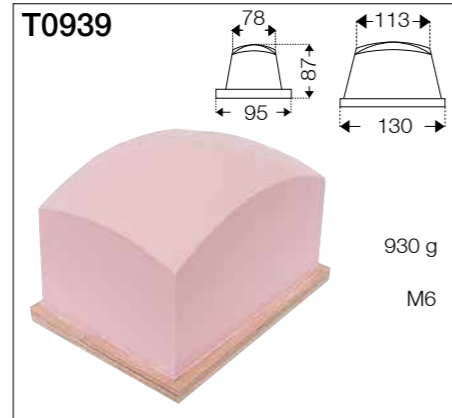
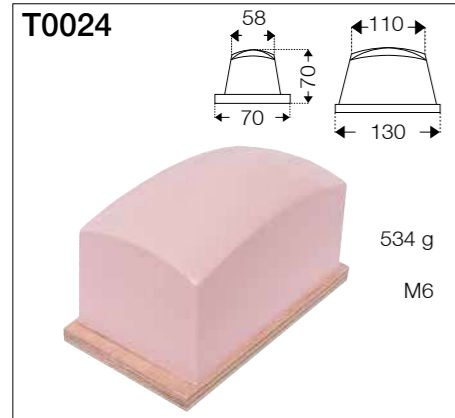
RECTANGULAR standard



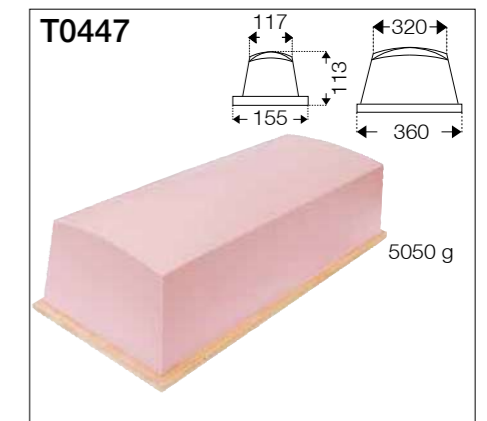
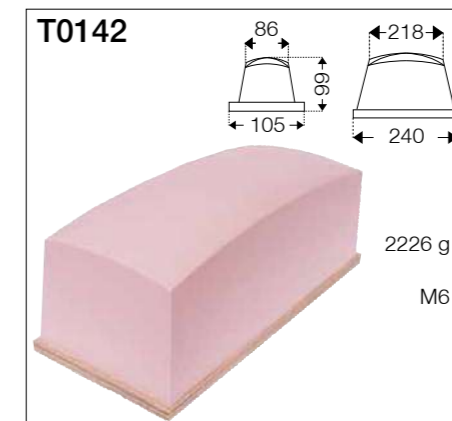
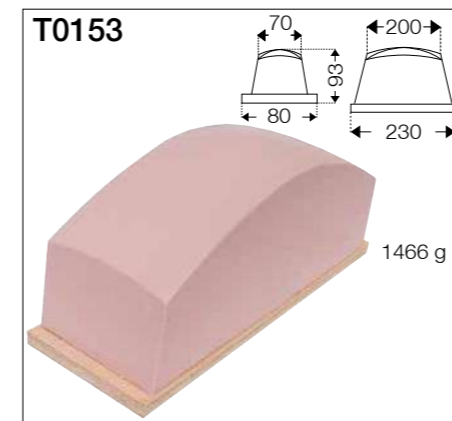
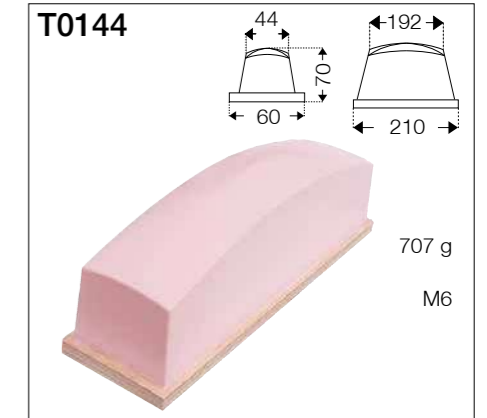
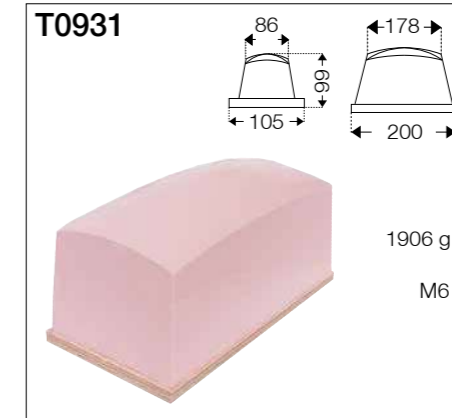
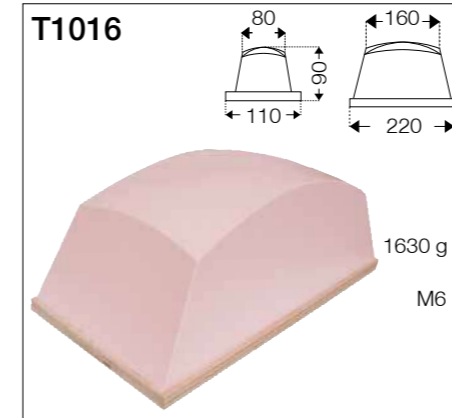
RECTANGULAR standard



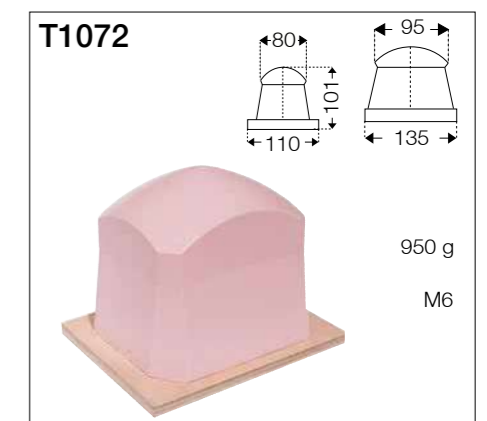
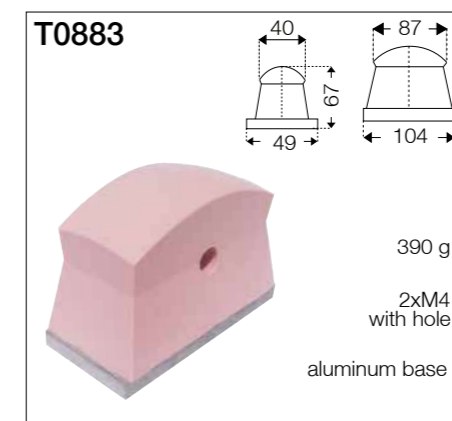
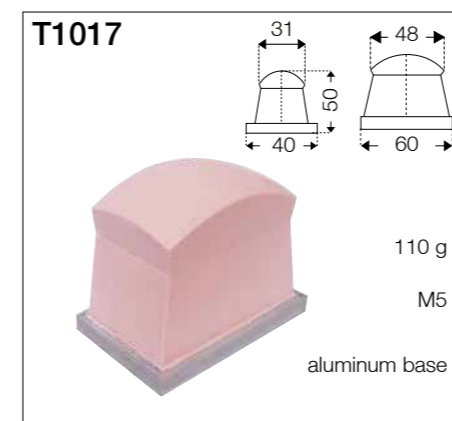
RECTANGULAR standard



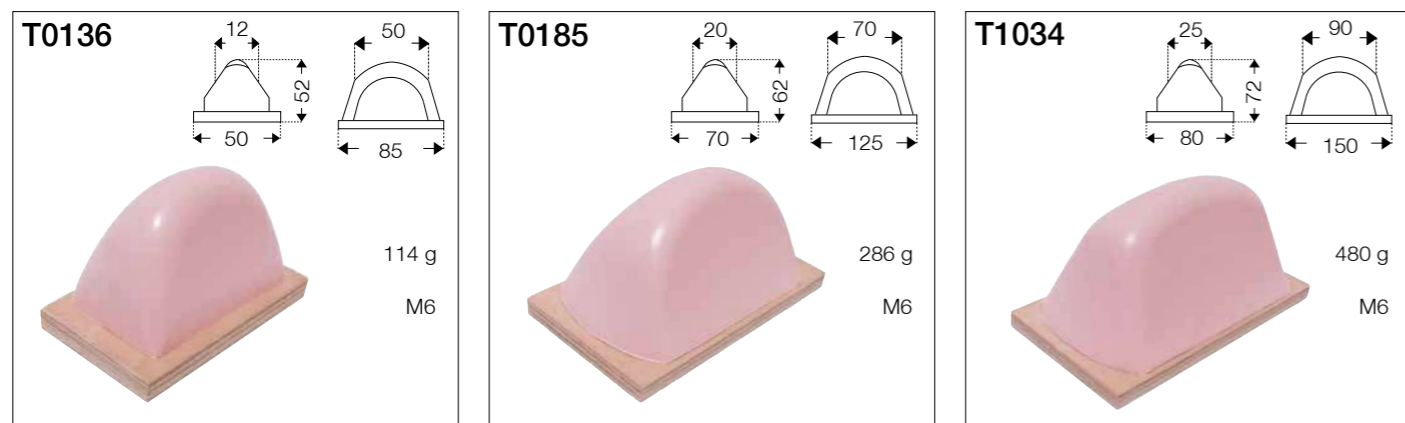
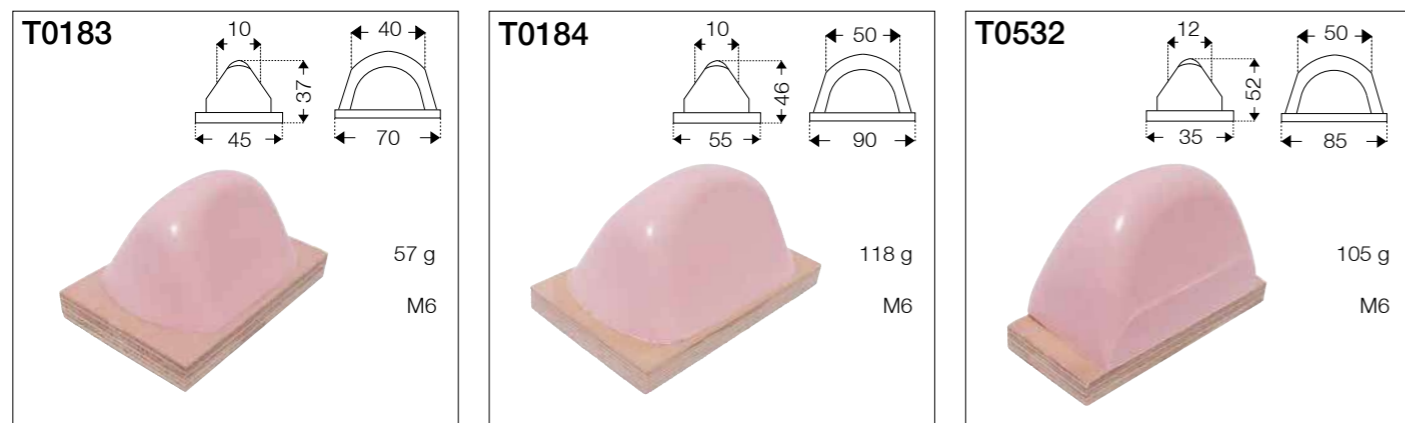
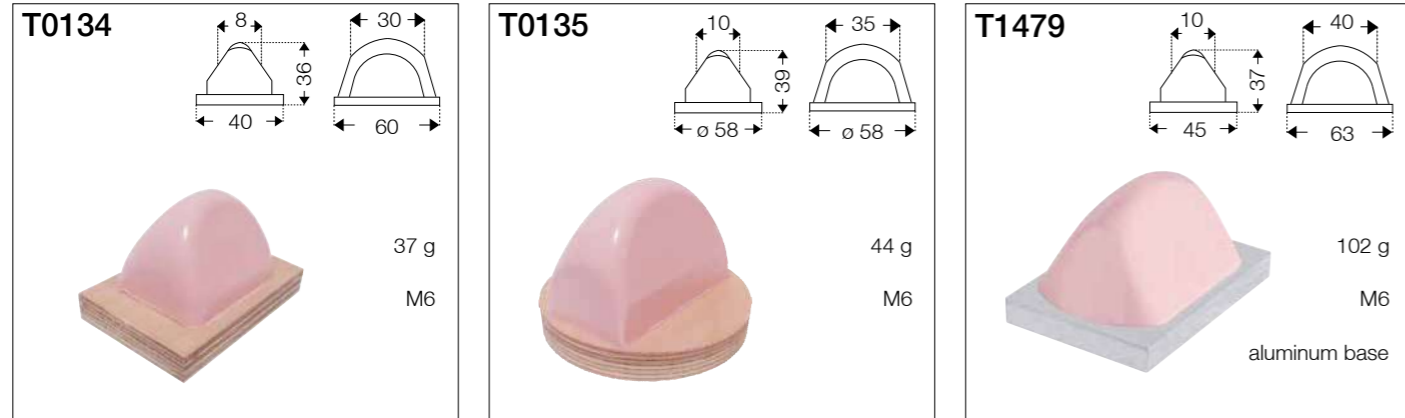
RECTANGULAR standard



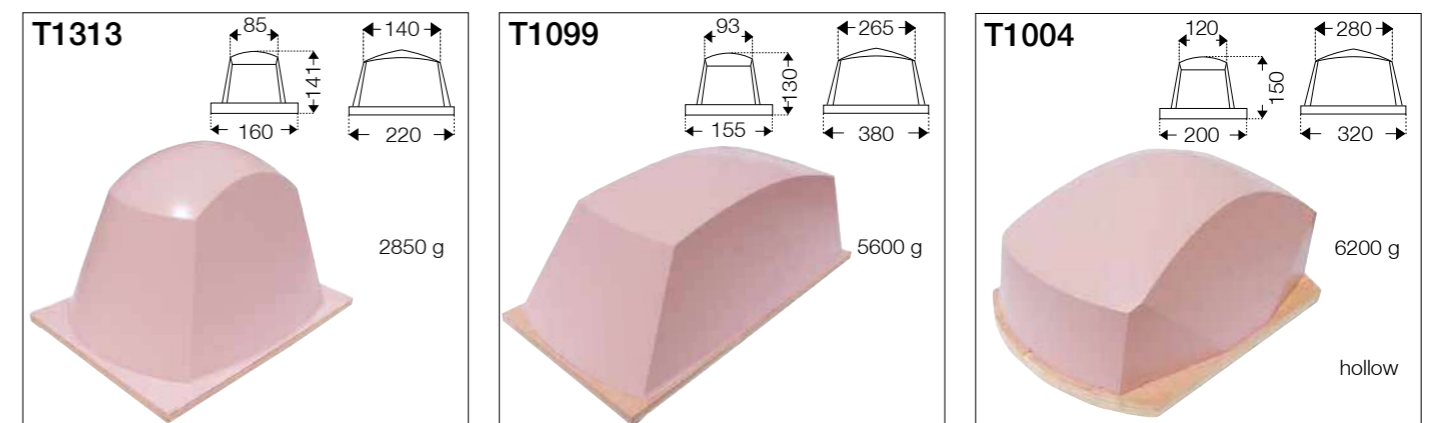
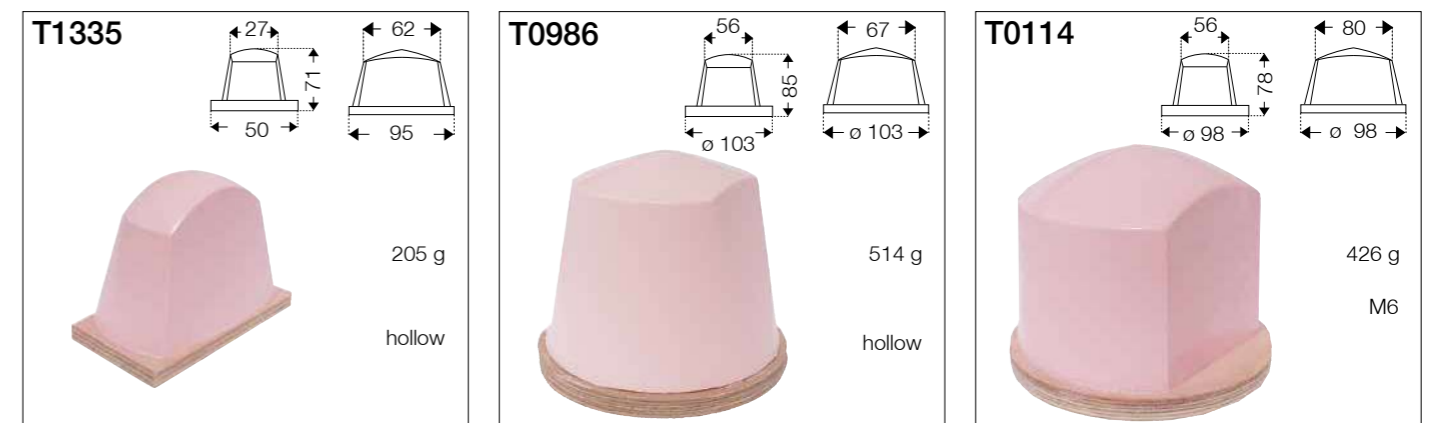
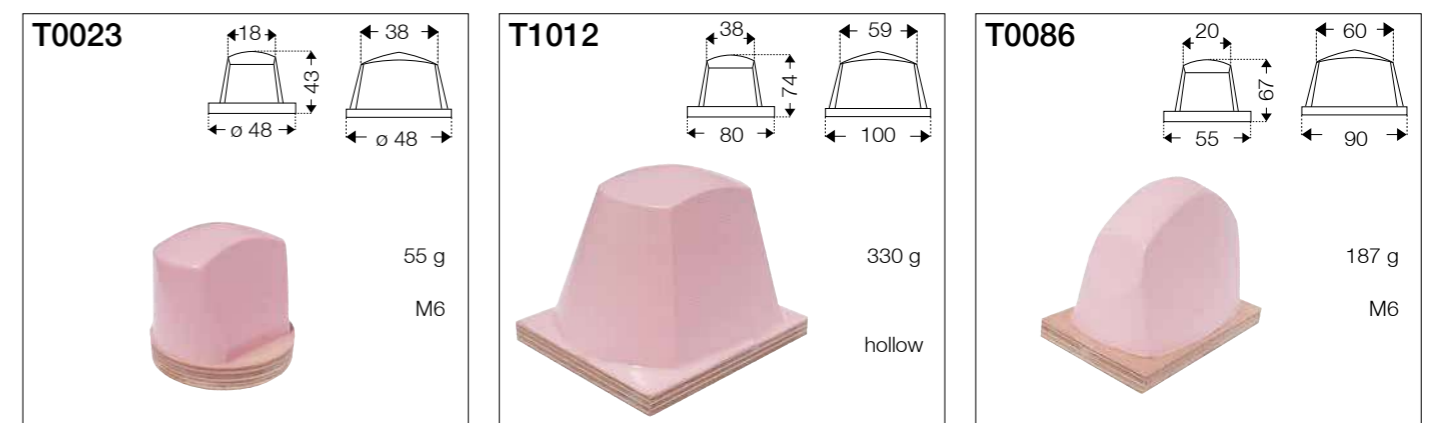
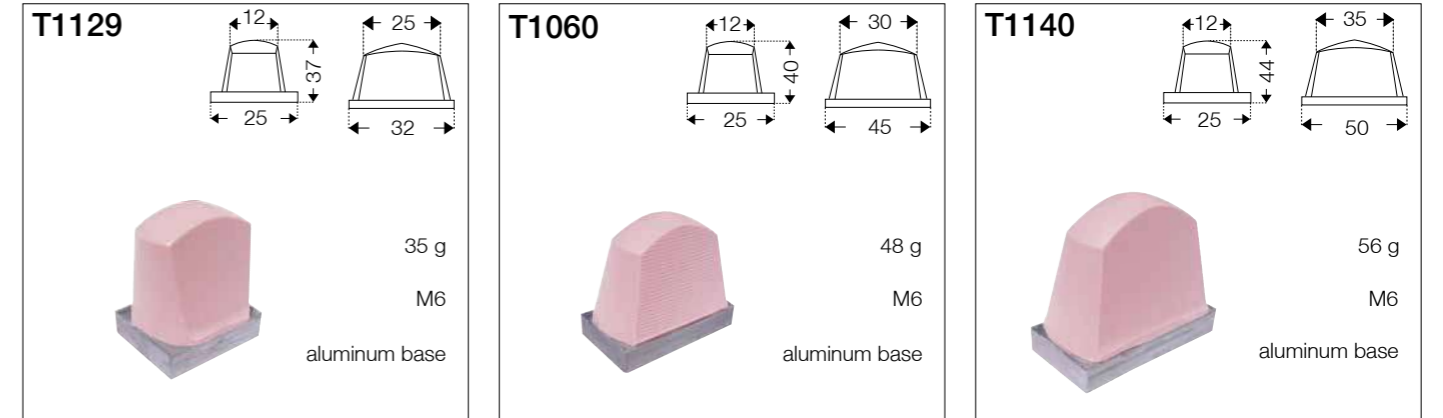
RECTANGULAR with a waist



RECTANGULAR fish belly



RECTANGULAR with domed print surface



SQUARE

T1242

11/11
26
ø 26

17 g
M6
aluminum base

T0842

14/14
25
17/17

15 g
M5
aluminum base

T0045

18/18
35
ø 43

19 g
M6

T0506

24/24
48
35/35

75 g
M5
aluminum base

T0062

34/34
47
ø 58

90 g
M6

T0390

44/44
60
55/55

147 g
M6

T0763

45/45
44
60/85

121 g
M6

T0307

55/55
50
70/80

190 g
M6

T0051

55/55
67
70/80

297 g
M6

T0022

60/60
66
75/80

300 g
M6

T0101

60/60
65
70/70

283 g
M6

T0028

105/105
87
120/120

1016 g
M6

SPECIAL PADS

Some applications place special demands to the printing pad. Different factors are responsible for this: e.g. the form of the to be printed part and the location for the print image. An uneven surface near the print image usually calls for a specially designed printing pad. Also the clustering of smaller pads to a pad combination can be useful.

For the development of special pads printing trials must be done in close collaboration between the application engineers, the film office and the construction team. If none of the more than 2'000 available printing pads fits your needs, we are happy to develop, test and produce a pad specially for your application.



Pad holders slide supports, clamps, pad cones



Slide supports

25 10 68 w = 58 mm l = 100 mm	35 10 68 w = 75 mm l = 100 mm	25 20 68 w = 58 mm l = 90 mm
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Clamps

13 05 63 w = 48 / l = 50 mm M10	13 05 62 w = 48 / l = 50 mm M10 for TVV 50 00 17	35 05 63 w = 48 / l = 50 mm M16x1,5	35 12 63 w = 48 / l = 120 mm M16x1,5
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Stop clamps

700 035 342 w = 10 mm	13 05 61 w = 15 mm
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Pad cones

70 00 61 M10 pluggable pad holder	35 01 61 M16x1,5 nut threaded, screw-on
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Intermediary disc

701 927 038 ø = 45 mm M6	701 927 039 ø = 60 mm M6
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Pad holders pluggable or with thread

Pad holder extra small

70 45 67 h = 45 mm M10	70 45 65 h = 45 mm M6	70 60 64 h = 60 mm M10	70 60 65 h = 60 mm M6
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Pad holders narrow with thread

35 50 63 h = 50 mm	35 70 63 h = 70 mm
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Pad holder central with thread

35 25 62 h = 26 mm	35 30 62 h = 30 mm	35 40 62 h = 40 mm M6	35 50 62 h = 50 mm M6	35 60 62 h = 60 mm M6	35 70 62 h = 70 mm M6	35 25 63 h = 26 mm ø = 100 mm
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Pad holder narrow

70 27 63 h = 27 mm	70 45 63 h = 45 mm	70 60 63 h = 60 mm
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Pad holder central

70 27 61 h = 27 mm	70 45 61 h = 45 mm M6	70 60 61 h = 60 mm M6
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Pad holder eccentric

70 27 62 h = 27 mm	70 45 62 h = 45 mm M6	70 60 62 h = 60 mm M6
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Double pad holder

70 75 65
for TVV 70 00 22 for 2-colour printing

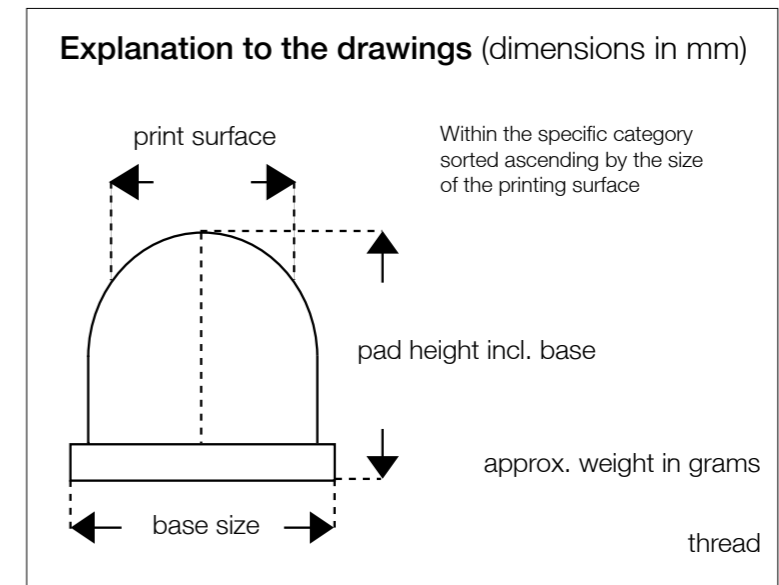


Index of pad numbers

No.	page	No.	page	No.	page
0001	15	0074	18	0163	25
0002	13	0075	25	0166	24
0003	13	0077	23	0183	28
0004	15	0078	22	0184	28
0005	15	0081	19	0185	28
0007	15	0082	24	0189	21
0008	15	0083	25	0190	24
0009	14	0084	21	0196	22
0010	13	0085	16	0198	10
0011	11	0086	29	0199	10
0017	23	0087	18	0212	17
0020	17	0088	19	0213	17
0021	18	0090	11	0253	21
0022	30	0091	17	0254	22
0023	29	0092	10	0274	21
0024	26	0093	10	0303	23
0025	14	0095	12	0307	30
0026	14	0097	19	0326	18
0027	11	0098	11	0328	11
0028	30	0101	30	0346	22
0030	26	0105	15	0360	24
0040	22	0107	25	0363	12
0042	13	0108	26	0365	24
0044	18	0109	17	0368	10
0045	30	0111	19	0383	12
0047	14	0114	29	0388	17
0048	23	0115	24	0390	30
0051	30	0118	18	0395	23
0053	16	0119	23	0401	18
0055	14	0120	13	0403	23
0056	24	0132	21	0405	10
0058	14	0134	28	0406	17
0059	25	0135	26	0407	17
0060	14	0136	28	0409	23
0061	25	0137	23	0410	21
0062	30	0140	24	0415	12
0063	14	0141	19	0416	18
0064	16	0142	27	0426	12
0065	14	0144	27	0431	13
0066	25	0151	24	0437	26
0069	19	0153	27	0447	26
0070	17	0154	25	0450	14
0071	23	0156	22	0457	18
0072	22	0159	11	0458	12
0073	26	0162	24	0459	21

Index of pad numbers

No.	page	No.	page	No.	page	No.	page
0501	17	0883	27	1189	12		
0506	30	0885	22	1205	15		
0522	12	0886	16	1209	14		
0525	12	0894	16	1213	12		
0526	13	0918	18	1234	23		
0532	28	0931	27	1242	30		
0539	12	0939	26	1272	21		
0542	18	0971	26	1277	20		
0545	10	0986	29	1278	20		
0548	10	0999	13	1290	20		
0558	26	1004	29	1292	20		
0570	16	1005	15	1299	20		
0579	19	1012	29	1307	20		
0600	13	1013	16	1309	20		
0605	12	1014	16	1311	20		
0610	19	1016	27	1313	29		
0628	11	1017	27	1325	10		
0633	22	1031	22	1332	20		
0636	11	1034	28	1335	29		
0637	11	1060	29	1344	15		
0646	18	1072	27	1389	15		
0699	26	1086	13	1406	15		
0700	24	1099	29	1416	20		
0709	25	1120	10	1422	20		
0722	11	1129	29	1426	21		
0723	13	1140	29	1466	11		
0738	26	1144	13	1479	28		
0742	26	1156	21	1542	10		
0745	17	1179	10	1700	11		
0752	23						
0756	25						
0762	24						
0763	30						
0765	22						
0767	21						
0770	17						
0774	19						
0781	14						
0801	21						
0820	25						
0834	15						
0842	30						
0844	22						
0864	16						
0867	25						
0880	26						





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