

Supplier	Brand	Type	Textile Layer	Geometry of the Lines	Pimple Shape	Pimple Surface	Uncut Size	Uncut Weight g	Thickness Total (max. 2.0 mm)	Base Thickness	Pimple Height H (min. 1.0 mm)	Pimple Diameter a (1.0-2.2 mm)	Aspect Ratio H/D (max. 1.1)	Pimple Distance b (1.0-2.0 mm)	Pimple Spacing a+b in cm	Pimple Density cm2 (10-30 pips/cm2)	Pimple Hardness	Pimple Grip	Push	Drive	Loop	Chop	Dis	Block	Off	Def	All
61second	Wind FT OX	MEDIUM (3)	no	horizontal	straight	ribbed	168x172	29	1.90	0.35	1.55	1.65	0.94	1.35	0.30	13	82	38									
AIR	Panamera	MEDIUM (2)	no	horizontal	conical	ribbed			1.35	0.35	1.00	1.80	0.56	1.40	0.32	11	98	22									
AIR	Upupupup (US) OX	LONG (4)	no	horizontal	straight	ribbed	180x179	21	2.00	0.30	1.70	1.60	1.06	1.10	0.27	16	75	27									
AIR	Classique	MEDIUM (3)	no	horizontal	straight	ribbed			1.75	0.15	1.60	1.80	0.89	1.30	0.31	12	86	37									
AMSIR	Surprise	LONG (4)	no	horizontal	straight	even			2.00	0.30	1.70	1.60	1.06	1.10	0.27	16	64	30									
AMSIR	Flutter	LONG (4)	no	horizontal	straight	ribbed			2.00	0.30	1.70	1.60	1.06	1.10	0.27	16	72	34									
AMSIR	Sensation	LONG (4)	no	horizontal	straight	ribbed			2.00	0.30	1.70	1.60	1.06	1.10	0.27	16	68	35									
ANDRO	Classic	MEDIUM (2)	yes	vertical	straight	ribbed			1.50	0.50	1.00	1.50	0.67	1.00	0.25	18	87	31									
ANDRO	Chaos	MEDIUM (3)	no	horizontal	straight	ribbed			2.00	0.60	1.40	1.50	0.93	1.30	0.28	15	81	38									
ARMSTRONG	Attack 8 Type L OX	MEDIUM (2)	no	vertical	conical	ribbed	181x168		1.40	0.40	1.00	1.80	0.56	1.20	0.30	13	96	20	9.2	9.3	9.4	9.3	9.24	9.30	9.36	9.30	9.30
ARMSTRONG	Attack 8 Type L 1.8	MEDIUM (2)	no	vertical	conical	ribbed	181x168		1.40	0.40	1.00	1.80	0.56	1.20	0.30	13	96	20	9.1	9.2	9.3	9.1	9.14	9.18	9.26	9.12	9.18
ARMSTRONG	Attack 3 Type L OX	SHORT (1)	no	vertical	conical	ribbed	182x167	29	1.50	0.50	1.00	2.00	0.50	1.20	0.32	11	94	23									
ARMSTRONG	Attack 3 Type M	MEDIUM (2)	no	vertical	conical	ribbed	182x167		1.40	0.40	1.00	1.70	0.59	1.30	0.30	13	96	28									
ARMSTRONG	Attack 8 Type M	MEDIUM (3)	no	vertical	conical	ribbed	180x169		1.70	0.50	1.20	1.50	0.80	1.50	0.30	13	94	35									
ARMSTRONG	Long Pimple OX	LONG (4)	no	horizontal	conical	ribbed	180x172	24	1.85	0.35	1.50	1.40	1.07	1.60	0.30	13	56	36									
ARMSTRONG	Twister EXT	LONG (4)	no	vertical	straight	ribbed			2.00	0.50	1.50	1.40	1.07	1.60	0.30	13	97	36									
ARMSTRONG	Attack 8 Type M EXX	MEDIUM (3)	no	vertical	conical	ribbed	182x169		1.80	0.50	1.30	1.70	0.76	1.30	0.30	13	94	38									
ARMSTRONG	Twister 1.5	LONG (4)	no	vertical	straight	ribbed	180x167	39	1.90	0.30	1.60	1.40	1.14	1.30	0.27	16	54	38									
AVALOX	Mo	MEDIUM (3)	no	horizontal	straight	ribbed			2.20	0.50	1.70	1.80	0.94	1.20	0.30	13	90	37									
BOMB	Hammer 2.0	SHORT (1)	no	horizontal	conical	ribbed			1.40	0.40	1.00	2.10	0.48	1.10	0.32	11	95	18	9.2	9.3	9.3	9.2	9.22	9.28	9.28	9.22	9.25
BOMB	Hammer OX	SHORT (1)	no	horizontal	conical	ribbed			1.40	0.40	1.00	2.10	0.48	1.10	0.32	11	95	18	9.1	9.2	9.4	9.2	9.16	9.20	9.34	9.20	9.23
BOMB	King Roc	MEDIUM (2)	no	horizontal	straight				1.60	0.40	1.20	2.00	0.60	1.00	0.30	13	86	25									
BOMB	Talent	LONG (4)	no	horizontal	straight	even			1.90	0.25	1.65	1.50	1.10	1.25	0.28	15	83	26									
BUTTERFLY	Orthodox	MEDIUM (2)	yes	vertical	conical	ribbed			1.80	0.80	1.00	1.80	0.56	1.20	0.30	13	93	29									
BUTTERFLY	Magnitude	MEDIUM (3)	no	vertical	straight	ribbed			1.85	0.35	1.50	1.60	0.94	1.40	0.30	13	84	33									
BUTTERFLY	Feint Ox	LONG (4)	no	horizontal	straight	ribbed			1.90	0.40	1.50	1.50	1.00	1.30	0.28	15	93	37									
BUTTERFLY	Feint Soft	LONG (4)	no	horizontal	straight	ribbed			1.90	0.40	1.50	1.50	1.00	1.30	0.28	15	60	37									
BUTTERFLY	Feint Long III	LONG (4)	no	horizontal	straight	ribbed			2.00	0.30	1.70	1.80	1.06	1.10	0.27	16	75	37									
BUTTERFLY	Feint AG	LONG (4)	no	horizontal	straight	ribbed			1.80	0.30	1.50	1.50	1.00	1.30	0.28	15	86	40									
BUTTERFLY	Feint Long II	LONG (4)	no	horizontal	straight	ribbed			1.80	0.30	1.50	1.50	1.00	1.40	0.29	14	83	40									
CTT	Pogo	LONG (4)	no	horizontal	straight	even			1.90	0.30	1.60	1.50	1.07	1.20	0.27	16	83	36									
DAWEI	388C-1 OX	MEDIUM (3)	no	horizontal	straight	ribbed			1.90	0.30	1.60	1.90	0.84	1.10	0.30	13	91	20	8.9	9.0	9.1	8.9	8.94	8.98	9.06	8.92	8.98
DAWEI	388C-1 1.8	MEDIUM (3)	no	horizontal	straight	ribbed			1.90	0.30	1.60	1.90	0.84	1.10	0.30	13	91	20	8.8	8.9	9.1	9.2	8.86	8.96	9.04	9.14	9.00
DAWEI	Saviga V	LONG (4)	no	horizontal	straight	ribbed			2.00	0.30	1.70	1.50	1.13	1.20	0.27	16	87	31									
DAWEI	388D-1	LONG (4)	no	horizontal	straight	ribbed			1.90	0.20	1.70	1.50	1.13	1.20	0.27	16	82	32									
DAWEI	388D	LONG (4)	no	horizontal	straight	even			2.00	0.30	1.70	1.50	1.13	1.40	0.29	14	88	37									
DER MATERIALSPEZIALIST	Predator 1.3 mm	MEDIUM (3)	no	horizontal	straight	ribbed	170x171	23	1.95	0.40	1.55	1.60	0.97	1.70	0.33	11	86	22	9.1	9.3	9.2	9.2	9.12	9.28	9.18	9.22	9.20
DER MATERIALSPEZIALIST	Predator OX	MEDIUM (3)	no	horizontal	straight	ribbed	170x171	23	1.95	0.40	1.55	1.60	0.97	1.70	0.33	11	86	22	9.0	9.3	9.1	9.2	9.02	9.28	9.08	9.22	9.15
DER MATERIALSPEZIALIST	L.S.D.-1.0	LONG (4)	no	horizontal	straight	even	170x170	32	1.95	0.20	1.75	1.60	1.09	1.40	0.30	13	62	23	9.2	9.1	8.7	8.9	9.10	9.06	8.80	8.94	8.98
DER MATERIALSPEZIALIST	Superwall OX	LONG (4)	no	horizontal	straight	ribbed	175x168	24	2.00	0.35	1.65	1.65	1.00	1.15	0.28	15	82	21	9.1	8.9	9.2	9.3	9.12	8.98	9.18	9.22	9.13
DER MATERIALSPEZIALIST	Undertaker OX	LONG (4)	no	horizontal	straight	even	170x170	32	1.80	0.30	1.50	1.50	1.00	1.50	0.30	13	82	18	9.1	8.8	9.0	9.2	9.08	8.88	9.02	9.12	9.03
DER MATERIALSPEZIALIST	Breakout 1.5	SHORT (1)	no	vertical	straight	ribbed	168x168	42	1.40	0.40	1.00	2.00	0.50	0.80	0.28	15	88	34	8.9	8.8	9.0	8.7	8.92	8.78	8.88	8.72	8.85
DER MATERIALSPEZIALIST	Helicat OX	MEDIUM (2)	no	horizontal	straight	ribbed			1.55	0.35	1.20	1.90	0.63	1.00	0.29	14	92	18					0.00	0.00	0.00	0.00	0.00
DER MATERIALSPEZIALIST	Rebellion OX	LONG (4)	no	horizontal	straight	ribbed	170x168	22	1.90	0.30	1.60	1.60	1.00	1.30	0.29	14	83	27					0.00	0.00	0.00	0.00	0.00
DHS	C-8	LONG (4)	no	horizontal	straight	ribbed			2.10	0.40	1.70	1.50	1.13	1.60	0.31	12	92	35									
DHS	Cloud & Fog III	LONG (4)	no	horizontal	straight	ribbed			2.10	0.40	1.70	1.70	1.00	1.40	0.31	12	85	36									
DHS	C-7	MEDIUM (2)	no	vertical	straight	ribbed			1.80	0.50	1.30	1.80	0.72	1.30	0.31	12	98	39									
DINGO SWISS	Ding Yi 1.8 mm	SHORT (1)	no	horizontal	conical	ribbed			1.50	0.40	1.10	2.20	0.50	1.00	0.32	11	94	30	9.1	9.3	9.4	9.3	9.16	9.30	9.34	9.30	9.28
DINGO SWISS	Zik-Zak OX	LONG (4)	no	horizontal	straight	ribbed			2.00	0.40	1.60	1.50	1.07	1.65	0.32	12	88	30	9.3	9.2	9.2	9.3	9.28	9.22	9.22	9.28	9.25
DONIC	Spike P1 1.5	LONG (4)	no	horizontal	straight	ribbed	171x165		1.80	0.30	1.50	1.50	1.00	1.20	0.27	16	73	32	9.2	9.1	9.1	9.2	9.18	9.12	9.12	9.18	9.15
DONIC	Spike P1 OX	LONG (4)	no	horizontal	straight	ribbed	171x165	25	1.80	0.30	1.50	1.50	1.00	1.20	0.27	16	73	32	9.2	9.0	9.2	9.1	9.20	9.02	9.20	9.08	9.13
DONIC	Spike P2 OX	LONG (4)	no	horizontal	straight	ribbed	171x165	24	1.95	0.35	1.60	1.60	1.00	1.10	0.27	16	78	38	9.0	9.0	9.1	9.3	9.02	9.06	9.08	9.24	9.10
DONIC	Akkadi L2	LONG (4)	no	horizontal	straight	even			2.00	0.30	1.70	1.60	1.06	1.20	0.28	15	89	33									
DONIC	Alligator Def	LONG (4)	no	vertical	straight	ribbed			1.90	0.40	1.50	1.45	1.03	1.55	0.30	13	66	34									
DONIC	Piranja FD-TEC	LONG (4)	no	vertical	straight	ribbed			2.00	0.40	1.60	1.50	1.07	1.30	0.28	15	78	35									
DONIC	Akkadi L1	LONG (4)	no	horizontal	straight	ribbed			2.00	0.30	1.70	1.60	1.06	1.10	0.27	16	87	36									
DOUBLE FISH	820A	MEDIUM (2)	no	horizontal	conical	ribbed			1.40	0.40	1.00	1.80	0.56	1.20	0.30	13	95	18	9.3	9.4	9.5	9.3	9.34	9.38	9.46	9.32	9.39
DOUBLE FISH	1615 Soft	LONG (4)	no	horizontal	straight	ribbed			1.90	0.35	1.55	1.40	1.11	1.30	0.27	16	57	29									
DOUBLE FISH	1615 Hard	MEDIUM (3)	no	horizontal	straight	ribbed			1.90	0.35	1.55	1.65	0.94	0.85	0.25	18	96	37									
DR NEUBAUER	Killer 1.5	MEDIUM (2)	no	vertical	straight	ribbed			1.70	0.40	1.30	2.00	0.65	1.00	0.30	13	84	10	9.0	9.1	8.9	9.0	8.98	9.08			9.00
DR NEUBAUER	Leopard	MEDIUM (2)	no	horizontal	conical	ribbed			1.5																		



SUPPLIER	BRAND	REMARK	HEAD SIZE (mm)	WEIGHT (g)	WOOD FLEXIBILITY	WOOD TOUCH (Hz)	apt GRIP of the pimples
ANDRO	Fibercomp DEF		159x156	82	stiff	1341	36-50
BTY	Petr Korbel OFF		159x153	90	stiff	1263	36-50
BTY	Joo Se Hyuk		165x155	101	stiff	1166	32-35
BTY	Defence Pro		166x151	97	stiff	1073	22-31
DER MATERIALSPEZIALIST	Blockbuster		157x152	70	stiff	1275	36-50
DHS	Magic D01 DEF		166x165	94	stiff	1111	32-35
DINGO SWISS	Yin Yan	combo blade	165x156	72	stiff	1313	36-50
DONIC	Defplay Classic V3		163x156	64	elastic, very	1165	32-35
DONIC	Defplay Senso V3		164x157	75	medium	1106	22-31
DR NEUBAUER	Barricade DEF		167x163	57	elastic	1348	36-50
DUNLOP	Barna 3-ply		179x158	121	stiff	1076	22-31
FRIENDSHIP	729 W-1		166x159	94	medium	1033	22-31
JOOLA	Chen Weixing		165x161	94	stiff	1095	22-31
JOOLA	T. Hold		163x155	73	medium	1080	22-31
JUIC	Eurocut		165x159	102	medium	1029	22-31
JUIC	Euro-Chopper		171x163	113	stiff	968	1-21
LKT	Toxic 5		165x160	89	medium	1110	32-35
LKT	Toxic 3		165x159	70	elastic, very	1071	22-31
MILKY WAY (YINHE)	LQ-1		165x154	94	stiff, very	1237	32-35
MILKY WAY (YINHE)	980		165X153	80	stiff	1164	32-35
MILKY WAY (YINHE)	Schild	combo blade	166x155	81	medium	1141	32-35
MILKY WAY (YINHE)	J-1		159x150	91	stiff, very	1088	22-31
NITTAKU	New Defence		159x156	84	stiff	1230	32-35
NITTAKU	Shake Defence		168x162	92	stiff	1174	32-35
NITTAKU	Jie Schöpp	combo blade	160x158	81	elastic	933	1-21
NORDMARK	Backstage DEF		160x155	80	medium	1022	22-31
STIGA	Flisan 60s		182x168	108	elastic	1050	22-31
STIGA	Hornet (red bowman, 5.3 mm)		170x155	99	medium	1046	22-31
STIGA	Hornet (red bowman, 5.4 mm)	test blade	171x157	101	medium	1029	22-31
STIGA	Tube DEF		162x158	79	elastic, very	918	1-21
STIGA	Hornet (red bowman, 5.1 mm)		172x158	100	elastic	904	1-21
STIGA	Hornet (yellow bowman, 5.0 mm)		170x156	95	elastic, very	903	1-21
STIGA	Hornet (black bowman, 4.7 mm)		171x158	97	elastic, very	866	1-21
STIGMA	Tage Flisberg Mästar Racket 40s		170X165	138	stiff, very	1300	36-50
TIBHAR	CO-S 3 Defensive		152x149	80	stiff, very	1406	36-50
TIBHAR	Defense Plus		154x155	71	medium	1268	36-50
TIBHAR	Stratus Powerdefense		160x154	89	stiff	1183	32-35
TISCHTENNIS-MANUFAKTUR	Hawk	“Barna blade replica”	169x152	97	stiff	1270	36-50
TISCHTENNIS-MANUFAKTUR	KFD Advance DEF+		165x158	85	stiff	1192	32-35
TSP	x-Series Defensive Combi	combo blade	162x155	77	elastic	895	1-21
VALOR	3-ply wood		169x156	97	medium	1052	22-31
VICTAS	Koji Matsushita DEF		164x155	82	elastic	1044	22-31