No.	Feature Name	Machining CAD (stl)	Model Parameters	Parameters Range (mm)
1	Round through hole		R C <sub>x</sub> C <sub>y</sub>	[5, 40] [10+R, 90-R] [10+R, 90-R]
2	Round blind hole		$R$ $C_x$ $C_y$ $H_1$ $H_2$ $\theta$	[5, 40] [10+R, 90-R] [10+R, 90-R] [14.5, 70] [5.5, 10] 360°
3	Cylindrical countersunk hole		$egin{array}{c} R_1 \\ R_2 \\ C_x \\ C_y \\ H_1 \end{array}$	[20, 40] [5, 18] [10+R <sub>1</sub> , 90-R <sub>1</sub> ] [10+R <sub>1</sub> , 90-R <sub>1</sub> ] [10, 50]
4	Tapered countersunk hole		$R_1$ $R_2$ $C_x$ $C_y$ $\theta_1$ $\theta_2$	[20, 35] [5, 15] [15+R <sub>1</sub> , 85-R <sub>1</sub> ] [15+R <sub>1</sub> , 85-R <sub>1</sub> ] 45° 360°
5	Round stepped hole		$R_1$ $R_2$ $C_x$ $C_y$ $\theta$ $H$	[20, 35] [10, 15] [15+R <sub>1</sub> , 85-R <sub>1</sub> ] [15+R <sub>1</sub> , 85-R <sub>1</sub> ] 135° [20, 50]
6	A-center hole		$R_1\\R_2\\D\\\theta_1\\\theta_2$	[8, 12] [4, 6] [20, 30] 60° 120°

		$C_{x}$	[40, 60]
		$R_1$	[10, 20]
7	Tration of state	$R_2$	[25, 35]
7	T-through slot	$\mathrm{H}_1$	[15, 25]
		$\mathrm{H}_2$	[30, 40]
		D	100
		$C_{x}$	[40, 60]
		$R_1$	[20, 35]
		$R_2$	[3, 5]
8	V-through slot	θ	45°
		Н	[3, 5]
		D	100
		 D	100
		$C_x$	[30, 70]
9	Rounded groove	R	[15, 25]
	Rounded groove	Н	[15, 25]
		D	100
		C	[45, 55]
		$C_{x}$	[45, 55]
1.0	Swallowtail	$R_1$	[15, 20]
10	groove	$R_2$	[30, 35]
		θ	[130°, 135°]
		D	100
		$C_{x}$	[60, 90]
		R	[5, 10]
11	A-keyway	D	[30, 40]
		Н	[5, 10]
			[5, 75]
		$C_x$	[60, 90]
		W	[5, 10]
12	B-keyway	D	[30, 40]
		Н	[5, 10]
			[5, 20]
		$C_{x}$	[60, 90]
		W	[5, 10]
13	C-keyway	D	[30, 40]
		Н	[5, 10]
			. / -1

14	Half-moon keyway	C <sub>x</sub> R D H	[50, 100] [20, 25] 10 [10, 15]
15	Straight groove	$egin{array}{c} W_1 \ W_2 \ H \ D \end{array}$	[15, 25] [30, 50] [10, 20] 100
16	Ring-shaped groove	$R_1$ $R_2$ $C_R$ $C_x$ $C_y$ $H$	[16, 20] [10, 14] [30, 35] [25, 30] [30, 70] [5, 15]
17	Rectangular through step	H W	[15, 80] [15, 80]
18	General step	$egin{array}{c} L_1 \ W_1 \ D \end{array}$	[30, 50] [50, 70] [30, 50]
19	Shaft step	$egin{array}{c} R_{x1} \\ R_{x} \\ H_{1} \\ R_{y1} \\ R_{y} \\ H_{2} \end{array}$	[15, 20] 25 [50, 60] [12.5, 22.5] 25 [40, 50]
20	Boss	$R_1 \\ R_2 \\ C_x \\ C_y \\ h \\ H$	[20, 25] [10, 15] [35, 65] [35, 65] [85, 90] 100 - h

21	External cylindrical surface	D H	[45, 55] [120, 180]
22	Plane	L W H	[95, 105] [95, 105] [95, 105]
23	Round	$C_{x1}$ $C_{y1}$ $C_{x2}$ $C_{y2}$ $D$	[15, 25] [15, 25] [15, 25] [15, 25] 100
24	Chamfer	$C_{x1}$ $C_{y1}$ $C_{x2}$ $C_{y2}$ $D$	[15, 25] [15, 25] [15, 25] [15, 25] 100
25	Rounding	R D	[15, 20] 100
26	Spherical crown	h R θ	[55, 70] 100 – h 180°
27	Convex hull	h L W H R	[85, 90] [50, 60] [25, 30] 100 – h

28	External screw thread	Number of threads	[40, 60]
29	Internal screw thread	Number of threads $D_2$	[40, 60] [25, 35]
30	General removal of volume	$egin{array}{c} L_{x1} \\ L_{x2} \\ L_{y2} \\ L_{x3} \\ D \end{array}$	[30, 60] [20, 50] [30, 60] [50, 70] [40, 60]
31	Triangular rib reinforcement	$W_1\\D\\L\\H\\D_1$	[40, 60] [40, 60] [30, 35] [30, 35] [15, 20]
32	Closed Pocket	L W D R	[25, 30] [35, 40] [40, 60] [35, 40]
33	Opened Pocket	L L <sub>1</sub> D	[10, 15] [75, 80] [40, 60]