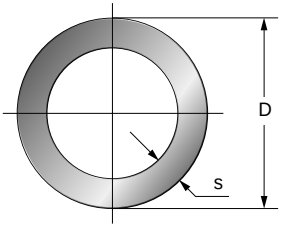
The right tooth pitch for sawing pipes

Our WIKUS formula helps you to calculate the right tooth pitch. In the table below you will find also find the most important dimensions.



$$T_z = \frac{508}{2s \sqrt[4]{(D-s)4s}}$$

T_z = tooth pitch (tpi)
D = outer diameter (mm)
s = wall thickness (mm)

If you have to cut two or more tubes lying side by side please use this table in view of the double wall thickness.

wall sickness	tooth pitch T_z (tpi) outer diameter D of tube (mm)																
[mm]	20	40	60	80	100	120	150	200	300	400	500	600	700	800	900	1000	1500
2	14	14	14	14	14	14	10-14	10-14	8-12	8-12	6-10	6-10	5-8	5-8	5-8	5-8	5-8
3	14	14	10-14	10-14	10-14	10-14	8-12	8-12	6-10	6-10	5-8	5-8	5-8	4-6	4-6	4-6	4-6
4	14	14	10-14	10-14	8-12	8-12	8-12	8-12	5-8	5-8	4-6	4-6	4-6	4-6	4-6	4-6	3-4
5	14	10-14	10-14	10-14	8-12	8-12	8-12	6-10	5-8	5-8	4-6	4-6	4-6	4-6	3-4	3-4	3-4
6	14	10-14	10-14	8-12	8-12	8-12	8-12	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	3-4
8	14	10-14	8-12	8-12	8-12	6-10	6-10	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	2-3	2-3
10		8-12	6-10	6-10	6-10	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	2-3	2-3	2-3
12		8-12	6-10	6-10	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	3-4	2-3	2-3	2-3	2-3
15		8-12	6-10	5-8	5-8	4-6	4-6	4-6	3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3
20			6-10	5-8	4-6	4-6	4-6	3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3	2-3
30				4-6	4-6	4-6	3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3	2-3	1,4-2
50						3-4	3-4	3-4	2-3	2-3	2-3	2-3	2-3	2-3	1,4-2	1,4-2	1,4-2
75								2-3	2-3	2-3	2-3	2-3	1,4-2	1,4-2	1,4-2	1,4-2	1,4-2
100									2-3	2-3	1,4-2	1,4-2	1,4-2	1,4-2	1,4-2	1,4-2	0,75-1,25
150										2-3	1,4-2	1,4-2	1,4-2	1,4-2	1,4-2	0,75-1,25	0,75-1,25
200											1,4-2	1,4-2	1,4-2	1,4-2	0,75-1,25	0,75-1,25	0,75-1,25
250												1,4-2	1,4-2	0,75-1,25	0,75-1,25	0,75-1,25	0,75-1,25
300													1,4-2	0,75-1,25	0,75-1,25	0,75-1,25	0,75-1,25
350														0,75-1,25	0,75-1,25	0,75-1,25	0,55-0,75
400															0,75-1,25	0,75-1,25	0,55-0,75
450																0,75-1,25	0,55-0,75
500																	0,55-0,75