

Sprocket Information

The following data is offered as a guideline only.

The table below can be used to determine the largest tube diameter a particular sprocket can be welded onto and allow the chain to run without hitting the weld. Note the table has columns for tube diameters using a "standard weld" which allows for 1/2" of chain clearance and a column for "special weld" which allows for 1/4" of chain clearance. With a special process it is possible to decrease the height of the weld allowing a smaller sprocket on a larger tube diameter. The formula used for this table is:

$$P.D. - (1/2H + 1/2H + C.C. + C.C.) = \text{Largest tube diameter (S.W. or SP.W.)}$$

- P.D. = Pitch diameter of the sprocket
- H = Height of the side plate of the chain
- C.C. = Chain Clearance – Chain side plate to tube
- S.W. = Standard Weld
- SP.W. = Special Weld

#40 Chain and Sprocket

# of Teeth	Largest Tube Diameter S.W.	Largest Tube Diameter SP.W.
14	1.28	1.53
15	1.44	1.69
16	1.60	1.85
17	1.78	2.01
18	1.91	2.16
19	2.07	2.32
20	2.23	2.48
21	2.39	2.64
22	2.55	2.8
23	2.71	2.96
24	2.87	3.12

#50 Chain and Sprocket

# of Teeth	Largest Tube Diameter S.W.	Largest Tube Diameter SP.W.
14	1.73	1.98
15	1.92	2.17
16	2.12	2.37
17	2.32	2.57
18	2.48	2.73
19	2.71	2.96
20	2.91	3.16
21	3.11	3.36
22	3.31	3.56
23	3.51	3.76
24	3.70	3.95

#60 Chain and Sprocket

# of Teeth	Largest Tube Diameter S.W.	Largest Tube Diameter SP.W.
14	2.17	2.42
15	2.40	2.66
16	2.64	2.89
17	2.88	3.13
18	3.12	3.37
19	3.36	3.61
20	3.59	3.84
21	3.83	4.08
22	4.07	4.32
23	4.31	4.56
24	4.55	4.8

#80 Chain and Sprocket

# of Teeth	Largest Tube Diameter S.W.	Largest Tube Diameter SP.W.
14	3.06	3.31
15	3.38	3.63
16	3.69	3.94
17	4.01	4.26
18	4.33	4.58
19	4.64	4.89
20	4.96	5.21
21	5.28	5.53
22	5.59	5.84
23	5.91	6.16
24	6.23	6.48