

## PIPE SUPPORT

### FLEXIBLE COUPLINGS – RIGID COUPLINGS

Piping joined with grooved type couplings, like all other piping systems, requires support to carry the weight of pipes, equipment and fluid. Like all other methods of joining pipes, the support or hanging method must be such as to eliminate undue stresses on joints, piping and other components. Additionally, the method of support must be such as to allow movement of the pipes where required and to provide for other special requirements such as drainage, etc. as may be required by the designer. The support system for flexible mechanical grooved type pipe couplings must consider some of the special requirements of these couplings.

The tables show suggested maximum span between pipe supports for horizontal straight runs of standard weight steel pipe carrying water or similarly dense liquids. They are not intended to be used as specifications for all installations. These DO NOT apply where critical calculations are made or where there are concentrated loads between supports.

**Do not attach supports directly to the couplings. Support adjoining pipe and equipment only.**

### RIGID SYSTEMS

For Victaulic rigid coupling Styles 07, W07, 307, HP-70, 005, 009, and others, the Maximum Hanger Spacing below may be used.

Pipe Size		Suggested Maximum Span Between Supports Feet/meters					
Nominal Outside Dia. In./mm	Actual Outside Dia. In./mm	Water Service			Gas or Air Service		
		*	†	‡	*	†	‡
1 25	1.315 33,7	7 2,1	9 2,7	12 3,7	9 2,7	9 2,7	12 3,7
1 1/4 32	1.660 42,4	7 2,1	11 3,4	12 3,7	9 2,7	11 3,4	12 3,7
1 1/2 40	1.900 48,3	7 2,1	12 3,7	15 4,6	9 2,7	13 4,0	15 4,6
2 50	2.375 60,3	10 3,1	13 4,0	15 4,6	13 4,0	15 4,6	15 4,6
3 80	3.500 88,9	12 3,7	15 4,6	15 4,6	15 4,6	17 5,2	15 4,6
4 100	4.500 114,3	14 4,3	17 5,2	15 4,6	17 5,2	21 6,4	15 4,6
6 150	6.625 168,3	17 5,2	20 6,1	15 4,6	21 6,4	25 7,6	15 4,6
8 200	8.625 219,1	19 5,8	21 6,4	15 4,6	24 7,3	28 8,5	15 4,6
10 250	10.750 273,0	19 5,8	21 6,4	15 4,6	24 7,3	31 9,5	15 4,6
12 300	12.750 323,9	23 7,0	21 6,4	15 4,6	30 9,1	33 10,1	15 4,6
14 350	14.000 355,6	23 7,0	21 6,4	15 4,6	30 9,1	33 10,1	15 4,6
16 400	16.000 406,4	27 8,2	21 6,4	15 4,6	35 10,7	33 10,1	15 4,6
18 450	18.000 457,0	27 8,2	21 6,4	15 4,6	35 10,7	33 10,1	15 4,6
20 500	20.000 508,0	30 9,1	21 6,4	15 4,6	39 11,9	33 10,1	15 4,6
24 600	24.000 610,0	32 9,8	21 6,4	15 4,6	42 12,8	33 10,1	15 4,6

\* Spacing corresponds to ASME B31.1 Power Piping Code.

† Spacing corresponds to ASME B31.9 Building Services Piping Code.

‡ Spacing corresponds to NFPA 13 Fire Sprinkler Systems.

## FLEXIBLE SYSTEMS

For coupling Styles including 75, 77, W77, 770, and others. Standard grooved-type couplings allow angular, linear and rotational movement at each joint, to accommodate expansion, contraction, settling, vibration, noise and other piping system movement. These features provide advantages in designing piping systems but must be considered when determining hanger and support bracing and location.

### Maximum Hanger Spacing

For straight runs without concentrated loads and where full linear movement is required.

PIPE SIZE Nominal Inches mm	Pipe Length in Feet/meters									
	7 2,1	10 3,0	12 3,7	15 4,6	20 6,1	22 6,7	25 7,6	30 9,1	35 10,7	40 12,2
	*Average Hangers per Pipe Length Evenly Spaced									
3/4 - 1 20 - 25	1	2	2	2	3	3	4	4	5	6
1 1/4 - 2 32 - 50	1	2	2	2	3	3	4	4	5	5
2 1/2 - 4 65 - 100	1	1	2	2	2	2	2	3	4	4
5 - 8 125 - 200	1	1	1	2	2	2	2	3	3	3
10 - 12 250 - 300	1	1	1	2	2	2	2	3	3	3
14 - 16 350 - 400	1	1	1	2	2	2	2	3	3	3
18 - 24 450 - 600	1	1	1	2	2	2	2	3	3	3
28 - 42 700 - 1050	1	1	1	1	2	2	2	3	3	3

\*No pipe length should be left unsupported between any two couplings.

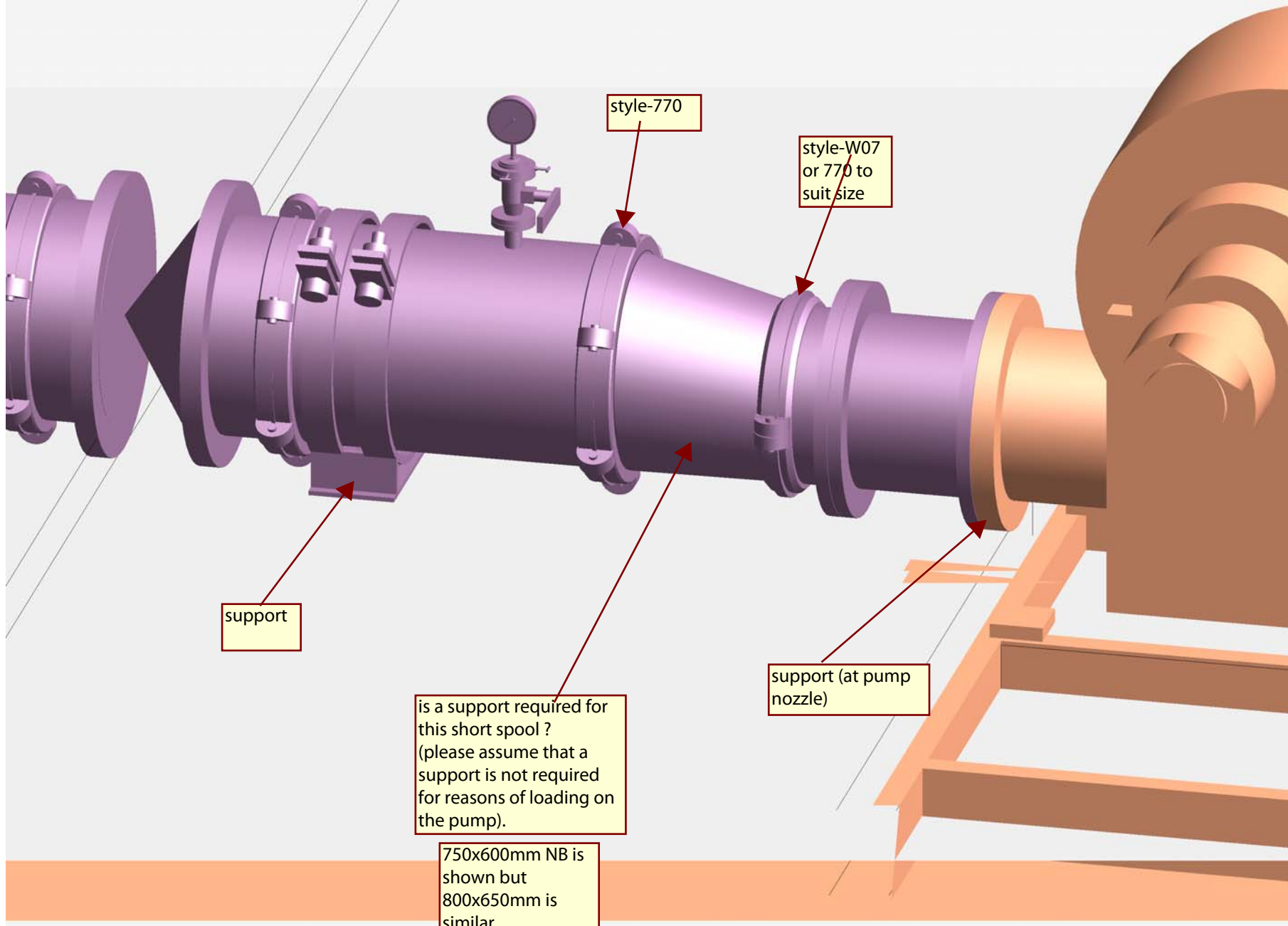
**NOTE:** 14 – 16" maximum hanger spacing values apply to 377 mm and 426 mm Style 77 couplings.

### Maximum Hanger Spacing

For straight runs without concentrated loads and where full linear movement is not required.

PIPE SIZE RANGE Nominal Inches mm	Suggested Maximum Span Between Supports Feet/meters
3/4 - 1 20 - 25	8 2,4
1 1/4 - 2 32 - 50	10 3,0
2 1/2 - 4 65 - 100	12 3,7
5 - 8 125 - 200	14 4,3
10 - 12 250 - 300	16 4,9
14 - 16 350 - 400	18 5,5
18 - 24 450 - 600	20 6,1
28 - 42 700 - 1050	21 6,4

**NOTE:** 14 – 16" maximum hanger spacing values apply to 377 mm and 426 mm Style 77 couplings.



style-770

style-W07  
or 770 to  
suit size

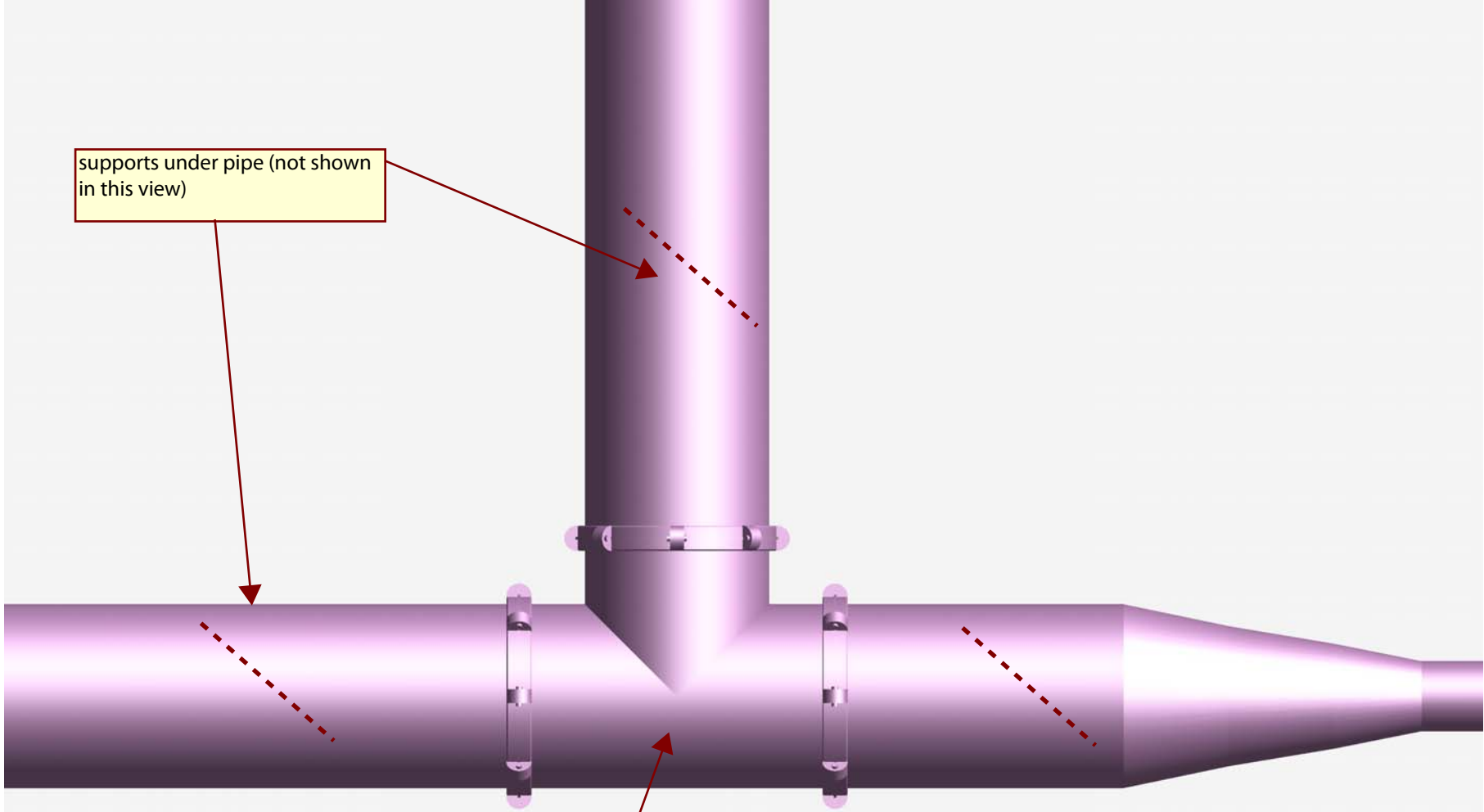
support

support (at pump  
nozzle)

is a support required for  
this short spool ?  
(please assume that a  
support is not required  
for reasons of loading on  
the pump).

750x600mm NB is  
shown but  
800x650mm is  
similar

supports under pipe (not shown in this view)



is a support required for this short spool ?

Plan View  
Pipe is 1050mmNB