

NPS, SPS, AND IPS, WHAT'S THE DIFFERENCE?

NPS, SPS, and IPS are very similar and are often used interchangeably. There are differences that should be noted. Let us discuss what each one is.

IPS stands for Iron Pipe Size and is an older standard based on the inside diameter (ID) of the pipe.

SPS stands for Standard Pipe Size and is also referenced as Schedule 40 pipe. You will also see references to EHPS. EHPS stands for Extra Heavy Pipe Size and is also referenced as Schedule 80 pipe.

NPS stands for Nominal Pipe Size and is the current standard. A NPS pipe size has two components. The first component references the outside diameter (OD) of the pipe but does not directly represent the OD. For example, a 2" NPS pipe has a 2.375" OD. The second component references the schedule and corresponds to the wall thickness or ID. Common schedules are 40 & 80. For example, a 2" NPS Sch 80 pipe has a 2.375" OD, 1.939" ID, and 0.218" wall thickness.

Common use of these names can lead to confusion or misrepresentation. When IPS is used, NPS sizes should be used, and will match each other in sizes. SPS references NPS Schedule 40 but is sometimes mistakenly used like NPS, with schedules other than 40. EHPS references NPS Schedule 80 and is rarely used differently.

SEFCOR literature and drawings are continually updated to use the NPS standard. Mixed use of IPS, SPS, EHPS, & NPS over 50 years, dozens of catalog versions, and tens of thousands of drawings means that you may still see IPS, SPS, & EHPS used. If you have any questions, please contact us.

Tubing can also be used, and it is different than the pipe sizes. Tubing is referenced by OD and wall thickness. It typically doesn't match any NPS, SPS, or IPS sizes. Even though tubing sizes are different than pipe sizes, they are often confused with each other, and should always be verified.

Quick Information

If you see IPS, treat it as NPS

If you see SPS, treat it as NPS Sch 40

If you see EHPS, treat it as NPS Sch 80

If you see tubing, verify it