

国家螺纹管标准 ANSI B1.20.1

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Characteristics of NPT (also known as ANSI/ASME B1.20.1 Pipe Threads, General Purpose):

该标准规定:

tapered thread 1 to 47° 锥形螺纹 1 度 47 分
truncation of roots and crests are flat 顶部和根部的截断面是平的
60° thread angle 60 度的螺纹断面角
pitch is measured in threads per inch 单位罗纹数以每英寸计算

Note! Pipe sizes do not refer to any physical dimensions. The outside diameter of a pipe or fitting must be measured and compared to a table for size identification. A 3/4" NPT pipe thread has an outside diameter - OD - of 1.050 inches.

备注：管的尺寸不是指物理容积。管的外部直径和属性必须以下面这个表格来确定。例如：一个标准为 3/4" NPT 的管外部直径为 1.050 英寸。

Each thread size has a defined number of threads per inch - TPI, or pitch. The 3/4" NPT pipe thread has 14 threads per inch. Both the TPI and OD of the thread are required for positive identification of thread size because more than one size have the same TPI.

每种罗纹管每英寸有固定的罗纹数（单位的罗纹数）。TPI 或 pitch 就是单位的罗纹数。3/4" NPT 标准的罗纹管每英寸有 14 条罗纹。由于不同的标准中可能会出现同样的单位罗纹数。因此每个标准必须有固定的单位的罗纹数（TPI）和固定的外部直径（OD）。

NPT - American Standard Pipe Taper Thread 1)

Pipe Size 管的尺寸

(inches) Threads per Inch 单位罗纹数

TPI - pitch Outside Diameter 外部直径

OD

(inches)

管的尺寸 单位罗纹数 外部直径

1/16" 27 0.313"

1/8" 27 0.405"

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1/4" 18 0.540"
3/8" 18 0.675"
1/2" 14 0.840"
3/4" 14 1.050"
1" 11-1/2 1.315"
1-1/4" 11-1/2 1.660"
1-1/2" 11-1/2 1.900"
2" 11-1/2 2.375"
2-1/2" 8 2.875"
3" 8 3.500"
3-1/2" 8 4.000"
4" 8 4.500"
5" 8 5.563"
6" 8 6.625"
8" 8 8.625"
10" 8 10.750"
12" 8 12.750"
14" 8 14.000"
16" 8 16.000"

1) The taper is 1/16 inch in an inch, which is the same as 3/4 inch in a foot (angle 1 to 47°)

1) 锥度为每英寸1/16英寸和每英尺3/4英寸是一样的。

NPT threads are not interchangeable with NPS - National Pipe Straight - threads.
国家螺纹管标准和美国标准直管螺纹（NPS）是无法互换的

NPT threads may look similar to ISO 7/1 threads. However, ISO and NPT threads should not be mixed. ISO threads have 55° taper angle versus 60° for NPT. The NPT root and crest configurations are also different from ISO. For ISO threads pitch is usually measured in millimeters (may be expressed in Inch). The pitch are different.

国家螺纹管标准可能会像ISO 7/1 国际标准化组织的7/1标准。但请不要将两种标准混淆。国际标准化组织的7/1标准有55度的罗纹标准，而国家螺纹管标准则是60度。国家螺纹管标准的顶部和底部和国际标准化组织的7/1标准也不相同。因为国际标准化组织的7/1标准通常是用毫米来度量的。罗纹也不同！