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**PROFESSIONAL STANDARD OF THE PEOPLE'S
REPUBLIC OF CHINA**

中华人民共和国化工行业标准

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**Steel Pipe Flanges
(PN Designated)
钢制管法兰
(PN 系列)**

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Steel Pipe Flanges — (PN Designated)

1. General provisions

1.0.1 This standard specifies the basic technical requirements of steel pipe flanges (PN designated), including nominal dimension, nominal pressure, material, pressure-temperature rating, flange type, dimension, seal contact face, tolerance and marking.

1.0.2 This Standard is applicable to steel pipe flanges and blind flanges in nominal pressure of PN2.5~PN160. The nominal flange pressure grades are denoted by PN, including the following nine grades: PN2.5, PN6, PN10, PN16, PN25, PN40, PN63, PN100 and PN160.

1.0.3 Nominal dimension and outside diameter of the steel pipe

Outside diameter of the steel pipe applicable to this Standard includes two series: A and B, where A designs for the international purposes (it is commonly referred to as "John Guest"), while B designs for the domestic adopting series (it is commonly referred to as "metric pipe"). Its nominal dimension DN and outside diameter of the steel pipe are in accordance with those specified in Table 1.0.3.

The flanges adopting B series steel pipe shall be marked with "B" at the back of the number of nominal dimension DN for differentiation. However, the flange adopting A series steel pipe must not be marked with "A" at the back of the number of nominal dimension DN, for more details, see Chapter 13 and Chapter 14 of this Standard.

Table 1.0.3 Nominal Dimension and Outside Diameter of the Steel Pipe (mm)

Nominal dimension DN		10	15	20	25	32		40	50	65	80
Outside diameter of the steel pipe	A	17.2	21.3	26.9	33.7	42.4		48.3	60.3	76.1	88.9
	B	14	18	25	32	38		45	57	76	89
Nominal dimension DN		100	125	150	200	250	300	350	400	450	500
Outside diameter of the steel pipe	A	114.3	139.7	168.3	219.1	273	323.9	355.6	406.4	457	508
	B	108	133	159	219	273	325	377	426	480	530
Nominal dimension DN		600	700	800	900	1000	1200	1400	1600	1800	2000
Outside diameter of the steel pipe	A	610	711	813	914	1016	1219	1422	1626	1829	2032
	B	630	720	820	920	1020	1220	1420	1620	1820	2020

1.0.4 This Standard is also applicable to valve, pump, chemical engineering machinery, pipeline fittings and equipment spares with flange being used as its coupling mode.

1.0.5 This Standard excludes selection principle for materials under particular fluid operating conditions.

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