

# NEW-FLOW STRAIGHTENING VANES

## SGN SERIES

AGA Report No.3 recommends fabrication of the 1998 Uniform Concentric 19-tube bundle flow straightener. No flow conditioner can eliminate all possible profile effects unless properly installed and used. Care should be taken to minimize flow disturbances and swirl-generating configurations in the metering system, particularly upstream of the orifice. Thus, when properly located, in well designed installations, the 1998 Uniform Concentric 19-Tube Bundle Flow Straightener can eliminate bias in orifice measurement. For further information on proper installation of this flow straightener.



Approvals:



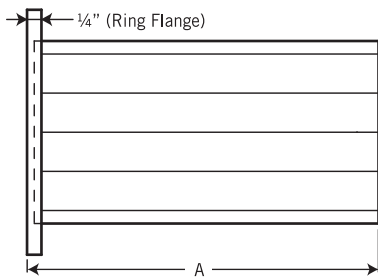
### Technical Data

**Size:** 2" to 36" available  
**Pressure Rating:** 150# to 900#, and option available  
**Material:** C.S., SS304, SS316, and option available

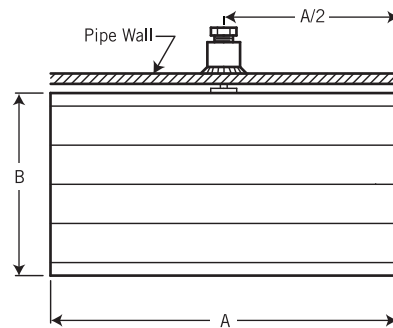
### Size and Type Specification

#### Ring Flange / All Pipe Size

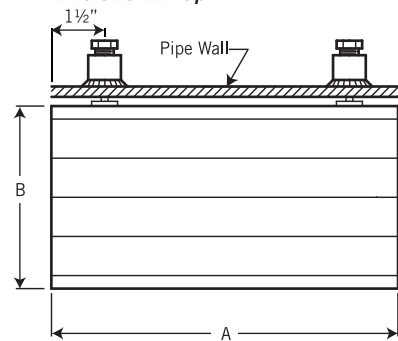
(NOTE: Ring Flange size is same O.D. dimension as raised face of flange.)



#### Line Size 2" ~ 10"

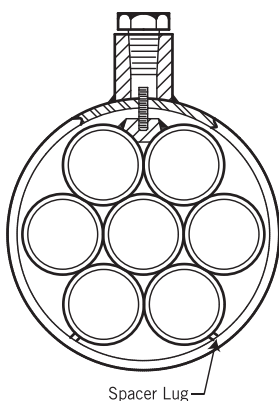


#### Line Size 12" Up



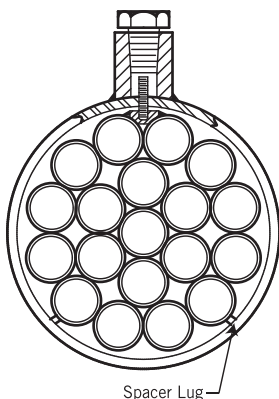
#### Standard Straightening Vane Bundles

**Type I:** 7-Tube Concentric Bundle for 2" Size Only



#### Standard Straightening Vane Bundles

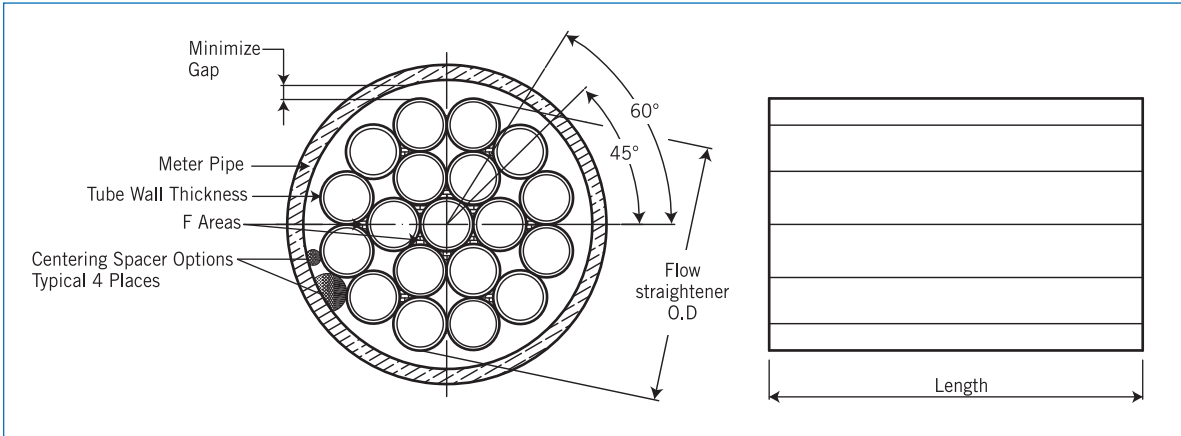
**Type II:** 19-Tube Concentric Bundle for 3" Size and Larger



### Dimensions Data

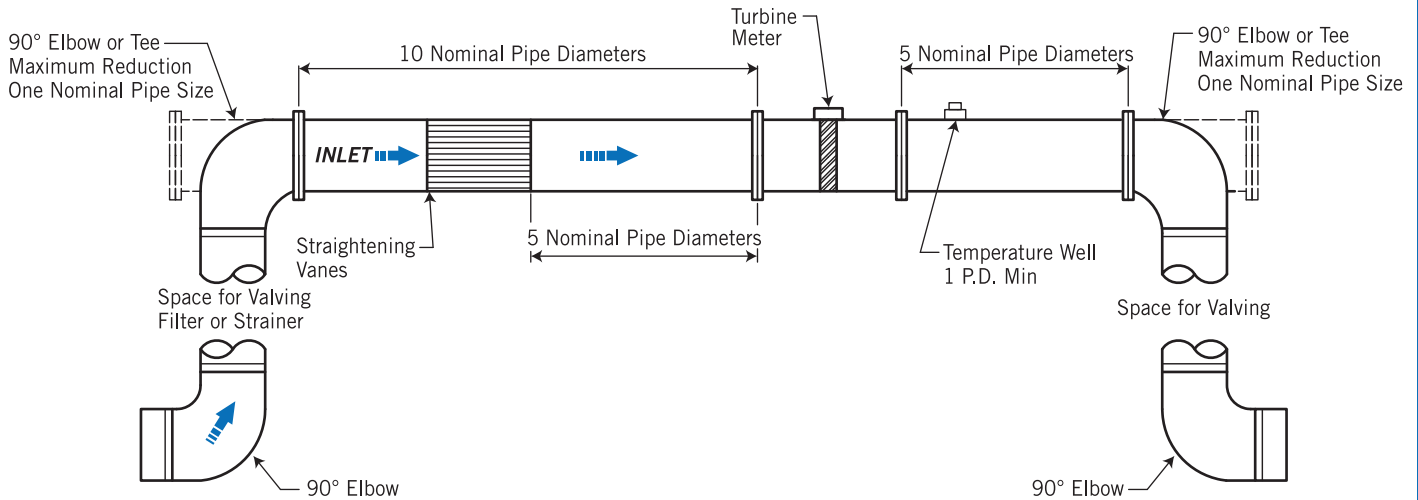
LINE SIZE	BUNDLE TYPE	LINE I.D.	LENGTH OF VANE		O.D. OF VANE	O.D. OF TUBES	I.D. OF TUBES	TUBES THICKNESS	NUMBER OF TUBES	APPROXIMATE WEIGHTS	
			A	B						FLANGE	LINE
inch		mm	mm	mm	mm	mm	mm			Kg	Kg
2	I	52.7	152.4	60.5	17.3	12.7	2.3	7		1.14	0.91
3	II	78.1	203.2	89.1	13.8	9.2	2.3	19		1.82	1.36
4	II	102.3	254.0	114.3	20.4	14.8	2.8	19		3.41	2.95
6	II	151.0	304.8	165.2	27.2	21.4	2.9	19		9.32	8.41
8	II	202.7	406.4	219.1	39.0	32.0	3.5	19		16.82	15.68
10	II	254.5	508	273.1	48.6	41.2	3.7	19		25.91	24.32
12	II	303.3	609.6	323.9	60.3	52.5	3.9	19		36.82	35.00
14	II	333.4	711.2	355.6	60.3	52.5	3.9	19		47.73	45.45
16	II	381.0	812.8	406.4	73.0	62.6	5.2	19		124.55	121.82
18	II	428.6	914.4	457.2	76.3	65.9	5.2	19		175.45	171.82
20	II	477.8	1016.0	508.0	89.1	78.1	5.5	19		216.82	212.73
24	II	574.6	1219.2	609.6	114.3	102.3	6.0	19		320.00	315.00
26	II	625.4	1320.8	660.4	114.3	102.3	6.0	19		370.00	361.82
30	II	727.0	1524.0	762.0	139.8	126.6	6.6	19		588.64	578.64
34	II	828.6	1727.2	863.6	165.2	151.0	7.1	19		854.55	845.45
36	II	876.4	1828.8	914.4	168.3	154.1	7.1	19		719.10	708.64

## Description of the 1998 Uniform Concentric 19-Tube Bundle Flow Straightener



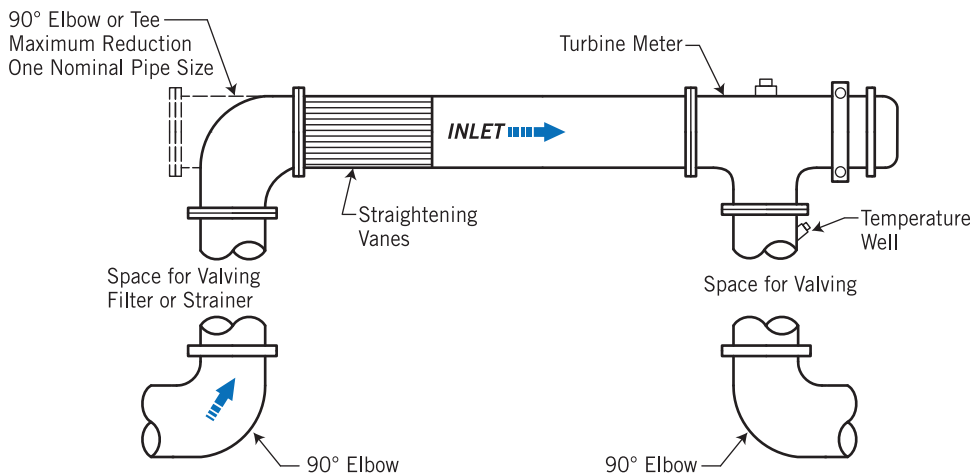
### Recommended Installation for In-Line Meters

#### (1) Recommended Installation of an In-Line Gas Turbine Meter (Minimum Lengths)



**NOTE:**  
Additional upstream or downstream pipe lengths are required when throttling devices are installed close to the meter.

#### (2) Recommended Installation of an Angle Body Gas Turbine Meter (Minimum Lengths)



**NOTE:**  
Inlet Piping 10 Nominal Pipe Diameters Long (5 Nominal Pipe Diameters with Straightening Vanes).  
Horizontal Installation (Inlet in Horizontal Plane, Outlet Down).

## Ordering Information

SGN	Code	Body (meter pipe) Material							
	1	Carbon Steel	2	SS304	3	SS316	4	option	
		Code	Inlet Tube (straightener vanes) Material						
		1	Carbon Steel	2	SS304	3	SS316	4	option
		Code	Type						
		F	Ring Flange type						
		L	Line type						
		Code	Size						
			(1) 2"	(2) 3"	(3) 4"	(4) 6"	(5) 8"	(6) 10"	
			(7) 12"	(8) 14"	(9) 16"	(10) 18"	(11) 20"	(12) 24"	
			(13) 26"	(14) 30"	(15) 34"	(16) 36"			
		Code	Pressure Rating						
			(1) ANSI 150#	(2) ANSI 300#	(3) ANSI 600#	(4) ANSI 900#			
			(0) option						
SGN								Complete Ordering Code	