



# SPIRAL WOUND

## Overview



# TABLE OF CONTENTS

## INDEX

SECTION 1	Purchase Spec For Miscellaneous	1
SECTION 2	Flange And Gasket Dimensions	2-4
SECTION 3	Standard Spiral Data Sheet	4
SECTION 4	Standard Spiral Temperature Chart	5
SECTION 5	Standard Spiral Colour Chart	5

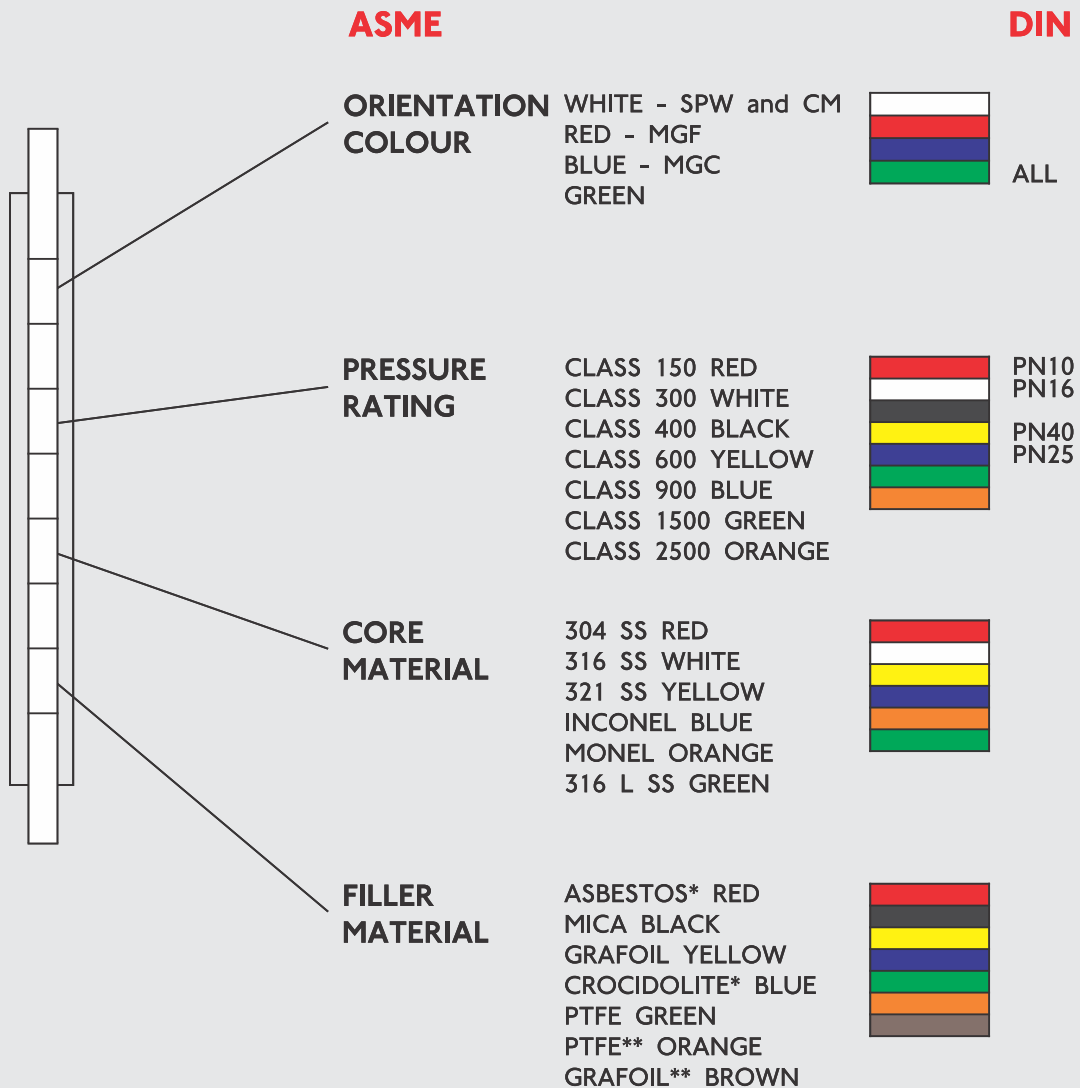


# PURCHASE SPEC FOR MISCELLANEOUS

## PIPING COMPONENTS - GASKETS

### COLOUR CODING OF GASKETS

All SPW, CM and MG gaskets shall be colour coded. The paint shall be applied on the outside periphery of the metal centering ring, starting with the orientation colour from the left to right. Width of colour bands shall be 3mm to 5mm wide.



\* ASBESTOS AND CROCIDOLITE IS PHASED OUT. ONLY RETAINED TO IDENTIFY EXISTING GASKETS  
 \*\* CLEANED FOR OXYGEN SERVICE

### EXAMPLE:



ASME CLASS 600, 304 SS SPIRAL WOUND, MICA FILLED

# FLANGE AND GASKET DIMENSIONS

## PIPING COMPONENTS - GASKETS

### COLOUR CODING OF GASKETS

All SPW, CM and MG gaskets shall be colour coded. The paint shall be applied on the outside periphery of the metal centering ring, starting with the orientation colour from the left to right. Width of colour bands shall be 3mm to 5mm wide.

Inner-Ring Id's for Spiral Wound Gaskets on ASME B16.47 Series B or API-605 Flanges					
NPS	Inner Ring ID Dimensions				
	150 CLASS	300 CLASS	400 CLASS	600 CLASS	900 CLASS
26	25.75	25.75	25.75	25.38	26.25
28	27.75	27.75	27.63	27.00	28.25
30	29.75	29.75	29.63	29.63	30.75
32	31.75	31.75	31.50	31.25	33
34	33.75	33.75	33.50	33.50	35.25
36	35.75	35.75	35.38	35.50	36.25
38	37.75	38.25	37.5	37.50	39.75
40	39.75	40.25	39.38	39.75	41.75
42	41.75	42.75	41.38	42.00	43.75
44	43.75	44.25	43.50	43.75	45.50
46	45.75	46.38	46.00	45.75	48.00
48	47.75	48.50	47.50	48	50.00
50	49.75	49.88	49.50	50	
52	51.75	51.88	51.50	52	
54	53.75	53.75	53.25	54.25	
56	56	56.25	55.25	56.25	
58	58.19	58.44	57.25	58	
60	60.44	61.31	59.75	60.25	

ASME B16.47 Series B or API-605 Spiral Wound Gasket Dimensions					
NPS	Gasket Dimensions				
	150 CLASS	300 CLASS	400 CLASS	600 CLASS	900 CLASS
26	26-1/2x27-1/2x28-9/16	26-1/2x28x30-3/8	26-1/4x27-1/2x29-3/8	26-1/8x28-1/8x30-1/8	27-1/4x29-1/2x33
28	28-1/2x29-1/2x30-9/16	28-1/2x30x32-1/2	28-1/8x29-1/2x31-1/2	27-3/4x39-3/4x32-1/4	29-1/4x31-1/2x35-1/2
30	30-1/2x31-1/2x32-9/16	30-1/2x32x34-7/8	30-1/8x31-3/4x33-3/4	30-5/8x32-5/8x34-5/8	31-3/4x33-3/4x37-3/4
32	32-1/2x34x37	32-1/2x34x37	32x33-7/8x35-7/8	32-3/4x34-3/4x36-3/4	34x36x40
34	34-1/2x36x39-1/8	34-1/2x36x39-1/8	34-1/8x35-7/8x37-7/8	35x37x39-1/4	36-1/4x38-1/4x42-1/4
36	36-1/2x37-3/4x38-7/8	36-1/2x38x41-1/4	36-1/8x38x40-1/4	37x39x41-1/4	37-1/4x39-1/4x44-1/4
38	38-3/8x39-3/4x41-1/8	39-3/4x41-1/4x43-1/4	38-1/4x40-1/4x42-1/4	39x41x43-1/2	40-3/4x42-3/4x47-1/4
40	40-1/4x41-7/8x43-1/8	41-3/4x43-1/4x45-1/4	40-3/8x42-3/8x44-3/8	41-1/4x43-1/4x45-1/2	43-1/4x45-1/4x49-1/4
42	42-1/2x43-7/8x45-1/8	43-3/4x45-1/4x47-1/4	42-3/8x44-3/8x46-3/8	43-1/2x45-1/2x48	45-1/4x47-1/4x51-1/4
44	44-1/4x45-7/8x47-1/8	45-3/4x47-1/4x49-1/4	44-1/2x46-1/2x48-1/2	45-3/4x47-3/4x50	47-1/2x49-1/2x53-7/8
46	46-0/2x48-3/16x49-7/16	47-7/8x49-3/8x51-7/8	47x49x50-3/4	47-3/4x49-3/4x52-1/4	50x52x56-1/2
48	48-1/2x50x51-7/16	49-3/4x51-5/8x53-7/8	49x51x53	50x52x54-3/4	52x54x58-1/2
50	50-1/2x52-3/16x53-7/16	51-7/8x53-3/8x55-7/8	51x53x55-1/4	52x54x57	
52	52-1/2x54-3/16x55-7/16	53-7/8x55-3/8x57-7/8	53x55x57-1/4	54x56x59	
54	54-1/2x56x57-5/8	55-1/4x57-1/4x60-1/4	55-1/4x57-1/4x59-3/4	56-1/4x58-1/4x61-1/4	
56	56-7/8x58-3/16x59-5/8	58-1/4x60x62-3/4	57-1/4x59-1/4x61-3/4	58-1/4x60-1/4x63-1/2	
58	59-5/64x60-3/16x62-3/16	60-7/16x61-15/16x65-3/16	59-1/4x61-1/4x63-3/4	60-1/2x62-1/2x65-1/2	
60	61-5/16x62-7/16x64-3/16	62-9/16x64-3/16x67-3/16	61-3/4x63-3/4x66-1/4	62-3/4x64-3/4x68-1/4	

# FLANGE AND GASKET DIMENSIONS

Inner-Ring Id's for Spiral Wound Gaskets on ASME B16.47 Series B or API-605 Flanges					
Flange Size	Inner Ring ID Dimensions				
	150 CLASS	300 CLASS	400 CLASS	600 CLASS	900 CLASS
26	25.75	25.75	26	25.5	26
28	27.75	27.75	28	27.5	28
30	29.75	29.75	29.75	29.75	30.25
32	31.75	31.75	32	32	32
34	33.75	33.75	34	34	34
36	35.75	35.75	36.13	36.13	36.25
38	37.75	37.50	37.5	37.50	39.75
40	39.75	39.50	39.38	39.75	41.75
42	41.75	41.50	41.38	42.00	43.75
44	43.75	43.50	43.50	43.75	45.50
46	45.75	45.38	46	45.75	48.00
48	47.75	47.63	47.50	48.00	50.00
50	49.75	49	49.50	50.00	
52	51.75	52	51.50	52.00	
54	53.50	53.25	53.25	54.25	
56	55.50	55.25	55.25	56.25	
58	57.50	57	57.25	58.00	
60	59.50	60	59.75	60.25	

ASME B16.47 Series B or API-605 Spiral Wound Gasket Dimensions					
NPS	Gasket Dimensions				
	150 CLASS	300 CLASS	400 CLASS	600 CLASS	900 CLASS
22	22-3/4x24x26	22-3/4x24x27-3/4	22-3/4x24-3/4x27-5/8	22-3/4x24-3/4x28-7/8	24-1/4x27x33
26	26-1/2x27-3/4x30-1/2	27x29x32-7/8	27x29x32-3/4	29x29x34-1/8	27x29x34-3/4
28	28-1/2x29-3/4x32-3/4	29x31x35-3/8	29x31x35-1/8	29x31x36	29x31x37-1/4
30	30-1/2x31-3/4x34-3/4	31-1/4x33-1/4x37-1/2	31-1/4x33-1/4x37-1/4	31-1/4x33-1/4x38-1/4	31-1/4x33-1/4x39-3/4
32	32-1/2x33-7/8x37	33-1/2x35-1/2x39-5/8	33-1/2x35-1/2x39-1/2	33-1/2x35-1/2x40-1/4	33-1/2x35-1/2x42-1/4
34	34-1/2x35-7/8x39	35-1/2x37-1/2x41-5/8	35-1/2x37-1/2x41-1/2	35-1/2x37-1/2x42-1/4	35-1/2x37-1/2x44-3/4
36	36-1/2x38-1/8x41-1/4	37-5/8x39-5/8x44	37-5/8x39-5/8x44	37-5/8x39-5/8x44-1/2	37-3/4x39-3/4x47-1/4
38	38-1/2x40-1/8x43-3/4	38-1/2x40x41-1/2	38-1/4x40-1/4x42-1/4	39x41x43-1/2	40-3/4x42-3/4x47-1/4
40	40-1/2x42-1/8x45-3/4	40-1/4x42-1/8x43-7/8	40-3/8x42-3/8x44-3/8	41-1/4x43-1/4x45-1/2	43-1/4x45-1/4x49-1/4
42	42-1/2x44-1/4x48	42-1/4x44-1/8x45-7/8	42-3/8x44-3/8x46-3/8	43-1/2x45-1/2x48	45-1/4x47-1/4x51-1/4
44	44-1/2x46-3/8x50-1/4	44-1/2x46-1/2x48	44-1/2x46-1/2x48-1/2	45-3/4x47-3/4x50	47-1/2x49-1/2x53-7/8
46	46-1/2x48-3/8x52-1/4	46-3/8x48-3/8x50-1/8	47x49x50-3/4	47-3/4x49-3/4x52-1/4	50x52x56-1/2
48	48-1/2x50-3/8x54-1/4	48-5/8x50-5/8x52-1/8	49x51x53	50x52x54-3/4	52x54x58-1/2
50	50-1/2x52-1/2x56-1/2	51x53x54-1/4	51x53x55-1/4	52x54x57	
52	52-1/2x54-1/2x58-3/4	53x55x56-1/4	53x55x57-1/4	54x56x59	
54	54-1/2x56-1/2x61	55-1/4x57-1/4x58-3/4	55-1/4x57-1/4x59-3/4	56-1/4x58-1/4x61-1/4	
56	56-1/2x58-1/2x63-1/4	57-1/4x59-1/4x60-3/4	57-1/4x59-1/4x61-3/4	58-1/4x60-1/4x63-1/2	
58	58-1/2x60-1/2x65-1/2	59-1/2x61-1/2x62-3/4	59-3/4x63-3/4x66-1/4	60-1/2x62-1/2x65-1/2	
60	60-1/2x62-1/2x67-1/2	61-1/2x63-1/2x64-3/4	61-3/4x63-3/4x66-1/4	62-3/4x64-3/4x68-1/4	



# FLANGE AND GASKET DIMENSIONS

## ASME B16.20/B16.5 Spiral Wound Dimensions

### Dimensions for (ASME B 16.20) Spiral Wound Gaskets used with ASME/ANSI B 16.5 Flanges

Flange Size (NPS)	Outside Dia. of Gasket		Inside Diameter of Gasket by Class							Outside Diameter of Outer Ring by Class						
	DIA.	DIA.	150	300	400	600	900	1500	2500	150	300	400	600	900	1500	2500
1/2	1.25	1.25	0.75	0.75	(2)--	0.75	(2)--	-0.75	0.75	1.88	2.13	(2)	2.13	(2)	2.50	2.75
3/4	1.56	1.56	1.00	1.00	(2)--	1.00	(2)--	1.00	1.00	2.25	2.63	(2)	2.63	(2)	2.75	3.00
1	1.88	1.88	1.25	1.25	(2)--	1.25	(2)--	1.25	1.25	2.63	2.88	(2)	2.88	(2)	3.13	3.38
1 1/4	2.38	2.38	1.88	1.88	(2)--	1.88	(2)--	1.56	1.56	3.00	3.25	(2)	3.25	(2)	3.50	4.13
1 1/2	2.75	2.75	2.13	2.13	(2)--	2.13	(2)--	1.88	1.88	3.38	3.75	(2)	3.75	(2)	3.88	4.63
2	3.38	3.38	2.75	2.75	(2)-	2.75	(2)-	2.31	2.31	4.13	4.38	(2)	4.38	(2)	5.63	5.75
2 1/2	3.88	3.88	3.25	3.25	(2)--	3.25	(2)--	2.75	2.75	4.88	5.13	(2)	5.13	(2)	6.50	6.63
3	4.75	4.75	4.00	4.00	3.75	4.00	3.75	3.63	3.63	5.38	5.88	(2)	5.88	6.63	6.88	7.75
4	5.88	5.88	5.00	5.00	4.75	4.75	4.75	4.63	4.63(1)	6.88	7.13	7.00	7.63	8.13	8.25	9.25
5	7.00	7.00	6.13	6.13	5.81	5.81	5.81	5.63	5.63(1)	7.75	8.50	8.38	9.50	9.75	10.00	11.00
6	8.25	8.25	7.19	7.19	6.88	6.88	6.88	6.75	6.75(1)	8.75	9.88	9.75	10.50	11.38	11.13	12.50
8	10.38	10.13	9.19	9.19	8.75	8.88	8.75	8.50	8.50(1)	11.00	12.13	12.00	12.63	14.13	13.88	15.25
10	12.50	12.25	11.31	11.31	10.88	10.81	10.88	10.50	10.63(1)	13.38	14.25	14.13	15.75	17.13	17.13	18.75
12	14.75	14.50	13.38	13.38	12.75	12.88	12.75	12.75(1)	12.50(1)	16.13	16.63	16.50	18.00	19.63	20.50	21.63
14	16.00	15.75	14.63	14.63	14.00	14.25	14.00	14.25(1)	(2)	17.75	19.13	19.00	19.38	20.50	22.75	(2)
16	18.25	18.00	16.63	16.63	16.25	16.25	16.25	16.00(1)	(2)	20.25	21.25	21.13	22.25	22.63	25.25	(2)
18	20.75	20.50	18.69	18.69	18.25	18.50	18.25	18.25(1)	(2)	21.63	23.50	23.38	24.13	25.13	27.75	(2)
20	22.75	22.50	20.69	20.69	20.50	20.50	20.50	20.25(1)	(2)	23.88	25.75	25.50	26.88	27.50	29.75	(2)
24	27.00	26.75	24.75	24.75	24.75(1)-	24.75	24.75(1)-	24.25(1)	(2)	28.25	30.50	30.25	31.13	33.00	35.50	(2)

Note: (1) Inner rings are required for all PTFE filled gaskets and for Class 900 gaskets, NPS 24; Class 1500 gaskets, NPS 12 through NPS 24; Class 2500 gaskets, NPS 4 through NPS 12.

Note: (2) There are no Class 400 flanges in NPS 1/2 through NPS 3 (use Class 600), Class 900 flanges in NPS 1/2 through NPS 2 1/2 (use Class 1500), or Class 2500 flanges NPS 14 and larger.

## STANDARD SPIRAL DATA SHEET

### Manufacturing Process

- Leader spirals are manufactured in accordance with all Global Industry Standards including ASME B16.20, ASME B16.47 Series A & B and EN/DIN
- Leader assures strict adherence to these specifications as routine inspection procedures are applied throughout the manufacturing process.
- Leader utilizes automated spiral wound equipment to insure consistency and uniform load characteristics.

### Quality

- Leader maintains 100% traceability of materials and finished goods used in our manufacturing process.
- Leader Global Technologies maintains an ISO 9001-2000 Certification.

### Technical Specifications

- M factor: 3
- Y value: 7500

### ROTT Values

- Gb - 926
- a - 0.341
- Gs - 2.9





# STANDARD SPIRAL TEMPERATURE CHART

ASME B 16.20 Colour Coding	Materials	Temperature Limits
Pink Stripe	Mica-Graphite non-asbestos	450° F
Grey Chart	Flexible Graphite (GrafTech GTB)	975° F, 1200° F (non-oxidizing)
Light Green Stripe	Ceramic	2000° F
White Stripe	PTFE	500° F
Silver Outside	Carbon Steel	1000° F
Yellow Outside	304ss	1400° F
Green Outside	316Lss	1400° F
Beige Outside	Hastelloy C	2000° F
Black Outside	Alloy 20	1500° F
Gold Outside	Inconel	2000° F
Orange Outside	Monel	1500° F
Purple Outside	Titanium	2000° F

# STANDARD SPIRAL COLOUR CHART

## Colour Coding

All leader Global Technologies Products are colour coded per ASME B 16.20 as follows:

LEADERFITE		Pink Stripe
FLEXIBLE GRAPHITE		Grey Stripe
PTFE		White Stripe
CERAMIC		Light Green Stripe
ALLOY 20		Black
CARBON STEEL		Silver
HASTELLOY B		Brown
HASTELLOY C		Beige
INCONEL		Gold
MONEL		Orange
NICKEL		Red
TITANIUM		Purple
304SS		Yellow
316LSS		Green
321SS		Turquoise
347SS		Blue









24 HR TOLL-FREE EMERGENCY  
BRANCH HELPLINE:

**0800 022 224**

WEBSITE:

**[www.bmgworld.net](http://www.bmgworld.net)**



 An Invicta Holdings Group Company

BEARINGS • SEALS • POWER TRANSMISSION • DRIVES & MOTORS  
MATERIALS HANDLING • FASTENERS & TOOLS • HYDRAULICS  
PNEUMATICS • FILTRATION • LUBRICATION • VALVES  
TECHNICAL RESOURCES • FIELD SERVICES

