

NEWMAN

SANITARY GASKET COMPANY

Products of integrity...from people of integrity.

ACRYLIC SIGHT GLASSES



I-LINE STYLE



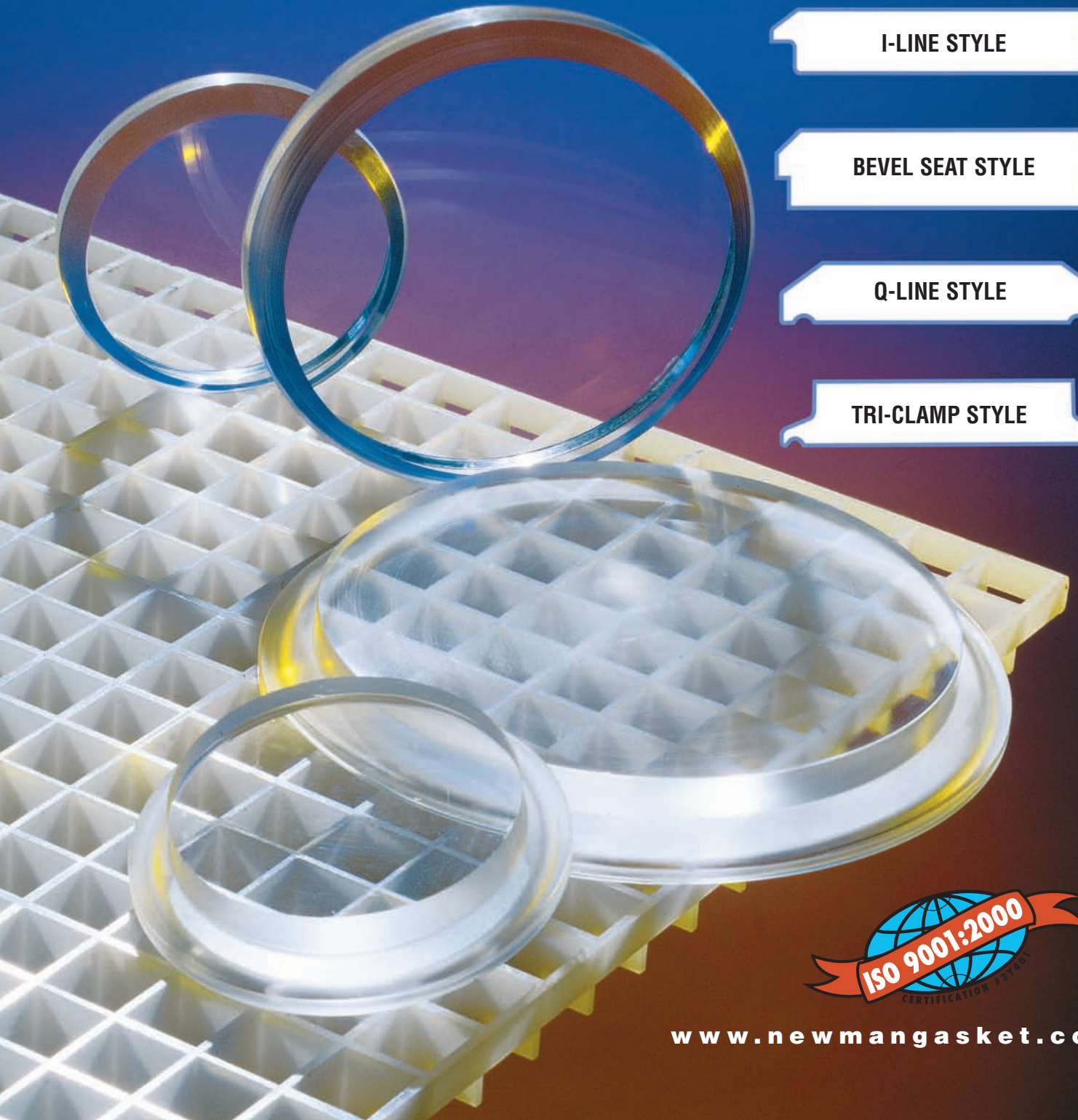
BEVEL SEAT STYLE



Q-LINE STYLE



TRI-CLAMP STYLE



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Pressure Rating (PSIG) Constant Load Case

		Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG
SIZE		1 1/2"				2"				2 1/2"				3"				4"			
TEMPERATURE F°	77°	150	150	59	150	94	135	85	85	64	133	54	103	47	96	40	75	27	66	25	48
	92°	131	150	51	130	82	117	74	74	56	115	47	89	40	83	34	65	24	58	22	41
	104°	121	150	47	120	75	108	68	68	51	106	44	82	37	77	32	60	22	53	20	38
	122°	111	150	43	110	69	99	63	63	47	97	40	76	34	70	29	55	20	49	18	35
	140°	101	147	39	100	63	90	57	57	43	89	36	69	31	64	27	50	18	44	17	32
	158°	81	118	32	80	50	72	46	46	34	71	29	55	25	51	21	40	15	35	13	25
	176°	61	88	24	60	38	54	34	34	26	53	22	41	19	38	16	30	11	27	10	19
	194°	30	44	12	30	19	27	17	17	13	27	11	21	9	19	8	15	5	13	5	10

Pressure Rating (PSIG) Intermittent Load Case

		Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG	Tri-Clamp 16AMPSSG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-14TSG
SIZE		1 1/2"				2"				2 1/2 "				3"				4"			
TEMPERATURE F°	77°	150	150	118	150	150	150	150	150	129	150	109	150	93	150	80	150	54	133	50	95
	92°	150	150	79	150	126	150	114	114	86	150	73	137	62	128	53	100	36	89	34	63
	104°	150	150	59	150	94	135	85	85	64	133	54	103	47	96	40	75	27	66	25	48
	122°	111	150	43	110	69	99	63	63	47	97	40	76	34	70	29	55	20	49	18	35
	140°	101	147	39	100	63	90	57	57	43	89	36	69	31	64	27	50	18	44	17	32
	158°	81	118	32	80	50	72	46	46	34	71	29	55	25	51	21	40	15	35	13	25
	176°	61	88	24	60	38	54	34	34	26	53	22	41	19	38	16	30	11	27	10	19
	194°	30	44	12	30	19	27	17	17	13	27	11	21	9	19	8	15	5	13	5	10

NOTES REGARDING PRESSURE RATINGS ACRYLIC SIGHT GLASSES

The pressure ratings in the above charts were calculated using procedures derived from engineering formulas published in Roark's Formulas for Stress and Strain, 6th edition, McGraw Hill. The charts show pressure ratings in PSIG for four types of acrylic sight glasses.

The Design Stress, the Intermittent Load Stress and the Poisson's Ratio we used as a basis for these calculations are those published by the manufacturer of the acrylic material. The stresses used are the maximum recommended such that "crazing due to stress alone will not occur for a very long time."

Note that the stress values employed are considerably lower than those published for the ultimate tensile strength of this material. Further, we have applied a safety factor of 2 in our calculation of pressure ratings. Finally, we have limited the rating to a maximum of 150 PSIG in

those cases where the calculations yielded ratings in excess of that value. Thus, we feel that our ratings offer a substantial margin of safety relative to the rupture strength of the sight glasses.

Nevertheless, because individual service conditions vary and because we have no control over individual applications and installations, we cannot guarantee the ratings in any particular use. While we hope the following data will serve as a useful guideline to engineers, it is up to the user to determine suitability for a specific application.

In particular, for hazardous service conditions, we strongly recommend that the user further derate the sight glasses. We also recommend that, at a minimum, the user hydrostatically test installations at pressures at least twice the maximum service pressure. For unusual or demanding applications, we recommend and encourage the user to contact the factory.

Newman Sanitary Gasket Company Sight Glasses are made from clear Plexiglas® formulations that have received clearance under FDA food additive regulation 21 CFR 177.1010 for use in contact with all types of food at or below room temperature.



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