

Ultra Purity with Guaranteed Ra



Semiconductor Flow Equipment



NEUMO Ehrenberg Group



SciMax - Ultra Purity with Guaranteed Ra

SciMax Semiconductor Flow Equipment is specially designed to meet the stringent standards of the semiconductor industry, delivering maximum results.

- **Maximum Guaranteed Ra**

EGMO guarantees the Ra in all internal surfaces, including bent areas.

- **Maximum Cleanability**

The multi-step cleaning cycle (degreasing, pickling, and electro-polishing) is conducted to ensure that products are cleaned with a perfect passivation layer. Final cleaning with ultra pure water is undertaken in a clean room.

- **Maximum Availability**

State-of-the-art manufacturing facilities and full marketing, distribution, and support in Europe, the USA, and Asia enables EGMO to supply semiconductor flow equipment of the highest quality standards to meet the customer's demands.

- **Full Traceability**

Each step of our production process is documented and recorded starting from raw materials through finished goods.



Proven Expertise and Experience: The NEUMO Ehrenberg group



The NEUMO Ehrenberg Group, a diversified multi-national organization headquartered in Germany, was founded by Senator Henry Ehrenberg in 1947

The know-how, experience, and impressive track record of its companies, NEUMO, VNE and EGMO, have been garnered over four decades. Today, the Group is a leading manufacturer of worldwide stainless steel process fittings and components. The group's worldwide distribution network supports major multinational accounts.

Guaranteed Quality * Reliable Delivery * Competitive Pricing



NEUMO Ehrenberg Group



Index

- Quick Selection Guide Page 2-3
- How to Order Page 4-5
- Tubes Page 6
- Tube Tolerances Page 6

○ Fitting Types



Elbows .. Page 7



Tees .. Page 8-9



Reducers .. Page 10



End Caps .. Page 11



Crosses .. Page 12-13

- Fitting Tolerances Page 14
- Vessels & Customized Components Page 15
- Inspection Tests and Documentation Page 16
- MTR - Material Test Report Page 17

Quick Selection Guide

Product	Application	Material	ID Ra (μ inch/ μ meter)	
SciMax 40	Main CDA Line, HI-VACUUM, Exhausts Lines	304L/316L	40 / 1	
SciMax 30	CDA, Main GN2 Lines	304L/316L	30 / 0.75	
SciMax 25	CDA, GN2, Instrument Air	316L	25 / 0.625	
SciMax 20	CDA, GN2, Breathing Air Systems	316L	20 / 0.5	
SciMax 15	High Purity Systems	316L	15 / 0.375	
SciMax 10	Ultra High Purity Systems	316L	10 / 0.25	
SciMax 5	Ultra High Purity Systems	316L	5 / 0.125	



	O.D.	Surface Treatment	Final Cleaning	Packing Environment Area	Packing & Capping	Marking
	Bright Finish	MP	DI-WATER	Control Environment	PE cap + PE bag	N/A
	Bright Finish	MP/EP	DI-WATER	Class 100,000	N2 purge + PE cap + PE bag	<ul style="list-style-type: none"> ○ Heat number ○ Job number ○ Material grade ○ Dimensions ○ Brand name
	Bright Finish	MP/EP	DI-WATER	Class 100,000	N2 purge + PE cap + PE bag	<ul style="list-style-type: none"> ○ Heat number ○ Job number ○ Material grade ○ Dimensions ○ Brand name
	32	MP/EP	DI-WATER	Class 1,000	N2 purge +PE cap + PE bag	<ul style="list-style-type: none"> ○ Heat number ○ Job number ○ Material grade ○ Dimensions ○ Brand name
	32	MP/EP	DI-WATER	Class 1,000	N2 purge +PE cap + PE bag	<ul style="list-style-type: none"> ○ Heat number ○ Job number ○ Material grade ○ Dimensions ○ Brand name
	32	EP	UPW 18MΩ	Class 10	UHP N2 purge + PE cap + Double PE bag	<ul style="list-style-type: none"> ○ Heat number ○ Job number ○ Material grade ○ Dimensions ○ Brand name
	32	EP	UPW 18MΩ	Class 10	UHP N2 purge + PE cap + Double PE bag	<ul style="list-style-type: none"> ○ Heat number ○ Job number ○ Material grade ○ Dimensions ○ Brand name

How to Order

To specify the part, choose a product line, type of material and then select the code number describing the requested part as shown below:

Fitting:

S M 4 0 6 L E P E L 9 0 - 0 . 2 5

Product Line Material Surface Treatment Shape O.D. Size

Product Line	Material	Surface Treatment	Shape	O.D. Size
SM40 - SciMax 40	6L - 316L	EP - Electro Polish	EL90 - Elbow 90	1/4" - 0.25
SM30 - SciMax 30	4L - 304L	MP - Mechanical Polish	EL45 - Elbow 45	3/8" - 0.375
SM25 - SciMax 25			ETEE - Equal Tee	1/2" - 0.5
SM20 - SciMax 20			ECRS - Equal Cross	3/4" - 0.75
SM15 - SciMax 15			ECAP - End Cap	1" - 1.0
SM10 - SciMax 10				1 1/2" - 1.5
SM5 - SciMax 5				2" - 2.0
				2 1/2" - 2.5
				3" - 3.0
				4" - 4.0
				6" - 6.0

For Example: **SM306LEPEL45-0.5**

Reducing Components:

S M 4 0 4 L M P R T E E - 0 . 7 5 x 1 . 5

Product Line Material Surface Treatment Shape O.D. Size Large O.D. Size Small

Product Line	Material	Surface Treatment	Shape	Size Large	Size Small
SM40 - SciMax 40	6L - 316L	EP - Electro Polish	RTEE - Reducing Tee	1/4" - 0.25	1/4" - 0.25
SM30 - SciMax 30	4L - 304L	MP - Mechanical Polish	CORD - Concentric Reducer	3/8" - 0.375	3/8" - 0.375
SM25 - SciMax 25			RCRS - Reducing Cross	1/2" - 0.5	1/2" - 0.5
SM20 - SciMax 20				3/4" - 0.75	3/4" - 0.75
SM15 - SciMax 15				1" - 1.0	1" - 1.0
SM10 - SciMax 10				1 1/2" - 1.5	1 1/2" - 1.5
SM5 - SciMax 5				2" - 2.0	2" - 2.0
				2 1/2" - 2.5	2 1/2" - 2.5
				3" - 3.0	3" - 3.0
				4" - 4.0	4" - 4.0
				6" - 6.0	6" - 6.0

For Example: **SM254LMPRTEE-2.0x0.375**



How to Order

Tubing:



Product Line	Material	Surface Treatment	Type	O.D. Size	Wall Thickness
SM40 - SciMax 40	6L - 316L	EP - Electro Polish	WE - Welded	1/4" - 0.25	0.035
SM30 - SciMax 30	4L - 304L	MP - Mechanical Polish	SL - Seamless	3/8" - 0.375	0.035
SM25 - SciMax 25				1/2" - 0.5	0.049
SM20 - SciMax 20				1/2" - 0.5	0.065
SM15 - SciMax 15				3/4" - 0.75	0.065
SM10 - SciMax 10				1" - 1.0	0.065
SM5 - SciMax 5				1 1/2" - 1.5	0.065
				2" - 2.0	0.065
				2 1/2" - 2.5	0.065
				3" - 3.0	0.065
				4" - 4.0	0.083
				6" - 6.0	0.109

For Example: **SM406LMPWE-0.25x0.035**



Tubes

TUBE Dimensions

O.D. Size Inch	Wall Thickness		Size x Wall Thickness
	t inch	t mm	
1/4"	0.035	0.89	0.25x0.035
3/8"	0.035	0.89	0.375x0.035
1/2"	0.049	1.24	0.5x0.049
1/2"	0.065	1.65	0.5x0.065
3/4"	0.065	1.65	0.75x0.065
1"	0.065	1.65	1.0x0.065
1 1/2"	0.065	1.65	1.5x0.065
2"	0.065	1.65	2.0x0.065
2 1/2"	0.065	1.65	2.5x0.065
3"	0.065	1.65	3.0x0.065
4"	0.083	2.11	4.0x0.083
6"	0.109	2.77	6.0x0.109



Tube Tolerances

Tube specifications, ASTM A-269/270/632

Tubing Diameter	Wall Thickness	OD Dimensional Specifications	Length	Wall
		ASTM Spec.	ASTM Spec.	ASTM Spec.
1/4"	.035"	+ .004"/- .000"	-0+1/8"	+/-10%
3/8"	.035"	+ .004"/- .000"	-0+1/8"	+/-10%
1/2"	.049"	+ .002"/- .008"	-0+1/8"	+/-10%
1/2"	.065"	+ .002"/- .008"	-0+1/8"	+/-10%
3/4"	.065"	+ .002"/- .008"	-0+1/8"	+/-10%
1"	.065"	+ .002"/- .008"	-0+1/8"	+/-10%
1 1/2"	.065"	+ .002"/- .008"	-0+1/8"	+/-10%
2"	.065"	+ .002"/- .008"	-0+1/8"	+/-10%
2 1/2"	.065"	+ .002"/- .011"	-0+1/8"	+/-10%
3"	.065"	+ .002"/- .011"	-0+1/8"	+/-10%
4"	.083"	+ .002"/- .012"	-0+1/8"	+/-10%
6"	.109"	+ .002"/- .015"	-0+1/8"	+/-10%



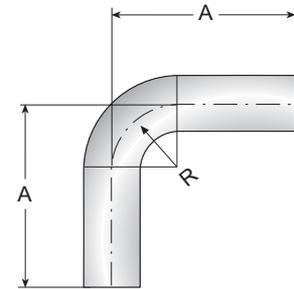
Elbows

EL90 - ELBOW 90°

O.D. Size Inch	Dimensions				Shape - Size
	A inch	A mm	R inch	R mm	
1/4"	2.62	66.7	0.62	15.9	EL90-0.25
3/8"	2.62	66.7	0.94	24.0	EL90-0.375
1/2"	3.00	76.2	1.06	27.0	EL90-0.5
3/4"	3.00	76.2	1.02	26.0	EL90-0.75
1"	3.00	76.2	1.50	38.10	EL90-1.0
1 1/2"	3.75	95.3	2.25	57.20	EL90-1.5
2"	4.75	120.7	3.00	76.20	EL90-2.0
2 1/2"	5.50	139.7	3.75	95.30	EL90-2.5
3"	6.24	158.5	4.50	114.30	EL90-3.0
4"	8.00	203.2	6.00	152.40	EL90-4.0
6"	11.50	292.1	9.00	228.60	EL90-6.0

* How to order - see page 4

** For wall thickness please refer to page 6

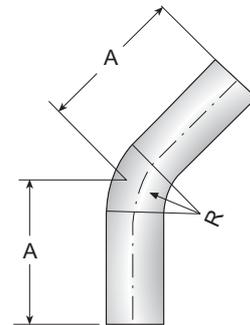


EL45 - ELBOW 45°

O.D. Size Inch	Dimensions				Shape - Size
	A inch	A mm	R inch	R mm	
1/4"	2.000	50.8	0.62	15.9	EL45-0.25
3/8"	2.000	50.8	0.94	24.0	EL45-0.375
1/2"	2.250	57.2	1.06	27.0	EL45-0.5
3/4"	2.250	57.2	1.02	26.0	EL45-0.75
1"	2.250	57.2	1.50	38.10	EL45-1.0
1 1/2"	2.500	63.5	2.25	57.20	EL45-1.5
2"	3.000	76.2	3.00	76.20	EL45-2.0
2 1/2"	3.375	85.7	3.75	95.30	EL45-2.5
3"	3.625	92.1	4.50	114.30	EL45-3.0
4"	4.500	114.3	6.00	152.40	EL45-4.0
6"	6.250	158.8	9.00	228.60	EL45-6.0

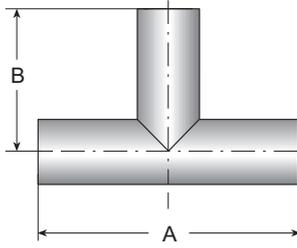
* How to order - see page 4

** For wall thickness please refer to page 6





Tees



ETEE - EQUAL TEE

O.D. Size Inch	Dimensions				Shape - Size
	A in	A mm	B inch	B mm	
¼"	3.500	88.90	1.750	44.50	ETEE-0.25
⅜"	3.500	88.90	1.750	44.50	ETEE-0.375
½"	3.750	95.25	1.875	47.60	ETEE-0.5
¾"	4.000	101.60	2.000	50.80	ETEE-0.75
1"	4.250	107.95	2.125	54.00	ETEE-1.0
1½"	4.750	120.65	2.375	60.30	ETEE-1.5
2"	5.750	146.25	2.875	73.00	ETEE-2.0
2½"	6.250	158.75	3.125	79.40	ETEE-2.5
3"	6.750	171.45	3.375	85.70	ETEE-3.0
4"	8.250	209.55	4.125	104.80	ETEE-4.0
6"	11.304	285.80	5.625	142.90	ETEE-6.0

* **How to order** - see page 4

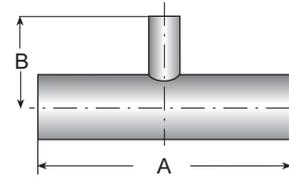
** For wall thickness please refer to page 6



Tees

RTEE - REDUCING TEE

O.D. Size Inch	Dimensions				Shape - Size
	A inch	A mm	B inch	B mm	
3/8" x 1/4"	3.500	88.90	1.750	44.45	RTEE-0.375x0.25
1/2" x 1/4"	3.750	95.30	1.875	47.65	RTEE-0.5x0.25
1/2" x 3/8"	3.750	95.30	1.875	47.65	RTEE-0.5x0.375
3/4" x 1/4"	4.000	101.60	2.000	50.80	RTEE-0.75x0.25
3/4" x 3/8"	4.000	101.60	2.000	50.80	RTEE-0.75x0.375
3/4" x 1/2"	4.000	101.60	2.000	50.80	RTEE-0.75x0.5
1" x 1/4"	4.250	108.00	2.125	54.00	RTEE-1.0x0.25
1" x 3/8"	4.250	108.00	2.125	54.00	RTEE-1.0x0.375
1" x 1/2"	4.250	108.00	2.125	54.00	RTEE-1.0x0.5
1" x 3/4"	4.250	108.00	2.125	54.00	RTEE-1.0x0.375
1 1/2" x 1/4"	4.750	120.70	2.375	60.35	RTEE-1.5x0.25
1 1/2" x 3/8"	4.750	120.70	2.375	60.35	RTEE-1.5x0.375
1 1/2" x 1/2"	4.750	120.70	2.375	60.35	RTEE-1.5x0.5
1 1/2" x 3/4"	4.750	120.70	2.375	60.35	RTEE-1.5x0.75
1 1/2" x 1"	4.750	120.70	2.375	60.35	RTEE-1.5x1.0
2" x 1/4"	5.750	146.00	2.625	66.70	RTEE-2.0x0.25
2" x 3/8"	5.750	146.00	2.625	66.70	RTEE-2.0x0.375
2" x 1/2"	5.750	146.00	2.625	66.70	RTEE-2.0x0.5
2" x 3/4"	5.750	146.00	2.625	66.70	RTEE-2.0x0.75
2" x 1"	5.750	146.00	2.625	66.70	RTEE-2.0x1.0
2" x 1 1/2"	5.750	146.00	2.625	66.70	RTEE-2.0x1.5
2 1/2" x 1/4"	6.250	158.80	2.875	73.00	RTEE-2.5x0.25
2 1/2" x 3/8"	6.250	158.80	2.875	73.00	RTEE-2.5x0.375
2 1/2" x 1/2"	6.250	158.80	2.875	73.00	RTEE-2.5x0.25
2 1/2" x 3/4"	6.250	158.80	2.875	73.00	RTEE-2.5x0.75
2 1/2" x 1"	6.250	158.80	2.875	73.00	RTEE-2.5x1.0
2 1/2" x 1 1/2"	6.250	158.80	2.875	73.00	RTEE-2.5x1.5
2 1/2" x 2"	6.250	158.80	2.875	73.00	RTEE-2.5x2.0
3" x 1/4"	6.750	171.50	3.125	79.40	RTEE-3.0x0.25
3" x 3/8"	6.750	171.50	3.125	79.40	RTEE-3.0x0.375
3" x 1/2"	6.750	171.50	3.125	79.40	RTEE-3.0x0.5
3" x 3/4"	6.750	171.50	3.125	79.40	RTEE-3.0x0.75
3" x 1"	6.750	171.50	3.125	79.40	RTEE-3.0x1.0
3" x 1 1/2"	6.750	171.50	3.125	79.40	RTEE-3.0x1.5
3" x 2"	6.750	171.50	3.125	79.40	RTEE-3.0x2.0
3" x 2 1/2"	6.750	171.50	3.125	79.40	RTEE-3.0x2.5
4" x 1/4"	8.250	209.60	3.625	92.10	RTEE-4.0x0.25
4" x 3/8"	8.250	209.60	3.625	92.10	RTEE-4.0x0.375
4" x 1/2"	8.250	209.60	3.625	92.10	RTEE-4.0x0.5
4" x 3/4"	8.250	209.60	3.625	92.10	RTEE-4.0x0.75
4" x 1"	8.250	209.60	3.625	92.10	RTEE-4.0x1.0
4" x 1 1/2"	8.250	209.60	3.625	92.10	RTEE-4.0x1.5
4" x 2"	8.250	209.60	3.875	98.40	RTEE-4.0x2.0
4" x 2 1/2"	8.250	209.60	3.875	98.40	RTEE-4.0x2.5
4" x 3"	8.250	209.60	3.875	98.40	RTEE-4.0x3.0
6" x 1/4"	11.250	285.80	4.785	123.80	RTEE-6.0x0.25
6" x 3/8"	11.250	285.80	4.785	123.80	RTEE-6.0x0.375
6" x 1/2"	11.250	285.80	4.785	123.80	RTEE-6.0x0.5
6" x 3/4"	11.250	285.80	4.785	123.80	RTEE-6.0x0.75
6" x 1"	11.250	285.80	4.785	123.80	RTEE-6.0x1
6" x 1 1/2"	11.250	285.80	4.785	123.80	RTEE-6.0x1.5
6" x 2"	11.250	285.80	4.785	123.80	RTEE-6.0x2
6" x 3"	11.250	285.80	4.785	123.80	RTEE-6.0x3
6" x 4"	11.250	285.80	5.125	130.20	RTEE-6.0x4.0

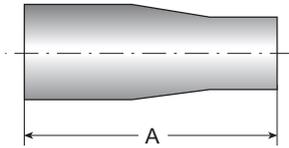


* How to order - see page 4

** For wall thickness please refer to page 6



Reducers



CORD - CONCENTRIC REDUCER

O.D. Size Inch	Dimensions		Shape - Size
	A inch	A mm	
3/8" x 1/4"	3.250	82.60	CORD-0.375x0.25
1/2" x 1/4"	3.250	82.60	CORD-0.25x0.25
1/2" x 3/8"	3.250	82.60	CORD-0.275x0.375
3/4" x 1/4"	3.250	82.60	CORD-0.75x0.25
3/4" x 3/8"	3.250	82.60	CORD-0.75x0.375
3/4" x 1/2"	4.000	101.60	CORD-0.75x0.5
1" x 1/4"	4.500	114.30	CORD-1.0x0.25
1" x 3/8"	4.500	114.30	CORD-1.0x0.375
1" x 1/2"	4.500	114.30	CORD-1.0x0.5
1" x 3/4"	4.000	101.60	CORD-1.0x0.75
1 1/2" x 1/4"	5.250	133.35	CORD-1.5x0.25
1 1/2" x 3/8"	5.250	133.35	CORD-1.5x0.375
1 1/2" x 1/2"	5.500	139.70	CORD-1.5x0.5
1 1/2" x 3/4"	5.000	127.00	CORD-1.5x0.75
1 1/2" x 1"	5.000	127.00	CORD-1.5x1.0
2" x 1/4"	5.500	139.70	CORD-2.0x0.25
2" x 3/8"	5.500	139.70	CORD-2.0x0.375
2" x 1/2"	7.750	196.90	CORD-2.0x0.5
2" x 3/4"	7.250	184.20	CORD-2.0x0.75
2" x 1"	7.250	184.20	CORD-2.0x1.0
2" x 1 1/2"	5.250	133.40	CORD-2.0x1.5
2 1/2" x 1/2"	9.750	247.70	CORD-2.5x0.5
2 1/2" x 3/4"	9.250	235.00	CORD-2.5x0.75
2 1/2" x 1"	9.250	235.00	CORD-2.5x1.0
2 1/2" x 1 1/2"	7.250	184.20	CORD-2.5x1.5
2 1/2" x 2"	5.500	139.70	CORD-2.5x2.0
3" x 1/2"	6.000	152.40	CORD-3.0x0.5
3" x 3/4"	6.000	152.40	CORD-3.0x0.75
3" x 1"	11.250	285.50	CORD-3.0x1.0
3" x 1 1/2"	9.250	235.00	CORD-3.0x1.5
3" x 2"	7.500	190.50	CORD-3.0x2.0
3" x 2 1/2"	5.500	139.70	CORD-3.0x2.5
4" x 3/4"	6.500	165.10	CORD-4.0x0.75
4" x 1"	15.500	393.70	CORD-4.0x1.0
4" x 1 1/2"	13.500	342.90	CORD-4.0x1.5
4" x 1 3/4"	11.750	298.45	CORD-4.0x1.75
4" x 2"	9.750	298.50	CORD-4.0x2.0
4" x 2 1/2"	7.750	247.70	CORD-4.0x2.5
4" x 3"	10.000	196.90	CORD-4.0x3.0
6" x 1"	11.500	292.10	CORD-6.0x1.0
6" x 1 1/2"	11.500	292.10	CORD-6.0x1.5
6" x 2"	11.500	292.10	CORD-6.0x2.0
6" x 2 1/2"	11.500	292.10	CORD-6.0x1.5
6" x 3"	10.000	254.00	CORD-6.0x3.0
6" x 4"	10.000	254.00	CORD-6.0x4.0

* **How to order** - see page 4

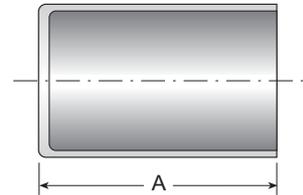
** For wall thickness please refer to page 6



End Caps

ECAP - End Cap

O.D. Size Inch	Dimensions		Shape - Size
	A inch	A mm	
1/4"	1.125	28.5	ECAP-0.25
3/8"	1.125	28.5	ECAP-0.375
1/2"	1.375	34.75	ECAP-0.5
3/4"	1.750	44.45	ECAP-0.75
1"	1.750	44.45	ECAP-1.0
1 1/2"	2.000	50.8	ECAP-1.5
2"	2.000	50.8	ECAP-2.0
2 1/2"	2.000	50.8	ECAP-2.5
3"	2.000	50.8	ECAP-3.0
4"	2.500	63.5	ECAP-4.0
6"	4.770	121.1	ECAP-6.0

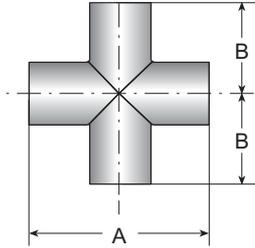


* How to order - see page 4

** For wall thickness please refer to page 6



Crosses

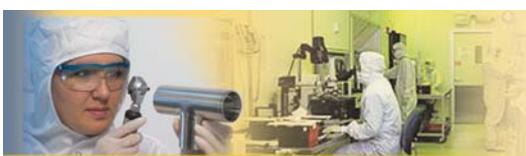


ECRS - EQUAL CROSS

O.D. Size Inch	Dimensions				Shape - Size
	A in	A mm	B inch	B mm	
1/4"	3.500	88.90	1.750	44.50	ECRS-0.25
3/8"	3.500	88.90	1.750	44.50	ECRS-0.375
1/2"	3.750	95.25	1.875	47.60	ECRS-0.5
3/4"	4.000	101.60	2.000	50.80	ECRS-0.75
1"	4.250	107.95	2.125	54.00	ECRS-1.0
1 1/2"	4.750	120.65	2.375	60.30	ECRS-1.5
2"	5.750	146.25	2.875	73.00	ECRS-2.0
2 1/2"	6.250	158.75	3.125	79.40	ECRS-2.5
3"	6.750	171.45	3.375	85.70	ECRS-3.0
4"	8.250	209.55	4.125	104.80	ECRS-4.0
6"	11.304	285.80	5.625	142.90	ECRS-6.0

* **How to order** - see page 4

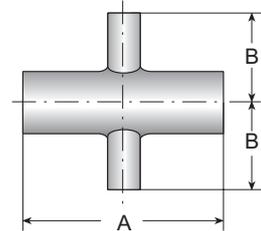
** For wall thickness please refer to page 6



Crosses

RCRS - REDUCING CROSS

O.D. Size Inch	Dimensions				Shape - Size
	A inch	A mm	B inch	B mm	
3/8" x 1/4"	3.500	88.90	1.750	44.45	RCRS-0.375x0.25
1/2" x 1/4"	3.750	95.30	1.875	47.65	RCRS-0.5x0.25
1/2" x 3/8"	3.750	95.30	1.875	47.65	RCRS-0.5x0.375
3/4" x 1/4"	4.000	101.60	2.000	50.80	RCRS-0.75x0.25
3/4" x 3/8"	4.000	101.60	2.000	50.80	RCRS-0.75x0.375
3/4" x 1/2"	4.000	101.60	2.000	50.80	RCRS-0.75x0.5
1" x 1/4"	4.250	108.00	2.125	54.00	RCRS-1.0x0.25
1" x 3/8"	4.250	108.00	2.125	54.00	RCRS-1.0x0.375
1" x 1/2"	4.250	108.00	2.125	54.00	RCRS-1.0x0.5
1" x 3/4"	4.250	108.00	2.125	54.00	RCRS-1.0x0.375
1 1/2" x 1/4"	4.750	120.70	2.375	60.35	RCRS-1.5x0.25
1 1/2" x 3/8"	4.750	120.70	2.375	60.35	RCRS-1.5x0.375
1 1/2" x 1/2"	4.750	120.70	2.375	60.35	RCRS-1.5x0.5
1 1/2" x 3/4"	4.750	120.70	2.375	60.35	RCRS-1.5x0.75
1 1/2" x 1"	4.750	120.70	2.375	60.35	RCRS-1.5x1.0
2" x 1/4"	5.750	146.00	2.625	66.70	RCRS-2.0x0.25
2" x 3/8"	5.750	146.00	2.625	66.70	RCRS-2.0x0.375
2" x 1/2"	5.750	146.00	2.625	66.70	RCRS-2.0x0.5
2" x 3/4"	5.750	146.00	2.625	66.70	RCRS-2.0x0.75
2" x 1"	5.750	146.00	2.625	66.70	RCRS-2.0x1.0
2" x 1 1/2"	5.750	146.00	2.625	66.70	RCRS-2.0x1.5
2 1/2" x 1/4"	6.250	158.80	2.875	73.00	RCRS-2.5x0.25
2 1/2" x 3/8"	6.250	158.80	2.875	73.00	RCRS-2.5x0.375
2 1/2" x 1/2"	6.250	158.80	2.875	73.00	RCRS-2.5x0.25
2 1/2" x 3/4"	6.250	158.80	2.875	73.00	RCRS-2.5x0.75
2 1/2" x 1"	6.250	158.80	2.875	73.00	RCRS-2.5x1.0
2 1/2" x 1 1/2"	6.250	158.80	2.875	73.00	RCRS-2.5x1.5
2 1/2" x 2"	6.250	158.80	2.875	73.00	RCRS-2.5x2.0
3" x 1/4"	6.750	171.50	3.125	79.40	RCRS-3.0x0.25
3" x 3/8"	6.750	171.50	3.125	79.40	RCRS-3.0x0.375
3" x 1/2"	6.750	171.50	3.125	79.40	RCRS-3.0x0.5
3" x 3/4"	6.750	171.50	3.125	79.40	RCRS-3.0x0.75
3" x 1"	6.750	171.50	3.125	79.40	RCRS-3.0x1.0
3" x 1 1/2"	6.750	171.50	3.125	79.40	RCRS-3.0x1.5
3" x 2"	6.750	171.50	3.125	79.40	RCRS-3.0x2.0
3" x 2 1/2"	6.750	171.50	3.125	79.40	RCRS-3.0x2.5
4" x 1/4"	8.250	209.60	3.625	92.10	RCRS-4.0x0.25
4" x 3/8"	8.250	209.60	3.625	92.10	RCRS-4.0x0.375
4" x 1/2"	8.250	209.60	3.625	92.10	RCRS-4.0x0.5
4" x 3/4"	8.250	209.60	3.625	92.10	RCRS-4.0x0.75
4" x 1"	8.250	209.60	3.625	92.10	RCRS-4.0x1.0
4" x 1 1/2"	8.250	209.60	3.625	92.10	RCRS-4.0x1.5
4" x 2"	8.250	209.60	3.875	98.40	RCRS-4.0x2.0
4" x 2 1/2"	8.250	209.60	3.875	98.40	RCRS-4.0x2.5
4" x 3"	8.250	209.60	3.875	98.40	RCRS-4.0x3.0
6" x 1/4"	11.250	285.80	4.785	123.80	RCRS-6.0x0.25
6" x 3/8"	11.250	285.80	4.785	123.80	RCRS-6.0x0.375
6" x 1/2"	11.250	285.80	4.785	123.80	RCRS-6.0x0.5
6" x 3/4"	11.250	285.80	4.785	123.80	RCRS-6.0x0.75
6" x 1"	11.250	285.80	4.785	123.80	RCRS-6.0x1
6" x 1 1/2"	11.250	285.80	4.785	123.80	RCRS-6.0x1.5
6" x 2"	11.250	285.80	4.785	123.80	RCRS-6.0x2
6" x 3"	11.250	285.80	4.785	123.80	RCRS-6.0x3
6" x 4"	11.250	285.80	5.125	130.20	RCRS-6.0x4.0



* How to order - see page 4

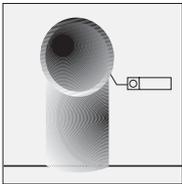
** For wall thickness please refer to page 6

Fitting Tolerances

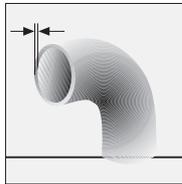
Nominal OD Size	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"
O.D. Tolerance	±.005	±.005	±.005	±.005	±.005	±.008	±.008	±.010	±.010	±.015	±.030
Nominal Wall Thickness	.035	.035	.049/.065	.065	.065	.065	.065	.065	.065	.083	.109
Wall Thickness Tolerance before EP	+0.003 - .004	+0.003 - .004	+0.005 - .008	+0.005 - .008	+0.005 - .008	+0.005 - .008	+0.005 - .008	+0.005 - .008	+0.005 - .008	+0.008 - .010	+0.015 - .015
Wall Thickness Tolerance after EP	+0.005 - .010	+0.005 - .010	+0.005 - .010	+0.005 - .010	+0.005 - .010	+0.005 - .010	+0.005 - .010	+0.005 - .010	+0.005 - .010	+0.008 - .012	+0.015 - .017
Control Length (C)	.750	.750	.750	.750	.750	.750	.750	.750	.750	.750	.750
Tangent Length (T)	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.750	2.000	2.500
Squareness Face to Tangent (B)	.005	.005	.005	.005	.008	.008	.008	.010	.016	.016	.030
Off Angle (O)	.009	.012	.014	.018	.025	.034	.043	.054	.068	.086	.135
Off Plane (P)	±.030	±.030	±.030	±.030	±.030	±.050	±.050	±.050	±.050	±.060	±.060

* All dimensions are in Inches

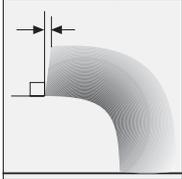
•Roundness



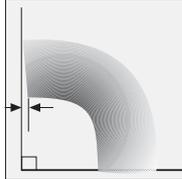
•Wall Thickness



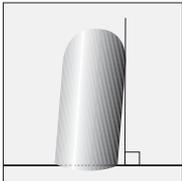
•Squareness Face to Tangent



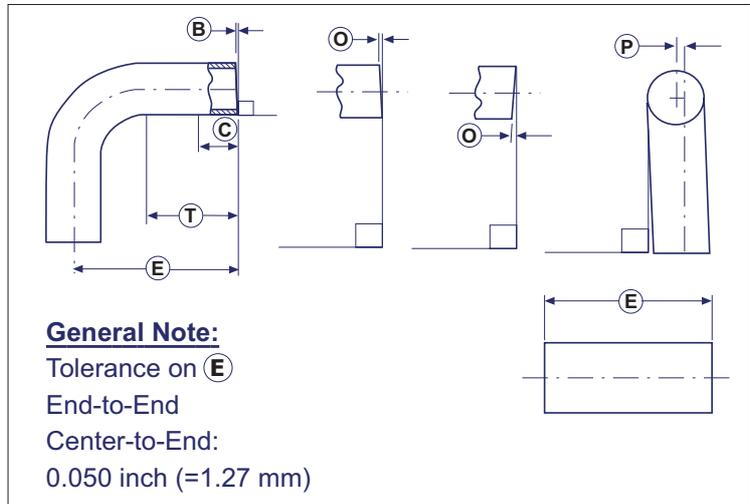
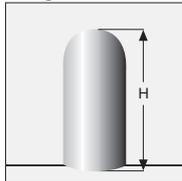
•Off Angle



•Off Plane



•Height



Vessels & Customized Components

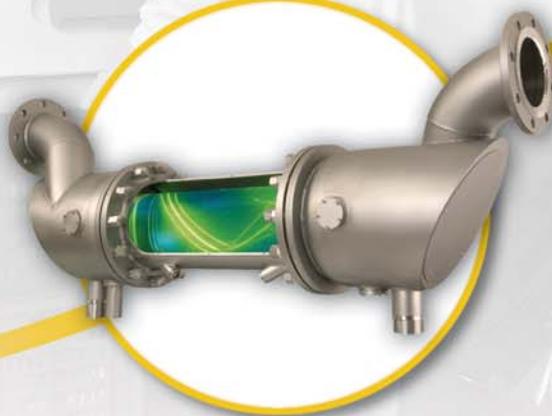
EGMO, with over 40 years of experience in stainless steel flow equipment, has the capability to transfer the customer concept design to product.

Our custom-made components include:

- Flow Components: manifolds, pneumatic valves, filter housing, special fittings.
- Vessels: vacuum chambers, expansion tanks, reactors, skids.

Our capabilities:

- Transfer concept design to production drawings
- Precision plastic forming
- Surface treatment including mechanical polish and in-house electro-polish services
- Q.A. system according to international standards: ISO, CE, TÜV



Inspection Tests and Documentation

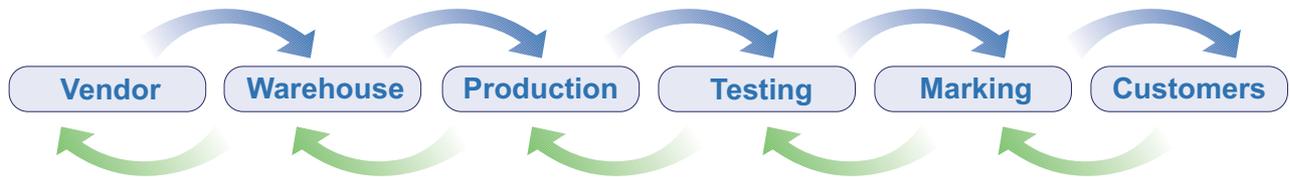
Summary table of testing, inspection and certification that can be given per product line.

Description	Standard / Value							
		SciMax 40	SciMax 30	SciMax 25	SciMax 20	SciMax 15	SciMax 10	SciMax 5
Material Composition	ASTM A269, A632	✓	✓	✓	✓	✓	✓	✓
Mechanical Tests	ASTM A269, A632	✓	✓	✓	✓	✓	✓	✓
Visual Inspection 100%	Internal procedure	✓	✓	✓	✓	✓	✓	✓
Dimensional Measurements	ANSI B31.3	✓	✓	✓	✓	✓	✓	✓
Hydrocarbon Cleaning Inspection	CGA G-4.1	✓	✓	✓	✓	✓	✓	✓
Helium Leak Test for Welded Fittings	1*10 ⁻⁹ scc/sec	✓	✓	✓	✓	✓	✓	✓
Inspection Certification	EN 10204 3.1	✓	✓	✓	✓	✓	✓	✓
Ra Measurements	ASME B46.1		✓	✓	✓	✓	✓	✓
Particles Test	<10 particles (greater than 0.1µ ft ³)						✓	✓
Moisture Test for Tube: Additional Moisture on UHP N2 Purged Gas	Δ0.5 ppm						✓	✓
Ultra Pure Water Resistivity	18 MΩ						✓	✓
SEM TEST - Scanning Electron Microscopy for Defects	SEMATECH 90120401B 40 defects (magnification*3500)						✓	✓
XPS TEST - X Ray Photoelectron Spectroscopy for Analysis of Cr/Fe	SEMATECH 90120403B 1.5/1<						✓	✓
XPS TEST - X Ray Photoelectron Spectroscopy for Analysis of CrO/FeO	SEMATECH 90120403B 3/1 <						✓	✓
AES TEST - Auger Electron Spectroscopy for Measuring of Oxide Thickness	SEMATECH 91060573B / 20 A<						✓	✓



MTR - Material Test Report

The MTR is the reference document for the entire history of the production processes and the raw materials used to make the SciMax component.



The MTR document is easily generated on-line via [Sci-Max.net](https://www.sci-max.net) using only the job number as input. The job number is the product identification number which represents all processes and raw materials related to the specific item.

Online MTR

Please, enter job/certificate number:

Create Certificate 



The MTR format provides the following information:

1. Part number, part description and job number
2. Material type
3. Heat Number per each component describing the fitting and its associated properties:
 - a. Tube dimensions and standards
 - b. Chemical composition
 - c. Mechanical properties
 - d. Visual, dimensional, corrosion, EDDY current testing, flaring and flattening, PMI Test
4. Certificate of Compliance (please refer to table page 16)





NEUMO EHRENBERG GROUP

GLOBAL LOCATIONS



NEUMO GmbH+Co. KG (D)
Tel: +49 (0) 7043 36 0
Fax: +49 (0) 7043 36 130
E-Mail: info@neumo.de
www.neumo.de
GERMANY



NEUMO-EGMO Spain S.L
Tel: +34 977 524 914
Fax: +34 977 524 898
E-Mail: neumo-es@neumo-es.com
www.neumo-es.com
SPAIN



NEUMO Polska Sp. z o.o
Tel: +48 (0) 46 833 4306
Fax: +48 (0) 46 832 5626
E-Mail: neumo@onet.lid.pl
POLAND



Damstahl Stainless UK
Tel: +44 (0) 1952 583 999
Fax: +44 (0) 1952 583 958
E-Mail: stainless@damstahl.com
www.damstahl.co.uk
UNITED KINGDOM



Damstahl a/s (Denmark)
Tel: +45 (0) 8794 4000
Fax: +45 (0) 8794 4150
E-Mail: ds@damstahl.com
www.damstahl.dk
DENMARK



Damstahl a/b (Sweden)
Tel: +46 87 61 71 00
Fax: +46 87 61 14 05
www.damstahl.se
SWEDEN



VNE Corporation
Tel: +1 800 356 1111
+1 608 756 4930
Fax: +1 608 756 3643
E-Mail: stainless@vnecorp.com
www.vnestainless.com
U.S.A



Neumo Turkey
Tel: +90 (212) 875 01 41
Fax: +90 (212) 875 23 13
E-Mail: neumo@superonline.com
www.neumo.com.tr
TURKEY



NEUMO Aseptic Technology
Tel: +86 (21) 5239 5005 /6 /7 /9
Fax: +86 (21) 5239 0489
E-Mail: info@neumo.com.cn
CHINA



AWH Armaturenwerke (D)
Hötensleben GmbH
Tel: +49 (0) 39405 92 0
Fax: +49 (0) 39405 92 111
E-Mail: info@awh.de
www.awh.de

Damstahl GmbH (D)
Tel: +49 (0) 2173 797 0
Fax: +49 (0) 2173 797 274
E-Mail: ds@damstahl.de
www.damstahl.de

Gebr. Rieger GmbH+Co. KG (D)
Tel: +49 (0) 7361 5702 0
Fax: +49 (0) 7361 5702 51
E-Mail: info@rr-rieger.de
www.rr-rieger.de
GERMANY



EGMO Ltd.
Tel: +972 (0) 4 9855 171/176
+972 (0) 4 9855 130/111
Fax: +972 (0) 4 9855 175
E-Mail: sales@egmo.co.il
www.egmo.co.il
ISRAEL



Neumo Budapest Kft
Tel: +36 (1) 3174177
+36 (1) 3185982
Fax: +36 (1) 266 8765
E-Mail: neumo@neumo.hu
www.neumo.hu
HUNGARY



Herrli AG (Switzerland)
Tel: +41 (0) 31 750 12 11
Fax: +41 (0) 31 750 12 00
E-Mail: info@herrli.net
www.herrli.net
SWITZERLAND



Damstahl a/s Oslo (N)
Tel: +47 56 14 35 30
Fax: +47 56 14 32 09
E-Mail: dbs@damstahl.com
www.damstahl.no
NORWAY

www.Sci-Max.net