

# STRIPWOUND METAL HOSE, coolant hose & lamp arms

# A LONG LEGACY OF PRECISION PRODUCTS

Precision Hose & Expansion Joints is one of a very few American companies that manufacture both Interlocked and Square Locked metal hose, in addition to a complete line of metal hose, wire braid, round metal expansion joints, metallic flue duct expansion joints, non-metallic flue duct expansion joints and rubber pressure piping expansion joints. With over 65 years of being in the metal hose and expansion joint business-dating back to the early 1950's-the owners of Precision Hose & Expansion Joints have over 130 years combined experience in this industry.

Our 105,000 square foot manufacturing facility is located on 6 acres in Stone Mountain, Georgia. The plant was designed totally for the state of the art manufacturing of metal hose and expansion joints. We would certainly welcome you to visit our company on your next visit to the Atlanta area.

Quality, service and fair pricing is the basis on how we operate our business.

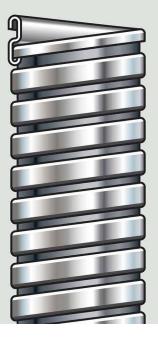
# STRIPWOUND METAL HOSE

Interlocked and Square Locked metal hose is available in 300 Series Stainless Steel, Galvanized, Brass, Bronze, and Monel. Precision Hose & Expansion Joints manufactures a wide range of sizes from 1/8" I.D. (inside diameter) to 16" I.D., with larger sizes available upon special request. All product lines are offered with a variety of packing materials to help increase the pressure rating of the hose and allow for vacuum applications. And if required, all product lines are available in a wide variety of extruded covers-PVC, Silicone, Rubber, Polyurethane, Teflon, etc.

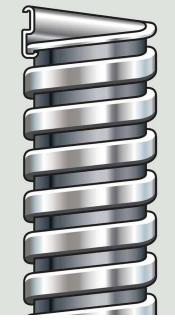
Precision Hose & Expansion Joints manufacturers a full line of Smooth Bore Interlocked metal hose for the handling of abrasive material and the complete product line is available in the same materials as our regular Rough Bore Interlocked hose. For special applications, fittings can be welded or brazed on Interlocked metal hose in our modern fabrication facility.

### Our Interlocked and Square Locked metal hose is manufactured to the highest quality standards in the industry.





#### Square Locked



### APPLICATIONS

Interlocked and Square Locked metal hose is used in a wide variety of applications.

### **INTERLOCKED**

- Dry bulk material handling
- Liner for corrugated metal hose
- Protective cover on metal hose
- Fume and dust collections
- Truck exhaust
- B.O.P. hose
- Telephone cord armor

### SQUARE LOCKED

- Protective casing
- Electronic shielding
- Security systems
- Wiring conduit
- Fiber optics
- Thermocouple

### Interlocked Rough Bore Hose

All dimensions are based on the hose in the extended position. All weights are approximate.

PHL-100S Stainless Steel 304 PHL-100G Galvanized Steel .010" – .012" Strip		PHM-150	S Stainless G Galvaniz S'' – .017''	zed Steel	
HOSE I.D. (IN.)	BEND RADIUS (IN.)	WEIGHT PER FOOT (LBS.)	HOSE I.D. (IN.)	BEND RADIUS (IN.)	WEIGHT PER FOOT (LBS.)
1″	5.75″	0.35	1″	6.4″	0.40
1-1/8″	6.0″	0.38	1-1/8″	6.5″	0.45
1-1/4″	6.25″	0.40	1-1/4"	6.6″	0.51
1-3/8″	6.5″	0.45	1-3/8″	6.7″	0.63
1-1/2″	6.75″	0.50	1-1/2"	6.9″	0.75
1-3/4″	7.0″	0.57	1-3/4"	7.0″	0.87
1-7/8″	7.25″	0.61	1-7/8″	7.5″	0.95
2″	7.50″	0.65	2″	8.0″	1.00
2-1/4″	7.80″	0.75	2-1/4"	9.0″	1.10
2-1/2″	8.5″	0.80	2-1/2"	10.0″	1.21
3″	10.0″	1.00	3″	12.0″	1.45
3-1/2″	10.5″	1.10	3-1/2"	16.5″	1.70
4″	14.5″	1.40	4″	18.0″	1.95
4-1/2″	16.5″	1.50	4-1/2"	19.0″	2.15
5″	18.0″	1.70	5″	19.5″	2.40
5-1/2″	20.0″	1.85	5-1/2"	21.5″	2.70
6″	22.0″	2.00	6″	23.5″	2.90
7″			7″	26.5″	3.35
8″			8″	27.0″	3.80
9″			9″	28.0″	4.25
10″			10″		
11″			11″		
12″			12″		
13″			13″		
14″			14″		
15″			15″		
16″			16″		

PHM-150G Galvanized Steel .015" – .017" Strip				
HOSE I.D. (IN.)	BEND RADIUS (IN.)	WEIGHT PER FOOT (LBS.)		
1″	6.4″	0.40		
1-1/8″	6.5″	0.45		
1-1/4"	6.6″	0.51		
1-3/8″	6.7″	0.63		
1-1/2″	6.9″	0.75		
1-3/4"	7.0″	0.87		
1-7/8″	7.5″	0.95		
2″	8.0″	1.00		
2-1/4"	9.0″	1.10		
2-1/2"	10.0″	1.21		
3″	12.0″	1.45		
3-1/2"	16.5″	1.70		
4″	18.0″	1.95		
4-1/2"	19.0″	2.15		
5″	19.5″	2.40		
5-1/2″	21.5″	2.70		
6″	23.5″	2.90		
7″	26.5″	3.35		
8″	27.0″	3.80		
9″	28.0″	4.25		
10″				
11″				
12″				
13″				
14″				
15″				

PHH-200S Stainless Steel 304 PHH-200G Galvanized Steel .018" - .020" Strip

> BEND RADIUS

> > \_\_\_

\_\_\_

\_\_\_

\_\_\_ 7.5″

7.6″ 7.7″

7.8″

8.85″ 9.7″

11.70"

12.20"

14.15"

16.0"

17.8″

19.5″

21.0"

24.5" 27.5″

27.75" 28.0"

31.0"

34.0"

38.0"

42.0"

45.0"

48.0"

HOSE I.D.

1″

1-1/8"

1-1/4″

1-3/8"

1-1/2" 1-3/4"

1-7/8"

2″ 2-1/4"

2-1/2" 3″

3-1/2"

4″

4-1/2"

5″

5-1/2"

6″

7″

8″ 9″

10" 11"

12″

13″

14"

15″

16"

PHXH-250S Stainless Steel 304 PHXH-250G Galvanized Steel .022" - .025" Strip

WEIGHT PER FOOT (LBS.)	HOSE I.D. (IN.)	BEND RADIUS (IN.)	WEIGHT PER FOOT (LBS.)
	1″		
	1-1/8"		
	1-1/4"		
	1-3/8″		
0.95	1-1/2″		
1.10	1-3/4″		
1.15	1-7/8″		
1.25	2″	8.3″	1.65
1.40	2-1/4"	9.5″	1.80
1.53	2-1/2″	10.0"	2.00
1.82	3″	12.5″	2.40
2.11	3-1/2"	12.75″	2.80
2.45	4″	14.5″	3.20
2.70	4-1/2"	16.5″	3.53
2.99	5″	18.1″	3.95
3.29	5-1/2"	21.55″	4.33
3.60	6″	25.0"	4.70
4.20	7″	29.25″	5.50
4.65	8″	32.1″	6.25
5.20	9″	33.6″	6.62
5.80	10″	35.0″	6.98
6.90	11″	38.5″	7.37
6.95	12″	42.0"	7.75
7.10	13″	45.5″	8.53
8.10	14″	49.0"	9.30
8.70	15″	52.5″	9.98
9.25	16″	56.0″	10.65

• Strip thickness of .030 and .035 are available upon request.

#### PACKING AVAILABLE

TYPE PACKING	PRESSURE RANGE	VACUUM	TEMPERATURE
Cotton	Up to 15 PSI	Up to 15" Mercury	300°F
Stainless Wire	Up to 15 PSI	Up to 15" Mercury	1500°F
Apyrous	Up to 15 PSI	Up to 15" Mercury	450°F
Elastomeric	Up to 20 PSI	Up to 20" Mercury	180°F

Packed

Unpacked

## Interlocked Smooth Bore Hose

All dimensions are based on the hose in the extended position. All weights are approximate.

PI	PHI-SB-SS-L PHI-SB-GG-L PHI-SB-GS-L		P	PHI-SB-SS-M PHI-SB-GG-M PHI-SB-GS-M		PI	HI-SB-SS HI-SB-GG HI-SB-GS	-H
HOSE I.D. (IN.)	BEND RADIUS (IN.)	WEIGHT PER FOOT (LBS.)	HOSE I.D. (IN.)	BEND RADIUS (IN.)	WEIGHT PER FOOT (LBS.)	HOSE I.D. (IN.)	BEND RADIUS (IN.)	WEIGHT PER FOOT (LBS.)
1-1/2″	9.5″	1.30	1-1/2″	12.5″	1.50	1-1/2″		
1-3/4″	11.5″	1.50	1-3/4″	14.0″	1.75	1-3/4"		
2″	13.0″	1.75	2″	16.5″	2.00	2″	17.0″	2.15
2-1/4″	14.5″	2.00	2-1/4″	17.0″	2.20	2-1/4″	17.5″	2.35
2-1/2″	15.0″	2.20	2-1/2″	18.25″	2.40	2-1/2″	18.6″	2.60
2-3/4″	16.0″	2.40	2-3/4″	18.5″	2.60	2-3/4″	19.0"	2.80
3″	18.0″	2.60	3″	20.0"	2.90	3″	20.5″	3.10
3-1/2″	18.75″	3.00	3-1/2″	21.0"	3.30	3-1/2″	21.4″	3.60
4″	19.25″	3.40	4″	22.5″	3.75	4″	22.0"	4.10
4-1/2″	22.0″	3.75	4-1/2″	25.0″	4.25	4-1/2″	25.0″	4.60
5″	25.0″	4.25	5″	27.0″	4.75	5″	27.5″	5.00
6″	27.0″	5.00	6″	31.0"	5.65	6″	33.0"	6.00
7″	29.0″	6.00	7″	32.5″	6.60	7″	37.0″	7.40
8″	32.0″	6.75	8″	36.0″	7.75	8″	39.0"	8.40
10″			10″	50.0"	9.75	10″	42.0"	10.50
12″			12″	60.0″	11.75	12″	47.0″	12.50
14″			14″	70.0″	13.50	14″	55.0"	14.60
16″			16″	80.0″	15.40	16″	62.5″	16.60

PHI-SB-GG-L	Armor and liner made from stainless steel Armor and liner made from galvanized Armor is made from galvanized / liner from stainless steel	- ( - (
PHI-SB-GG-M	Armor and liner made from stainless steel Armor and liner made from galvanized Armor is made from galvanized / liner from stainless steel	- a - a - a
PHI-SB-GG-H	Armor and liner made from stainless steel Armor and liner made from galvanized Armor is made from galvanized / liner from stainless steel	- ( - (

- 0.015" on both
- 0.015" on both
- 0.015" on both
- armor is 0.015" and liner is 0.018"
- armor is 0.015" and liner is 0.018"
- armor is 0.015" and liner is 0.018"
- 0.018" on both
- 0.018" on both
- 0.018" on both

#### PACKING AVAILABLE

TYPE PACKING	PRESSURE RANGE	VACUUM	TEMPERATURE
Cotton	Up to 15 PSI	Up to 15" Mercury	300°F
Stainless Wire	Up to 15 PSI	Up to 15" Mercury	1500°F
Apyrous	Up to 15 PSI	Up to 15" Mercury	450°F
Elastomeric	Up to 20 PSI	Up to 20" Mercury	180°F



Packed

Unpacked

### Interlocked Loose Wound Metal Hose

For use on Braided Corrugated Metal Hose Assemblies requiring either an OD Guard or ID Flow Liner

All dimensions are based on the hose in the extended position. All weights are approximate.

	PHI-LW-S Stainless Steel 304 PHI-LW-G Galvanized Steel .010" – .012" Strip				
HOSE I.D. (IN.)	WEIGHT PER FOOT (LBS.)	HOSE I.D. (IN.)	WEIGHT PER FOOT (LBS.)		
3/8″	0.140	1-1/8"	0.33		
13/32″	0.145	1-1/4"	0.37		
7/16″	0.150	1-3/8″	0.44		
15/32"	0.155	1-1/2″	0.49		
1/2″	0.165	1-5/8″	0.53		
9/16″	0.175	1-3/4"	0.59		
5/8″	0.185	1-7/8″	0.63		
11/16″	0.190	2″	0.68		
3/4"	0.220	2-1/16"	0.70		
13/16″	0.225	2-1/8″	0.74		
7/8″	0.240	2-1/4"	0.80		
15/16"	0.270	2-1/2″	0.90		
1″	0.285	3″	1.00		
1-1/16"	0.300	3-1/2" to 10"	N/A		

Many types of fittings can be attached to Interlocked metal hose either at the factory or in the field. (*Refer to page 7.*)

### Bronze, Brass and Monel material is available upon request. Dimensions are the same as Galvanized Steel.

Bronze specifies: PHI-LW-BR

• Brass specifies: PHI-LW-BA

#### PACKING AVAILABLE

TYPE PACKING	PRESSURE RANGE	VACUUM	TEMPERATURE
Cotton	Up to 15 PSI	Up to 15" Mercury	300°F
Stainless Wire	Up to 15 PSI	Up to 15" Mercury	1500°F
Apyrous	Up to 15 PSI	Up to 15" Mercury	450°F
Elastomeric	Up to 20 PSI	Up to 20" Mercury	180°F



Packed

Unpacked



## Interlocked Capilary Hose

All dimensions are based on the hose in the extended position. All weights are approximate.

PHI-IL-S PHI-IL-C			
HOSE I.D. (IN.)	HOSE O.D. (IN.)	WEIGHT PER FOOT (LBS.)	
15/32"	.256″	0.052	
13/16"	.285″	0.062	
7/32″	.325″	0.092	
1/4″	.345″	0.110	
9/32″	.375″	0.120	
5/16"	.405″	0.130	
3/8″	.575″	0.160	
1/2″	.600″	0.180	
9/16″	.665″	0.185	
5/8″	.725″	0.190	
11/16"	.790″	0.200	
3/4″	.850″	0.210	
13/16″	.950"	0.230	
7/8″	.980″	0.250	
15/16"	1.040″	0.270	

Larger sizes available upon request.

Special swaged fittings available upon request.

Bronze and Brass material is available upon request. Dimensions are the same as Galvanized Steel.

• Bronze specifies: PHI-IL-BR

Brass specifies: PHI-IL-BA



All product lines are available with a wide variety of extruded covers–PVC, Silicone, Rubber, Polyurethane, Teflon, etc.

#### PACKING AVAILABLE

TYPE PACKING	PRESSURE RANGE	VACUUM	TEMPERATURE
Cotton	Up to 15 PSI	Up to 15" Mercury	300°F
Stainless Wire	Up to 15 PSI	Up to 15" Mercury	1500°F
Apyrous	Up to 15 PSI	Up to 15" Mercury	450°F
Elastomeric	Up to 20 PSI	Up to 20" Mercury	180°F



Packed

Unpacked

### Square Locked Metal Hose

All dimensions are based on the hose in the extended position. All weights are approximate.

HOSE I.D. (IN.)	HOSE O.D. (IN.)	WEIGHT PER FOOT (LBS.)
1/8″	.210″	0.030
5/32"	1/4"	0.038
3/16"	9/32″	0.042
7/32″	5/16"	0.047
1/4"	11/32″	0.053
9/32"	3/8″	0.061
5/16"	13/32″	0.065
11/32"	7/16″	0.070
3/8″	15/32″	0.082
13/32″	17/32″	0.095
7/16″	9/16"	0.115
1/2"	5/8″	0.140
9/16"	11/16"	0.150
5/8″	3/4"	0.165
7/8″	1″	0.310
1″	1-1/8″	0.400

# PHI-SL-SStainless Steel 304PHI-SL-GGalvanized Steel

HOSE I.D. (IN.)	HOSE O.D. (IN.)	WEIGHT PER FOOT (LBS.)
3/16"	9/32″	0.055
7/32″	5/16″	0.057
1/4″	.360″	0.065
9/32″	3/8" 0.067	
5/16"	.420″	0.072
11/32"	.460″	0.077
3/8″	1/2″	0.081
7/16″	9/16"	0.093
1/2″	5/8″	0.120
9/16″	11/16"	0.130
5/8″	3/4″	0.156
3/4″	31/32"	0.250
7/8″	1-1/16″	0.270
1″	1-3/16″	0.285
1-1/4"	1-7/16"	0.370
1-1/2″	1-5/8″	0.450





Square Locked metal hose can be used in a wide variety of applications where flexibility is required.

Bronze and Brass material is available upon request. Dimensions are the same as Galvanized Steel.

Bronze specifies: PHI-SL-BR

Brass specifies: PHI-SL-BA

All product lines are available with a wide variety of extruded covers-PVC, Silicone, Rubber, Polyurethane, Teflon, etc.

#### PACKING AVAILABLE

TYPE PACKING	PRESSURE RANGE	VACUUM	TEMPERATURE
Cotton	Up to 15 PSI	Up to 15" Mercury	300°F
Stainless Wire	Up to 15 PSI	Up to 15" Mercury	1500°F
Apyrous	Up to 15 PSI	Up to 15" Mercury	450°F
Elastomeric	Up to 20 PSI	Up to 20" Mercury	180°F



Packed

Unpacked



## Assembly Fittings Available

ASSEMBLY FITTING		Descript	Attachment Method	
	Part D (Cam-Lock), Groove Coupler	Available from 1/2" – 8" Sizes	Aluminum or Stainless Steel	Epoxy or Welding
	Slip-on Fixed Flange	150# Rated Raised Face Slip-on Flange	Carbon Steel or Stainless Steel	Welding
	Part A (Cam-Lock), Groove Adapter	Available from 1/2" – 8" Sizes	Aluminum or Stainless Steel	Epoxy or Welding
	Plate Flange	150# Drilling Variety of thickness and drilling	Carbon Steel or Stainless Steel	Welding
	Tube End	Wide range of wall gauges and bent tube ends.	Carbon Steel, Aluminum or Stainless Steel	Epoxy or Welding
	Slip-on Flange with Type C-Stub End	Sched. 10 Type "C" Stub end with 150# Slip-on Flange	Carbon Steel or Stainless Steel	Welding
	Unthreaded Nipple	Hose fits into Unthreaded Nipple. Schedule 10 or 40	Carbon Steel or Stainless Steel	Welding
	Male Pipe Nipple	Schedule 40 Pipe Nipple with NPT threads	Carbon Steel, Aluminum or Stainless Steel	Epoxy or Welding
	Victaulic Male Nipple	Schedule 40 Pipe grooved Victaulic clamping	Carbon Steel or Stainless Steel	Welding
	Farm Flange	Specify hose O.D. when ordering	Carbon Steel or Stainless Steel	Welding

Please contact the factory for fittings not shown in the above chart for a quote.

### Many types of fittings can be attached to Interlocked metal hose either at the factory or in the field.

- Fittings can be attached to the I.D. or O.D. by either Epoxy or Welding.
- Epoxy has a maximum temperature of 250°F.
- Welding has a maximum temperature of 1500°F. Note: Welded fittings not recommended on packed hose.

HOSE MATERIAL	MAXIMUM TEMPERATURE	FITTING ATTACHMENT METHOD	MAXIMUM TEMPERATURE
Stainless Steel	1800°F	Welding	1200°F
Galvanized	500°F	Ероху	250°F

### **Coolant Hose**

Sealflex<sup>®</sup> Metallic Tubing & Flexible Gooseneck Tubing

HOSE SIZE (IN.)	HOSE I.D. (IN.)	HOSE O.D. (IN.)
1/8″	.156″	.315″
1/4"	.260"	.497″
3/8"	.375″	.585″
1/2"	.500″	.795″
3/4"	.750" 1.068"	

#### STANDARD FITTINGS

Sealflex® can be provided with male or female couplings and nozzles, or fitted to your specifications.

- Male NPT
- Female NPT
- Nozzle

#### **BENEFITS**

- Sealflex<sup>®</sup> Metallic Tubing is tension-wound to completely seal itself to carry oil, coolants, and solvents without leaking.
- Flexible Gooseneck Tubing allows for hose to stay put in position allowing for a consistent, accurate stream of coolant to targeted area.

Coolant hoses are available from 6" in length and above. Our engineering department is available for any custom applications that you might have.



### Lamp Arms

Precision Hose & Expansion Joints manufactures flexible steel tubing for many applications and our engineering department is ready to work with you on any custom application needed.

- Lamps
- Medical Equipment
- Refrigeration
- Microphone Arms
- Goose Necks
- Instrumentation
- Support Mounts
- Fiber Optics

- Available finishes:
- Chrome
- Black E-coat
- Nickel
- Unfinished

## Warranty

- 1. DEFINITION: "Document" shall refer to these General Terms and Conditions and the Purchase Order, Invoice, or Delivery Ticket, as the case may be, printed on the face hereof.
- 2. DELIVERY: Time is of the essence in this transaction, and if delivery of conforming Product(s) or performance of conforming services is not completed by the time(s) promised, Buyer reserves the right, in addition to its other rights and remedies, to cancel this order, to reject such Product(s) or services in whole or part on reasonable notice to Seller, and/ or to purchase substitute Products or services elsewhere and charge Seller with any loss incurred. Shipments sent C.O.D. without Buyer's written consent will not be accepted and will be at Seller's risk.
- 3. PRICE: Buyer shall not be billed at prices higher than stated herein unless authorized in writing by Buyer. Seller agrees to notify Buyer of any price reduction made in Products or services covered by this Document subsequent to the date hereof and prior to delivery or performance and agrees that any such reduction will be applicable to this Document.
- 4. TERMS: This sale is limited of these terms and conditions. Any additional or different terms or conditions proposed by you are rejected unless we expressly agree there to in writing. A contract embodying all and only these terms and conditions shall be formed by (i) delivery of materials or goods ("Product(s)") or performance of services and (ii) acceptance of such Product(s) or services by buyer. References to this document shall, unless the context otherwise requires, include any contract resulting from this Document. No modification of this document shall be effective without our written consent. No course of prior dealings, no usage of trade, and no course of performance shall be used to modify, supplement, or explain any terms used in this Document.
- 5. PAYMENT: All payments are due pursuant to the payment term on the face of this Document.
- 6. TERMINATION: Buyer expressly reserves the right, in the event that this Document is issued pursuant to a prime contact with the Government or to a subcontract thereunder, to terminate the work under this Document at any time by written or telegraphic notice to Seller stating the extent and effective date of such termination, in which event the rights and obligations of the parties hereto shall be determined in accordance with the termination provisions applicable to such Government contract.
- 7. CONTINGENCIES: Failure of either party to perform hereunder, except for the payment of money, in whole or in part, occasioned by act of God, act of the public enemy, fire, explosion, perils of sea, flood, drought, war, riot, sabotage, terrorism, accident, embargo, government priority, requisition or allocation, or any circumstance of like or different character beyond the reasonable control of the party so failing to perform, shall not subject said party to any liability to the other party for such period of time and to the extent that such contingency precludes performance.

#### 8. WARRANTIES:

- (a) Seller makes NO WARRANTY WHATSOEVER, except as to title, with respect to any Product(s) manufactured and/or designed to Buyer's own specifications (other than mere dimensions), and Buyer shall, at its own expense, indemnify, defend and hold Seller harmless from and against any claim, suit, or expense which shall be asserted or brought against Seller by reason of its manufacture or sale of such Product(s).
- (b) Seller makes NO WARRANTY WHATSOEVER concerning any Product(s) manufactured by others, but will extend to Buyer any warranties respecting such Product(s) as made by the manufacturer of such Product(s). Seller will repair or replace any Product(s) manufactured by Seller which prove defective within one (1) year from the date of shipment if such defects are due to defective workmanship of Seller's employees, provided that the Product(s) has or has been (i) properly assembled and utilized in accordance with Seller's design thereof and instructions relating thereto AND (ii) returned to the Seller at Buyer's expense. This warranty shall be voided by any changes made in the Product(s) prior to or in connection with their assembly or use.
- (c) EXCEPT FOR THE EXPRESS WARRANTY DESCRIBED ABOVE THERE ARE NO WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, WHICH EXTEND BEYOND THE DESCRIPTION OF THE PRODUCT(S) ON THE FACE HEREOF NO WARRANTIES OF REPRESENTATIONS AT ANY TIME MADE BY ANY REPRESENTATIVE OF SELLER SHALL BE EFFECTIVE TO VARY OR EXTEND THE ABOVE REFERENCED EXPRESS WARRANTIES OR ANY OTHER TERMS HEREOF.
- (d) In no event shall Seller be liable for consequential, incidental, or special damages resulting from or in any matter related to the Product(s), the design, use, or any inability to use the Product(s), including without limitation, damages arising out of or in any manner relating to the delivery of the Product(s), or any delay with respect to delivery of the Product(s). The sole and exclusive remedy with respect to any defective Product(s) manufactured by Seller shall be repair, correction, or replacement thereof pursuant to the "WARRANTY" provisions above. Should the Product(s) prove so defective, however, as to preclude the remedying of warranted defects by repair or replacement. Buyer's sole and exclusive remedy shall be the refund of the purchase price of the defective Product(s) involved, upon return of the Product(s) to Seller.
- (e) Seller warrants that the use or sale of any Product(s) delivered hereunder, or any part thereof, except any Product(s) produced to Buyer's drawings or specifications, does not infringe any adverse valid existing patent. Seller shall indemnify, defend, and hold harmless Buyer, Buyer's customers, users of the Product(s), and any of their successors and assigns, from and against any and all liability, damage, loss, cost, or expense incurred in connection with any claim, suit, or action for actual or alleged infringement of any such patent, arising out of or in connection with the use or sale of such Product(s).
- 9. LOSS IN TRANSIT: Title and risk of loss in transit shall pass to Buyer upon delivery to (i) Buyer or (ii) a carrier, where shipment is made F.O.B. Seller's shipping point.
- 10. ASSIGNMENT: Either party's assignment of this Document, of any interest herein, or of any money due or to become due hereunder without the prior written consent of the other party shall be void, unless such assignment is made to an affiliate of the assigning party.
- 11. INDEPENDENT CONTRACTOR: In performing any services hereunder, each party is and undertakes performance hereof as an independent contractor, with sole responsibility for all persons employed in connection therewith, including without limitation, exclusive liability for the payment of all Federal, State, and local Unemployment and Disability Insurance and all Social Security and/or other taxes and contributions payable in respect of such persons from and against which liability each party agrees to indemnify, defend, and hold harmless the other part.

#### 12. MANNER OF PERFORMANCE:

- (a) Each party shall comply with all laws, regulations, and/or other requirements of local, state, and federal governments in connection with its manufacture or delivery of any Product(s) or performance of any services hereunder, including without limitation, those pertaining to financial capability responsibility and security for pollution damage and the price production sale, or delivery of the Product(s) or services. Specifically, but not by way of limitation, each party agrees to comply with Executive Order 11246 regarding equal employment opportunity, the Rehabilitation Act of 1973, the Vietnam Era Veterans Readjustment Act of 1972, the Occupational Safety and Health Act, the Fair Labor Standards Act. the Americans with Disabilities Act, and all regulations promulgated pursuant to any of the above.
- (b) If this order involves the presence of either party on the other party's premises, such party comply with all safety, health, and security laws, regulations, and the other party's policies and shall take all necessary precautions to prevent injury or damage to persons or property while so engaged.



2200 Centre Park Court Stone Mountain, GA 30087 877.850.2662 Toll free 770.413.5680 Phone 770.413.5643 Fax

30 1

A CALLER OF