

HOSE TEC[®] **TOUGH**

METAL HOSE[™]

by Kuriyama

Interlocked and Corrugated Metal Hose



Kuriyama of America, Inc.



EDITION 0117

HOSE TECHNOLOGY, INC.

Founded in 1982 in Williamsport, IN, Hose Technology, Inc., a division of Kuri Tec Manufacturing, Inc., manufactures high quality, custom designed and standard metal hose, delivered quickly and competitively priced. We offer both interlocked and corrugated metal hose styles to meet the needs of a wide variety of applications – agricultural, dry bulk truck, dry bulk handling, environmental clean-up, trucking and many more.



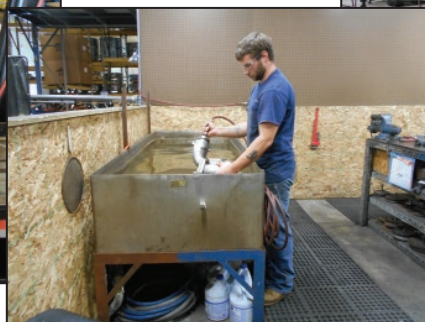
PRODUCT DESIGN AND DEVELOPMENT



Having the right hose for the job is of utmost importance to ensure long hose life and user safety. Our helpful, in-house design team is always available to develop custom solutions based on the specific needs of your particular hose application. Let us create a solution for you!

QUALITY MANUFACTURING, FABRICATION & TESTING

The key to our success is our people! Our experienced, certified, professional fabrication staff of welders ensures you receive high quality assemblies you can trust to perform at the highest level. All Hose Tec welders are ASME IX certified, and we leak test 100% of all corrugated hoses we make to NAHAD guidelines before shipping.



INVENTORY

In addition to the metal hose inventory already housed at Kuriyama's six North American warehouses, Hose Tec recently added 80,000 feet of additional space to our centrally located warehouse, allowing for quick delivery throughout the U.S.



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BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS OR DISCONTINUE PRODUCTS WITHOUT PRIOR NOTICE.

Agriculture — Grain handling/chutes/vac systems, feed trucks.

Brewery — Grain handling offloading railcar/in-plant.

Chemical — Dry bulk resin handling offloading railcars/bulk trucks/in-plant, fume exhaust.

Cryogenics — Armor for transfer hoses.

Environmental/Industrial Clean-Up — Dry material handling for power plants, steel mills, fly ash, soda ash, lime powder.

Food Processing — Dry bulk handling, protective armor on hot water lines.

Government — Fresh air/air conditioning ducting for ship maintenance.

Mining — Dry bulk handling, lime, trona. Ducting/venting/exhaust lines.

OEM — Air/Gas/Liquid/Material handling, armor guard, bend restrictor, wire guides.

Oil Field — BOP lines, heater hoses, dry bulk handling, frac sand trucks.

Petro-Chemical — Dry resin handling offloading railcars/bulk trucks/in-plant.

Plastics — Transfer/transport of pellets, resins with railcars/bulk trucks/in-plant.

Plating — Fume removal.

Railyard — Switch box heating.

Shipyards — Maintenance ducting lines for fresh air/air conditioning.

Steel Mills — Hot material clean-up, protective armor, ducting/venting, cooling plate armor.

Textile Mills — Dust/lint control.

Trucking — Dry bulk drop hoses, vacuum hoses, flexible exhaust connectors, hot air blower hoses.

Welding — Fume exhaust.

Woodworking — Dust/chip control.

While this is a list of industries and common uses within the industry, there are still many more that are not listed here. The type of metal hose used in these industries could be either interlocked hose or corrugated hose.

Application Guide	Metal-Hose-To-Go [™]	HT4000 Series, "Multi-Flex" Rough Bore	HT5000 Series, "Smooth Flow" Smooth Bore (lined)	HT1100 Series, "Floppy Guard"
Abrasive Material Handling	✓	✓	✓	
Air Intake Supply; Fresh Air Intake		✓		
Bend Restrictor		✓		✓
Beverage Dispenser Hose Armor				✓
BOP (Blow Out Protection) for Hydraulic, Cryogenic and Other High Pressure Hoses		✓		✓
Bulk Unloading/Loading (Railcar/Truck)	✓	✓	✓	
Dry Bulk Transfer (Railcar/Truck/In-Plant)	✓	✓	✓	
Dust/Fume Collection		✓		
Engine Exhaust		✓		
Environmental/Industrial Clean-Up	✓	✓		
Fly Ash/Soda Ash Handling	✓	✓		
Fume Hood Exhaust		✓		
Garage Fume Exhaust		✓		
Grain Handling	✓	✓	✓	
High Temperature Material Handling	✓	✓	✓	
Hot Air Blower/Suction	✓	✓		
Hot Air Ducting		✓		
Industrial Dryer Vents		✓		
Liner for Corrugated/Braided Assemblies		✓		
Low Temperature Material Transfer	✓	✓	✓	
Oven/Kiln Exhaust		✓		
Plastic Pellet Transfer	✓	✓	✓	
Pneumatic Transfer	✓	✓	✓	
Protective Armor/Shielding for Hoses		✓		✓
Shielding for Wiring		✓		✓
Steam Hose Liner		✓		
Railcar - Bulk Unloading/Loading		✓	✓	
Spot Cooling/Air Conditioning Ducting		✓		
Truck - Bulk Unloading/Loading	✓	✓	✓	
Truck Exhaust/Flexible Tailpipe Exhaust		✓		
Vacuum Trucks and Equipment	✓	✓	✓	

CAUTION

NOTE: This application guide provides information on typical flexible metal hose applications. Actual results may vary due to variances in the operating conditions involving temperature, chemical resistance, abrasiveness of the material being handled, working pressure, handling requirements, etc. Please refer to the specifications printed for each product in this catalog and our Cautionary Statement (see page 22), to better ensure successful results.

NOTE: For questions regarding chemical resistance please call Hose Technology at 1-800-878-5501.

METAL-HOSE-TO-GO™

Stainless Metal Hose Assemblies

In Stock for immediate delivery and use!

Hoses include
pre-welded
stainless threaded
NPT (TOE) ends

No welding
required!

Rough Bore (Unlined) Stainless Steel Hose

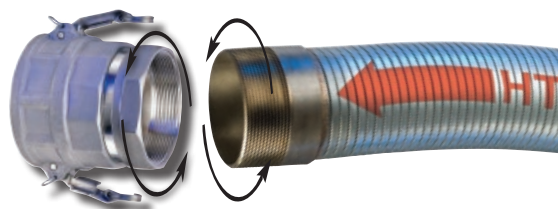
Former Part Number	New Part Number	ID (in.)	OAL (ft.)*	Minimum Bend Radius (in.)	Weight (lbs./ea.)
S203X120STOE	HTS4200-300X10TOE	3	10	11.00	22
S204X120STOE	HTS4200-400X10TOE	4	10	14.50	28
S204X144STOE	HTS4200-400X12TOE	4	12	14.50	33
S204X228STOE	HTS4200-400X19TOE	4	19	14.50	52
S205X120STOE	HTS4200-500X10TOE	5	10	17.00	34
S205X228STOE	HTS4200-500X19TOE	5	19	17.00	61
S206X120STOE	HTS4200-600X10TOE	6	10	22.00	42

Smooth Bore (Lined) Stainless Steel Hose

Former Part Number	New Part Number	ID (in.)	OAL (ft.)*	Minimum Bend Radius (in.)	Weight (lbs./ea.)
SS154X228STOE	HTSS5150-400X19TOE	4	19	15.00	67
SS184X120STOE	HTSS5180-400X10TOE	4	10	16.00	38
SS184X144STOE	HTSS5180-400X12TOE	4	12	16.00	45
SS184X180STOE	HTSS5180-400X15TOE	4	15	16.00	56
SS184X210STOE	HTSS5180-400X17.5TOE	4	17.5	16.00	65
SS184X228STOE	HTSS5180-400X19TOE	4	19	16.00	70
SS184X300STOE	HTSS5180-400X25TOE	4	25	16.00	92
SS185X180STOE	HTSS5180-500X15TOE	5	15	20.50	75
SS185X228STOE	HTSS5180-500X19TOE	5	19	20.50	93
SS186X120STOE	HTSS5180-600X10TOE	6	10	24.50	62
SS186X180STOE	HTSS5180-600X15TOE	6	15	24.50	90
SS186X228STOE	HTSS5180-600X19TOE	6	19	24.50	112
SS186X300STOE	HTSS5180-600X25TOE	6	25	24.50	146

* OAL (overall length) in "natural lie" state, actual length may vary slightly

- 1. Select your hose**
- 2. Select your couplings**
- 3. Thread together and done!**



Please refer to the back page for the location of your nearest warehouse for availability of products/sizes shown.

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Nominal Specifications

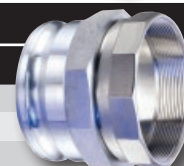
THREADED SWIVEL ALUMINUM FEMALE COUPLER WITH SS304 THREADED NPT INSERT

Part Number	Size (in.)	Weight Each (lbs.)	Standard Carton
KAS-C401	4	5.20	1
KAS-C501	5	6.53	1
KAS-C601	6	10.49	1



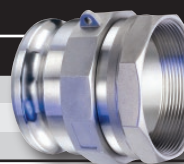
THREADED SWIVEL ALUMINUM MALE ADAPTOR WITH SS304 THREADED NPT INSERT

Part Number	Size (in.)	Weight Each (lbs.)	Standard Carton
KAS-E401	4	4.67	1
KAS-E501	5	5.42	1
KAS-E601	6	6.97	1



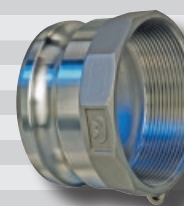
THREADED SWIVEL SS304 MALE ADAPTOR WITH SS304 THREADED NPT INSERT

Part Number	Size (in.)	Weight Each (lbs.)	Standard Carton
KSS-E401	4	6.12	1
KSS-E501	5	7.61	1
KSS-E601	6	11.07	1



THREADED PART 'A' QUICK-ACTING MALE ADAPTOR x FEMALE NPT (NON-SWIVEL)

Part Number	Size (in.)	Weight Each (lbs.)	Standard Carton†
AL-A300	3	0.70	35
SS304-A300	3	2.16	8
SS-A300	3	2.16	8
AL-A400	4	1.58	20
SS304-A400	4	2.88	6
SS-A400	4	2.88	6
AL-A500	5	1.75	4
SS304-A500	5	4.30	4
SS-A500	5	4.30	4
AL-A600	6	2.95	15
SS304-A600	6	6.00	2
SS-A600	6	6.00	2



Note: Couplings can be purchased individually also.

THREADED PART 'D' QUICK-ACTING FEMALE COUPLER x FEMALE NPT (NON-SWIVEL)

Part Number	Size (in.)	Weight Each (lbs.)	Standard Carton†
AL-D300	3	1.80	20
SS304-D300	3	3.82	8
SS-D300	3	3.82	8
AL-D400	4	2.16	10
SS304-D400	4	5.14	6
SS-D400	4	5.14	6
AL-D500	5	3.42	4
SS304-D500	5	8.00	4
SS-D500	5	8.00	4
AL-D600	6	4.24	10
SS304-D600	6	10.06	2
SS-D600	6	10.06	2



Note: Couplings can be purchased individually also.

WHITE NEOPRENE (FDA) GASKETS FOR QUICK ACTING COUPLINGS

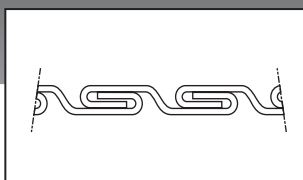
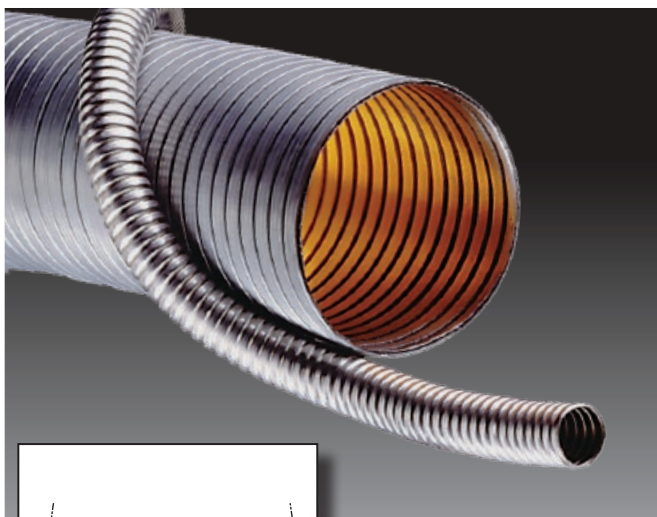
Part Number	Size (in.)	Weight Each (lbs.)	Standard Carton
WN300	3	0.042	10
WN400	4	0.066	10
WN500	5	0.094	10
WN600	6	0.116	10



Note: For standard part "A" and "D" Quick-Acting Couplings, please refer to our separate Kuriyama-Couplings™ full line catalog. Web: <http://www.kuriyama.com>

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Construction: A single strip of galvanized or 304 stainless steel wound into a interlocked metal hose, with or without packing materials.

Max Service Temperature: Galvanized: to 750°F (399°C), Stainless: to 1,500°F (816°C)

Note: for packed hoses service temperature see page 19.

Features and Advantages:

- **Abrasion Resistant and Durable** – steel construction resists damage from abrasive and damaging materials.
- **Corrosion Resistant (Stainless Only)** – 304 stainless version resists corrosion making it resistant to the elements.
- **Heat Resistant** – can withstand very high temperatures allowing for the transfer of hot materials.

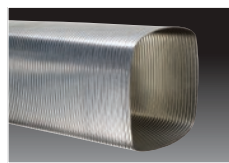
Rough Bore (unlined) Interlocked Metal Hose

HTS4000 Series

HTG4000 Series

Applications:

- Abrasive material handling
- BOP (Blow out Protection) for hydraulic, cryogenic and other high pressure hoses
- Bulk truck and railcar unloading
- Dry bulk transfer
- Fly ash and soda handling
- Grain handling
- Transfer of high temperature air, gasses and materials
- Protective armor/shielding for hoses
- Truck tailpipe exhaust
- Vacuum trucks and equipment



Also available in oval, square or rectangle.

- **Conductive** – prevents the build-up of static electricity eliminating the risk of “hose arcing”.
- **Flexible** – corrugations allow for greater flexibility than lined metal hose.

Nominal Specifications

Weight	Series	Material	Wall Thickness (in.)	Max Service Temp (°F)
Extra Light Weight	HTG4100	Galvanized Steel	0.0110	750
	HTS4100	304 Stainless Steel	0.0110	1,500
Light Weight	HTG4150	Galvanized Steel	0.0150	750
	HTS4150	304 Stainless Steel	0.0150	1,500
Medium Weight	HTG4200	Galvanized Steel	0.0185	750
	HTS4200	304 Stainless Steel	0.0185	1,500
Heavy Weight	HTG4250	Galvanized Steel	0.0245	750
	HTS4250	304 Stainless Steel	0.0245	1,500
Extra Heavy Weight	HTG4300	Galvanized Steel	0.0290	750
	HTS4300	304 Stainless Steel	0.0290	1,500

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Rough Bore (unlined) Interlocked Metal Hose

HTS4000 Series

HTG4000 Series

Nominal Specifications

Hose Size I.D. (in.)	HTG4100 HTS4100		HTG4150 HTS4150		HTG4200 HTS4200		HTG4250 HTS4250		HTG4300 HTS4300	
	Extra Light Weight		Light Weight		Med. Weight		Heavy Weight		Extra Hvy. Weight	
	Min. Inside Bend Radius (in.)	Weight (lbs./ft.)	Min. Inside Bend Radius (in.)	Weight (lbs./ft.)	Min. Inside Bend Radius (in.)	Weight (lbs./ft.)	Min. Inside Bend Radius (in.)	Weight (lbs./ft.)	Min. Inside Bend Radius (in.)	Weight (lbs./ft.)
1 ³ / ₈	4.25	0.45	5.00	0.60	—	—	—	—	—	—
1 ¹ / ₂	4.75	0.50	5.50	0.70	6.00	1.00	—	—	—	—
1 ⁵ / ₈	5.00	0.54	5.75	0.75	6.50	1.05	—	—	—	—
1 ³ / ₄	5.25	0.58	6.00	0.80	7.00	1.10	—	—	—	—
1 ⁷ / ₈	5.50	0.62	6.25	0.85	7.50	1.20	—	—	—	—
2	6.00	0.70	6.50	0.90	8.00	1.30	9.00	1.60	9.50	2.10
2 ¹ / ₄	6.75	0.75	7.25	1.10	8.50	1.45	9.50	1.80	10.00	2.20
2 ¹ / ₂	7.50	0.80	8.00	1.20	9.00	1.60	10.00	2.00	10.50	2.30
2 ³ / ₄	8.75	0.90	8.25	1.30	10.00	1.80	11.00	2.15	11.50	2.50
3	10.00	1.00	10.50	1.40	11.00	2.00	12.00	2.30	13.00	2.70
3 ¹ / ₄	10.50	1.10	11.25	1.50	12.00	2.10	13.00	2.50	13.50	2.95
3 ¹ / ₂	11.00	1.20	12.00	1.60	12.50	2.30	13.50	2.70	14.00	3.20
4	12.50	1.40	13.50	1.80	14.50	2.60	15.00	3.10	15.50	3.60
4 ¹ / ₂	14.00	1.50	15.00	2.00	16.00	2.90	17.00	3.50	18.00	4.10
5	15.00	1.70	16.00	2.30	17.00	3.00	18.00	3.90	19.00	4.50
5 ¹ / ₄	16.00	1.80	17.25	2.40	18.00	3.15	19.50	4.10	20.50	4.75
5 ¹ / ₂	17.50	1.90	18.50	2.50	19.50	3.30	21.00	4.30	22.00	5.00
6	20.00	2.00	21.00	2.70	22.00	3.60	23.50	4.70	25.00	5.40
6 ¹ / ₄	20.50	2.10	21.50	2.80	23.00	3.75	24.50	4.90	26.00	5.60
6 ¹ / ₂	21.00	2.20	22.00	2.95	23.50	3.90	25.00	5.10	26.50	5.80
7	22.00	2.40	23.00	3.20	25.00	4.20	26.50	5.50	28.00	6.30
7 ¹ / ₄	23.00	2.50	23.75	3.30	26.00	4.30	27.50	5.70	29.00	6.50
7 ¹ / ₂	24.00	2.60	24.50	3.40	26.50	4.40	28.00	5.85	29.50	6.75
8	25.00	2.70	26.00	3.60	28.00	4.70	29.50	6.20	31.00	7.20
9	—	—	28.25	4.05	30.50	5.30	32.00	6.60	34.00	7.60
9 ¹ / ₂	—	—	29.50	4.25	31.50	5.60	33.50	6.80	35.50	7.80
10	—	—	30.50	4.50	32.50	5.90	34.50	7.00	37.00	9.00
11	—	—	33.00	5.00	35.50	6.50	37.50	7.40	39.50	9.90
11 ¹ / ₄	—	—	33.75	5.10	36.00	6.60	38.00	7.50	40.50	10.20
11 ¹ / ₂	—	—	34.50	5.20	37.00	6.75	38.50	7.60	41.50	10.40
12	—	—	36.00	5.40	38.00	7.00	40.00	7.80	42.00	10.80
14	—	—	50.00	6.30	53.00	8.10	55.00	9.40	57.50	12.60
16	—	—	—	—	60.50	9.20	62.50	11.00	75.00	14.40

NOTE: Standard lengths are 25 ft. and 50 ft. coils, **WHEN FULLY EXTENDED;** other lengths available on request.

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Smooth Bore (lined) Interlocked Metal Hose

HTSS5000 Series

HTGS5000 Series

HTGG5000 Series

Hose Material Indicated by Directional Arrow Color

Arrow Color	Armor Material	Liner Material
RED	Stainless	Stainless
BLUE	Galvanized	Stainless
BLACK	Galvanized	Galvanized

Construction: Two strips of galvanized or 304 stainless steel wound into an interlocked metal hose consisting of an outer cover (referred to as the armor) and smooth inner liner, with or without packing materials.

Max Service Temperature: Galvanized: to 750°F (399°C),
Stainless: to 1,500°F (816°C)

Note: for packed hoses service temperature see page 19.

Features and Advantages:

- **Highly Abrasion Resistant and Durable** – steel construction resists damage from abrasive and damaging materials. Additionally, liner material provides extra layer of protection for longer hose life.
- **Smooth Bore** – reduces degradation of the transferred materials and improves flow rates. Helps prevent “angel hairing.”
- **Corrosion Resistant (Stainless Only)** – 304 stainless version resists corrosion making it resistant to the elements.

Applications:

- Abrasive material handling
- Bulk truck and railcar unloading
- Dry bulk transfer
- Grain handling
- Transfer of high temperature air, gasses and materials
- Plastic Pellet Transfer
- **Heat Resistant** – can withstand very high temperatures allowing for the transfer of hot materials.
- **Conductive** – prevents the build-up of static electricity eliminating the risk of “hose arcing”.

Nominal Specifications

Series	Armor			Liner		
	Weight	Material	Thickness (in.)	Weight	Material	Thickness (in.)
HTGG5150	Light Weight	Galvanized Steel	0.0150	Light Weight	Galvanized Steel	0.0150
HTGS5150	Light Weight	Galvanized Steel	0.0150	Light Weight	304 Stainless Steel	0.0150
HTSS5150	Light Weight	304 Stainless	0.0150	Light Weight	304 Stainless Steel	0.0150
HTGG5180	Medium Weight	Galvanized Steel	0.0180	Light Weight	Galvanized Steel	0.0150
HTGS5180	Medium Weight	Galvanized Steel	0.0180	Light Weight	304 Stainless Steel	0.0150
HTSS5180	Medium Weight	304 Stainless	0.0180	Light Weight	304 Stainless Steel	0.0150
HTSS5250	Heavy Weight	304 Stainless	0.0250	Medium Weight	304 Stainless Steel	0.0180

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Smooth Bore (lined) Interlocked Metal Hose

HTSS5000 Series

HTGS5000 Series

HTGG5000 Series

Nominal Specifications

Hose Size I.D. (in.)	HT _ 5150 Series		HT _ 5180 Series		HT _ 5250 Series	
	HTGG – Galv. Armor/Galv. Liner HTGS – Galv. Armor/SS Liner HTSS – SS Armor/SS Liner		HTGG – Galv. Armor/Galv. Liner HTGS – Galv. Armor/SS Liner HTSS – SS Armor/SS Liner		HTSS – SS Armor/SS Liner	
	Lt. Wt. Armor/Lt. Wt. Liner		Med. Wt. Armor/Lt. Wt. Liner		Hvy. Wt. Armor/Med. Wt. Liner	
	Minimum Inside Bend Radius (in.)	Weight (lbs./ft.)	Minimum Inside Bend Radius (in.)	Weight (lbs./ft.)	Minimum Inside Bend Radius (in.)	Weight (lbs./ft.)
1½	5.63	1.10	6.00	1.50	—	—
1¾	6.50	1.35	7.00	1.70	—	—
2	7.50	1.60	8.00	1.90	—	—
2¼	8.50	1.90	9.50	2.10	—	—
2½	9.50	2.10	10.50	2.30	—	—
2¾	10.50	2.30	12.50	2.50	—	—
3	11.50	2.50	14.00	2.80	17.50	3.75
3½	13.50	2.90	15.00	3.20	18.50	4.35
4	15.00	3.40	16.00	3.60	19.50	5.10
4½	17.00	3.75	18.50	4.00	22.00	5.40
5	18.50	4.10	20.50	4.70	24.00	5.60
6	22.00	4.90	24.50	5.60	30.00	6.25
7	26.50	5.80	29.00	6.60	34.00	7.80
8	30.50	6.60	31.50	7.70	37.00	8.80
10	—	—	39.50	9.70	43.00	11.00
12	—	—	47.00	11.70	52.00	13.00
14	—	—	55.00	13.50	60.00	15.50
16	—	—	63.00	15.00	69.00	18.00

NOTE: Standard coil length is 25 ft., **WHEN FULLY EXTENDED;** other lengths available on request.

Please refer to the back page for the location of your nearest warehouse for availability of products/sizes shown.

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HOSE TEC® **TOUGH**

METAL HOSE™



“Floppy Guard” Interlocked Metal Hose

HTS1100

HTG1100

**Extremely
Flexible!**

Construction: A single strip of galvanized or 304 stainless steel wound into an interlocked metal hose creating a unique, floppy-type construction that's more flexible than other metal hoses.

Max Service Temperature: Galvanized: to 750°F (399°C),
Stainless: to 1,500°F (816°C)

Applications:

- Bend restrictor
- Beverage dispenser hose armor
- BOP (Blow out Protection) for hydraulic, cryogenic and other high pressure hoses
- Protective armor/shielding for hoses
- Shielding for wiring

Features and Advantages:

- **Abrasion Resistant and Durable** – steel construction protects plastic and rubber hoses from external abrasion.
- **Corrosion Resistant (Stainless Only)** – 304 stainless version resists corrosion allowing it to be left in the elements.
- **Heat Resistant** – can withstand very high temperatures allowing for the transfer of hot materials.
- **Conductive** – prevents the build-up of static electricity eliminating the risk of “hose arcing”.
- **Highly Flexible** – Unique design provides a smaller bend radius than other metal hoses.

Nominal Specifications

Hose Size ID (in.)	HTG1100/HTS1100			Hose Size ID (in.)	HTG1100/HTS1100		
	Min. Inside Bend Radius (in.)	Thickness (in.)	Weight (lbs./ft.)		Min. Inside Bend Radius (in.)	Thickness (in.)	Weight (lbs./ft.)
3/16	0.75	0.011	0.08	1 1/8	4.50	0.011	0.32
1/4	1.00	0.011	0.10	1 1/4	5.00	0.011	0.36
5/16	1.25	0.011	0.12	1 3/8	5.50	0.011	0.42
3/8	1.50	0.011	0.14	1 1/2	6.00	0.011	0.48
1/2	2.25	0.011	0.16	1 5/8	6.50	0.011	0.52
5/8	2.75	0.011	0.18	1 3/4	7.00	0.011	0.58
3/4	3.00	0.011	0.20	1 7/8	7.50	0.011	0.62
7/8	3.50	0.011	0.23	2	8.00	0.011	0.66
1	3.75	0.011	0.28	2 1/4	9.50	0.011	0.76

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Corrugated Metal Hose Services

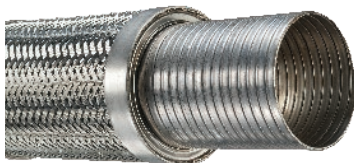
Hose Tec designs and manufactures a wide variety of custom corrugated metal hose. Corrugated metal hose is generally used in high pressure applications, for everything from air and water to natural gas and molten sulfur. Hose Tec offers medium weight/medium flexibility and heavy duty/higher pressure versions depending on the needs of the application.



**Let us design
a custom hose
for you!**



We provide additional services such as adding special protective covers or guards, identification tags for hose tracking, or lining corrugated hose with interlocked hose for additional abrasion resistance.

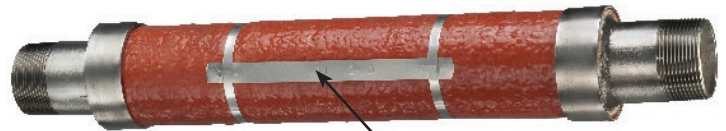


Corrugated Hose Assembly with Interlocked Hose Liner

- Liner is used to help protect the hose corrugations.
- Eliminates material build-up and reduces damage caused by abrasion.

Thermal Fire Sleeves

- Silicone coated fiberglass orange sleeves.
- Protects assembly from high heat or molten splash.



Identification Tags

- Are available to be attached to any hose assembly as required.

Please refer to the back page for the location of your nearest warehouse for availability of products/sizes shown.

BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS OR DISCONTINUE PRODUCTS WITHOUT PRIOR NOTICE.

Corrugated Metal Hose – Medium Weight/Medium Flexibility

Construction: Annular/Standard Pitch (open and compressed available upon request)

Hose Material: 316 or 321 Stainless Steel

Braid Material: 316 or 321 Stainless Steel

ID (in.)	Braids	Braid Construction	Braid Coverage (%)	OD (in.)	Max. Pressure @ 70°F (PSIG)		Centerline Bend Radius (in.)		Weight (lbs./ft.)
					Working	Burst	Dynamic	Static	
1/4	0	24 x 5 x 0.014	89	0.48	180	-	5.0	1.00	0.09
	1			0.57	2,116	8,464			0.17
	2			0.64	3,125	12,500			0.26
3/8	0	24 x 7 x 0.014	91	0.63	100	-	5.5	1.25	0.13
	1			0.70	1,501	6,004			0.25
	2			0.81	2,401	9,604			0.36
1/2	0	24 x 7 x 0.014	82	0.82	80	-	6.0	1.50	0.23
	1			0.89	1,075	4,301			0.34
	2			0.96	1,720	6,880			0.46
3/4	0	36 x 8 x 0.014	90	1.21	70	-	8.0	2.25	0.39
	1			1.28	792	3,168			0.59
	2			1.35	1,267	5,069			0.79
1	0	36 x 9 x 0.014	85	1.51	40	-	9.0	2.75	0.53
	1			1.58	571	2,285			0.75
	2			1.65	914	3,654			0.98
1 1/4	0	48 x 7 x 0.016	83	1.85	25	-	10.5	3.50	0.76
	1			1.93	531	2,125			1.07
	2			2.02	850	3,398			1.37
1 1/2	0	48 x 9 x 0.016	87	2.19	20	-	12.0	4.00	0.84
	1			2.28	472	1,887			1.23
	2			2.37	755	3,021			1.63
2	0	48 x 9 x 0.020	89	2.61	15	-	15.0	5.00	0.90
	1			2.72	516	2,064			1.52
	2			2.84	826	3,302			2.14
2 1/2	0	72 x 7 x 0.020	86	3.23	12	-	20.0	8.00	1.16
	1			3.33	387	1,548			1.86
	2			3.43	619	2,477			2.56
3	0	72 x 8 x 0.020	85	3.78	10	-	22.0	9.00	1.21
	1			3.88	316	1,264			2.00
	2			3.98	506	2,022			2.80
3 1/2	0	72 x 10 x 0.020	84	4.32	9	-	24.0	10.00	1.62
	1			4.45	297	1,188			2.61
	2			4.58	475	1,900			3.60
4	0	72 x 10 x 0.020	84	4.85	8	-	27.0	13.00	1.69
	1			4.98	232	927			2.68
	2			5.10	371	1,485			3.68
5	0	72 x 8 x 0.025	74	5.90	6	-	31.0	18.00	2.50
	1			6.03	191	764			3.75
	2			6.15	306	1,222			5.00
6	0	96 x 12 x 0.020	90	6.87	5	-	36.0	19.00	3.47
	1			7.10	165	660			4.75
	2			7.33	264	1,056			6.04
8	0	96 x (21 x 0.024)	96	9.09	6	-	40.0	20.00	5.56
	1			9.19	234	934			9.44
	2			9.28	374	1,495			13.36
10	0	96 x (25 x 0.028)	98	11.18	5	-	50.0	25.00	6.80
	1			11.32	230	918			12.90
	2			11.45	367	1,469			19.00
12	0	96 x (25 x 0.028)	97	13.23	3	-	60.0	30.00	9.02
	1			13.37	161	643			14.83
	2			13.50	257	1,029			20.64
14	0	96 x (25 x 0.028)	93	14.70	3	-	70.0	35.00	14.10
	1			14.84	119	476			21.70
	2			14.98	190	760			29.30

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Corrugated Metal Hose – Heavy Duty/Higher Pressure & Corrosion Resistant

Construction: Annular/Close Pitch

Hose Material: 316 or 321 Stainless Steel

Braid Material: 316 or 321 Stainless Steel

ID (in.)	Braids	Braid Construction	Braid Coverage (%)	OD (in.)	Max. Pressure @ 70°F (PSIG)		Centerline Bend Radius (in.)		Weight (lbs./ft.)
					Working	Burst	Dynamic	Static	
1/4	0			0.50	180	-			0.09
	1	24 x 5 x 0.014	89	0.57	2,562	10,250	5.0	2.50	0.17
	2			0.64	4,099	16,400			0.26
3/8	0			0.67	100	-			0.13
	1	24 x 7 x 0.014	91	0.74	1,501	6,004	5.5	2.75	0.25
	2			0.81	2,401	9,604			0.36
1/2	0			0.82	80	-			0.39
	1	24 x 7 x 0.020	96	0.92	2,194	8,777	8.0	4.00	0.63
	2			1.02	3,510	14,040			0.87
3/4	0			1.21	70	-			0.48
	1	36 x 6 x 0.020	92	1.31	1,311	5,244	8.0	4.00	0.79
	2			1.41	2,098	8,392			1.10
1	0			1.50	40	-			0.79
	1	36 x 8 x 0.020	95	1.60	1,069	4,276	9.0	4.50	1.20
	2			1.70	1,710	6,840			1.61
1 1/4	0			1.85	33	-			1.02
	1	48 x 6 x 0.025	95	1.97	1,110	4,443	10.0	5.00	1.66
	2			2.10	1,776	7,040			2.30
1 1/2	0			2.17	20	-			1.36
	1	48 x 7 x 0.025	95	2.30	868	3,472	10.0	5.00	2.11
	2			2.43	1,388	5,552			2.86
2	0			2.51	15	-			1.60
	1	48 x 9 x 0.025	95	2.64	810	3,240	11.5	5.75	2.56
	2			2.76	1,296	5,184			3.52
2 1/2	0			3.23	10	-			2.00
	1	72 x 7 x 0.025	96	3.36	578	2,312	24.0	12.00	3.12
	2			3.49	925	3,700			3.30
3	0			3.78	10	-			2.97
	1	72 x 9 x 0.025	88	3.91	540	2,160	28.0	14.00	4.42
	2			4.03	864	3,456			5.87
4	0			4.91	8	-			3.10
	1	72 x 9 x 0.025	89	4.93	333	1,332	40.0	20.00	4.55
	2			5.05	533	2,132			6.00
6	0			6.87	5	-			3.85
	1	96 x (13 x 0.025)	89	7.10	266	1,062	48.0	24.00	6.45
	2			7.33	425	1,700			9.05

All corrugated hoses are custom designed. Contact Hose Tec at (800) 878-5501 for pricing and availability.

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Fittings for Custom Assemblies

In addition to our standard cam lock couplings, Hose Tec metal hose assemblies can be designed and manufactured with a wide variety of end fittings. Some of the more common include the following:

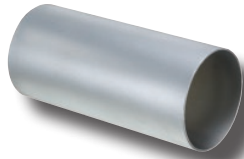
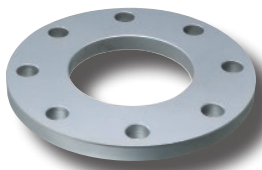
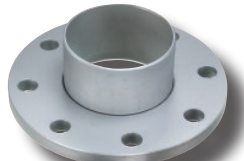


Fitting Type	Description	Materials Available	Method of Attachment
"TOE" Male Pipe Thread NPT	Schedule 40 TOE (threaded one end) pipe nipple with with NPT threads. Other threads and schedules available.	Carbon Steel, Stainless steel and aluminum	Weld or epoxy
Male Pipe Thread Counter-bore	Counterbored so that interlocked hose can be inserted, creating a smooth transition between hose and fitting.	Carbon Steel, Stainless steel and aluminum	Weld or epoxy
Male Adaptor Swivel	Available from 3" to 6" size	Available with a stainless steel swivel insert. Adaptor available in stainless steel or aluminum	Weld or epoxy
Female Coupler Swivel	Available from 3" to 6" size	Available with a stainless steel swivel insert. Adaptor only available in aluminum.	Weld or epoxy
Victaulic Fitting	Schedule 40 pipe grooved for Victaulic clamping.	Carbon Steel or Stainless	Weld
Concentric Reducer	Various sizes available, consult with factory for details.	Carbon Steel or Stainless	Weld or epoxy

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Fittings for Custom Assemblies

	Fitting Type	Description	Materials Available	Method of Attachment
	Sanitary Coupler	For use in food and beverage applications.	Stainless	Weld
	Tube End	Wide range of wall guages available.	Aluminum or stainless steel	Weld or epoxy
	Raised Face Flange	1/2" thru 14"	Carbon Steel or Stainless	Welded
	Plate Flange	150# drilling. Variety of thicknesses and drillings available, including TTMA specifications.	Carbon Steel or Stainless	Welded
	Stub End	Schedule 10 is standard. Schedule 40 available upon request	Stainless Steel	Weld or epoxy
	Floating Flange (Unassembled)	Various sizes available, consult with factory for details.	Carbon Steel or Stainless	Weld
	Floating Flange (Assembled)	1/2" thru 14"	Stainless stub with Carbon Steel flange or Stainless Steel stub with Stainless Steel flange	Weld or epoxy

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INTERLOCKED METAL HOSE

Also referred to as strip-wound metal hose, interlocked metal hose is manufactured from a single metal strip wound around a mandrel. It's generally more flexible than corrugated metal hose, used in medium pressure applications (15-20 PSI), and is not liquid tight. Interlocked hose can be manufactured with a smooth bore liner that provides additional abrasion resistance and reduces degradation of the transferred materials. They can also be manufactured with various packing materials, such as fabrics and elastomers, to make a more pressure tight hose. Interlock hoses are generally used for dry bulk material handling, in exhaust applications, or as a protective cover for plastic or rubber hoses.

Rough Bore (unpacked)



Rough Bore (packed)



Smooth Bore (unpacked)



Material Flow

Smooth Bore (packed)



Material Flow

HT4000 Series Rough Bore

Hose Material	Series	Hose Weight	Hose Size ID	Length
HT ☐	4 ☐	☐ ☐ ☐	☐ ☐ ☐	x ☐ ☐
G - Galvanized S - Stainless		100 – Extra light weight 150 – Light weight 200 – Medium weight 250 – Heavy weight 300 – Extra heavy weight	138 or 1-3/8" through 1600 or 16"	In feet

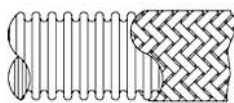
HT5000 Series Smooth Bore

Material: Armor/Liner	Series	Hose Weight	Hose Size ID	Length
HT ☐	5 ☐	☐ ☐ ☐	☐ ☐ ☐	x ☐ ☐
G - Galvanized S - Stainless		150 – Light weight armor/ Light weight liner 180 – Medium weight armor/ Light weight liner 250 – Heavy weight armor/ Medium weight liner	150 or 1-1/2" through 1600 or 16"	In feet

CORRUGATED METAL HOSE

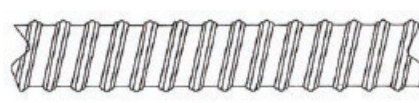
Corrugated metal hose is manufactured from a metal strip that's rolled and welded together, with corrugations added to increase flexibility. The corrugations are available in annular or helical patterns. Annular corrugations are parallel and independent of one another. They are more common than helical corrugations as they're generally more flexible. Helical patterns consist of a single corrugation that runs around the entire length of the hose, and better allow liquid to drain from the hose. Single or double layer metal braids are often added to the exterior of corrugated hose to increase the pressure rating which can exceed 3,000 PSI. Therefore, corrugated hoses are generally used in high pressure applications involving fluids or gasses.

Annular



Separate, parallel corrugations

Helical



One continuous corrugations

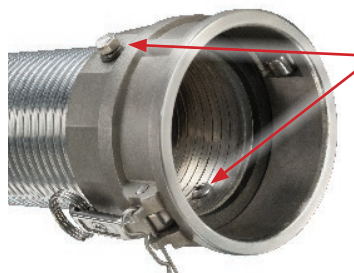
PACKING MATERIALS

Packing materials are commonly inserted into a specially designed groove within the interlocked hose to make it more pressure tight. Various packing materials are available based on the particular requirements of the application. Packing is particularly common in powder transfer applications where a tighter seal is required.

Packing Materials	Maximum Temperature (°F)	Primary Benefits
Fiber (Cotton)	300	Economical
Fiber (Apyrous)	700	High Temperature Resistance
Elastomer (NR)	180	Highest Pressure & Vacuum Ratings
Elastomer (Silicone)	500	Highest Pressure & Vacuum Ratings; High Temperature Resistance
Metal (Stainless Steel)	1,500	Highest Temperature Resistance

EPOXY/BOLT CONNECTION

The process of welding ends onto the hose has a tendency to burn and damage most packing materials near the area of the weld (except the stainless steel packing). This results in areas that are less pressure tight near the ends. Hose Tec has designed a process by which the couplings are attached with a high strength adhesive and secured with two bolts, thereby not damaging the packing.



Round headed bolts are used inside as to not cause an obstruction of the transferred materials.

TOES

TOE (threaded one end) couplings consist of a plain end x NPT thread, welded onto the hose, allowing for easy coupling attachment and interchangeability with NPT couplings.

TOE couplings are commonly used with interlock hose in order that the end user can easily replace couplings in the field, should one become damaged. Alternatively, had the cam lock or flange been welded directly to the hose, they would need to return it for repair.

TOE couplings are also commonly used with corrugated hose in order to provide adaptability for different piping configurations. The end user can use the TOE fitting to connect to female couplers, elbows, cam locks, ball valves, or female unions.



TOE ends allow for easy fitting replacement and interchangeability in the field.

Commonly Used Metal Hose Terms

Abrasion — Scuffing, rubbing or wear of a hose or braid surface.

Ambient Conditions — The surrounding environment to which a hose assembly is subjected. This includes temperature, corrosion and extreme physical conditions.

Annular — With reference to the convolution form, meaning independent corrugations straight and parallel.

Armor — Flexible interlocked tubing placed over the entire length, or in short lengths, at the ends of a metal hose to protect it from physical damage and to help protect from over bending.

ASME — American Society of Mechanical Engineers.

Bend Radius — The centerline radius of a hose in a bent condition.

Braid — A flexible metal sheath surrounding metal hose that prevents the hose from elongating under pressure. Braid is composed of a number of wires wrapped helically around the hose while at the same time going over and under each other in a basket weave fashion.

Compressed — Interlocked hose in its completely closed state.

Extended — Interlocked hose in its completely open state.

Fatigue — The process of failure in a metal hose associated with motion or pressure.

Floppy Interlock “Floppy Guard” — Constructed for maximum flexibility.

Helical — With reference to the convolution form, meaning one single convolution generated along the axis of the tube in a manner similar to a screw thread.

Interlocked Hose — Formed from profiled strip and wound into flexible metal tubing with no subsequent welding, brazing, or soldering. May be made pressure tight by winding in strands of packing.

Intermittent Bend Radius — The designation for a radius used for non-continuous operation. Usually in an elastic radius.

Minimum Bend Radius — The smallest radius to which a hose is permitted to be bent, generally applicable only to static conditions. Sometimes referred to as static bend radius.

Natural Lie (Relaxed) — Interlocked hose halfway between the compressed and extended state.

Offset — A condition wherein the ends of a hose are displaced laterally with respect to each other with the ends being in parallel planes. Sometimes referred to as lateral offset, shear, or parallel offset.

Operating Conditions — The designation of pressure, temperature, motion media and environment. Used interchangeably with “application.”

Packing — Material inserted into the windings of interlocked hose to make it less susceptible to leaking.

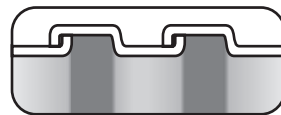
Pressure — The internal hydraulic or pneumatic force applied to a metal hose.

Rough Bore (Unlined) — Interlocking metal hose that allows movement of media in either direction.

Smooth Bore (Lined) — Interlocking metal hose that uses an additional strip to create a smooth transition of media in one direction only.

Square Cutting — Cutting the end of a metal hose so that the end will be completely flush with a fitting for attaching.

Squarelocked Hose — Flexible metal hose that is not mechanically locked together.



Standard Interlock — Flexible interlocked hose that offers flexibility, strength and service life.



TOE — Threaded one end

Torque — A force that produces rotation on an interlocked hose.

Vacuum — Negative pressure or suction.

Cautionary Statement

All Products sold and distributed by Kuriyama of America, Inc. are in the nature of commodities and they are sold by published specifications and not for particular purposes, uses or applications. Purchaser shall first determine their suitability for the intended purposes, uses or applications and shall either conduct its own engineering studies or tests, or retain qualified engineers, consultants or testing laboratories and consult with them before determining the proper use, suitability or propriety of the merchandise or Products for the intended purposes, uses or applications.

Kuriyama of America, Inc. ("Seller") does not recommend the Products for any particular purpose, use or application, and the Purchaser or user thereof shall assume full responsibility for the suitability, propriety, use and application of the Products. Purchaser shall follow all instructions contained in Seller's catalogs, brochures, technical bulletins and other documents regarding the Products. The Products, including but not limited to, hose, tubing or couplings, may fail due to the use or conveyance of substances at elevated or lowered temperatures or at excessive pressure, the conveyance of abrasive, injurious, flammable, explosive or damaging substances.

Hose or tubing used in bent configurations will be subjected to increased abrasion. Hose clamps or couplings may loosen after initial installation and all sections of hose and tubing including connections, couplings, clamps, conductivity and bonding should be inspected frequently, regularly and consistently, and should be replaced, adjusted or re-tightened for the avoidance of leakage, for the prevention of injuries or damages, and for general safety purposes. Except as indicated in its Limited Warranty, Seller shall not be liable or responsible for direct or indirect injuries or damages caused by or attributed to the failure or malfunction of any Products sold or distributed by it.

Purchasers or users of the Products should frequently and consistently undertake inspections and protective measures with respect to the use and application of Products, which should include the examination of tube and cover, conditions of the hose or tubing, and the identification, repair or replacement of sections showing cracking, blistering, separations, internal and external abrasions, leaking or slipped couplings or connections and make proper proof tests.

Limited Warranty

The Products sold or distributed by Seller are warranted to its customers to be free from defects in material and workmanship at the time of shipment by us, subject to the following provisions.

ALL WARRANTY CLAIMS SHALL BE MADE WITHIN SIX (6) MONTHS AFTER SELLER SHIPPED THE PRODUCTS. SELLER'S LIABILITY HEREUNDER IS LIMITED AT SELLER'S EXCLUSIVE DISCRETION, TO 1) THE PURCHASE PRICE OF ANY PRODUCTS PROVING DEFECTIVE; 2) REPAIR OF ANY DEFECTIVE PRODUCT OR PART THEREOF; OR 3) REPLACEMENT OF ANY DEFECTIVE PRODUCT OR PART UPON ITS AUTHORIZED RETURN TO SELLER.

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