

FLEX HOSE GLOSSARY

A.N.S.I.	<i>American National Standards Institution, Inc.</i>
A.S.T.M.	<i>American Society for Testing and Materials</i>
Braid	<i>A continuous sleeve of interwoven single or multiple strands of material. Usually textile or steel.</i>
Burst Pressure	<i>The pressure at which rupture occurs</i>
Carcass	<i>The fabric, cord or metal reinforcing section of hose as distinguished from the tube or cover</i>
Cold Flow	<i>Continued deformation or movement under stress</i>
Compression Set	<i>The deformation which remains in rubber after it has been subjected to, and released from, stress such as a clamp. The longer the stress is maintained the more defined the deformation</i>
Corrugated Hose	<i>Hose with an exterior that is radially or heliacally grooved to enhance flexibility, strength or overall weight</i>
Coupling	<i>A device at the end of a length of hose that allows for a connection to be made.</i>
Coupling Joint	<i>This leakproof connection is achieved by fastening together the mating surfaces of two couplings</i>
Cover	<i>The outermost part of the hose. The main purpose for the hose cover is to protect the hose reinforcement from physical or environmental damage. Covers can be compounded to produce resistance to oils, ozone or abrasion</i>
Date code	<i>Any combination of letters and numbers to identify when the hose was manufactured</i>
Durometer	<i>An instrument for measuring the hardness of rubber</i>
Durometer Hardness	<i>A numerical value which indicates the resistance to indentation of the blunt probe of the durometer testing device</i>
Ferrule	<i>A collar placed around a hose end to attach the fitting to the hose. The ferrule may be crimped or swaged, forcing the hose against the shank of the coupling, or the shank may be expanded, forcing the hose out against the ferrule or some combination</i>
Helix	<i>A wire or other reinforcement material spiraled or wound around the cylindrical body of the hose</i>
Hose	<i>A flexible conduit consisting of a tube, reinforcement and usually an outer cover</i>
Hose Assembly	<i>A length of hose with a coupling attached at one or both ends of the hose</i>
I.D.	<i>Inside diameter</i>
I.P.T.	<i>Iron Pipe Thread. Also known as N.P.T. (National Pipe Taper Thread)</i>
Impulse	<i>An application of force in a manner that produces sudden strain or motion such as a pressure spike</i>
Media	<i>Any material being transported through a hose</i>
N.P.S.	<i>American Standard Straight Pipe Thread for Free Mechanical Joints</i>
N.P.S.M.	<i>Same as N.P.S.</i>
O.D.	<i>Outside Diameter</i>
Operating Pressure	<i>The pressure at which the system functions. Also known as Working Pressure</i>
P.S.I.	<i>Pound per Square Inch</i>
P.S.I.G.	<i>Pound per Square Inch Gauge</i>
Permanent Fitting	<i>The type of fitting which cannot be removed</i>
R.M.A.	<i>Rubber Manufacturer's Association</i>
Reinforcement	<i>The internal layer of the hose that gives it strength and shape. The hose working pressure is dependent upon the type (or types) of reinforcement and amount used in the construction. Eg: Cord, wire, helical, rings</i>
Reusable Fitting	<i>The type of fitting that can be removed from a hose and recoupled on another hose</i>
Safety Factor	<i>A ratio used to establish the working pressure of a hose based upon burst pressure. Typically: 3:1 water, 4:1 Suspensions & slurries, 5:1 for steam</i>
Skive	<i>To remove or cut away a part of the hose cover exposing the reinforcement, to permit the attachment of a coupling</i>
Tube	<i>The inner most part of the hose layers that will be in contact with the media transported through the hose. Usually rubber compounds or plastic blended to give the tube specific properties compatible with the media</i>
U.N.	<i>Unified National Thread (constant thread)</i>
U.N.C.	<i>Unified National Course Thread</i>
U.N.F.	<i>Unified National Fine Thread</i>
Viscosity	<i>A material's resistance to flow under pressure, thickness</i>
W.P.	<i>Working Pressure</i>
Working Pressure	<i>The maximum pressure to which a hose assembly will be subjected, including pressure surges</i>

FLEX HOSE selector table

PRODUCT	FEATURES								
	Core (1)	reinforcement	PSI	diam	length	service	applications	options	additions
Super Mining Flex	1/2"@ ≤12" 1"@ ≥12"	steel ring	200 or 300	4" to 30"	40 ft	suction & discharge	Pit & field or line pump suction hose. Booster pump lines in place of pipe. Dredge suction.	500 PSI, 300# flanges or rotating, SBR tube	reducing sizes, outlets, pressure taps, drains
Mining Flex	1/2"@ ≤12" 1"@ ≥12"	steel spring	200 300 500	4" to 60"	40 ft	suction & discharge	Matrix & tailing pump Replace multiple fittings and rigid pipe	300# flanges or rotating / SBR, neoprene, nitrile, hypalon, chlorobutyl, EPDM	reducing sizes, outlets, pressure taps, drains
Series 1000	optional	helical wire	150	4" to 24"	40 ft	suction & discharge	In-plant	300# flanges or rotating / SBR, neoprene, nitrile, hypalon, chlorobutyl, EPDM	reducing sizes, outlets, pressure taps, drains
Corrugated hose	1/2 inch gum rubber	helical wire	150	4.5" to 24"	10ft 20ft 40ft	suction & discharge	Discharge to sumps and settling tanks	other flanges	Nat rubber or neoprene wear tube
Series 8000	optional	spring steel	150	2" to 84"	24 inch	suction & discharge	Replace rigid pipe reduce pump vibration	300# flanges or rotating, lateral offsets / SBR, neoprene, nitrile, hypalon, chlorobutyl, EPDM	reducing sizes, eccentric design
Town-i-flex reducing hose	optional	spring steel	150	6" to 48"	20'	suction & discharge	Replace rigid pipe reduce pump vibration	300# flanges or rotating	reducing sizes, eccentric design
Series 9000	Towniprene 1/2 inch tube	spring steel	150	2" to 84"	24 inch	suction & discharge	Replace rigid pipe reduce pump vibration	300# flanges or rotating, lateral offsets	reducing sizes, eccentric design
Flotation hose	std	Polyester cord fabric	150	4" to 30"	40'	discharge	self-floating hose	300# flanges or rotating	300PSI optional
Town-I flex laterals & Tees	optional	spring steel	200-600	Contact Townley	Contact Townley	suction & discharge	Replace rigid pipe	300# flanges or rotating	reducing sizes, outlets, pressure taps, drains

(1) Standard features: gum rubber wear tube, polyester reinforcing cord, SBR finish coating

reviewed by JRP 1/10/05

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