

SECTION 02 **BLACK &** **GALVANIZED NIPPLES**

This section lists out our extensive offering for steel nipples and pipe. Each section conveniently lays out the different offerings of each type of nipple in black, galvanized, wholesale and retail.

For Steel Pipe, Pre-Cut Pipe, Extra-Heavy Nipples, Seamless Nipples, please visit our wholesale literature page at our website: www.bkproducts.com

Black & Galv. Nipples0018

- Schedule 40
- Schedule 80
- Schedule 80 Seamless
- Schedule 160 Seamless

Nipple Assortments031

- Series 6700

Schedule 40 Precut Pipe033





1-1/4in Diameter
Schedule 40 Nipples
MIP x MIP

BULK PART NUMBER					BARCODED PART NUMBER				
Length	Black	Galvanized	Inner	MC	Length	Black	Galvanized	Inner	MC
Close	586-001	566-001	25	-	Close	586-001HC	566-001HC	5	80
2in	586-020	566-020	25	-	2in	586-020HC	566-020HC	5	80
2-1/2in	586-025	566-025	25	-	2-1/2in	586-025HC	566-025HC	5	80
3in	586-030	566-030	25	-	3in	586-030HC	566-030HC	5	80
3-1/2in	586-035	566-035	25	-	3-1/2in	586-035HC	566-035HC	5	60
4in	586-040	566-040	25	-	4in	586-040HC	566-040HC	5	60
4-1/2in	586-045	566-045	25	-	4-1/2in	586-045HC	566-045HC	5	60
5in	586-050	566-050	25	-	5in	586-050HC	566-050HC	5	60
5-1/2in	586-055	566-055	25	-	5-1/2in	586-055HC	566-055HC	5	60
6in	586-060	566-060	25	-	6in	586-060HC	566-060HC	5	60
7in	586-070	566-070	25	-	7in	586-070HC	566-070HC	5	30
8in	586-080	566-080	25	-	8in	586-080HC	566-080HC	5	30
9in	586-090	566-090	25	-	9in	586-090HC	566-090HC	5	30
10in	586-100	566-100	25	-	10in	586-100HC	566-100HC	5	30
11in	586-110	566-110	10	-	11in	586-110HC	566-110HC	5	30
12in	586-120	566-120	10	-	12in	586-120HC	566-120HC	5	30

1-1/2in Diameter
Schedule 40 Nipples
MIP x MIP

BULK PART NUMBER					BARCODED PART NUMBER				
Length	Black	Galvanized	Inner	MC	Length	Black	Galvanized	Inner	MC
Close	587-001	567-001	25	-	Close	587-001HC	567-001HC	5	80
2in	587-020	567-020	25	-	2in	587-020HC	567-020HC	5	80
2-1/2in	587-025	567-025	25	-	2-1/2in	587-025HC	567-025HC	5	80
3in	587-030	567-030	25	-	3in	587-030HC	567-030HC	5	80
3-1/2in	587-035	567-035	25	-	3-1/2in	587-035HC	567-035HC	5	60
4in	587-040	567-040	25	-	4in	587-040HC	567-040HC	5	60
4-1/2in	587-045	567-045	25	-	4-1/2in	587-045HC	567-045HC	5	20
5in	587-050	567-050	25	-	5in	587-050HC	567-050HC	5	20
5-1/2in	587-055	567-055	25	-	5-1/2in	587-055HC	567-055HC	5	20
6in	587-060	567-060	25	-	6in	587-060HC	567-060HC	5	20
7in	587-070	567-070	10	-	7in	587-070HC	567-070HC	5	20
8in	587-080	567-080	10	-	8in	587-080HC	567-080HC	5	20
9in	587-090	567-090	10	-	9in	587-090HC	567-090HC	5	20
10in	587-100	567-100	10	-	10in	587-100HC	567-100HC	5	20
11in	587-110	567-110	10	-	11in	587-110HC	567-110HC	5	20
12in	587-120	567-120	10	-	12in	587-120HC	567-120HC	5	20



FINISHES

Black, Galvanized and Their Designed Applications

Our fittings, nipples and pipes are offered in three finishes: Black, Galvanized and Red Brass. Each finish offers unique application advantages over each other making them ideal for particular projects.

BLACK FINISH

Accessories with black finish are generally used for lubricant oil, grease, LP gas, natural gas, gases (nitrogen, oxygen, etc.), steam and diesel. This finish is best suited for normal use where an inner rustproof protection is not required.

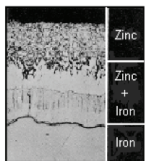
GALVANIZED FINISH

Our Galvanized Finish offering is used for hot and cold water systems, refrigeration, sprinklers, compressed air, gasoline, diesel, alcohol, and some other applications where conducted fluid needs inner rustproof protection.

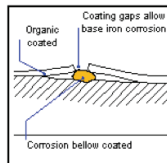
These fittings are manufactured by hot-dip galvanizing according to ASTM A-153. There are several ways to protect iron against rust, but none better than our hot-dip galvanizing process. Hot-dip galvanizing is one of the most efficient, practical and economical ways to protect iron and steel as zinc resists very well environment, air, and water corrosion for long lasting protection.

Galvanizing protects from corrosion the following ways:

- 1) It offers a long lasting isolating coverage made of metallic zinc and zinc alloy expertly applied to our iron.
- 2) Since zinc is bonded to iron as part of the iron-zinc combination, the protection works at a molecular level throughout the union. This serves as both a mechanical and corrosion protector.

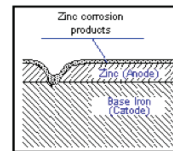


Zinc resists the environment's corrosive actions. Opposite to this, most of the organic coatings (paintings) are environmentally unstable and need to be renewed frequently. When a little failure occurs, corrosion starts and it begins to become larger under the protective coating.



Cathodic iron protection, provided by the metallic zinc coating, is factually based on corrosion being an electro-chemical process.

As zinc is a highly active electrochemical element, it tends to absorb oxygen before iron does it. Furthermore, this condition



creates additional protection against zinc hydroxide. This cathodic protection prevents corrosion to exposed parts, due to any discontinuity or mechanical damage on the coating.



NIPPLE PRODUCTS

We manufacture threaded and flat end nipples with galvanized and black finishes alongside aluminum and brass options. Processed diameters range from 1/8-in to 6-in and lengths from close thread to 12-in for nipples with pipe lengths from 10 ft to 21-ft.

WELDED STEEL NIPPLE PRODUCTS

Offering includes:

- Schedule 40 Nipple, Black and Galvanized
- Schedule 80 Nipple, Black and Galvanized
- Galvanized Conduit Nipple (UL listed)

Normal applications for threaded product lines are steam, gas, water and compressed air. Schedule should be selected based on the conduction lines required pressure. Our galvanized conduit is best with metallic pipes used for installation of wires and cables.

Our welded steel nipples are manufactured to ASTM A733 and ASME B1.20.1 specifications. UL6 specification applies for galvanized conduit nipples.

SEAMLESS STEEL NIPPLE PRODUCTS

This nipple offering is manufactured with seamless steel pipe that complies with ASTM A106, Grade B standard.

- Schedule 40 Nipple, Black and Electro-galvanized (includes yellow-zinc finish)
- Schedule 80 Nipple, Black and Electro-galvanized (includes yellow-zinc finish)
- Schedule 160 Nipple, Black and Electro-galvanized (includes yellow-zinc finish)

These seamless nipples are ideal for high temperature service applications. Schedule should be selected based on the conduction lines required pressure.

Our seamless steel nipples are manufactured according to ASTM A733 and ASME B1.20.1 standards.

BRASS NIPPLES

Southland brass nipples are manufactured with ASTM B43 compliant brass tube.

Brass nipple applications include plumbing, heater lines, boilers and related purposes.

These are manufactured according to ASTM B687 and ASME B1.20.1 standards.



NIPPLE SPECIFICATIONS

Material, Mechanical & Chemical Properties

Southland nipples are manufactured to the exacting technical specs noted below. All nipple products undergo rigorous testing to help ensure guaranteed quality throughout all product groups.

MATERIAL SPECIFICATIONS

Our line of steel nipples and ready cut pipe is manufactured according to the strictest worldwide specifications. For this reason its response to corrosion, temperature and working pressures will be excellent, promoting long lasting and reliable fluid conduction systems.

MECHANICALS PROPERTIES

Welded steel pipe nipples and ready-cut pipe, schedule 40 & 80, ERW type (Electric Resistance Welded), Grade A are manufactured to the ASTM A-53 standard.

Seamless steel pipe nipples and ready-cut pipe, schedule 40, 80, 160 & XXS, Grade B are manufactured to the ASTM A-106 standard.

	GRADE A	GRADE B
Tensile strength	48,000 psi	60,000 psi
Yield strength	30,000 psi	35,000 psi
Elongation in 2 inches	$E = \frac{625000 \cdot A \cdot 0.2}{U \cdot 0.9}$	$E = \frac{625000 \cdot A \cdot 0.2}{U \cdot 0.9}$

CHEMICAL PROPERTIES

Chemical composition (%) – maximum values

	CARBON	COOPER A	NICKEL A	CHROME A	MOLYBDENUM A	VANADIUM A	MANGANESE	PHOSPHORUS	SULFUR
Grade A: A53	0.25%	0.4%	0.4%	0.4%	0.15%	0.08%	0.95%	0.05%	0.045%
Grade B: A106	0.30%	0.4%	0.4%	0.4%	0.15%	0.08%	0.29-1.06%	0.035%	0.035%

A – The combination of these 5 elements should not exceed 1.00%



PRESSURES

Maximum allowable working pressure - Grade A welded carbon steel pipe threaded nipples.

Size	Depth Thread	OD	Wall Thickness	Schedule	-20°-100°F (PSI)	200°F (PSI)	300°F (PSI)	400°F (PSI)	500°F (PSI)	600°F (PSI)	650°F (PSI)
1/8-in	0.027	0.405	0.068	40	2948	2948	2948	2948	2948	2782	2702
	0.027	0.405	0.095	80	5222	5222	5222	5222	5222	4857	4756
1/4-in	0.046	0.540	0.088	40	2229	2229	2229	2229	2229	2084	2038
	0.046	0.540	0.119	80	4085	4085	4085	4085	4085	3823	3729
3/8-in	0.046	0.675	0.091	40	1897	1897	1897	1897	1897	1777	1739
	0.046	0.675	0.126	80	3547	3547	3547	3547	3547	3281	3229
1/2-in	0.054	0.840	0.109	40	1879	1879	1879	1879	1879	1747	1715
	0.054	0.840	0.147	80	3301	3301	3301	3301	3301	3067	3006
3/4-in	0.054	1.050	0.113	40	1601	1601	1601	1601	1601	1493	1454
	0.054	1.050	0.154	80	2795	2795	2795	2795	2795	2605	2555
1-in	0.066	1.315	0.133	40	1438	1438	1438	1438	1438	1335	1315
	0.066	1.315	0.179	80	2505	2505	2505	2505	2505	2320	2281
1-1/4-in	0.066	1.660	0.140	40	1254	1254	1254	1254	1254	1169	1145
	0.066	1.660	0.191	80	2172	2172	2172	2172	2172	2021	1980
1-1/2-in	0.066	1.900	0.145	40	1162	1162	1162	1162	1162	1086	1064
	0.066	1.900	0.200	80	2028	2028	2028	2028	2028	1883	1846
2-in	0.066	2.375	0.154	40	1034	1034	1034	1034	1034	964	940
	0.066	2.375	0.218	80	1834	1834	1834	1834	1834	1699	1660
2-1/2-in	0.096	2.875	0.203	40	1037	1037	1037	1037	1037	964	945
	0.096	2.875	0.276	80	1785	1785	1785	1785	1785	1657	1621
3-in	0.096	3.500	0.216	40	953	953	953	953	953	886	866
	0.096	3.500	0.300	80	1657	1657	1657	1657	1657	1537	1507
4-in	0.096	4.500	0.237	40	872	872	872	872	872	809	792
	0.096	4.500	0.337	80	1518	1518	1518	1518	1518	1408	1379
6-in	0.096	6.625	0.280	40	771	771	771	771	771	713	700
	0.096	6.625	0.432	80	1434	1434	1434	1434	1434	1328	1301



THREADS

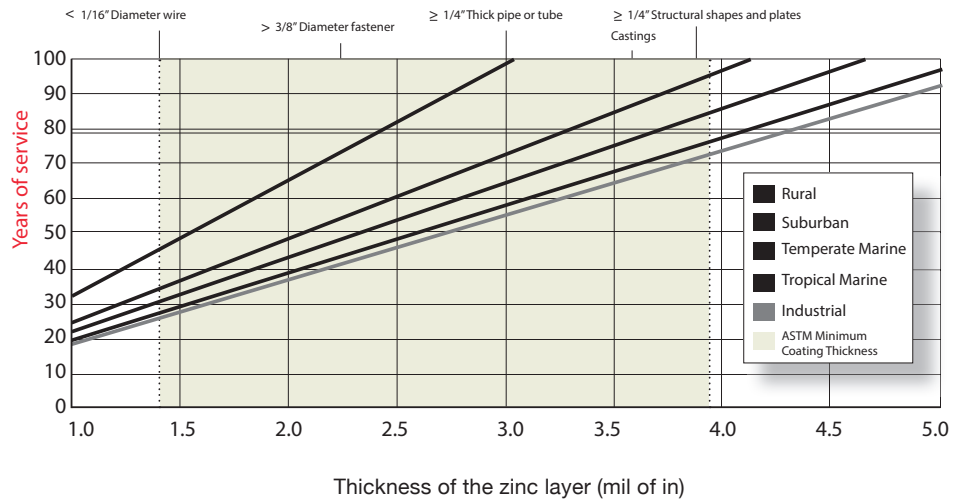
Our products comply with ASME B1.20.1 standard.

NOMINAL PIPE SIZE	OUTSIDE DIAMETER	THREADS PER INCH	PITCH OF THREAD	HANDTIGHT ENGAGEMENT		EFFECTIVE THREAD		OVERALL THREAD LENGTH	
				LENGTH		LENGTH		INCH	THREADS
				INCH	THREADS	INCH	THREADS		
1/8-in	0.4050	27	0.03704	0.1615	4.36	0.2639	7.12	0.3924	10.59
1/4-in	0.5400	18	0.05556	0.2278	4.10	0.4018	7.23	0.5946	10.70
3/8-in	0.6750	18	0.05556	0.2400	4.32	0.4078	7.34	0.6006	10.81
1/2-in	0.8400	14	0.07143	0.3200	4.48	0.5337	7.47	0.7815	10.94
3/4-in	1.0500	14	0.07143	0.3390	4.75	0.5457	7.64	0.7935	11.11
1-in	1.3150	12	0.08696	0.4000	4.60	0.6828	7.85	0.9845	11.32
1-1/4-in	1.6600	12	0.08696	0.4200	4.83	0.7068	8.13	1.0085	11.60
1-1/2-in	1.9000	12	0.08696	0.4200	4.83	0.7235	8.32	1.0252	11.79
2-in	2.3750	12	0.08696	0.4360	5.01	0.7565	8.70	1.0582	12.17
2-1/2-in	2.8750	8	0.12500	0.6820	5.46	1.1375	9.10	1.5712	12.57
3-in	3.5000	8	0.12500	0.7660	6.13	1.2000	9.60	1.6337	13.07
4-in	4.5000	8	0.12500	0.8440	6.75	1.3000	10.40	1.7337	13.87
6-in	6.6250	8	0.12500	0.9580	7.66	1.5125	12.10	1.9462	15.57



TABLE

Showing the Lifetime of Hot Dip Galvanized Products



RURAL:

This is the less aggressive environment since the presence of sulfurs and emissions are very low.

SUBURBAN:

These environments are less corrosive than industrial areas and, in general terms, are found in residential zones, peripheral communities, urban areas and cities without heavy industry.

TEMPERATE MARINE

These areas are close to the sea coast with temperate weather making them less corrosive than industrial areas.

TROPICAL MARINE:

These are hot weather areas considered as a less corrosive environment as they are typically located farther from industrial zones.

INDUSTRIAL:

Most cities and urban areas fall into this aggressive environment category as they contain sulfurs and phosphates.

