

ALLOY AND NON-FERROUS FABRICATION

Fabrication of alloy and non-ferrous piping is to be priced on the same basis as corresponding operation on carbon steel materials, PLUS the percentage given in table below applicable to the carbon steel price schedules noted.

Labor Operations	MATERIAL CLASSIFICATION—GROUP NUMBERS								
	1	2	3	4	5	6	7	8	9
Bends	50%	50%	50%	50%	50%	50%	200%	100%	50%
All Welded Fabrication	75%	100%	150%	100%	100%	100%	200%	150%	200%
Machining (1)	50%	50%	50%	75%	50%	50%	200%	75%	50%
Local Stress Relief	50%	50%	50%	50%	.....	.....	.....	.....	.....
Radiographic Inspection	15%	15%	25%	15%	15%	15%	25%	25%	50%
Mag. Particle, Dye Penetrant, Flg'd Hydro	15%	15%	15%	15%	15%	15%	15%	15%	15%

Note 1. Includes cutting, threading, beveling and machining of pipe I.D.

ALLOY AND NON-FERROUS MATERIALS

GROUP 1	ASTM A335-P1	.50% Moly	GROUP 4	Stainless Steels Types 304, 309, 310, 316 (including "L" & "H" Grades)
	ASTM A335-P2	.50-.70% Chr.		
	ASTM A335-P12	.85-1.10% Chr.	GROUP 5	Copper, Brass, Everdur
	ASTM A335-P11	1.05-1.45% Chr.		
	ASTM A335-P3	1.50-2.00% Chr.		
GROUP 2	ASTM A335-P3b	1.75-2.25% Chr.	GROUP 6	ASTM A-333-GR1 (see note 4) ASTM A-333-GR4 ASTM A-333-GR9 (see note 4)
	ASTM A335-P22	2.00-2.50% Chr.		
	ASTM A335-P21	2.75-3.25% Chr.		
	ASTM A335-P5,b,c	4.00-6.00% Chr.		
GROUP 3	ASTM A335-P7	6.00-8.00% Chr.	GROUP 7	Hastelloy, Titanium, 99% Ni.
	ASTM A335-P9	8.00-10.00% Chr.	GROUP 8	Stainless Steels Types 321 & 347, Cu-Ni, Monel, Inconel, Incoloy, Alloy 20
	Ferritic Chromes	10.00-15% Chr.		
	ASTM A333 Gr. 3	3.50% Nickel	GROUP 9	Aluminum

Note 2. The molybdenum content in alloys listed in Groups 1 to 3 inclusive, shall not exceed 1%.

Note 3. Prices of fabrication of alloys other than those listed above will be furnished on application.

Note 4. Where our standard carbon steel welding procedures and filler metal can be used, alloy extras will not apply to A-333-GR1 and A-333-GR9 fabrication.

FRACTIONS - DECIMALS - MILLIMETERS

	<u>Decimal</u>	<u>MM</u>		<u>Decimal</u>	<u>MM</u>
$1/64$	.0156	.396	$33/64$	.5156	13.096
$1/32$	.0312	.793	$17/32$	.5312	13.493
$3/64$	.0468	1.190	$35/64$	.5468	13.890
$1/16$	.0625	1.587	$9/16$	.5625	14.287
$5/64$	.0781	1.984	$37/64$	.5781	14.684
$3/32$	.0937	2.381	$19/32$	.5937	15.081
$7/64$	.1093	2.778	$39/64$	.6093	15.478
$1/8$	.125	3.175	$5/8$	.625	15.875
$9/64$	.1406	3.571	$41/64$	.6406	16.271
$5/32$	.1562	3.968	$21/32$	.6562	16.668
$11/64$	.1718	4.365	$43/64$	.6718	17.065
$3/16$	.1875	4.762	$11/16$	.6875	17.462
$13/64$	.2031	5.159	$45/64$	.7031	17.859
$7/32$	.2187	5.556	$23/32$	.7187	18.256
$15/64$	.2343	5.953	$47/64$	.7343	18.653
$1/4$	.250	6.350	$3/4$	.750	19.050
$17/64$	.2656	6.746	$49/64$	.7656	19.446
$9/32$	.2812	7.143	$25/32$	.7812	19.843
$19/64$	.2968	7.540	$51/64$	.7968	20.240
$5/16$	.3125	7.937	$13/16$	.8125	20.637
$21/64$	.3281	8.334	$53/64$	.8281	21.034
$11/32$	.3437	8.731	$27/32$	.8437	21.431
$23/64$	.3593	9.128	$55/64$	.8593	21.828
$3/8$	.375	9.525	$7/8$	.875	22.225
$25/64$	.3906	9.921	$57/64$	.8906	22.621
$13/32$	.4062	10.318	$29/32$	.9062	23.018
$27/64$	.4218	10.715	$59/64$	.9218	23.415
$7/16$	.4375	11.112	$15/16$	.9375	23.812
$29/64$	.4531	11.509	$61/64$	.9531	24.209
$15/32$	.4687	11.906	$31/32$	.9687	24.606
$31/64$	.4843	12.303	$63/64$	.9843	25.003
$1/2$	.500	12.700	1	1.000	25.400