45° ELBOW FORGED FITTING

D-LINE® Forged steel fittings are manufactured in process allows to develop products with a consistent and unyielding quality. We mantain a strict quality control under the ASME B16.11, MSS SP-79, MSS SP-83, and MSS SP-97 requirements making our manufacturing process one of the best in the market.

All D-LINE® carbon forged steel fittings are zinc-phosphate coated for superior corrosion resistance.

APPLICATIONS

D-LINE® Forged fittings serve multi-national end users in a wide range of applications in many industries including:

- Water Treatment
- Mining
- Chemical & Petrochemical
- Ship Building Industries
- Public Services
- Pipe Engineering
- Fire Protection
- General Industries
- Food Industries

DESIGN FEATURES

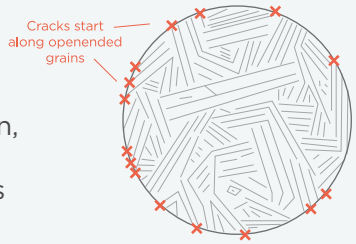
- Carbon Steel: ASTM A-105
- Class 3000 & 6000
- Dimensions to per ASME B16.11
- Thread to per ASME B1.20.1
- NPT & SW ends available
- Sour gas service to per NACE MR-0175

FORGED STEEL ADVANTAGES

Forged steel offers a great advantage against casting or plating:

- Saving machining hours
- Better metallic yield
- Improving the grain structure
- Directional flow that enables the improvement of impact and mechanical resistance properties

CAST
[Random Grains]



FORGED
[Aligned Grains]

ASTM forged carbon steel grade A-105 is a low carbon, manganese and silicon containing steel. Forged steel fittings are manufactured in a process where metals is molded by applying pressure.

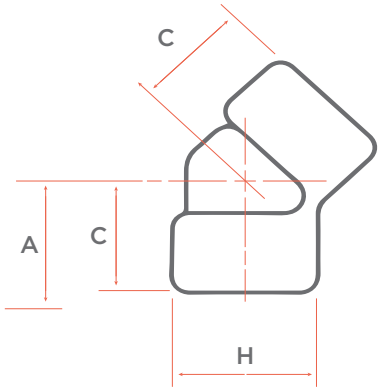
D-LINE® offers the complete product line of forged steel fittings including:

- Elbows
- Couplings
- Tees
- Unions
- Reducers
- Caps & Plugs
- Laterals
- Cross
- Outlets and more

www.dlineproducts.com | sales@dlineproducts.com

DIMENSIONS

THREADED NPT



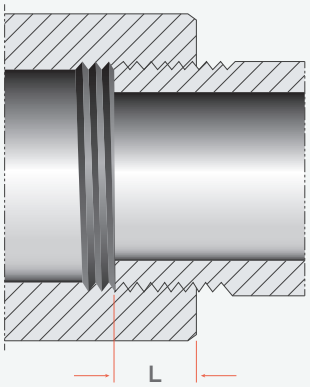
CLASS 3000 DIMENSIONS AND WEIGHTS												
Size	**1/8”**	**1/4”**	**3/8”**	**1/2”**	**3/4”**	**1”**	**1-1/4”**	**1-1/2”**	**2”**	**2-1/2”**	**3”**	**4”**
A	0.81	0.97	1.12	1.31	1.50	1.75	2.00	2.38	2.50	3.25	3.75	4.50
C	0.67	0.75	0.87	0.98	1.10	1.30	1.38	1.69	1.73	2.05	2.52	3.11
H	0.87	098	1.30	1.50	1.81	2.20	2.44	2.95	3.31	4.02	4.76	5.98
WEIGHT (KG)	0.10	0.10	0.13	0.24	0.34	0.51	0.77	1.03	1.59	2.79	4.80	14.5

Dimensions are expressed in inches
Weight is estimated

CLASS 6000 DIMENSIONS AND WEIGHTS								
Size	**1/2”**	**3/4”**	**1”**	**1-1/4”**	**1-1/2”**	**2”**	**2-1/2”**	**3”**
A	1.50	1.75	2.00	2.38	2.50	3.25	3.75	4.19
C	0.98	1.10	1.30	1.38	1.69	1.73	2.05	2.52
H	1.81	2.20	2.44	2.95	3.31	4.02	4.76	5.75
WEIGHT (KG)	0.46	0.73	1.13	1.50	2.29	3.47	6.21	9.52

Dimensions are expressed in inches
Weight is estimated

LENGTH OF THREAD SCREWED INTO FITTING

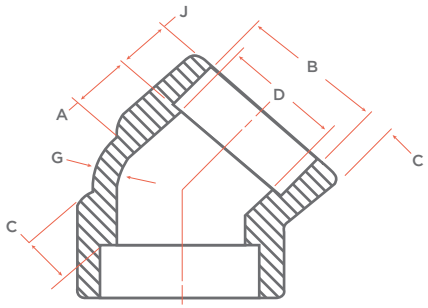


SIZE	L
1/8”	0.273
1/4”	0.395
3/8”	0.407
1/2”	0.534
3/4”	0.553
1”	0.661
1-1/4”	0.681
1-1/2”	0.681

SIZE	L
2”	0.697
2-1/2”	0.933
3”	1.016
3-1/2”	1.071
4”	1.094
5”	1.187
6”	1.208
8”	1.313

DIMENSIONS

SOCKET WELD



CLASS 3000 DIMENSIONS AND WEIGHTS												
Size		1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
B	Max.	0.44	0.58	0.71	0.88	1.09	1.35	1.70	1.94	2.43	2.93	3.56	4.57
	Min.	0.42	0.56	0.69	0.86	1.07	1.33	1.68	1.92	2.41	2.91	3.54	4.55
D	Max.	0.30	0.39	0.52	0.65	0.85	1.08	1.41	1.64	2.10	2.53	3.13	4.09
	Min.	0.24	0.33	0.46	0.59	0.79	1.02	1.35	1.58	2.04	2.41	3.01	3.97
C	Avg.	0.13	0.15	0.16	0.18	0.19	0.22	0.24	0.25	0.27	0.35	0.38	0.42
	Min.	0.13	0.13	0.14	0.16	0.17	0.20	0.21	0.22	0.24	0.30	0.33	0.37
G	Min.	0.10	0.12	0.13	0.15	0.15	0.18	0.19	0.20	0.22	0.28	0.30	0.34
J	Min.	0.38	0.38	0.38	0.38	0.50	0.50	0.50	0.50	0.62	0.62	0.62	0.75
A		0.44	0.44	0.53	0.62	0.75	0.88	1.06	1.25	1.50	1.62	2.25	2.62
WEIGHT (KG)		0.10	0.10	0.13	0.24	0.34	0.51	0.77	1.03	1.59	2.79	4.80	14.5

Dimensions are expressed in inches
Weight is estimated

CLASS 6000 DIMENSIONS AND WEIGHTS									
Size		1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
B	Max.	0.88	1.09	1.35	1.70	1.94	2.43	2.93	3.56
	Min.	0.86	1.07	1.33	1.68	1.92	2.41	2.91	3.54
D	Max.	0.49	0.64	0.85	1.19	1.37	1.72	2.53	3.13
	Min.	0.43	0.58	0.79	1.13	1.31	1.66	2.41	3.01
C	Avg.	0.23	0.27	0.31	0.31	0.35	0.43	0.35	0.38
	Min.	0.20	0.24	0.27	0.27	0.31	0.37	0.30	0.33
G	Min.	0.19	0.22	0.25	0.25	0.28	0.34	0.28	0.30
J	Min.	0.38	0.50	0.50	0.50	0.50	0.62	0.62	0.62
A		0.75	0.88	1.06	1.25	1.50	1.62	1.62	2.25
WEIGHT (KG)		0.46	0.73	1.13	1.50	2.29	3.47	6.21	9.52

Dimensions are expressed in inches
Weight is estimated

WELDING GAP AND MINIMUM FLAT DIMENSION