

SERIES: S145/245 Series

SPECIFICATION: SAE AS1424

BRAID: CRES

INNERCORE: Metallic Convoluted

TEMPERATURE RANGE (SS INNER CORE): -268°C + 455°C (-450°F + 850°F)

TEMPERATURE RANGE (INCONEL INNER CORE): -268°C + 648°C (-450°F + 1200°F)

QUALIFICATIONS: SAE AS1424

S145/245 SERIES:

The premier and proven all-metallic aerospace hose, qualified to AS1424. S145/245 performs in extreme hot and cold, beyond the range of all thermoplastic hoses. It is used extensively on Space Vehicle and Launch Vehicle applications as well as hot sections of turbine engines where performance and reliability are critical. The hose consists of a convoluted innercore formed of CRES or Inconel® tubing, reinforced with a layer of CRES 304 wire braid. Operating pressures range from 2000 PSI (138 Bar) in small diameters to 800 PSI (55 Bar) in large diameters. S145/245 hose operates at temperatures up to 1200°F without the need for firesleeve. Standard fittings are available in CRES or Inconel®. Hybrid assemblies combining flex hose with multi-bend tube are a Titeflex specialty and provide improved vibration dampening, ease of installation and maintenance over strictly rigid tubing. Titeflex can mold a proprietary silicone on S145/245 hose assemblies, encapsulating braid and innercore, for service in severe vibration applications. Where greater flexibility and tighter bend radius is required, in a less dynamic environment, Titeflex offers S245 hose. S245 is available in the same alloys as S145.



Hose size 8 depicted (Not to scale). Actual hose construction varies by size.

ENGLISH

HOSE SIZE	OPERATING PRESSURE	HOSE ID (MIN)	HOSE OD (MAX)	BRAIDED HOSE WT/1/	PROOF PRESSURE	ROOM TEMP BURST (MIN)	BEND RADIUS (MIN) /2/, /3/	BEND RADIUS (MIN) /2/, /4/
	psi	in	in	lb/in	psi	psi	in	in
4	2,000	0.23	0.56	0.016	3,000	8,000	2	4
5	1,800	0.28	0.63	0.018	2,700	7,200	2.5	5
6	1,600	0.34	0.7	0.02	2,400	6,400	3	6
8	1,400	0.45	0.86	0.028	2,100	5,600	4	8
10	1,200	0.57	1	0.038	1,800	4,800	4.5	9
12	1,050	0.7	1.15	0.042	1,575	4,200	5	10
16	800	0.95	1.45	0.058	1,200	3,200	6	12

NOTES:

/1/ Over minimum 12 inch length

/2/ Measured from centerline

/3/ Static

/4/ Flexing

Inconel® code: N145 (contact Titeflex for details)



TITFLEX S145 (S145 SERIES)

METRIC

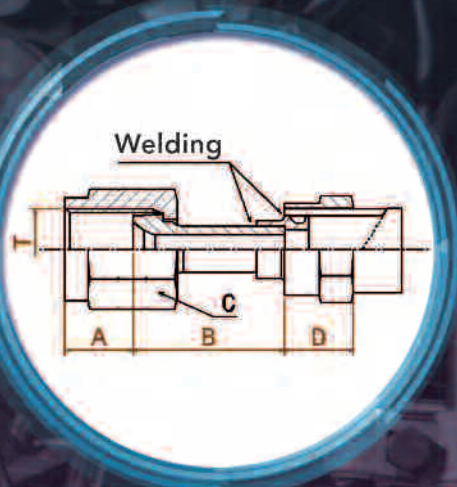
HOSE SIZE	OPERATING PRESSURE	HOSE ID (MIN)	HOSE OD (MAX)	BRAIDED HOSE WT/1/	PROOF PRESSURE	ROOM TEMP BURST (MIN)	BEND RADIUS (MIN) /2/, /3/	BEND RADIUS (MIN) /2/, /4/
	bar	mm	mm	g/m	bar	bar	mm	mm
4	140	5.8	14	286	200	550	51	102
5	124	7.11	16	321	186	496	64	127
6	110	8.6	18	357	160	440	76	152
8	96	11	22	500	140	380	102	203
10	82	14	25	679	120	330	114	229
12	72	18	29	750	109	290	127	254
16	55	24	37	1036	82	220	152	305

NOTES:
 /1/ Over minimum 305 mm length
 /2/ Measured from centerline
 /3/ Static
 /4/ Flexing

TITFLEX S145 (S145 SERIES) FLARED (JIC) FITTINGS

ENGLISH - INCHES

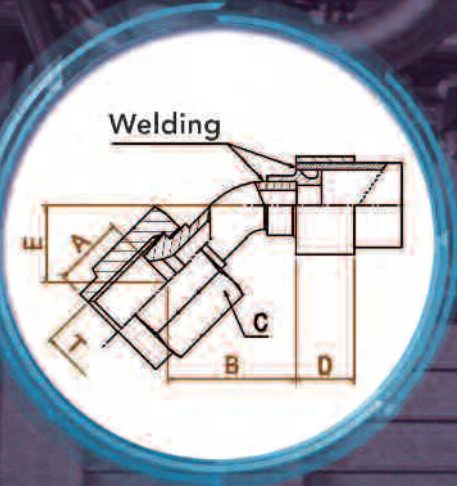
STRAIGHT FLARED FITTINGS - MATES WITH AS33656/AS4395 & AS33657/AS4396



Welding

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	WEIGHT (LB) CRES
4	Y60004-51	7/16-20	0.372	1.340	0.562	0.900	NA	0.040
5	Y60005-51	1/2-20	0.375	1.400	0.625	1.100	NA	0.060
6	Y60006-51	9/16-18	0.375	1.480	0.688	1.200	NA	0.065
8	Y60008-51	3/4-16	0.438	1.580	0.875	1.300	NA	0.110
10	Y60010-51	7/8-14	0.515	1.710	1.000	1.500	NA	0.144
12	Y60012-51	1-1/16-12	0.562	1.830	1.250	1.740	NA	0.255
16	Y60016-51	1-5/16-12	0.620	2.020	1.500	2.30	NA	0.394

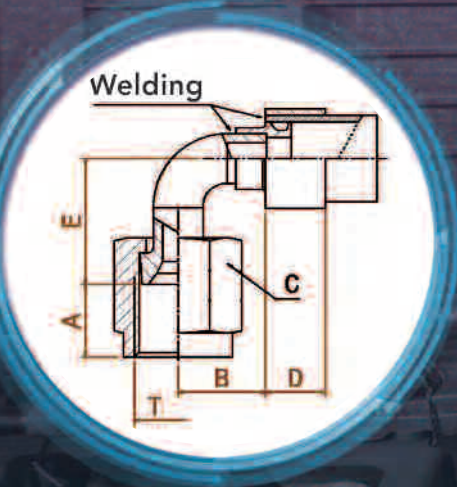
45° ELBOW FLARED FITTINGS - MATES WITH AS33656/AS4395 & AS33657/AS4396



Welding

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	WEIGHT (LB) CRES
4	Y60104-51	7/16-20	0.372	1.340	0.562	0.900	0.347	0.050
5	Y60105-51	1/2-20	0.375	1.410	0.625	1.100	0.414	0.065
6	Y60106-51	9/16-18	0.375	1.500	0.688	1.200	0.471	0.075
8	Y60108-51	3/4-16	0.438	1.710	0.875	1.300	0.572	0.120
10	Y60110-51	7/8-14	0.515	1.930	1.000	1.500	0.643	0.180
12	Y60112-51	1-1/16-12	0.562	2.250	1.250	1.740	0.680	0.300
16	Y60116-51	1-5/16-12	0.620	2.840	1.500	2.30	0.790	0.500

90° ELBOW FLARED FITTINGS - MATES WITH AS33656/AS4395 A & AS33657/AS4396



Welding

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	WEIGHT (LB) CRES
4	Y60204-51	7/16-20	0.372	1.130	0.562	0.900	0.642	0.050
5	Y60205-51	1/2-20	0.375	1.180	0.625	1.100	0.773	0.065
6	Y60206-51	9/16-18	0.375	1.240	0.688	1.200	0.890	0.075
8	Y60208-51	3/4-16	0.438	1.420	0.875	1.300	1.107	0.130
10	Y60210-51	7/8-14	0.515	1.640	1.000	1.500	1.281	0.190
12	Y60212-51	1-1/16-12	0.562	1.920	1.250	1.740	1.405	0.300
16	Y60216-51	1-5/16-12	0.620	2.620	1.500	2.30	1.708	0.569

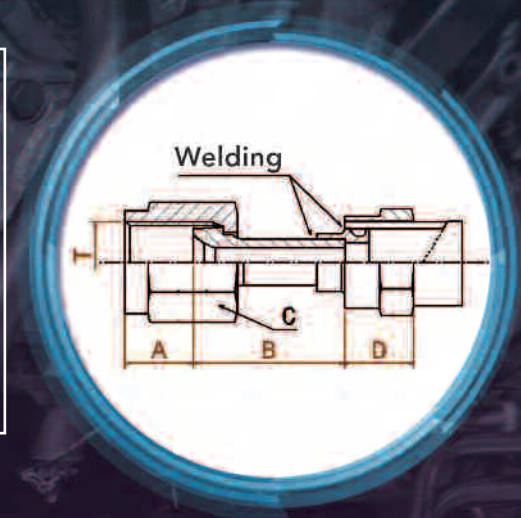
* Contact Titeflex for details.

TITEFLEX S145 (S145 SERIES) FLARED (JIC) FITTINGS

METRIC - MILLIMETERS

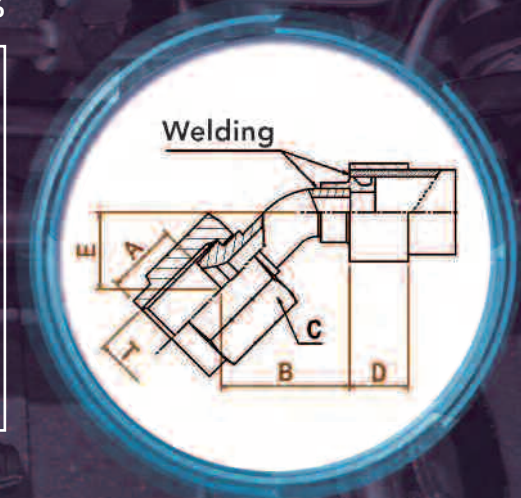
STRAIGHT FLARED FITTINGS - MATES WITH AS33656/AS4395 & AS33657/AS4396

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	WEIGHT (GRAMS) CRES
4	Y60004-51	7/16-20	9.4	34.0	14.3	22.9	NA	18.0
5	Y60005-51	1/2-20	9.5	35.6	15.9	27.9	NA	27.0
6	Y60006-51	9/16-18	9.5	37.6	17.5	30.5	NA	29.5
8	Y60008-51	3/4-16	11.1	40.1	22.2	33.0	NA	50.0
10	Y60010-51	7/8-14	13.1	43.4	25.4	38.1	NA	65.5
12	Y60012-51	1-1/16-12	14.3	46.5	31.8	44.2	NA	115.5
16	Y60016-51	1-5/16-12	15.7	51.3	38.1	58.4	NA	178.5



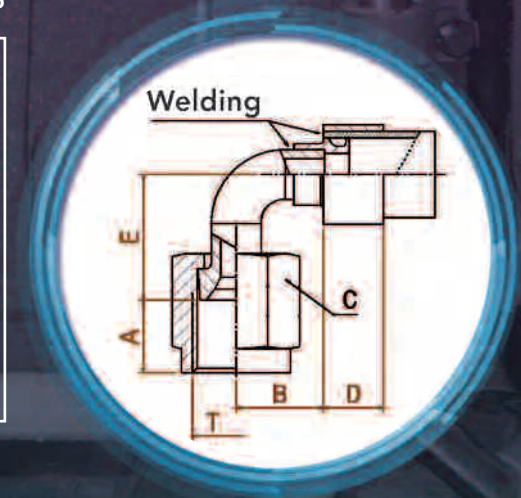
45° ELBOW FLARED FITTINGS - MATES WITH AS33656/AS4395 & AS33657/AS4396

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	WEIGHT (GRAMS) CRES
4	Y60104-51	7/16-20	9.4	34.0	14.3	22.9	8.8	22.5
5	Y60105-51	1/2-20	9.5	35.8	15.9	27.9	10.5	29.5
6	Y60106-51	9/16-18	9.5	38.1	17.5	30.5	12.0	34.0
8	Y60108-51	3/4-16	11.1	43.4	22.2	33.0	14.5	54.5
10	Y60110-51	7/8-14	13.1	49.0	25.4	38.1	16.3	81.5
12	Y60112-51	1-1/16-12	14.3	57.2	31.8	44.2	17.3	136.0
16	Y60116-51	1-5/16-12	15.7	72.1	38.1	58.4	20.1	227.0



90° ELBOW FLARED FITTINGS - MATES WITH AS33656/AS4395 & AS33657/AS4396

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	WEIGHT (GRAMS) CRES
4	Y60204-51	7/16-20	9.4	28.7	14.3	22.9	16.3	22.5
5	Y60205-51	1/2-20	9.5	30.0	15.9	27.9	19.6	29.5
6	Y60206-51	9/16-18	9.5	31.5	17.5	30.5	22.6	34.0
8	Y60208-51	3/4-16	11.1	36.1	22.2	33.0	28.1	59.0
10	Y60210-51	7/8-14	13.1	41.7	25.4	38.1	32.5	86.0
12	Y60212-51	1-1/16-12	14.3	48.8	31.8	44.2	35.7	136.0
16	Y60216-51	1-5/16-12	15.7	66.5	38.1	58.4	43.4	258.0



TITEFLEX S145 (S145 SERIES) FLARELESS (NAS) FITTINGS

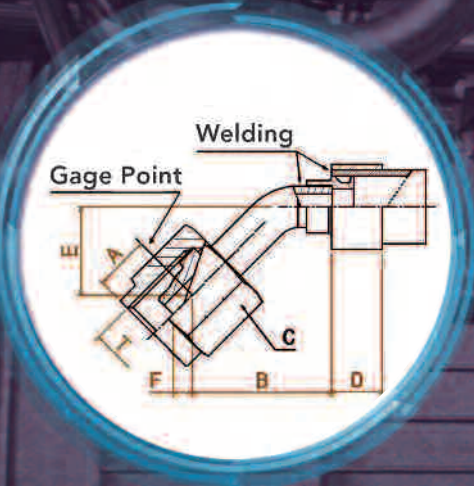
ENGLISH - INCHES

STRAIGHT FLARELESS FITTINGS - MATES WITH AS33514/AS33515 & AS4375/AS4377



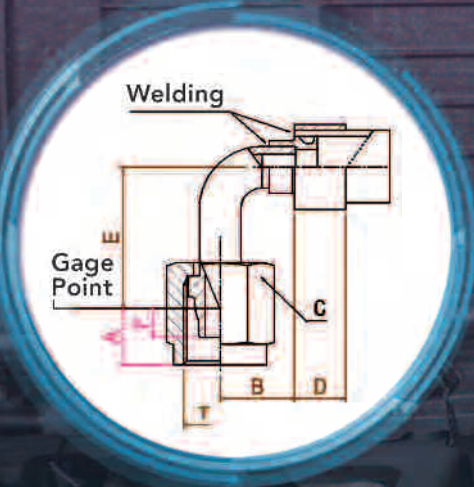
HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	GAGE POINT (F)	WEIGHT (LB) CRES
4	Y60404-51	7/16-20	0.320	1.340	0.562	0.900	NA	0.155	0.1
5	Y60405-51	1/2-20	0.310	1.400	0.625	1.100	NA	0.157	0.1
6	Y60406-51	9/16-18	0.327	1.480	0.688	1.200	NA	0.164	0.1
8	Y60408-51	3/4-16	0.368	1.580	0.875	1.300	NA	0.189	0.1
10	Y60410-51	7/8-14	0.396	1.710	1.000	1.500	NA	0.201	0.2
12	Y60412-51	1-1/16-12	0.421	1.830	1.250	1.740	NA	0.228	0.4
16	Y60416-51	1-5/16-12	0.425	2.020	1.500	2.30	NA	0.297	0.5

45° ELBOW FLARELESS FITTINGS - MATES WITH AS33514/AS33515 & AS4375/AS4377



HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	GAGE POINT (F)	WEIGHT (LB) CRES
4	Y60504-51	7/16-20	0.320	1.62	0.562	0.900	0.530	0.110	0.1
5	Y60505-51	1/2-20	0.310	1.750	0.625	1.100	0.554	0.111	0.1
6	Y60506-51	9/16-18	0.327	1.880	0.688	1.200	0.580	0.116	0.1
8	Y60508-51	3/4-16	0.368	1.120	0.875	1.300	0.710	0.134	0.1
10	Y60510-51	7/8-14	0.396	2.380	1.000	1.500	0.912	0.142	0.2
12	Y60512-51	1-1/16-12	0.421	2.690	1.250	1.740	0.984	0.161	0.4
16	Y60516-51	1-5/16-12	0.425	3.190	1.500	2.30	1.025	0.210	0.6

90° ELBOW FLARELESS FITTINGS - MATES WITH AS33514/AS33515 & AS4375/AS4377



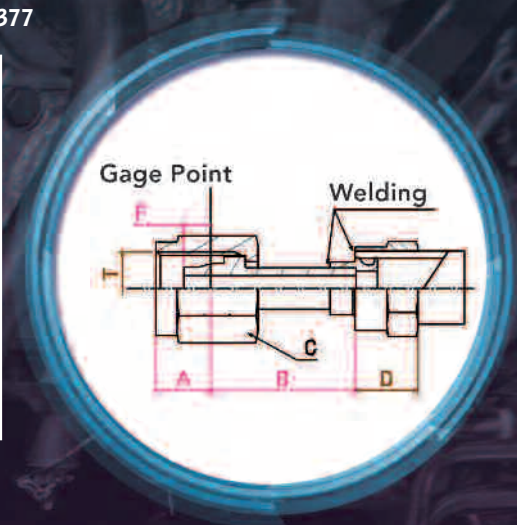
HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	GAGE POINT (F)	WEIGHT (LB) CRES
4	Y60604-51	7/16-20	0.320	1.180	0.562	0.900	0.860	0.155	0.1
5	Y60605-51	1/2-20	0.310	1.240	0.625	1.100	0.873	0.157	0.1
6	Y60606-51	9/16-18	0.327	1.310	0.688	1.200	1.010	0.164	0.1
8	Y60608-51	3/4-16	0.368	1.500	0.875	1.300	1.265	0.189	0.1
10	Y60610-51	7/8-14	0.396	1.750	1.000	1.500	1.671	0.201	0.2
12	Y60612-51	1-1/16-12	0.421	2.060	1.250	1.740	1.840	0.228	0.4
16	Y60616-51	1-5/16-12	0.425	2.500	1.500	2.30	2.030	0.297	0.6

TITEFLEX S145 (S145 SERIES) FLARELESS (NAS) FITTINGS

METRIC - MILLIMETERS

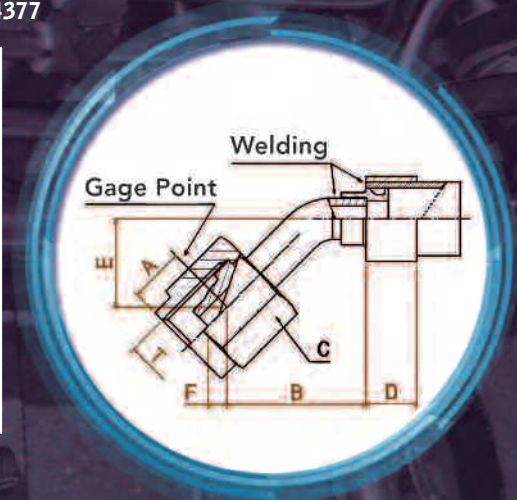
STRAIGHT FLARELESS FITTINGS - MATES WITH AS33514/AS33515 & AS4375/AS4377

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	GAGE POINT (F)	WEIGHT (GRAMS) CRES
4	Y60404-51	7/16-20	8.1	31.8	14.3	22.9	NA	3.94	22.7
5	Y60405-51	1/2-20	7.9	35.1	15.9	27.9	NA	3.99	27.2
6	Y60406-51	9/16-18	8.3	35.1	17.5	30.5	NA	4.17	31.7
8	Y60408-51	3/4-16	9.3	39.6	22.2	33.0	NA	4.80	54.4
10	Y60410-51	7/8-14	10.1	44.5	25.4	38.1	NA	5.11	81.6
12	Y60412-51	1-1/16-12	10.7	49.3	31.8	44.2	NA	5.79	163.3
16	Y60416-51	1-5/16-12	10.8	53.8	38.1	58.4	NA	7.54	217.7



45° ELBOW FLARELESS FITTINGS - MATES WITH AS33514/AS33515 & AS4375/AS4377

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	GAGE POINT (F)	WEIGHT (GRAMS) CRES
4	Y60504-51	7/16-20	8.1	41.1	14.3	22.9	13.5	2.79	22.7
5	Y60505-51	1/2-20	7.9	44.5	15.9	27.9	14.1	2.82	31.7
6	Y60506-51	9/16-18	8.3	47.8	17.5	30.5	14.7	2.95	36.3
8	Y60508-51	3/4-16	9.3	53.8	22.2	33.0	18.0	3.40	59.0
10	Y60510-51	7/8-14	10.1	60.5	25.4	38.1	23.2	3.61	90.7
12	Y60512-51	1-1/16-12	10.7	68.3	31.8	44.2	25.0	4.09	176.9
16	Y60516-51	1-5/16-12	10.8	81.0	38.1	58.4	26.0	5.33	258.5



90° ELBOW FLARELESS FITTINGS - MATES WITH AS33514/AS33515 & AS4375/AS4377

HOSE SIZE	PART NUMBER	NUT THREAD SIZE (T)	NUT ENGAGEMENT LENGTH (A)	REACH MAX (B)	NUT SIZE (C)	COLLAR HEX SIZE (D)	DROP (E)	GAGE POINT (F)	WEIGHT (GRAMS) CRES
4	Y60604-51	7/16-20	8.1	30.0	14.3	22.9	21.8	3.94	22.7
5	Y60605-51	1/2-20	7.9	31.5	15.9	27.9	22.2	3.99	31.7
6	Y60606-51	9/16-18	8.3	33.3	17.5	30.5	25.7	4.17	36.3
8	Y60608-51	3/4-16	9.3	38.1	22.2	33.0	32.1	4.80	63.5
10	Y60610-51	7/8-14	10.1	44.5	25.4	38.1	42.4	5.11	99.7
12	Y60612-51	1-1/16-12	10.7	52.3	31.8	44.2	46.7	5.79	186.0
16	Y60616-51	1-5/16-12	10.8	63.2	38.1	58.4	51.6	7.54	290.3

