

GRADES STOCKED

| SPECIFICATIONS | | SPECIFICATIONS | |
|---|---|--------------------------------------|--|
| E-4130 | MIL-S-6758, AMS-6370, AMS-S-6758, AMS-2301, AMS-6348, AMS-2304, ASTM-A-331 (C.F. ONLY), ASTM-A-322 (H.R. ONLY) | E-8740 | AMS-6322, MIL-S-6049 EXC. SONIC, AMS-2301, AMS-2304, ASTM-A-331, AMS-S-6049 EXC. SONIC |
| E-4130 H.T. | MIL-S-6758, AMS-6346, AMS-6370 CHEMS ONLY, AMS-2301, AMS-2304, ASTM-A-331, AMS-S-6758 | E-9310 N&T | MIL-S-7393 COMP. 3, AMS-6260, AMS-2301, AMS-2304, ASTM-A-322, CAP. OF HT-5042 |
| E-4140 ANN. | MIL-S-5626, AMS-6382, AMS-6349 EXC. COND., AMS-2301, AMS-2304, ASTM-A-331, AMS-S-5626 | E-9310 VAC. MELT. N&T | MIL-S-7393 COMP. 3, AMS-6265, AMS-6260, AMS-2300, AMS-6267, MIL-S-83030 COMP. 3, CAP. OF HT-5042, BPS-299-947-032 (EXC. HARDNESS), EMS-56280 |
| E-4140 NORM. | MIL-S-5626, AMS-6382 EXC. COND., AMS-6349, AMS-2301, AMS-2304, AMS-6529, ASTM-A-322, AMS-S-5626 | E-52100 VAC. MELT. (SPH. ANN) | MIL-S-7420, AMS-6444, AMS-6440, AMS-2300, AMS-S-7420 |
| E-4330 MOD. VAC. MELT. N&T | MIL-S-8699, AMS-6411, AMS-6427, AMS-2300, BMS-7-122, BMS-7-27, CE-0906, EXC. SONIC TO FOLLOWING: FMS-1012, GM-1010, EMS-96242 | D6AC VAC. MELT. | AMS-6431, AMS-2300, STM-05-500, LCM-05-2190, EXC. SONIC TO FOLLOWING: FMS-1011, GM-1013, MIL-S-8949, AMS-S-8949 |
| E-4340 N&T | MIL-S-5000, AMS-6415, AMS-6484, AMS-6409, AMS-2301, AMS-2304, AMS-2310, ASTM-A-331 (C.F. ONLY), ASTM-A-322 (H.R. ONLY), BMS-7-28, DMS-1555 GRD. B, AMS-S-5000 | H-11 VAC. MELT. | AMS-6485, AMS-6487, AMS-6488, EMS-642 (EXC. FATIGUE TEST) |
| E-4340 VAC. MELT. N&T | MIL-S-8844 CL 1, MIL-S-5000, AMS-6414, AMS-6415, AMS-2300, AMS-6484, AMS-S-5000, BPS-299-947-055, DMS-1555 GRD.A , BMS-7-28 | HY-TUF N&T | MIL-S-7108, AMS-6418, AMS-2301, AMS-2304, ASTM-A-322, AMS-S-7108, DMS-1841 GRD. B |
| E-4340 VAC. MELT. N&T "300M" | MIL-S-8844 CL. 3, MIL-S-83135, AMS-6417, AMS-6419, AMS-6257 EXC. HARDNESS, AMS-2300, LC-05-1190, DMS-1935, BMS-7-26 CL. 1, GM-1012, CE-0896 | HY-TUF VAC. MELT. N&T | MIL-S-7108, AMS-6418 CHEMS ONLY, AMS-6425, AMS-2300, AMS-S-7108, DMS-1841 GRD. A |
| E-4620 VAC. MELT. | MIL-S-7493, AMS-6294, AMS-2300, ASTM-A-331 (C.F. ONLY), ASTM-A-322 (H.R. ONLY) | NITRIDING HT (BHN 241-285) | MIL-S-6709 COMP. A 135 MODIFIED, AMS-6470 EXC. HARDNESS, AMS-6472, AMS-2301, AMS-2304, ASTM-A-322, AMS-S-6709 |
| E-6150 VAC. MELT. | MIL-S-8503, AMS-6448, AMS-2300, AMS-S-8503, ASTM-A-331 (C.F. ONLY), ASTM-A-322 (H.R. ONLY) | NITRIDING VAC. MELT. | MIL-S-6709 COMP. A 135 MODIFIED, AMS-6471, AMS-2300, AMS-S-6709, BELL 299-947-036 |
| | | 9-4-30 VAC. MELT. | AMS-6526 EXC. AS SHIPPED COND, MIL-STD-2154 CL. A, BMS-7-182 TYPE 2, STO-160-LBO-012, MMS-2102 (EXC. FRACTURE TOUGH. & SONIC) |

AUTOMATIC EXCEPTIONS TO THE SPECS LISTED ARE: LINE MARKING AND INSPECTION (I.E. MAG., SONIC, ETC.)

Refer to pages 103 through 108 for tolerances, weights, recommended stock removal, chemical analysis, machinability.
 General information in back of book.

AIRCRAFT ALLOY

ROUNDS STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. |
|----------------|------------------|--------------|----------------|------------------------|------------------|--------------|--------------|
| 1/8" | E-4130 | C.D. | Norm | 13/32" | E-4130 E-4130 | C.D. C.D. | H.T. Norm |
| 3/16" | E-4130 E-4130 | C.D. C.D. | H.T. Norm | 7/16" | E-4130 | C.D. | H.T. |
| 7/32" | E-4130 | C.D. | Norm | | E-4130 | C.D. | Norm |
| .220" | E-8740 | G&P | Ann. | | E-4140 | C.D. | Ann. |
| 1/4" | E-4130 | C.D. | H.T. | | E-4330 Mod V.M. | C.G. | N&T |
| | E-4130 | C.D. | Norm | | E-4340 | C.D. | N&T |
| | E-4140 | C.D. | Ann. | E-4620 V.M. | C.G. | As rolled | |
| | E-4330 Mod V.M. | C.G. | N&T | E-6150 V.M. | C.G. | Ann. | |
| | E-4340 | C.D. | N&T | E-52100 V.M. | C.G. | Ann. | |
| | E-4620 V.M. | C.G. | As rolled | | | | |
| .260 " | E-6150 V.M. | C.G. | Ann. | .4475" | H-11 V.M. | C.G. | Ann. |
| | E-52100 V.M. | C.G. | Ann. | E-4340 | G&P | N&T | |
| | Nitriding V.M. | C.G. | N&T | E-4340 V.M. | C.G. | N&T | |
| | | | | E-8740 | G&P | Ann. | |
| | | | | | | | |
| | H-11 V.M. | C.G. | Ann. | 15/32" | E-4130 | C.D. | H.T. |
| | E-4340 V.M. | C.G. | N&T | E-4130 | C.D. | Norm | |
| | E-4340 | G&P | N&T | .484" | H-11 V.M. | C.G. | Ann. |
| | E-8740 | G&P | Ann. | | | | |
| .270" | H-11 V.M. | C.G. | Ann. | 1/2" | E-4130 | C.D. | H.T. |
| 9/32" | E-4130 | C.D. | H.T. | E-4130 | C.D. | Norm | |
| E-4130 | C.D. | Norm | | E-4140 | C.D. | Ann. | |
| 5/16" | E-4130 | C.D. | H.T. | E-4330 Mod V.M. | C.G. | N&T | |
| | E-4130 | C.D. | Norm | E-4340 | C.D. | N&T | |
| | E-4140 | C.D. | Ann. | E-4340 V.M. | C.G. | N&T | |
| | E-4330 Mod V.M. | C.G. | N&T | E-4340 Mod V.M. "300M" | C.G. | N&T | |
| | E-4340 | C.D. | N&T | E-4620 V.M. | C.G. | As rolled | |
| | E-4620 V.M. | C.G. | As rolled | E-6150 V.M. | C.G. | Ann. | |
| E-6150 V.M. | C.G. | Ann. | E-9310 V.M. | C.G. | N&T | | |
| E-52100 V.M. | C.G. | Ann. | E-52100 V.M. | C.G. | Ann. | | |
| Nitriding V.M. | C.G. | N&T | Nitriding V.M. | C.G. | N&T | | |
| | | | Hy-Tuf V.M. | C.G. | N&T | | |
| .3225" | H-11 V.M. | C.G. | Ann. | .510" | D6AC V.M. | C.G. | N&T |
| | E-4340 | G&P | N&T | H-11 V.M. | C.G. | Ann. | |
| | E-4340 V.M. | C.G. | N&T | E-4330 Mod V.M. | C.G. | N&T | |
| | E-8740 | G&P | Ann. | E-4340 | G&P | N&T | |
| 21/64" | E-4130 | C.D. | Norm | E-4340 V.M. | C.G. | N&T | |
| | | | | E-4340 Mod V.M. "300M" | C.G. | N&T | |
| 11/32" | E-4130 | C.D. | Norm | E-8740 | G&P | Ann. | |
| 3/8" | E-4130 | C.D. | H.T. | .525" | H-11 V.M. | C.G. | Ann. |
| | E-4130 | C.D. | Norm | 17/32" | E-4130 | C.D. | H.T. |
| | E-4140 | C.D. | Ann. | E-4130 | C.D. | Norm | |
| | E-4330 Mod V.M. | C.G. | N&T | .540" | H-11 V.M. | C.G. | Ann. |
| | E-4340 | C.D. | N&T | | | | |
| | E-4620 V.M. | C.G. | As rolled | 9/16" | E-4130 | C.D. | H.T. |
| | E-6150 V.M. | C.G. | Ann. | E-4130 | C.D. | Norm | |
| | E-52100 V.M. | C.G. | Ann. | E-4140 | C.D. | Ann. | |
| | Nitriding V.M. | C.G. | N&T | E-4340 | C.D. | N&T | |
| | Hy-Tuf V.M. | C.G. | N&T | E-4620 V.M. | C.G. | As rolled | |
| | | | | E-6150 V.M. | C.G. | Ann. | |
| | | | E-52100 V.M. | C.G. | Ann. | | |
| | | | Nitriding V.M. | C.G. | N&T | | |
| .385" | H-11 V.M. | C.G. | Ann. | .5725" | E-4340 | G&P | N&T |
| | E-4340 | G&P | N&T | H-11 V.M. | C.G. | Ann. | |
| | E-4340 V.M. | C.G. | N&T | E-8740 | G&P | Ann. | |
| E-8740 | G&P | Ann. | | | | | |
| .391" | H-11 V.M. | C.G. | Ann. | .587" | H-11 V.M. | C.G. | Ann. |
| 25/64" | E-4130 | C.D. | Norm | | | | |

Finish: C.D. - Cold Drawn
C.G. - Centerless Ground
R.T. - Rough Turned
G&P - Ground and Polished

Condition: Ann. - Annealed
N&T - Normalized and Sub-critical Annealed
H.T. - Heat treated (RC 26/32)
C.D./T. - Turned to a Cold Drawn tol.

V.M. - Vacuum Arc Re-melt Norm - Normalized
P.G. - Precision Ground
RCS - Round Corner Square
HRRT - Hot Rolled and Rough Turned

AIRCRAFT ALLOY

ROUNDS STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. |
|------------------------|------------------------|-----------|-----------------|------------------------|------------------------|------------------------|-----------|
| 5/8" | E-4130 | C.D. | H.T. | 13/16" | E-4140 | C.D. | Ann. |
| | E-4130 | C.D. | Norm | | E-4340 | C.D. | N&T |
| | E-4140 | C.D. | Ann. | | E-52100 V.M. | C.G. | Ann. |
| | E-4330 Mod V.M. | C.G. | N&T | | Nitriding V.M. | C.G. | N&T |
| | E-4340 | C.D. | N&T | 7/8" | E-4130 | C.D. | H.T. |
| | E-4340 V.M. | C.G. | N&T | | E-4130 | C.D. | Norm |
| | E-4340 Mod V.M. "300M" | C.G. | N&T | | E-4140 | C.D. | Ann. |
| | E-4620 V.M. | C.G. | As rolled | | E-4330 Mod V.M. | C.G. | N&T |
| | E-6150 V.M. | C.G. | Ann. | | E-4330 Mod V.M. | R.T. | N&T |
| | E-9310 V.M. | C.G. | N&T | | E-4340 | C.D. | N&T |
| | E-52100 V.M. | C.G. | Ann. | | E-4340 V.M. | C.G. | N&T |
| | Nitriding V.M. | C.G. | N&T | | E-4340 V.M. | R.T. | N&T |
| | Hy-Tuf V.M. | C.G. | N&T | | E-4340 Mod V.M. "300M" | C.G. | N&T |
| | .635" | H-11 V.M. | C.G. | | Ann. | E-4340 Mod V.M. "300M" | R.T. |
| E-4340 | | G&P | N&T | | E-4620 V.M. | C.G. | As rolled |
| E-4340 V.M. | | C.G. | N&T | | E-6150 V.M. | C.G. | Ann. |
| E-4340 Mod V.M. "300M" | | C.G. | N&T | | E-9310 V.M. | C.G. | N&T |
| E-8740 | | G&P | Ann. | | E-9310 V.M. | R.T. | N&T |
| .649" | H-11 V.M. | C.G. | Ann. | E-52100 V.M. | C.G. | Ann. | |
| | 11/16" | H-11 V.M. | C.G. | Ann. | Nitriding V.M. | C.G. | N&T |
| E-4130 | | C.D. | H.T. | 9-4-30 V.M. | C.G. | N&T | |
| E-4130 | | C.D. | Norm | .885" | D6AC V.M. | C.G. | N&T |
| E-4140 | | C.D. | Ann. | | H-11 V.M. | C.G. | Ann. |
| E-4340 | | C.D. | N&T | | E-4340 | G&P | N&T |
| E-52100 V.M. | | C.G. | Ann. | | E-4340 Mod V.M. "300M" | C.G. | N&T |
| Nitriding V.M. | C.G. | N&T | E-8740 | G&P | Ann. | | |
| .725" | H-11 V.M. | C.G. | Ann. | .900" | H-11 V.M. | C.G. | Ann. |
| | 3/4" | E-4130 | C.D. | | H.T. | 15/16" | H-11 V.M. |
| E-4130 | | C.D. | Norm | E-4130 | C.D. | | H.T. |
| E-4140 | | C.D. | Ann. | E-4130 | C.D. | | Norm |
| E-4330 Mod V.M. | | C.G. | N&T | E-4140 | C.D. | | Ann. |
| E-4330 Mod V.M. | | R.T. | N&T | E-4340 | C.D. | | N&T |
| E-4340 | | C.D. | N&T | E-52100 V.M. | C.G. | | Ann. |
| E-4340 V.M. | | C.G. | N&T | 1" | D6AC V.M. | C.G. | N&T |
| E-4340 V.M. | | C.G. | N&T | | H-11 V.M. | C.G. | Ann. |
| E-4340 V.M. | | R.T. | N&T | | E-4130 | C.D. | H.T. |
| E-4340 Mod V.M. "300M" | | C.G. | N&T | | E-4130 | C.D. | Norm |
| E-4340 Mod V.M. "300M" | | R.T. | N&T | | E-4130 | R.T. | Norm |
| E-4620 V.M. | | C.G. | As rolled | | E-4140 | C.D. | Ann. |
| E-6150 V.M. | | C.G. | Ann. | | E-4140 | H.R. | Norm |
| E-9310 V.M. | | C.G. | N&T | | E-4330 Mod V.M. | C.G. | N&T |
| E-9310 V.M. | R.T. | N&T | E-4330 Mod V.M. | | R.T. | N&T | |
| E-52100 V.M. | C.G. | Ann. | E-4340 | | C.D. | N&T | |
| Nitriding V.M. | C.G. | N&T | E-4340 | | H.R. | N&T | |
| Hy-Tuf V.M. | C.G. | N&T | E-4340 V.M. | | C.G. | N&T | |
| 9-4-30 V.M. | C.G. | N&T | E-4340 V.M. | | R.T. | N&T | |
| .760" | D6AC V.M. | C.G. | N&T | | E-4340 Mod V.M. "300M" | C.G. | N&T |
| | H-11 V.M. | C.G. | Ann. | E-4340 Mod V.M. "300M" | R.T. | N&T | |
| | E-4330 Mod V.M. | C.G. | N&T | E-4620 V.M. | C.G. | As rolled | |
| | E-4340 | G&P | N&T | E-6150 V.M. | C.G. | Ann. | |
| | E-4340 V.M. | C.G. | N&T | E-9310 V.M. | C.G. | N&T | |
| | E-4340 Mod V.M. "300M" | C.G. | N&T | E-9310 V.M. | R.T. | N&T | |
| 13/16" | H-11 V.M. | C.G. | Ann. | E-52100 V.M. | C.G. | Ann. | |
| | E-4130 | C.D. | H.T. | Nitriding V.M. | C.G. | N&T | |
| | E-4130 | C.D. | Norm | Hy-Tuf V.M. | R.T. | N&T | |
| | | | | 9-4-30 V.M. | C.G. | N&T | |

NOTE: IT IS NOT ADVISABLE TO TRY TO FINISH ON SIZE FROM THE SIZE PURCHASED.

NOTE: BARS ARE NOT PERFECTLY ROUND, SQUARE, OR STRAIGHT.

PLEASE REFER TO THE VARIOUS CHARTS IN THIS BOOK.

AIRCRAFT ALLOY

ROUNDS

STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. |
|---------|--|---|---|---------|--|---|--|
| 1.010" | H-11 V.M. E-4330 Mod V.M. E-4340 E-4340 V.M. E-8740 | C.G. C.G. G&P C.G. G&P | Ann. N&T N&T N&T Ann. | 1-1/4" | E-9310 V.M. E-52100 V.M. Nitriding V.M. Hy-Tuf V.M. 9-4-30 V.M. | R.T. C.G. C.G. R.T. C.G. | N&T Ann. N&T N&T N&T |
| 1.020" | H-11 V.M. | C.G. | Ann. | 1.260" | E-4340 E-8740 | G&P G&P | N&T. Ann. |
| 1-1/16" | H-11 V.M. E-4130 E-4130 E-4140 E-4340 | C.G. C.D. C.D. C.D. C.D. | Ann. H.T. Norm Ann. N&T | 1-5/16" | E-4130 E-4130 E-4140 E-4340 | C.D./T. C.D./T. C.D./T. C.D. | H.T. Norm Ann. N&T |
| 1-1/8" | D6AC V.M. H-11 V.M. E-4130 E-4130 E-4140 E-4140 E-4330 Mod V.M. E-4340 E-4340 E-4340 V.M. E-4340 V.M. E-4340 Mod V.M. "300M" E-4340 Mod V.M. "300M" E-9310 V.M. E-9310 V.M. E-52100 V.M. Nitriding V.M. | C.G. C.G. C.D. C.D. C.D. R.T. R.T. C.D. R.T. C.G. R.T. C.G. R.T. C.G. R.T. C.G. R.T. C.G. C.G. | N&T Ann. H.T. Norm Ann. Norm N&T N&T N&T N&T N&T N&T N&T N&T N&T Ann. N&T Ann. N&T | 1-3/8" | D6AC V.M. D6AC V.M. H-11 V.M. E-4130 E-4130 E-4140 E-4330 Mod V.M. E-4330 Mod V.M. E-4340 E-4340 E-4340 V.M. E-4340 V.M. E-4340 Mod V.M. "300M" E-4340 Mod V.M. "300M" E-9310 V.M. E-52100 V.M. Nitriding V.M. | C.G. R.T. C.G. C.D./T. C.D./T. C.D./T. C.G. R.T. C.D. R.T. C.G. R.T. C.G. R.T. R.T. C.G. C.G. C.G. | N&T N&T Ann. H.T. Norm Ann. N&T N&T N&T N&T N&T N&T N&T N&T N&T Ann. N&T |
| 1.135" | H-11 V.M. E-4330 Mod V.M. E-4340 E-4340 V.M. E-8740 | C.G. C.G. G&P C.G. G&P | Ann. N&T N&T N&T Ann. | 1-7/16" | H-11 V.M. E-4130 E-4140 E-4340 | C.G. C.D./T. C.D./T. C.D. | Ann. Norm Ann. N&T |
| 1-3/16" | E-4130 E-4130 E-4140 E-4340 | C.D. C.D. C.D. C.D. | H.T. Norm Ann. N&T | 1-1/2" | D6AC V.M. D6AC V.M. H-11 V.M. E-4130 E-4130 E-4140 E-4140 E-4330 Mod V.M. E-4330 Mod V.M. E-4340 E-4340 E-4340 V.M. E-4340 V.M. E-4340 Mod V.M. "300M" E-4340 Mod V.M. "300M" E-4620 V.M. E-6150 V.M. E-9310 E-9310 V.M. E-9310 V.M. E-52100 V.M. Nitriding V.M. Hy-Tuf Hy-Tuf V.M. | C.G. R.T. C.G. C.D./T. C.D./T. R.T. R.T. C.G. R.T. C.D./T. R.T. C.G. R.T. C.G. R.T. R.T. C.G. R.T. C.G. C.G. R.T. R.T. | N&T N&T Ann. H.T. Norm Norm Ann. Norm N&T N&T N&T N&T N&T N&T N&T N&T N&T N&T Ann. N&T N&T Ann. N&T N&T |
| 1-1/4" | D6AC V.M. D6AC V.M. H-11 V.M. E-4130 E-4130 E-4130 E-4140 E-4140 E-4330 Mod V.M. E-4330 Mod V.M. E-4340 E-4340 E-4340 V.M. E-4340 V.M. E-4340 Mod V.M. "300M" E-4340 Mod V.M. "300M" E-4620 V.M. E-6150 V.M. E-9310 V.M. | C.G. R.T. C.G. C.D./T. C.D./T. R.T. C.D./T. R.T. C.G. R.T. C.D. R.T. C.G. R.T. C.G. R.T. C.G. C.G. C.G. C.G. | N&T N&T Ann. H.T. Norm Norm Ann. Norm N&T N&T N&T N&T N&T N&T N&T N&T N&T Ann. Ann. N&T N&T | | | | |

Finish: C.D. - Cold Drawn
 C.G. - Centerless Ground
 R.T. - Rough Turned
 G&P - Ground and Polished

Condition: Ann. - Annealed
 N&T - Normalized and Sub-critical Annealed
 H.T. - Heat treated (RC 26/32)
 C.D./T. - Turned to a Cold Drawn tol.

V.M. - Vacuum Arc Re-melt
 P.G. - Precision Ground
 RCS - Round Corner Square
 HRRT - Hot Rolled and Rough Turned
 Norm - Normalized

AIRCRAFT ALLOY

ROUNDS STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | |
|----------------|------------------------|---------|-----------------|------------------------|------------------------|-----------|-------|------|
| 1-1/2" | 9-4-30 V.M. | C.G. | N&T | 2" | H-11 V.M. | C.G. | Ann. | |
| 1.510" | E-8740 | G&P | Ann. | | E-4130 | C.D./T. | Norm | |
| 1-9/16 " | E-4130 | C.D./T. | Norm | | E-4130 | R.T. | Norm | |
| | E-4140 | C.D./T. | Ann. | | E-4140 | C.D./T. | Ann. | |
| | E-4340 | C.D./T. | N&T | | E-4140 | R.T. | Norm | |
| 1-5/8" | D6AC V.M. | R.T. | N&T | | E-4330 Mod V.M. | R.T. | N&T | |
| | H-11 V.M. | C.G. | Ann. | | E-4340 | C.D./T. | N&T | |
| | E-4130 | C.D./T. | Norm | | E-4340 | R.T. | N&T | |
| | E-4130 | R.T. | Norm | | E-4340 V.M. | R.T. | N&T | |
| | E-4140 | C.D./T. | Ann. | | E-4340 Mod V.M. "300M" | R.T. | N&T | |
| | E-4140 | R.T. | Norm | E-4620 V.M. | R.T. | As rolled | | |
| | E-4330 Mod V.M. | R.T. | N&T | E-6150 V.M. | R.T. | Ann. | | |
| | E-4340 | C.D./T. | N&T | E-9310 | R.T. | N&T | | |
| | E-4340 | R.T. | N&T | E-9310 V.M. | R.T. | N&T | | |
| | E-4340 V.M. | R.T. | N&T | E-52100 V.M. | R.T. | Ann. | | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | Nitriding | R.T. | H.T. | | |
| | E-4620 V.M. | R.T. | As rolled | Nitriding V.M. | R.T. | N&T | | |
| | E-9310 V.M. | R.T. | N&T | Hy-Tuf | R.T. | N&T | | |
| | E-52100 V.M. | R.T. | Ann. | Hy-Tuf V.M. | R.T. | N&T | | |
| Nitriding V.M. | R.T. | N&T | 9-4-30 V.M. | R.T. | N&T | | | |
| 1-3/4" | D6AC V.M. | R.T. | N&T | 2-1/8" | D6AC V.M. | R.T. | N&T | |
| | H-11 V.M. | C.G. | Ann. | | H-11 V.M. | C.G. | Ann. | |
| | E-4130 | C.D./T. | Norm | | E-4130 | C.D./T. | Norm | |
| | E-4130 | R.T. | Norm | | E-4130 | R.T. | Norm | |
| | E-4140 | C.D./T. | Ann. | | E 4140 | C.D./T. | Ann. | |
| | E-4140 | R.T. | Norm | | E-4330 Mod V.M. | R.T. | N&T | |
| | E-4330 Mod V.M. | R.T. | N&T | | E-4340 | C.D./T. | N&T | |
| | E-4340 | C.D./T. | N&T | | E-4340 | R.T. | N&T | |
| | E-4340 | R.T. | N&T | | E-4340 V.M. | R.T. | N&T | |
| | E-4340 V.M. | R.T. | N&T | | E-4340 Mod V.M. "300M" | R.T. | N&T | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | E-9310 V.M. | R.T. | N&T | | |
| | E-4620 V.M. | R.T. | As rolled | 2-3/16" | E-4130 | C.D./T. | Norm | |
| | E-6150 V.M. | R.T. | Ann. | | 2-1/4" | D6AC V.M. | R.T. | N&T |
| | E-9310 | R.T. | N&T | | | H-11 V.M. | C.G. | Ann. |
| E-9310 V.M. | R.T. | N&T | E-4130 | | | C.D./T. | Norm | |
| E-52100 V.M. | R.T. | Ann. | E-4130 | R.T. | | Norm | | |
| Nitriding V.M. | R.T. | N&T | E-4140 | C.D./T. | | Ann. | | |
| Hy-Tuf V.M. | R.T. | N&T | E-4140 | R.T. | | Norm | | |
| 9-4-30 V.M. | R.T. | N&T | E-4330 Mod V.M. | R.T. | | N&T | | |
| 1-7/8" | D6AC V.M. | R.T. | N&T | E-4340 | | C.D./T. | N&T | |
| | H-11 V.M. | C.G. | Ann. | E-4340 | | R.T. | N&T | |
| | E-4130 | C.D./T. | Norm | E-4340 V.M. | | R.T. | N&T | |
| | E-4130 | R.T. | Norm | E-4340 Mod V.M. "300M" | R.T. | N&T | | |
| | E-4140 | C.D./T. | Ann. | E-4620 V.M. | R.T. | As rolled | | |
| | E-4140 | R.T. | Norm | E-9310 V.M. | R.T. | N&T | | |
| | E-4330 Mod V.M. | R.T. | N&T | E-52100 V.M. | R.T. | Ann. | | |
| | E-4340 | C.D./T. | N&T | Nitriding | R.T. | H.T. | | |
| | E-4340 | R.T. | N&T | Nitriding V.M. | R.T. | N&T | | |
| | E-4340 V.M. | R.T. | N&T | Hy-Tuf V.M. | R.T. | N&T | | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | 9-4-30 V.M. | R.T. | N&T | | |
| | E-4620 V.M. | R.T. | As rolled | 2-3/8" | D6AC V.M. | R.T. | N&T | |
| | E-6150 V.M. | R.T. | Ann. | | H-11 V.M. | C.G. | Ann. | |
| | E-9310 V.M. | R.T. | N&T | | E-4130 | C.D./T. | Norm | |
| E-52100 V.M. | R.T. | Ann. | E-4130 | | R.T. | Norm | | |
| Nitriding V.M. | R.T. | N&T | E-4140 | | C.D./T. | Ann. | | |
| | R.T. | N&T | E-4140 | | R.T. | Norm | | |
| | R.T. | N&T | E-4330 Mod V.M. | R.T. | N&T | | | |
| 2" | D6AC V.M. | R.T. | N&T | | | | | |

NOTE: IT IS NOT ADVISABLE TO TRY TO FINISH ON SIZE FROM THE SIZE PURCHASED.

NOTE: BARS ARE NOT PERFECTLY ROUND, SQUARE, OR STRAIGHT.

PLEASE REFER TO THE VARIOUS CHARTS IN THIS BOOK.

AIRCRAFT ALLOY

ROUNDS STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. |
|----------------|------------------------|---------|----------------|--------|------------------------|---------|-----------|
| 2-3/8" | E-4340 | C.D./T. | N&T | 2-7/8" | E-4140 | C.D./T. | Ann. |
| | E-4340 | R.T. | N&T | | E-4140 | R.T. | Norm |
| | E-4340 V.M. | R.T. | N&T | | E-4340 | R.T. | N&T |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | E-4340 V.M. | R.T. | N&T |
| | E-9310 V.M. | R.T. | N&T | | E-4340 Mod V.M. "300M" | R.T. | N&T |
| | Nitriding | R.T. | H.T. | | | | |
| 2-1/2" | D6AC V.M. | R.T. | N&T | 3" | D6AC V.M. | R.T. | N&T |
| | H-11 V.M. | C.G. | Ann. | | H-11 V.M. | C.G. | Ann. |
| | E-4130 | C.D./T. | Norm | | E-4130 | C.D./T. | Norm |
| | E-4130 | R.T. | Norm | | E-4130 | R.T. | Norm |
| | E-4140 | C.D./T. | Ann. | | E-4140 | C.D./T. | Ann. |
| | E-4140 | R.T. | Norm | | E-4140 | R.T. | Norm |
| | E-4330 Mod V.M. | R.T. | N&T | | E-4330 Mod V.M. | R.T. | N&T |
| | E-4340 | C.D./T. | N&T | | E-4340 | C.D./T. | N&T |
| | E-4340 | R.T. | N&T | | E-4340 | R.T. | N&T |
| | E-4340 V.M. | R.T. | N&T | | E-4340 V.M. | R.T. | N&T |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | E-4340 Mod V.M. "300M" | R.T. | N&T |
| | E-4620 V.M. | R.T. | As rolled | | E-4620 V.M. | R.T. | As rolled |
| | E-6150 V.M. | R.T. | Ann. | | E-6150 V.M. | R.T. | Ann. |
| | E-9310 | R.T. | N&T | | E-9310 | R.T. | N&T |
| | E-9310 V.M. | R.T. | N&T | | E-9310 V.M. | R.T. | N&T |
| | E-52100 V.M. | R.T. | Ann. | | E-52100 V.M. | R.T. | Ann. |
| | Nitriding | R.T. | H.T. | | Nitriding | R.T. | H.T. |
| | Nitriding V.M. | R.T. | N&T | | Nitriding V.M. | R.T. | N&T |
| | Hy-Tuf | R.T. | N&T | | Hy-Tuf | R.T. | N&T |
| | Hy-Tuf V.M. | R.T. | N&T | | Hy-Tuf V.M. | R.T. | N&T |
| | 9-4-30 V.M. | R.T. | N&T | | 9-4-30 V.M. | R.T. | N&T |
| 2-5/8" | E-4130 | C.D./T. | Norm | 3-1/8" | E-4130 | C.D./T. | Norm |
| | E-4130 | R.T. | Norm | | E-4140 | C.D./T. | Ann. |
| | E-4140 | C.D./T. | Ann. | | E-4140 | R.T. | Norm |
| | E-4140 | R.T. | Norm | | E-4340 | C.D./T. | N&T |
| | E-4330 Mod V.M. | R.T. | N&T | | E-4340 | R.T. | N&T |
| | E-4340 | C.D./T. | N&T | | E-4340 V.M. | R.T. | N&T |
| | E-4340 | R.T. | N&T | | E-9310 V.M. | R.T. | N&T |
| 2-3/4" | D6AC V.M. | R.T. | N&T | 3-1/4" | D6AC V.M. | R.T. | N&T |
| | H-11 V.M. | C.G. | Ann. | | H-11 V.M. | C.G. | Ann. |
| | E-4130 | C.D./T. | Norm | | E-4130 | C.D./T. | Norm |
| | E-4130 | R.T. | Norm | | E-4130 | R.T. | Norm |
| | E-4140 | C.D./T. | Ann. | | E-4140 | C.D./T. | Ann. |
| | E-4140 | R.T. | Norm | | E-4140 | R.T. | Norm |
| | E-4330 Mod V.M. | R.T. | N&T | | E-4330 Mod V.M. | R.T. | N&T |
| | E-4340 | C.D./T. | N&T | | E-4340 | C.D./T. | N&T |
| | E-4340 | R.T. | N&T | | E-4340 | R.T. | N&T |
| | E-4340 V.M. | R.T. | N&T | | E-4340 V.M. | R.T. | N&T |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | E-4340 Mod V.M. "300M" | R.T. | N&T |
| E-9310 | R.T. | N&T | E-9310 | R.T. | N&T | | |
| E-9310 V.M. | R.T. | N&T | E-9310 V.M. | R.T. | N&T | | |
| E-52100 V.M. | R.T. | Ann. | E-52100 V.M. | R.T. | Ann. | | |
| Nitriding | R.T. | H.T. | Nitriding | R.T. | H.T. | | |
| Nitriding V.M. | R.T. | N&T | Nitriding V.M. | R.T. | N&T | | |
| Hy-Tuf V.M. | R.T. | N&T | Hy-Tuf V.M. | R.T. | N&T | | |
| 9-4-30 V.M. | R.T. | N&T | 9-4-30 V.M. | R.T. | N&T | | |
| 2-7/8" | E-4130 | C.D./T. | Norm | 3-3/8" | E-4130 | C.D./T. | Norm |
| | E-4130 | R.T. | Norm | | E-4130 | R.T. | Norm |
| | | | E-4340 | | R.T. | N&T | |
| | | | E-4340 V.M. | | R.T. | N&T | |
| | | | E-9310 V.M. | | R.T. | N&T | |
| | | | | | | | |
| | | | | 3-1/2" | D6AC V.M. | R.T. | N&T |
| | | | | | H-11 V.M. | C.G. | Ann. |

Finish: C.D. - Cold Drawn
C.G. - Centerless Ground
R.T. - Rough Turned
G&P - Ground and Polished

Condition: Ann. - Annealed
N&T - Normalized and Sub-critical Annealed
H.T. - Heat treated (RC 26/32)
C.D./T. - Turned to a Cold Drawn tol.

V.M. - Vacuum Arc Re-melt Norm - Normalized
P.G. - Precision Ground
RCS - Round Corner Square
HRRT - Hot Rolled and Rough Turned

AIRCRAFT ALLOY

ROUNDS STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | | |
|------------------------|------------------------|-----------|-------------|------------------------|------------------------|------------------------|-----------------|---------|------|
| 3-1/2" | E-4130 | C.D./T. | Norm | 4" | 9-4-30 V.M. | R.T. | N&T | | |
| | E-4130 | R.T. | Norm | | 4-1/4" | E-4130 | C.D./T. | Norm | |
| | E-4140 | C.D./T. | Ann. | | | E-4130 | R.T. | Norm | |
| | E-4140 | R.T. | Norm | | | E-4140 | C.D./T. | Ann. | |
| | E-4330 Mod V.M. | R.T. | N&T | | | E-4140 | R.T. | Norm | |
| | E-4340 | C.D./T. | N&T | | | E-4330 Mod V.M. | R.T. | N&T | |
| | E-4340 | R.T. | N&T | | | E-4340 | C.D./T. | N&T | |
| | E-4340 V.M. | R.T. | N&T | | | E-4340 | R.T. | N&T | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | | E-4340 V.M. | R.T. | N&T | |
| | E-4620 V.M. | R.T. | As rolled | | | E-4340 Mod V.M. "300M" | R.T. | N&T | |
| | E-6150 V.M. | R.T. | Ann. | | | E-9310 V.M. | R.T. | N&T | |
| | E-9310 | R.T. | N&T | | | 4-1/2" | H-11 V.M. | R.T. | Ann. |
| | E 9310 V.M. | R.T. | N&T | | | | E-4130 | C.D./T. | Norm |
| | E-52100 V.M. | R.T. | Ann. | | | | E-4130 | R.T. | Norm |
| | Nitriding | R.T. | H.T. | | | | E-4140 | C.D./T. | Ann. |
| | Nitriding V.M. | R.T. | N&T | | | | E-4140 | R.T. | Norm |
| | Hy-Tuf | R.T. | N&T | | | | E-4330 Mod V.M. | R.T. | N&T |
| Hy-Tuf V.M. | R.T. | N&T | E-4340 | C.D./T. | | | N&T | | |
| 9-4-30 V.M. | R.T. | N&T | E-4340 | R.T. | N&T | | | | |
| 3-5/8" | E-4130 | R.T. | Norm | E-4340 V.M. | R.T. | | N&T | | |
| | E-4140 | R.T. | Norm | E-4340 Mod V.M. "300M" | R.T. | | N&T | | |
| 3-3/4" | D6AC V.M. | R.T. | N&T | E-4620 V.M. | R.T. | | As rolled | | |
| | H-11 V.M. | C.G. | Ann. | E-9310 | R.T. | | N&T | | |
| | E-4130 | C.D./T. | Norm | E-9310 V.M. | R.T. | | N&T | | |
| | E-4130 | R.T. | Norm | E-52100 V.M. | R.T. | | Ann. | | |
| | E-4140 | C.D./T. | Ann. | Nitriding | R.T. | | H.T. | | |
| | E-4140 | R.T. | Norm | Hy-Tuf | R.T. | | N&T | | |
| | E-4330 Mod V.M. | R.T. | N&T | 4-3/4" | E-4130 | | R.T. | Norm | |
| | E-4340 | C.D./T. | N&T | | E-4140 | R.T. | Norm | | |
| | E-4340 | R.T. | N&T | | E-4330 Mod V.M. | R.T. | N&T | | |
| | E-4340 V.M. | R.T. | N&T | | E-4340 | R.T. | N&T | | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | E-4340 V.M. | R.T. | N&T | | |
| | E-9310 | R.T. | N&T | | E-4340 Mod V.M. "300M" | R.T. | N&T | | |
| | E-9310 V.M. | R.T. | N&T | | E-9310 V.M. | R.T. | N&T | | |
| | E-52100 V.M. | R.T. | Ann. | | 5" | H-11 V.M. | R.T. | Ann. | |
| Nitriding V.M. | R.T. | N&T | E-4130 | | | R.T. | Norm | | |
| 3-7/8" | E-4340 | R.T. | N&T | | | E-4140 | R.T. | Norm | |
| | 4" | D6AC V.M. | R.T. | | | N&T | E-4330 Mod V.M. | R.T. | N&T |
| H-11 V.M. | | C.G. | Ann. | | | E-4340 | R.T. | N&T | |
| E-4130 | | C.D./T. | Norm | | | E-4340 V.M. | R.T. | N&T | |
| E-4130 | | R.T. | Norm | | | E-4340 Mod V.M. "300M" | R.T. | N&T | |
| E-4140 | | C.D./T. | Ann. | E-4620 V.M. | | R.T. | As rolled | | |
| E-4140 | | R.T. | Norm | E-9310 | | R.T. | N&T | | |
| E-4330 Mod V.M. | | R.T. | N&T | E-9310 V.M. | | R.T. | N&T | | |
| E-4340 | | C.D./T. | N&T | Nitriding | | R.T. | H.T. | | |
| E-4340 | | R.T. | N&T | 5-1/4" | | E-4130 | R.T. | Norm | |
| E-4340 V.M. | | R.T. | N&T | | | E-4140 | R.T. | Norm | |
| E-4340 Mod V.M. "300M" | | R.T. | N&T | | | E-4330 V.M. | R.T. | N&T | |
| E-4620 V.M. | | R.T. | As rolled | | E-4340 | R.T. | N&T | | |
| E-6150 V.M. | | R.T. | Ann. | | E-4340 V.M. | R.T. | N&T | | |
| E-9310 | | R.T. | N&T | | E-4340 Mod V.M. "300M" | R.T. | N&T | | |
| E-9310 V.M. | R.T. | N&T | E-9310 V.M. | | R.T. | N&T | | | |
| E-52100 V.M. | R.T. | Ann. | 5-1/2" | | E-4130 | R.T. | Norm | | |
| Nitriding | R.T. | H.T. | | | E-4140 | R.T. | Norm | | |
| Nitriding V.M. | R.T. | N&T | | | E-4330 Mod V.M. | R.T. | N&T | | |
| Hy-Tuf | R.T. | N&T | | | E-4340 | R.T. | N&T | | |
| Hy-Tuf V.M. | R.T. | N&T | | | | | | | |

NOTE: IT IS NOT ADVISABLE TO TRY TO FINISH ON SIZE FROM THE SIZE PURCHASED.

NOTE: BARS ARE NOT PERFECTLY ROUND, SQUARE, OR STRAIGHT.

PLEASE REFER TO THE VARIOUS CHARTS IN THIS BOOK.

AIRCRAFT ALLOY

ROUNDS

STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | |
|------------------------|------------------------|--------|-----------|------------------------|---------------|--------|-------|------|
| 5-1/2" | E-4340 V.M. | R.T. | N&T | 7-3/4" | E-9310 | R.T. | N&T | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | 8" | E-4130 | R.T. | Norm | |
| | E-9310 | R.T. | N&T | | E-4140 | R.T. | Norm | |
| | E-9310 V.M. | R.T. | N&T | | E-4330 Mod VM | R.T. | N&T | |
| Nitriding | R.T. | H.T. | E-4340 | | R.T. | N&T | | |
| 5-3/4" | E-4130 | R.T. | Norm | E-4340 V.M. | R.T. | N&T | | |
| | E-4140 | R.T. | Norm | E-4340 MOD V.M. "300M" | R.T. | N&T | | |
| | E-4340 | R.T. | N&T | E-9310 | R.T. | N&T | | |
| | E-4340 V.M. | R.T. | N&T | E-9310 V.M. | R.T. | N&T | | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | 8-1/4" | E-4340 | R.T. | N&T | |
| 6" | D6AC V.M. | R.T. | N&T | 8-1/2" | E-4130 | R.T. | Norm | |
| | H-11 V.M. | R.T. | Ann. | | E-4140 | R.T. | Norm | |
| | E-4130 | R.T. | Norm | | E-4340 | R.T. | N&T | |
| | E-4140 | R.T. | Norm | 9" | E-4130 | R.T. | Norm | |
| | E-4330 Mod V.M. | R.T. | N&T | | E-4140 | R.T. | Norm | |
| | E-4340 | R.T. | N&T | | E-4330 Mod VM | R.T. | N&T | |
| | E-4340 V.M. | R.T. | N&T | | E-4340 | R.T. | N&T | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | E-4340 V.M. | R.T. | N&T | |
| | E-4620 V.M. | R.T. | As rolled | E-9310 V.M. | R.T. | N&T | | |
| | E-9310 | R.T. | N&T | 9-1/2 " | E-4130 | R.T. | Norm | |
| | E-9310 V.M. | R.T. | N&T | | E-4140 | R.T. | Norm | |
| | Nitriding | R.T. | H.T. | | E-4340 | R.T. | N&T | |
| | Nitriding V.M. | R.T. | N&T | 10" | E-4130 | R.T. | Norm | |
| Hy-Tuf V.M. | R.T. | N&T | E-4140 | | R.T. | Norm | | |
| 6-1/4" | E-4130 | R.T. | Norm | | E-4330 Mod VM | R.T. | N&T | |
| | E-4140 | R.T. | Norm | | E-4340 | R.T. | N&T | |
| | E-4340 | R.T. | N&T | | E-4340 V.M. | R.T. | N&T | |
| | E-4340 MOD V.M. "300M" | R.T. | N&T | E-9310 V.M. | R.T. | N&T | | |
| 6-1/2" | E-4130 | R.T. | Norm | 10-1/2" | E-4340 | R.T. | N&T | |
| | E-4140 | R.T. | Norm | | E-4340 V.M. | R.T. | N&T | |
| | E-4340 | R.T. | N&T | 11" | E-4130 | R.T. | Norm | |
| | E-4340 V.M. | R.T. | N&T | | E-4140 | R.T. | Norm | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | E-4340 | R.T. | N&T | |
| E-9310 | R.T. | N&T | 12" | E-4130 | R.T. | Norm | | |
| E-9310 V.M. | R.T. | N&T | | E-4140 | R.T. | Norm | | |
| 6-3/4" | E-4130 | R.T. | | Norm | E-4340 | R.T. | N&T | |
| | E-4140 | R.T. | Norm | 13" | E-4130 | R.T. | Norm | |
| | E-4340 | R.T. | N&T | | E-4340 | R.T. | N&T | |
| | E-9310 V.M. | R.T. | N&T | 14" | E-4130 | R.T. | Norm | |
| 7" | E-4130 | R.T. | Norm | | E-4340 | R.T. | N&T | |
| | E-4140 | R.T. | Norm | 16" | E-4130 | R.T. | Norm | |
| | E-4330 Mod VM | R.T. | N&T | | E-4340 | R.T. | N&T | |
| | E-4340 | R.T. | N&T | 18" | E-4130 | R.T. | Norm | |
| | E-4340 V.M. | R.T. | N&T | | E-4340 | R.T. | N&T | |
| | E-4340 Mod V.M. "300M" | R.T. | N&T | | 20" | E-4130 | R.T. | Norm |
| | E-9310 | R.T. | N&T | E-4340 | | R.T. | N&T | |
| E-9310 V.M. | R.T. | N&T | 7-1/4" | E-4340 | R.T. | N&T | | |
| 7-1/2" | E-4130 | R.T. | | Norm | 7-3/4" | E-4340 | R.T. | N&T |
| | E-4140 | R.T. | | Norm | | | | |
| E-4340 | R.T. | N&T | | | | | | |
| E-4340 V.M. | R.T. | N&T | | | | | | |
| E-4340 Mod V.M. "300M" | R.T. | N&T | | | | | | |
| E-9310 V.M. | R.T. | N&T | | | | | | |

Finish: C.D. - Cold Drawn
 C.G. - Centerless Ground
 R.T. - Rough Turned
 G&P - Ground and Polished

Condition: Ann. - Annealed
 N&T - Normalized and Sub-critical Annealed
 H.T. - Heat treated (RC 26/32)
 C.D./T. - Turned to a Cold Drawn tol.

V.M. - Vacuum Arc Re-melt Norm - Normalized
 P.G. - Precision Ground
 RCS - Round Corner Square
 HRRT - Hot Rolled and Rough Turned

AIRCRAFT ALLOY



HEXAGONS STOCKED IN 12' R/L



| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | |
|--------|--------|--------|--------|---------|--------|--------|-------|------|
| 1/4" | E-4130 | C.D. | Norm | 15/16" | E-4130 | C.D. | H.T. | |
| | E-4340 | C.D. | N&T | | 1" | E-4130 | C.D. | Norm |
| 5/16" | E-4130 | C.D. | Norm | E-4130 | | C.D. | H.T. | |
| | 3/8" | E-4130 | C.D. | Norm | | E-4140 | C.D. | Ann. |
| E-4130 | | C.D. | H.T. | E-4340 | | C.D. | N&T | |
| E-4340 | | C.D. | N&T | 1-1/16" | E-4130 | C.D. | N&T | |
| 7/16" | E-4130 | C.D. | H.T. | | E-4340 | C.D. | N&T | |
| | 1/2" | E-4130 | C.D. | Norm | 1-1/8" | E-4130 | C.D. | Norm |
| E-4130 | | C.D. | H.T. | E-4130 | | C.D. | H.T. | |
| E-4140 | | C.D. | Ann. | E-4140 | | C.D. | Ann. | |
| E-4340 | | C.D. | N&T | 1-1/4" | E-4130 | C.D. | Norm | |
| 9/16" | E-4130 | C.D. | Norm | | E-4130 | C.D. | H.T. | |
| | E-4130 | C.D. | H.T. | | E-4140 | C.D. | Ann. | |
| 5/8" | E-4130 | C.D. | Norm | | E-4340 | C.D. | N&T | |
| | E-4130 | C.D. | H.T. | 1-3/8" | E-4130 | C.D. | Norm | |
| | E-4140 | C.D. | Ann. | | E-4140 | C.D. | Ann. | |
| | E-4340 | C.D. | N&T | 1-1/2" | E-4130 | C.D. | Norm | |
| 11/16" | E-4130 | C.D. | Norm | | E-4130 | C.D. | H.T. | |
| | 3/4" | E-4130 | C.D. | | Norm | E-4140 | C.D. | Ann. |
| | | E-4130 | C.D. | | H.T. | E-4340 | C.D. | N&T |
| | | E-4140 | C.D. | Ann. | 1-5/8" | E-4130 | C.D. | Norm |
| E-4340 | C.D. | N&T | 1-3/4" | E-4130 | | C.D. | Norm | |
| 13/16" | E-4130 | C.D. | | H.T. | E-4340 | C.D. | N&T | |
| | 7/8" | E-4130 | C.D. | Norm | 2" | E-4130 | C.D. | Norm |
| E-4130 | | C.D. | H.T. | E-4340 | | C.D. | N&T | |
| E-4140 | | C.D. | Ann. | | | | | |
| E-4340 | | C.D. | N&T | | | | | |
| | | | C.D. | N&T | | | | |



Finish: C.D. - Cold Drawn
 C.G. - Centerless Ground
 R.T. - Rough Turned
 G&P - Ground and Polished

Condition: Ann. - Annealed
 N&T - Normalized and Sub-critical Annealed
 H.T. - Heat treated (RC 26/32)
 C.D./T. - Turned to a Cold Drawn tol.

V.M. - Vacuum Arc Re-melt Norm - Normalized
 P.G. - Precision Ground
 RCS - Round Corner Square
 HRRT - Hot Rolled and Rough Turned

AIRCRAFT ALLOY

SQUARES

STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | |
|--------|-------------|----------|-------------|-------------|-------------|----------|----------|------|
| 1/4" | E-4130 | C.D. | H.T. | 2-1/2" | E-4340 | C.D. | N&T | |
| | E-4340 | C.D. | N&T | | E-4340 | H.R.-RCS | N&T | |
| 5/16" | E-4130 | C.D. | H.T. | | E-4340 V.M. | H.R. | N&T | |
| 3/8" | E-4130 | C.D. | H.T. | 2-3/4" | E-4340 | H.R.-RCS | N&T | |
| | E-4340 | C.D. | N&T | | E-4340 V.M. | H.R. | N&T | |
| 7/16" | E-4130 | C.D. | H.T. | 3" | E-4130 | H.R.-RCS | Norm | |
| 1/2" | E-4130 | C.D. | H.T. | | E-4140 | H.R.-RCS | Norm | |
| | E-4130 | C.D. | Norm | | E-4340 | H.R.-RCS | N&T | |
| | E-4140 | C.D. | Ann. | E-4340 V.M. | H.R. | N&T | | |
| | E-4340 | C.D. | N&T | 3-1/2" | E-4130 | H.R.-RCS | Norm | |
| | E-4340 V.M. | C.D. | N&T | | E-4140 | H.R.-RCS | Norm | |
| 5/8" | E-4130 | C.D. | H.T. | E-4340 | H.R.-RCS | N&T | | |
| | E-4130 | C.D. | Norm | 4" | E-4130 | H.R.-RCS | Norm | |
| | E-4140 | C.D. | Ann. | | E-4140 | H.R.-RCS | Norm | |
| | E-4340 | C.D. | N&T | | E-4340 | H.R.-RCS | N&T | |
| E-4340 | C.D. | N&T | E-4340 V.M. | | H.R. | N&T | | |
| 3/4" | E-4130 | C.D. | H.T. | 5" | E-4130 | H.R.-RCS | Norm | |
| | E-4130 | C.D. | Norm | | E-4140 | H.R.-RCS | Norm | |
| | E-4140 | C.D. | Ann. | | E-4340 | H.R.-RCS | N&T | |
| | E-4340 | C.D. | N&T | | E-4340 V.M. | H.R. | N&T | |
| | E-4340 V.M. | C.D. | N&T | 6" | E-4130 | H.R.-RCS | Norm | |
| 7/8" | E-4130 | C.D. | H.T. | | E-4140 | H.R.-RCS | Norm | |
| | E-4130 | C.D. | Norm | | E-4340 | H.R.-RCS | N&T | |
| | E-4140 | C.D. | Ann. | | E-4340 V.M. | H.R. | N&T | |
| 1" | E-4130 | C.D. | H.T. | 1-1/8" | E-4130 | C.D. | H.T. | |
| | E-4130 | C.D. | Norm | | E-4130 | C.D. | Norm | |
| | E-4140 | C.D. | Ann. | | 1-1/4" | E-4130 | C.D. | H.T. |
| | E-4340 | C.D. | N&T | | | E-4130 | C.D. | Norm |
| | E-4340 V.M. | C.D. | N&T | | | E-4140 | C.D. | Ann. |
| 1-1/2" | E-4130 | C.D. | H.T. | E-4340 | C.D. | N&T | | |
| | E-4130 | C.D. | Norm | E-4340 V.M. | C.D. | N&T | | |
| | E-4140 | C.D. | Ann. | 1-3/4" | E-4340 V.M. | H.R. | N&T | |
| | E-4340 | C.D. | N&T | | 2" | E-4130 | H.R.-RCS | Norm |
| | E-4340 V.M. | H.R. | N&T | | | E-4140 | C.D. | Ann. |
| 2-1/4" | E-4130 | H.R.-RCS | Norm | E-4340 | | C.D. | N&T | |
| | E-4140 | H.R.-RCS | Norm | E-4340 | | H.R. | N&T | |
| | E-4340 | H.R.-RCS | N&T | E-4340 V.M. | | H.R. | N&T | |
| | E-4340 V.M. | H.R. | N&T | 2-1/2" | E-4130 | H.R.-RCS | Norm | |
| E-4130 | H.R.-RCS | Norm | E-4140 | | H.R.-RCS | Norm | | |



NOTE: IT IS NOT ADVISABLE TO TRY TO FINISH ON SIZE FROM THE SIZE PURCHASED.
 NOTE: BARS ARE NOT PERFECTLY ROUND, SQUARE, OR STRAIGHT.
 PLEASE REFER TO THE VARIOUS CHARTS IN THIS BOOK.

AIRCRAFT ALLOY

FLATS

STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | |
|-------------|----------------------------|--------|-------------|-------------|--------|--------|-------|------|
| 3/16" x 1" | E-4130 | C.D. | Norm | 1/2" x 1" | E-4140 | C.D. | Ann. | |
| | E-4130 | C.D. | Norm | | E-4340 | C.D. | N&T | |
| | E-4130 | C.D. | Norm | | 1-1/4" | E-4130 | C.D. | Norm |
| 1/4" x 1" | E-4130 E-4140 E-4340 | C.D. | Norm | 1-1/2" | E-4130 | C.D. | Norm | |
| | | C.D. | Ann. | E-4140 | C.D. | Ann. | | |
| | | C.D. | N&T | E-4340 | C.D. | N&T | | |
| | E-4130 | C.D. | Norm | 1-3/4" | E-4130 | C.D. | Norm | |
| | E-4130 | C.D. | Norm | 2" | E-4130 | C.D. | Norm | |
| | E-4140 | C.D. | Ann. | E-4140 | C.D. | Ann. | | |
| | E-4340 | C.D. | N&T | E-4340 | C.D. | N&T | | |
| | E-4340 | C.D. | N&T | E-4340 V.M. | H.R. | N&T | | |
| | E-4130 | C.D. | Norm | 2-1/2" | E-4130 | C.D. | Norm | |
| | E-4130 | C.D. | Norm | E-4140 | C.D. | Ann. | | |
| | E-4140 | C.D. | Ann. | E-4340 | C.D. | N&T | | |
| | E-4340 | C.D. | N&T | 3" | E-4130 | C.D. | Norm | |
| | E-4340 | C.D. | N&T | E-4140 | C.D. | Ann. | | |
| | E-4340 | C.D. | N&T | E-4340 | C.D. | N&T | | |
| | E-4130 | C.D. | Norm | 4" | E-4130 | C.D. | Norm | |
| E-4130 | C.D. | Norm | E-4140 | C.D. | Ann. | | | |
| E-4130 | C.D. | Norm | E-4340 | C.D. | N&T | | | |
| E-4130 | C.D. | Norm | 5" | E-4130 | C.D. | Norm | | |
| E-4130 | C.D. | Norm | 6" | E-4130 | C.D. | Norm | | |
| E-4130 | C.D. | Norm | E-4140 | C.D. | Ann. | | | |
| E-4130 | C.D. | Norm | E-4340 | C.D. | N&T | | | |
| 5/16" x 1" | E-4130 | C.D. | Norm | 5/8" x 1" | E-4130 | C.D. | Norm | |
| 1-1/2" | E-4130 | C.D. | Norm | | E-4140 | C.D. | Ann. | |
| 2" | E-4130 | C.D. | Norm | | E-4340 | C.D. | N&T | |
| 3/8" x 3/4" | E-4130 E-4130 E-4140 | C.D. | Norm | | 1-1/4" | E-4130 | C.D. | Norm |
| | | C.D. | Norm | | 1-1/2" | E-4130 | C.D. | Norm |
| | | C.D. | Ann. | | E-4340 | C.D. | N&T | |
| | E-4130 | C.D. | Norm | | 2" | E-4130 | C.D. | Norm |
| | E-4130 | C.D. | Norm | | E-4140 | C.D. | Ann. | |
| | E-4140 | C.D. | Ann. | | E-4340 | C.D. | N&T | |
| | E-4340 | C.D. | N&T | | E-4340 | C.D. | N&T | |
| | E-4130 | C.D. | Norm | | 2-1/2" | E-4130 | C.D. | Norm |
| | E-4130 | C.D. | Norm | | 3" | E-4130 | C.D. | Norm |
| | E-4340 | C.D. | N&T | | E-4140 | C.D. | Ann. | |
| | E-4340 | C.D. | N&T | | 4" | E-4130 | C.D. | Norm |
| | E-4340 | C.D. | N&T | | E-4340 | C.D. | N&T | |
| | E-4130 | C.D. | Norm | 6" | E-4130 | C.D. | Norm | |
| | E-4340 | C.D. | N&T | 3/4" x 1" | E-4130 | C.D. | H.T. | |
| | E-4340 | C.D. | N&T | | E-4130 | C.D. | Norm | |
| E-4130 | C.D. | Norm | E-4140 | | C.D. | Ann. | | |
| E-4130 | C.D. | Norm | E-4340 | | C.D. | N&T | | |
| E-4130 | C.D. | Norm | E-4340 V.M. | | H.R. | N&T | | |
| E-4130 | C.D. | Norm | 1-1/4" | | E-4130 | C.D. | Norm | |
| 1/2" x 3/4" | E-4130 | C.D. | Norm | E-4140 | C.D. | Ann. | | |
| 1" | E-4130 | C.D. | Norm | 1-1/2" | E-4130 | C.D. | H.T. | |

NOTE: IT IS NOT ADVISABLE TO TRY TO FINISH ON SIZE FROM THE SIZE PURCHASED.

NOTE: BARS ARE NOT PERFECTLY ROUND, SQUARE, OR STRAIGHT.

PLEASE REFER TO THE VARIOUS CHARTS IN THIS BOOK.

AIRCRAFT ALLOY

FLATS

STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | | |
|---------------|-------------|--------|-------------|---------|-----------------|-------------|-----------------|--------|------|
| 3/4" x 1-1/2" | E-4130 | C.D. | Norm | 1" x 5" | E-4130 | C.D. | Norm | | |
| | E-4140 | C.D. | Ann. | | E-4140 | C.D. | Ann. | | |
| | E-4340 | C.D. | N&T | | E-4340 | C.D. | N&T | | |
| | 1-3/4" | E-4130 | C.D. | | Norm | 6" | E-4130 | C.D. | Norm |
| | | E-4130 | C.D. | | H.T. | | E-4340 | C.D. | N&T |
| | | E-4130 | C.D. | | Norm | | 1-1/4" x 1-1/2" | E-4130 | C.D. |
| | E-4140 | C.D. | Ann. | | E-4340 | C.D. | | N&T | |
| | E-4340 | C.D. | N&T | | 2" | E-4130 | | C.D. | H.T. |
| | E-4340 V.M. | H.R. | N&T | | | E-4130 | | C.D. | Norm |
| | 2-1/2" | E-4130 | C.D. | | | Norm | | E-4140 | C.D. |
| | | E-4140 | C.D. | | Ann. | E-4340 | | C.D. | N&T |
| | 3" | E-4130 | C.D. | | Norm | 2-1/2" | | E-4130 | C.D. |
| E-4140 | | C.D. | Ann. | E-4340 | C.D. | | | N&T | |
| E-4340 | | C.D. | N&T | 3" | E-4130 | | | C.D. | H.T. |
| 4" | E-4130 | C.D. | Norm | | E-4130 | C.D. | | Norm | |
| | E-4140 | C.D. | Ann. | | E-4140 | C.D. | | Ann. | |
| | E-4340 | C.D. | N&T | E-4340 | C.D. | N&T | | | |
| 5" | E-4130 | C.D. | Norm | 4" | E-4130 | C.D. | Norm | | |
| | E-4340 | C.D. | N&T | | E-4340 | C.D. | N&T | | |
| 1" x 1-1/4" | E-4130 | C.D. | H.T. | 5" | E-4340 | C.D. | N&T | | |
| | E-4130 | C.D. | Norm | | 1-1/2" x 1-3/4" | E-4130 | C.D. | Norm | |
| | E-4140 | C.D. | Ann. | 2" | | E-4130 | C.D. | H.T. | |
| | E-4340 | C.D. | N&T | | | E-4130 | C.D. | Norm | |
| | 1-1/2" | E-4130 | C.D. | | | H.T. | E-4140 | C.D. | Ann. |
| | | E-4130 | C.D. | Norm | | E-4340 | C.D. | N&T | |
| | | E-4140 | C.D. | Ann. | | E-4340 V.M. | H.R. | N&T | |
| | | E-4340 | C.D. | N&T | | 2-1/2" | E-4130 | C.D. | Norm |
| | E-4340 V.M. | H.R. | N&T | E-4140 | | | C.D. | Ann. | |
| | 1-3/4" | E-4130 | C.D. | Norm | | | E-4340 | C.D. | N&T |
| | | E-4140 | C.D. | Ann. | | E-4340 V.M. | H.R. | N&T | |
| | | 2" | E-4130 | C.D. | | H.T. | 3" | E-4130 | C.D. |
| E-4130 | | | C.D. | Norm | | E-4130 | | C.D. | Norm |
| E-4140 | C.D. | | Ann. | E-4140 | C.D. | Ann. | | | |
| E-4340 | C.D. | | N&T | E-4340 | C.D. | N&T | | | |
| 2-1/2" | E-4340 V.M. | H.R. | N&T | 4" | E-4340 V.M. | H.R. | N&T | | |
| | E-4130 | C.D. | H.T. | | E-4130 | C.D. | Norm | | |
| | E-4130 | C.D. | Norm | | E-4140 | C.D. | Ann. | | |
| | E-4140 | C.D. | Ann. | | E-4340 V.M. | H.R. | N&T | | |
| 3" | E-4340 | C.D. | N&T | 5" | E-4130 | C.D. | H.T. | | |
| | E-4340 V.M. | H.R. | N&T | | E-4130 | C.D. | Norm | | |
| | 4" | E-4130 | C.D. | | H.T. | E-4340 | C.D. | N&T | |
| | | E-4130 | C.D. | | Norm | 6" | E-4130 | C.D. | Norm |
| E-4140 | | C.D. | Ann. | E-4140 | C.D. | | Ann. | | |
| E-4340 | | C.D. | N&T | E-4340 | C.D. | | N&T | | |
| E-4340 V.M. | H.R. | N&T | 1-3/4" x 3" | E-4130 | C.D. | | Norm | | |
| 4" | E-4130 | C.D. | | H.T. | E-4130 | H.R. | Norm | | |
| | E-4130 | C.D. | | Norm | E-4140 | C.D. | Ann. | | |
| | E-4140 | C.D. | Ann. | | | | | | |
| E-4340 | C.D. | N&T | | | | | | | |
| E-4340 V.M. | H.R. | N&T | | | | | | | |

Finish: C.D. - Cold Drawn
 C.G. - Centerless Ground
 R.T. - Rough Turned
 G&P - Ground and Polished

Condition: Ann. - Annealed
 N&T - Normalized and Sub-critical Annealed
 H.T. - Heat treated (RC 26/32)
 C.D/T. - Turned to a Cold Drawn tol.

V.M. - Vacuum Arc Re-melt
 P.G. - Precision Ground
 RCS - Round Corner Square
 HRRT - Hot Rolled and Rough Turned
 Norm - Normalized

AIRCRAFT ALLOY

FLATS

STOCKED IN 12' R/L

| SIZE | TYPE | FINISH | COND. | SIZE | TYPE | FINISH | COND. | |
|-------------|-------------|--------|-------------|-------------|-------------|--------|-------|------|
| 1-3/4" x 3" | E-4140 | H.R. | Norm | 2-1/2" x 6" | E-4130 | C.D. | Norm | |
| | E-4340 | C.D. | N&T | | E-4130 | H.R. | Norm | |
| 4" | E-4340 | H.R. | N&T | 3" x 4" | E-4140 | C.D. | Ann. | |
| | E-4130 | H.R. | Norm | | E-4140 | H.R. | Norm | |
| | E-4140 | H.R. | Norm | | E-4340 | C.D. | N&T | |
| | E-4340 | C.D. | N&T | | E-4340 | H.R. | N&T | |
| | E-4340 | H.R. | N&T | | E-4340 V.M. | H.R. | N&T | |
| 2" x 2-1/2" | E-4130 | C.D. | Norm | 5" | E-4130 | C.D. | Norm | |
| | E-4130 | H.R. | Norm | | E-4130 | H.R. | Norm | |
| | E-4140 | C.D. | Ann. | | E-4340 | C.D. | N&T | |
| | E-4140 | H.R. | Norm | 6" | E-4130 | C.D. | Norm | |
| | E-4340 | C.D. | N&T | | E-4130 | H.R. | Norm | |
| | E-4340 | H.R. | N&T | | E-4140 | C.D. | Ann. | |
| 3" | E-4340 V.M. | H.R. | N&T | 3-1/2" x 4" | E-4140 | H.R. | Norm | |
| | E-4130 | C.D. | Norm | | E-4340 | C.D. | N&T | |
| | E-4130 | H.R. | Norm | | 6" | E-4340 | C.D. | N&T |
| E-4140 | C.D. | Ann. | E-4340 | H.R. | | N&T | | |
| E-4140 | H.R. | Norm | 4" x 5" | E-4340 | | H.R. | N&T | |
| E-4340 | C.D. | N&T | | 6" | E-4130 | H.R. | Norm | |
| E-4340 | H.R. | N&T | | | E-4140 | H.R. | Norm | |
| 3-1/2" | E-4340 | H.R. | N&T | | 4" x 6" | E-4340 | H.R. | N&T |
| | E-4130 | C.D. | Norm | 5" | | E-4130 | C.D. | Norm |
| | E-4130 | H.R. | Norm | | | E-4340 | C.D. | N&T |
| E-4140 | C.D. | Ann. | 2-1/2" x 3" | | E-4140 | H.R. | Norm | |
| E-4140 | H.R. | Norm | | E-4140 | H.R. | Norm | | |
| E-4340 | C.D. | N&T | | E-4340 | C.D. | N&T | | |
| 4" | E-4340 | H.R. | N&T | 3-1/2" | E-4340 | H.R. | N&T | |
| | E-4130 | C.D. | Norm | | 4" | E-4130 | C.D. | Norm |
| | E-4130 | H.R. | Norm | | | E-4130 | H.R. | Norm |
| E-4140 | C.D. | Ann. | 5" | E-4140 | | C.D. | Ann. | |
| E-4140 | H.R. | Norm | | E-4340 | C.D. | N&T | | |
| E-4340 | C.D. | N&T | | E-4340 | H.R. | N&T | | |
| 5" | E-4340 | H.R. | N&T | 2-1/2" x 3" | E-4130 | C.D. | Norm | |
| | E-4130 | C.D. | Norm | | E-4140 | H.R. | Norm | |
| | E-4130 | H.R. | Norm | | E-4340 | C.D. | N&T | |
| 6" | E-4340 V.M. | H.R. | N&T | 3-1/2" x 4" | E-4340 | H.R. | N&T | |
| | E-4130 | C.D. | Norm | | 6" | E-4340 | C.D. | N&T |
| | E-4130 | H.R. | Norm | | | E-4340 | H.R. | N&T |
| E-4340 | C.D. | N&T | 4" x 5" | E-4340 | | H.R. | N&T | |
| E-4340 | H.R. | N&T | | 6" | E-4130 | H.R. | Norm | |
| E-4340 | C.D. | N&T | | | E-4140 | H.R. | Norm | |
| 2-1/2" x 3" | E-4340 | H.R. | N&T | | 4" x 6" | E-4340 | H.R. | N&T |
| | E-4340 | H.R. | N&T | 5" | | E-4130 | C.D. | Norm |
| | E-4140 | H.R. | Norm | | | E-4340 | C.D. | N&T |
| 3-1/2" | E-4140 | H.R. | Norm | | 2-1/2" x 3" | E-4140 | H.R. | Norm |
| | E-4340 | C.D. | N&T | E-4140 | | H.R. | Norm | |
| | E-4340 | H.R. | N&T | E-4340 | | C.D. | N&T | |
| 4" | E-4130 | C.D. | Norm | 3-1/2" | E-4340 | H.R. | N&T | |
| | E-4130 | H.R. | Norm | | 4" | E-4130 | C.D. | Norm |
| | E-4140 | C.D. | Ann. | | | E-4130 | H.R. | Norm |
| 5" | E-4140 | H.R. | Norm | 5" | | E-4140 | C.D. | Ann. |
| | E-4340 | C.D. | N&T | | E-4340 | C.D. | N&T | |
| | E-4340 | H.R. | N&T | | E-4340 | H.R. | N&T | |



NOTE: IT IS NOT ADVISABLE TO TRY TO FINISH ON SIZE FROM THE SIZE PURCHASED.
 NOTE: BARS ARE NOT PERFECTLY ROUND, SQUARE, OR STRAIGHT.
 PLEASE REFER TO THE VARIOUS CHARTS IN THIS BOOK.

AIRCRAFT ALLOY WEIGHTS

ROUNDS

| Estimated Weight, Lbs. | | | | Estimated Weight, Lbs. | | | |
|------------------------|----------|----------|------------|------------------------|----------|----------|------------|
| Size in Inches | Per Inch | Per Foot | 12 Ft. Bar | Size in Inches | Per Inch | Per Foot | 12 Ft. Bar |
| 1/8" | .004 | .042 | .50 | 1" 3/4" | .68 | 8.178 | 98.14 |
| 3/16" | .008 | .094 | 1.13 | 7/8" | .78 | 9.388 | 112.70 |
| 7/32" | .011 | .128 | 1.54 | 2" | .89 | 10.68 | 128.2 |
| .220" | .011 | .129 | 1.548 | 1/8" | 1.01 | 12.06 | 144.7 |
| 1/4" | .014 | .167 | 2.00 | 3/16" | 1.07 | 12.78 | 153.4 |
| .270" | .016 | .1946 | 2.335 | 1/4" | 1.13 | 13.52 | 162.2 |
| 9/32" | .018 | .211 | 2.53 | 3/8" | 1.26 | 15.06 | 180.7 |
| 5/16" | .022 | .261 | 3.13 | 1/2" | 1.39 | 16.69 | 200.3 |
| .3225" | .023 | .277 | 3.324 | 5/8" | 1.54 | 18.40 | 220.8 |
| 21/64" | .024 | .287 | 3.44 | 3/4" | 1.69 | 20.20 | 242.4 |
| 11/32" | .026 | .316 | 3.79 | 7/8" | 1.84 | 22.07 | 264.8 |
| 3/8" | .031 | .376 | 4.51 | 3" | 2.01 | 24.03 | 288.4 |
| .385" | .033 | .395 | 4.74 | 1/8" | 2.18 | 26.08 | 312.9 |
| 25/64" | .034 | .407 | 4.88 | 1/4" | 2.36 | 28.21 | 338.5 |
| .391" | .034 | .4008 | 4.896 | 3/8" | 2.54 | 30.42 | 365.0 |
| 13/32" | .037 | .441 | 5.29 | 1/2" | 2.73 | 32.71 | 392.5 |
| 7/16" | .043 | .511 | 6.13 | 5/8" | 2.93 | 35.09 | 421.1 |
| .4475" | .045 | .535 | 6.42 | 3/4" | 3.14 | 37.55 | 450.6 |
| 15/32" | .049 | .587 | 7.04 | 7/8" | 3.34 | 40.10 | 481.2 |
| .484" | .052 | .626 | 7.512 | 4" | 3.56 | 42.73 | 512.6 |
| 1/2" | .056 | .668 | 8.02 | 1/4" | 4.02 | 48.23 | 578.7 |
| .510" | .058 | .694 | 8.328 | 1/2" | 4.51 | 54.07 | 648.9 |
| 33/64" | .059 | .710 | 8.52 | 3/4" | 5.03 | 60.25 | 723.0 |
| .525" | .061 | .7359 | 8.831 | 5" | 5.56 | 66.75 | 801.1 |
| 17/32" | .063 | .754 | 9.05 | 1/4" | 6.13 | 73.60 | 883.2 |
| .540" | .066 | .795 | 9.54 | 1/2" | 6.73 | 80.77 | 969.2 |
| 9/16" | .070 | .845 | 10.14 | 3/4" | 7.36 | 88.29 | 1059.0 |
| .5725" | .073 | .875 | 10.50 | 6" | 8.01 | 96.12 | 1153.5 |
| .587" | .077 | .928 | 11.136 | 1/4" | 8.71 | 104.3 | 1252.0 |
| 5/8" | .087 | 1.043 | 12.52 | 1/2" | 9.40 | 112.8 | 1353.8 |
| .635" | .089 | 1.07 | 12.84 | 3/4" | 10.14 | 121.7 | 1460.0 |
| .649" | .093 | 1.12 | 13.44 | 7" | 10.90 | 130.8 | 1570.8 |
| 11/16" | .105 | 1.262 | 15.14 | 1/4" | 11.70 | 140.4 | 1684.8 |
| .725" | .117 | 1.40 | 16.80 | 1/2" | 12.52 | 150.2 | 1802.2 |
| 3/4" | .125 | 1.502 | 18.02 | 3/4" | 13.42 | 161.0 | 1932.0 |
| .760" | .128 | 1.54 | 18.48 | 8" | 14.24 | 170.9 | 2050.6 |
| 13/16" | .147 | 1.763 | 21.16 | 1/4" | 15.17 | 182.0 | 2184.0 |
| 7/8" | .170 | 2.044 | 24.53 | 1/2" | 16.08 | 192.9 | 2315.0 |
| .885" | .174 | 2.09 | 25.08 | 3/4" | 17.09 | 205.1 | 2461.2 |
| .900" | .180 | 2.16 | 25.92 | 9" | 18.02 | 216.3 | 2595.2 |
| 15/16" | .192 | 2.347 | 28.16 | 1/2" | 20.08 | 241.0 | 2891.6 |
| 1" | .22 | 2.670 | 32.04 | 10" | 22.25 | 267.0 | 3204.0 |
| .010" | .228 | 2.733 | 32.796 | 1/2" | 24.67 | 296.0 | 3552.0 |
| .020" | .231 | 2.77 | 33.24 | 11" | 27.00 | 324.0 | 3888.0 |
| 1/16" | .25 | 3.014 | 36.17 | 12" | 32.17 | 386.0 | 4632.0 |
| 1/8" | .28 | 3.379 | 40.55 | 13" | 38.0 | 456.0 | 5472.0 |
| .135" | .287 | 3.44 | 41.28 | 14" | 43.67 | 524.0 | 6288.0 |
| 3/16" | .31 | 3.766 | 45.19 | 16" | 57.50 | 690.0 | 8280.0 |
| 1/4" | .35 | 4.173 | 50.08 | 18" | 72.17 | 866.0 | 10392.0 |
| .260" | .353 | 4.24 | 50.88 | 20" | 89.17 | 1070.0 | 12840.0 |
| 5/16" | .38 | 4.600 | 55.20 | | | | |
| 3/8" | .42 | 5.049 | 60.59 | | | | |
| 7/16" | .46 | 5.518 | 66.22 | | | | |
| 1/2" | .50 | 6.008 | 72.10 | | | | |
| .510" | .518 | 6.21 | 74.52 | | | | |
| 9/16" | .54 | 6.520 | 78.24 | | | | |
| 5/8" | .59 | 7.051 | 84.61 | | | | |

AIRCRAFT ALLOY WEIGHTS



HEXAGONS



| Estimated Weight, Lbs. | | | | Estimated Weight, Lbs. | | | |
|------------------------|----------|----------|------------|------------------------|----------|----------|------------|
| Size in Inches | Per Inch | Per Foot | 12 Ft. Bar | Size in Inches | Per Inch | Per Foot | 12 Ft. Bar |
| 3/16" | .009 | .104 | 1.25 | 1" 3/16" | .35 | 4.152 | 49.82 |
| 1/4" | .015 | .184 | 2.21 | 1/4" | .38 | 4.601 | 55.21 |
| 5/16" | .02 | .288 | 3.46 | 3/8" | .46 | 5.567 | 66.80 |
| 3/8" | .03 | .414 | 4.97 | 1/2" | .55 | 6.625 | 79.50 |
| 7/16" | .05 | .564 | 6.77 | 5/8" | .65 | 7.775 | 93.30 |
| 1/2" | .06 | .736 | 8.83 | 3/4" | .75 | 9.019 | 108.23 |
| 9/16" | .08 | .932 | 11.18 | 2" | .98 | 11.78 | 141.4 |
| 5/8" | .10 | 1.150 | 13.80 | 1/4" | 1.24 | 14.91 | 178.9 |
| 11/16" | .12 | 1.392 | 16.70 | 1/2" | 1.53 | 18.40 | 220.8 |
| 3/4" | .14 | 1.656 | 19.87 | | | | |
| 13/16" | .16 | 1.944 | 23.33 | | | | |
| 7/8" | .19 | 2.254 | 27.05 | | | | |
| 15/16" | .22 | 2.588 | 31.06 | | | | |
| 1" | .25 | 2.945 | 35.34 | | | | |
| 1/16" | .28 | 3.324 | 39.89 | | | | |
| 1/8" | .31 | 3.727 | 44.72 | | | | |

AIRCRAFT ALLOY WEIGHTS



SQUARES



| Estimated Weight, Lbs. | | | | Estimated Weight, Lbs. | | | |
|------------------------|----------|----------|------------|------------------------|----------|----------|------------|
| Size in Inches | Per Inch | Per Foot | 12 Ft. Bar | Size in Inches | Per Inch | Per Foot | 12 Ft. Bar |
| 1/4" | .017 | .213 | 2.550 | 2" 3/4" | 2.14 | 25.72 | 308.6 |
| 5/16" | .03 | .332 | 3.981 | 3" | 2.55 | 30.6 | 367.2 |
| 3/8" | .04 | .478 | 5.736 | 1/2" | 3.47 | 41.65 | 500.0 |
| 7/16" | .05 | .651 | 7.810 | 4" | 4.53 | 54.4 | 652.8 |
| 1/2" | .07 | .850 | 10.200 | 5" | 7.08 | 85.0 | 1020.0 |
| 5/8" | .11 | 1.328 | 15.940 | 6" | 10.25 | 123.0 | 1476.0 |
| 3/4" | .16 | 1.913 | 22.960 | | | | |
| 7/8" | .22 | 2.603 | 31.240 | | | | |
| 1" | .28 | 3.400 | 40.80 | | | | |
| 1/8" | .36 | 4.303 | 51.64 | | | | |
| 1/4" | .44 | 5.313 | 63.76 | | | | |
| 1/2" | .64 | 7.650 | 91.80 | | | | |
| 3/4" | .87 | 10.410 | 124.95 | | | | |
| 2" | 1.13 | 13.600 | 163.2 | | | | |
| 1/4" | 1.43 | 17.21 | 206.6 | | | | |
| 1/2" | 1.77 | 21.25 | 255.0 | | | | |

AIRCRAFT ALLOY WEIGHTS

FLATS

| Estimated Weight, Lbs. | | | | Estimated Weight, Lbs. | | | |
|------------------------|----------|----------|------------|------------------------|----------|----------|------------|
| Size in Inches | Per Inch | Per Foot | 12 Ft. Bar | Size in Inches | Per Inch | Per Foot | 12 Ft. Bar |
| 3/16" x 1" | .053 | .638 | 7.66 | 3/4" x 5" | 1.060 | 12.750 | 153.00 |
| 1-1/2" | .080 | .956 | 11.47 | | | | |
| 2" | .106 | 1.275 | 15.30 | 3/4" x 6" | 1.280 | 15.300 | 186.30 |
| 1/4" x 1" | .071 | .850 | 10.20 | 1" x 1-1/4" | .354 | 4.250 | 51.00 |
| 1-1/2" | .106 | 1.275 | 15.30 | 1-1/2" | .425 | 5.100 | 61.20 |
| 1-3/4" | .124 | 1.488 | 17.86 | 1-3/4" | .496 | 5.950 | 71.40 |
| 2" | .142 | 1.700 | 20.40 | 2" | .567 | 6.800 | 81.60 |
| 2-1/2" | .177 | 2.125 | 25.50 | 2-1/2" | .708 | 8.500 | 102.00 |
| 3" | .213 | 2.550 | 30.60 | 3" | .850 | 10.200 | 122.40 |
| 4" | .283 | 3.400 | 40.80 | 4" | 1.130 | 13.600 | 163.20 |
| 5/16" x 1" | .089 | 1.063 | 12.76 | 5" | 1.420 | 17.000 | 204.00 |
| 1-1/2" | .133 | 1.594 | 19.13 | 6" | 1.700 | 20.400 | 244.80 |
| 2" | .177 | 2.125 | 25.50 | 1-1/4" x 1-1/2" | .531 | 6.375 | 76.50 |
| 3/8" x 3/4" | .080 | .956 | 11.47 | 2" | .708 | 8.500 | 102.00 |
| 1" | .106 | 1.275 | 15.30 | 2-1/2" | .885 | 10.630 | 127.60 |
| 1-1/4" | .133 | 1.594 | 19.13 | 3" | 1.060 | 12.750 | 153.00 |
| 1-1/2" | .159 | 1.913 | 22.96 | 4" | 1.420 | 17.000 | 204.00 |
| 1-3/4" | .186 | 2.231 | 26.77 | 5" | 1.770 | 21.250 | 255.00 |
| 2" | .213 | 2.550 | 30.60 | 6" | 2.130 | 25.500 | 306.00 |
| 2-1/2" | .266 | 3.188 | 38.26 | 1-1/2" x 1-3/4" | .744 | 8.920 | 107.10 |
| 3" | .319 | 3.825 | 45.90 | 2" | .850 | 10.200 | 122.40 |
| 4" | .425 | 5.100 | 61.20 | 2-1/2" | 1.060 | 12.750 | 153.00 |
| 1/2" x 3/4" | .106 | 1.275 | 15.30 | 3" | 1.280 | 15.300 | 183.60 |
| 1" | .142 | 1.700 | 20.40 | 4" | 1.700 | 20.400 | 244.80 |
| 1-1/4" | .177 | 2.125 | 25.50 | 5" | 2.13 | 25.50 | 306.00 |
| 1-1/2" | .213 | 2.550 | 30.60 | 6" | 2.55 | 30.60 | 367.20 |
| 1-3/4" | .248 | 2.975 | 35.70 | 1-3/4" x 3" | 1.49 | 17.85 | 214.20 |
| 2" | .283 | 3.400 | 40.80 | 4" | 1.98 | 23.80 | 285.60 |
| 2-1/2" | .354 | 4.250 | 51.00 | 2" x 2-1/2" | 1.42 | 17.00 | 204.00 |
| 3" | .425 | 5.100 | 61.20 | 3" | 1.70 | 20.40 | 244.80 |
| 4" | .567 | 6.800 | 81.60 | 3-1/2" | 1.98 | 23.80 | 285.60 |
| 5" | .708 | 8.500 | 102.00 | 4" | 2.27 | 27.20 | 326.00 |
| 6" | .850 | 10.200 | 122.40 | 5" | 2.83 | 34.00 | 408.00 |
| 5/8" x 1" | .177 | 2.125 | 25.50 | 6" | 3.40 | 40.80 | 489.60 |
| 1-1/4" | .221 | 2.656 | 31.87 | 2-1/2" x 3" | 2.13 | 25.50 | 306.00 |
| 1-1/2" | .266 | 3.188 | 38.26 | 3-1/2" | 2.48 | 29.75 | 357.00 |
| 1-3/4" | .310 | 3.719 | 44.63 | 4" | 2.83 | 34.00 | 408.00 |
| 2" | .354 | 4.250 | 51.00 | 5" | 3.54 | 42.50 | 510.00 |
| 2-1/2" | .438 | 5.313 | 63.76 | 6" | 4.25 | 51.00 | 612.00 |
| 3" | .531 | 6.375 | 76.50 | 3" x 4" | 3.40 | 40.80 | 489.60 |
| 4" | .708 | 8.500 | 102.00 | 5" | 4.25 | 51.00 | 612.00 |
| 6" | 1.060 | 12.750 | 153.00 | 6" | 5.10 | 61.20 | 734.40 |
| 3/4" x 1" | .213 | 2.550 | 30.60 | 3-1/2" x 4" | 3.97 | 47.60 | 571.00 |
| 1-1/4" | .266 | 3.188 | 38.26 | 6" | 5.95 | 71.40 | 857.00 |
| 1-1/2" | .319 | 3.825 | 45.90 | 4" x 5" | 5.67 | 68.04 | 816.48 |
| 1-3/4" | .372 | 4.463 | 53.56 | 6" | 6.80 | 81.60 | 979.20 |
| 2" | .425 | 5.100 | 61.20 | | | | |
| 2-1/2" | .531 | 6.375 | 76.60 | | | | |
| 3" | .637 | 7.650 | 91.80 | | | | |
| 4" | .850 | 10.200 | 122.40 | | | | |

SIZE TOLERANCES

HOT ROLLED BARS — FLATS Tolerances for Thickness and Width

| Specified Widths, In. | Thickness Tolerance for Thickness Given Over or Under, In. | | | | | Width Tolerance, In. | |
|-----------------------|--|------------------|---------------------|-------------------|-------------------|----------------------|-------|
| | Under 1/4 | 1/4 to 1/2 incl. | Over 1/2 to 1 incl. | Over 1 to 2 incl. | Over 2 to 4 incl. | Over | Under |
| To 1" incl. | 0.007" | 0.008" | 0.010" | - | - | 1/64" | 1/64" |
| Over 1" to 2" incl. | 0.007" | 0.012" | 0.015" | 1/32" | - | 1/32" | 1/32" |
| Over 2" to 4" incl. | 0.008" | 0.015" | 0.020" | 1/32" | 3/64" | 1/16" | 1/32" |
| Over 4" to 6" incl. | 0.009" | 0.015" | 0.020" | 1/32" | 1/16" | 3/32" | 1/16" |

HOT ROLLED SQUARES AND HOT ROLLED OR ROUGH TURNED ROUNDS

| Specified Sizes, In. | Size Tolerance, In. | | Out-of-Round or Square, In. |
|-----------------------------|---------------------|--------|-----------------------------|
| | Over | Under | |
| Over 7/8" to 1" incl. | 0.009" | 0.009" | 0.013" |
| Over 1" to 1-1/8" incl. | 0.010" | 0.010" | 0.015" |
| Over 1-1/8" to 1-1/4" incl. | 0.011" | 0.011" | 0.016" |
| Over 1-1/4" to 1-3/8" incl. | 0.012" | 0.012" | 0.018" |
| Over 1-3/8" to 1-1/2" incl. | 0.014" | 0.014" | 0.021" |
| Over 1-1/2" to 2" incl. | 1/64" | 1/64" | 0.023" |
| Over 2" to 2-1/2" incl. | 1/32" | 0 | 0.023" |
| Over 2-1/2" to 3-1/2" incl. | 3/64" | 0 | 0.035" |
| Over 3-1/2" to 4-1/2" incl. | 1/16" | 0 | 0.046" |
| Over 4-1/2" to 5-1/2" incl. | 5/64" | 0 | 0.058" |
| Over 5-1/2" to 6-1/2" incl. | 1/8" | 0 | 0.070" |
| Over 6-1/2" to 8-1/4" incl. | 5/32" | 0 | 0.085" |
| Over 8-1/4" to 9-1/2" incl. | 3/16" | 0 | 0.100" |
| Over 9-1/2" to 12" incl. | 1/4" | 0 | |

HOT ROLLED BARS ROUND CORNERED SQUARES

| Corner Radii | |
|------------------------|------------------------------|
| Nominal Sizes* Inches | Nominal Corner Radii, Inches |
| 2" to 2-7/16" incl. | 5/16" |
| 2-1/2" to 2-7/8" incl. | 3/8" |
| 3" to 3-3/8" incl. | 7/16" |
| 3-1/2" to 3-7/8" incl. | 1/2" |
| 4" to 4-3/8" incl. | 5/8" |
| 4-1/2" to 6" incl. | 3/4" |

*Sizes are the distances between opposite sides. Round-cornered squares are rolled to dimensions, not to weights per linear foot.

COLD FINISHED BARS

All Tolerances are in Inch and are Minus

| Size in inches | 4130 NORM 4140 ANN 6150 ANN 8740 ANN | 4130 HT 4330 NORM & TEMP 4340 NORM & TEMP 52100 SPHERIODIZED ANN 9310 NORM & TEMP NITRIDING D6AC NORM & TEMP HY-TUF NORM & TEMP |
|----------------|---|--|
|----------------|---|--|

ROUNDS

| | | |
|-----------------------------|--------|--------|
| To 1-1/2" incl. | 0.004" | 0.006" |
| Over 1-1/2" to 2-1/2" incl. | 0.005" | 0.007" |
| Over 2-1/2" to 4" incl. | 0.006" | 0.008" |
| Over 4" to 6" incl. | 0.007" | 0.009" |

HEXAGONS

| | | |
|-----------------------------|--------|--------|
| To 3/4" incl. | 0.004" | 0.007" |
| Over 3/4" to 1-1/2" incl. | 0.005" | 0.008" |
| Over 1-1/2" to 2-1/2" incl. | 0.006" | 0.009" |

SQUARES

| | | |
|-----------------------------|--------|--------|
| To 3/4" incl. | 0.005" | 0.008" |
| Over 3/4" to 1-1/2" incl. | 0.006" | 0.009" |
| Over 1-1/2" to 2-1/2" incl. | 0.007" | 0.010" |

FLATS

WIDTH IN INCHES *The tolerances for flats apply to thickness as well as width.*

| | | |
|---------------------------|--------|--------|
| To 3/4" incl. | 0.005" | 0.009" |
| Over 3/4" to 1-1/2" incl. | 0.006" | 0.011" |
| Over 1-1/2" to 3" incl. | 0.007" | 0.013" |
| Over 3" to 4" incl. | 0.009" | 0.017" |
| Over 4" to 6" incl. | 0.011" | 0.021" |

NOTE 1. CG & RT Vac Melt Alloy Tolerances are the same as Stainless. See page 64.

NOTE 2. DG&P & TG&P Finishes are: Plus or Minus .001"

NOTE 3. CF/T equals same as Cold Draw Tolerances

NOTE 4. HR/RT equals same as Hot Rolled Tolerances

NOTE: ALL TOLERANCES ON THIS PAGE ARE A CLOSE APPROXIMATION BASED ON VARIOUS MILL MFG. PRACTICES.

Recommended Stock Removal (Minimum requirement necessary to qualify for rejection)

The following table provides minimum stock removal requirements, for Round, Flat, Hex and Square bars, to ensure surfaces that are free of decarburization, seams, laps, cracks, pits and other injurious surface imperfections. These are based on various Industry Standards. Please consult these charts, prior to any thermal treatment.

| Hot Rolled Size (Inches) | Minimum Removal From The Surface, Inches (Per Each Side) | Cold Drawn Size (Inches) |
|-----------------------------|--|--------------------------------|
| -- Up to 1/2" Incl. | .030" | -- Up to 7/16" Incl. |
| Over 1/2" to 3/4" Incl. | .045" | Over 7/16" to 11/16" Incl. |
| Over 3/4" to 1" Incl. | .060" | Over 11/16" to 15/16" Incl. |
| Over 1" to 1-1/2" Incl. | .075" | Over 15/16" to 1-7/16" Incl. |
| Over 1-1/2" to 2" Incl. | .090" | Over 1-7/16" to 1-15/16" Incl. |
| Over 2" to 2-1/2" Incl. | .125" | Over 1-15/16" to 2-7/16" Incl. |
| Over 2-1/2" to 3-1/2" Incl. | .156" | Over 2-7/16" to 3-3/8" Incl. |
| Over 3-1/2" to 4-1/2" Incl. | .187" | Over 3-3/8" to 4-3/8" Incl. |
| Over 4-1/2" to 6" Incl. | .250" | |
| Over 6" to 7-1/2" Incl. | .312" | |
| Over 7-1/2" to 9" Incl. | .375" | |

PRESSED (FORGED) ROUND BARS

The amount of metal to be removed from the surface of Carbon and Alloy Pressed Round Bars over 8" in diameter in order to obtain a finished size varies because consideration must be given to several factors, such as manufacturing practice, size of bar, length and straightness. As a guide, the usual allowances for bars 8' to 10' long are:

Diameters through 13" 1/2" on diameter, 1/4" on surface
 Diameters over 13" to 19" 5/8" on diameter, 5/16" on surface

CENTERLESS GROUND:

ALL GROUND BAR SHOULD BE "DEFECT FREE" WITHIN THE STANDARD SIZE TOLERANCES OF ANY MANUFACTURING DEFECTS. IE: SEAMS, LAPS, AND CRACKS.

STOCK REMOVAL IS RECOMMENDED TO BELOW THE STANDARD SIZE TOLERANCES TO REMOVE ANY HANDLING MARKS THAT MAY EXIST.

EXAMPLE:

1-1/2" RD TOL IS + OR - .003"
 MATERIAL SHOULD NOT HAVE ANY DEFECT UNDER -.003"

ROUGH TURNED:

ALL "R.T." SIZES ARE PRODUCED ON THE PLUS SIDE AND SHOULD BE DEFECT FREE ON SIZE.

EXAMPLE:

5" RD HR-RT SHOULD BE DEFECT FREE AT 5"

NOTE: INSPECTION PRIOR TO ALTERING MATERIAL IS ADVISABLE.

NOTE: IT IS NOT ADVISABLE TO TRY TO FINISH ON SIZE FROM THE SIZE PURCHASED.

ALLOY CONDITIONS*

Physical Condition

- A — As Forged
- B — As Rolled
- C — Annealed
- D — Normalized
- E — Normalized & Tempered

Surface Condition

- 1 — Black as Forged or Rolled
- 2 — Pickled or Blast Cleaned
- 3 — Rough Turned/ Smooth Turned
- 4 — Cold Finished (Drawn)
- 5 — Centerless Ground
- 6 — Turned, Ground and Polished

*E-52100 Spheriodized Annealed is Cond. E.

*D6AC Normalized and Tempered is Cond. F.

STEELS

(562) 802-2721

CHEMICAL ANALYSES — Maximum Unless Indicated

| AISI | CARBON | MAN-GANESE | PHOS-PHORUS | SULFER | SILICON | NICKEL | CHROM-IUM | MOLYB-DENUM | COPPER | OTHERS |
|--------------------|----------|------------|-------------|--------|-----------|-----------|-----------|-------------|--------|---------------------------|
| E-4130 | .28/.33 | .40/.60 | .025 | .025 | .15/.35 | .25 | .80/1.10 | .15/.25 | .35 | |
| E-4130 HT | .28/.33 | .40/.60 | .025 | .025 | .15/.35 | .25 | .80/1.10 | .15/.25 | .35 | |
| E-4140 | .38/.43 | .75/1.0 | .025 | .025 | .20/.35 | .25 | .80/1.10 | .15/.25 | .35 | |
| E-4330 | .28/.33 | .80/1.0 | .015 | .015 | .20/.35 | 1.65/2.0 | .75/.95 | .35/.50 | .35 | V .05/.10 |
| MOD V.M. E-4340 | .38/.43 | .65/.85 | .015 | .008 | .15/.35 | 1.65/2.0 | .70/.90 | .20/.30 | .35 | |
| E-4340 V.M. | .38/.43 | .65/.85 | .01 | .01 | .15/.35 | 1.65/2.0 | .70/.90 | .20/.30 | .35 | |
| E-4340 MOD 300M | .40/.43 | .65/.90 | .01 | .008 | 1.45/1.80 | 1.65/2.0 | .70/.95 | .35/.45 | .35 | V .05/.10 |
| E-4620 V.M. | .17/.22 | .45/.60 | .025 | .025 | .20/.35 | 1.65/2.00 | .20 | .20/.30 | .35 | |
| E-52100 V.M. | .98/1.10 | .25/.45 | .015 | .015 | .20/.35 | .25 | 1.3/1.6 | .08 | .35 | |
| E-6150 V.M. | .48/.53 | .70/.90 | .025 | .025 | .20/.35 | .25 | .80/1.10 | .06 | .35 | V .15/.30 |
| E-8740 | .38/.43 | .75/1.0 | .025 | .025 | .20/.35 | .40/.70 | .40/.60 | .20/.30 | .35 | |
| E-9310 | .07/.13 | .40/.70 | .025 | .025 | .20/.35 | 3.00/3.50 | 1.0/1.4 | .08/.15 | .35 | B .001 |
| E-9310 V.M. | .07/.13 | .40/.70 | .015 | .015 | .20/.35 | 3.00/3.50 | 1.0/1.4 | .08/.15 | .35 | B .001 |
| Nitriding HT | .38/.43 | .50/.70 | .025 | .025 | .20/.40 | .25 | 1.4/1.8 | .30/.40 | .35 | Al .95/1.30 |
| Nitriding V.M. | .38/.43 | .50/.70 | .015 | .015 | .20/.40 | .25 | 1.4/1.8 | .30/.40 | .35 | Al .95/1.30 |
| H-11 | .38/.43 | .20/.40 | .015 | .015 | .80/1.0 | .25 | 4.75/5.25 | 1.2/1.4 | .35 | V .40/.60 |
| Hy-Tuf | .23/.28 | 1.2/1.5 | .04 | .04 | 1.3/1.7 | 1.65/2.0 | .20/.40 | .35/.45 | .35 | |
| Hy-Tuf V.M. | .23/.28 | 1.2/1.5 | .01 | .01 | 1.3/1.7 | 1.65/2.0 | .20/.40 | .35/.45 | .35 | |
| D6AC | .45/.48 | .60/.90 | .01 | .01 | .15/.30 | .40/.70 | .90/1.20 | .90/1.10 | .35 | V .08/.15 |
| 9-4-30 | .29/.34 | .10/.35 | .01 | .01 | .20 | 7.0/8.0 | .90/1.10 | .90/1.10 | .35 | V .06/.12 Co 4.25/4.75 |

The above chart is a compilation of Aerospace, ASTM, Federal and Military specifications. It is for reference only and should not be used for design or specifications.

**MACHINABILITY RATINGS*
 ALLOY**

| GRADE | APPROXIMATE SURF. FT. PER MIN. | % RELATIVE SPEED BASED ON C-1212 AS 100% | GRADE | APPROXIMATE SURF. FT. PER MIN. | % RELATIVE SPEED BASED ON C-1212 AS 100% (165 SFM) |
|-------------------|--------------------------------|--|-----------|--------------------------------|--|
| E-4130 | 120 | 72 | E-6150 | 100 | 60 |
| E-4130 H.T. | 65 | 40 | E-8740 | 110 | 66 |
| E-4140 | 110 | 66 | E-9310 | 80 | 49 |
| E-4330 Mod | 95 | 57 | Nitriding | 83 | 51 |
| E-4340 | 95 | 57 | H-11 | 75 | 45 |
| E-4340 Mod "300M" | 95 | 57 | Hy-Tuf | 75 | 45 |
| E-4620 V.M. | 110 | 66 | D6AC | 80 | 49 |
| E-52100 | 65 | 40 | 9-4-30 | 75 | 45 |

*These machinability ratios must be recognized as approximate values.