Helium in Stainless Steel

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SRIM version ---> SRIM-2013.00

Calc. date ---> April 03, 2018

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Disk File Name = SRIM Outputs\Helium in Stainless Steel.txt

Ion = Helium [2] , Mass = 4.003 amu

Target Density = 8.0000E+00 g/cm3 = 8.5951E+22 atoms/cm3

======= Target Composition ========

Atom Name	Atom Numb	Atomic Percent	Mass Percent
Cr	24	008.00	007.42
Fe	26	074.00	073.73
Ni	28	018.00	018.85

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Bragg Correction = 0.00%

Stopping Units = eV / Angstrom

See bottom of Table for other Stopping units

Ion Energy	dE/dx Elec.	dE/dx Nuclear	Projected Range	Longitudinal Straggling	Lateral Straggling
99.9999 eV	9.808E-01	1.559E+00	8 A	16 A	11 A
110 eV	1.029E+00	1.610E+00	9 A	16 A	12 A
120 eV	1.074E+00	1.657E+00	9 A	17 A	13 A
130 eV	1.118E+00	1.701E+00	10 A	18 A	13 A
139.999 eV	1.160E+00	1.741E+00	10 A	19 A	14 A
149.999 eV	1.201E+00	1.779E+00	11 A	20 A	14 A
159.999 eV	1.241E+00	1.814E+00	11 A	20 A	15 A
169.999 eV	1.279E+00	1.847E+00	11 A	21 A	15 A
179.999 eV	1.316E+00	1.878E+00	12 A	22 A	16 A
199.999 eV	1.387E+00	1.936E+00	13 A	23 A	17 A
224.999 eV	1.471E+00	1.999E+00	14 A	25 A	18 A
249.999 eV	1.551E+00	2.055E+00	15 A	27 A	19 A
274.999 eV	1.626E+00	2.106E+00	16 A	28 A	20 A
299.999 eV	1.699E+00	2.151E+00	17 A	30 A	22 A
324.999 eV	1.768E+00	2.191E+00	18 A	31 A	23 A
349.999 eV	1.835E+00	2.229E+00	19 A	33 A	24 A
374.999 eV	1.899E+00	2.262E+00	20 A	34 A	25 A
399.999 eV	1.962E+00	2.294E+00	21 A	35 A	26 A
449.999 eV	2.080E+00	2.349E+00	23 A	38 A	28 A
499.999 eV	2.193E+00	2.396E+00	25 A	41 A	30 A
549.999 eV	2.300E+00	2.437E+00	27 A	44 A	32 A
599.999 eV	2.402E+00	2.472E+00	29 A	46 A	34 A
649.999 eV	2.500E+00	2.503E+00	31 A	49 A	36 A

699.999 eV	2.595E+00	2.530E+00	33 A	51 A	37 A
799.999 eV	2.774E+00	2.576E+00	37 A	56 A	41 A
899.999 eV	2.942E+00	2.612E+00	40 A	60 A	44 A
999.999 eV	3.101E+00	2.640E+00	44 A	65 A	48 A
1.10 keV	3.253E+00	2.662E+00	48 A	69 A	51 A
1.20 keV	3.397E+00	2.679E+00	51 A	74 A	54 A
1.30 keV	3.536E+00	2.693E+00	55 A	78 A	57 A
1.40 keV	3.670E+00	2.703E+00	59 A	82 A	60 A
1.50 keV	3.798E+00	2.710E+00	62 A	86 A	64 A
1.60 keV	3.923E+00	2.716E+00	66 A	90 A	67 A
1.70 keV	4.044E+00	2.719E+00	70 A	94 A	69 A
1.80 keV	4.161E+00	2.720E+00	73 A	98 A	72 A
2.00 keV	4.386E+00	2.719E+00	81 A	105 A	78 A
2.25 keV	4.652E+00	2.712E+00	90 A	114 A	85 A
2.50 keV	4.904E+00	2.700E+00	99 A	123 A	92 A
2.75 keV	5.143E+00	2.685E+00	108 A	132 A	99 A
3.00 keV	5.372E+00	2.667E+00	117 A	141 A	105 A
3.25 keV	5.591E+00	2.647E+00	126 A	149 A	112 A
3.50 keV	5.802E+00	2.626E+00	136 A	157 A	118 A
3.75 keV	6.006E+00	2.605E+00	145 A	165 A	125 A
4.00 keV	6.203E+00	2.582E+00	154 A	173 A	131 A
4.50 keV	6.579E+00	2.537E+00	173 A	188 A	143 A
5.00 keV	6.935E+00	2.491E+00	192 A	203 A	155 A
5.50 keV	7.273E+00	2.445E+00	211 A	218 A	166 A
6.00 keV	7.597E+00	2.400E+00	230 A	232 A	177 A
6.50 keV	7.907E+00	2.357E+00	249 A	245 A	188 A
7.00 keV	8.206E+00	2.314E+00	268 A	259 A	199 A
8.00 keV	8.772E+00	2.234E+00	306 A	284 A	220 A
9.00 keV	9.260E+00	2.158E+00	345 A	308 A	240 A
10.00 keV	9.662E+00	2.088E+00	384 A	331 A	260 A
11.00 keV	1.002E+01	2.023E+00	423 A	354 A	279 A
12.00 keV	1.039E+01	1.962E+00	463 A	376 A	298 A
13.00 keV	1.085E+01	1.905E+00	502 A	397 A	316 A
14.00 keV	1.136E+01	1.852E+00	541 A	417 A	334 A
15.00 keV	1.189E+01	1.802E+00	580 A	436 A	351 A
16.00 keV	1.244E+01	1.756E+00	618 A	455 A	368 A
17.00 keV	1.296E+01	1.712E+00	656 A	472 A	384 A
18.00 keV	1.348E+01	1.670E+00	693 A	489 A	399 A
20.00 keV	1.446E+01	1.594E+00	767 A	520 A	429 A
22.50 keV	1.560E+01	1.509E+00	857 A	555 A	463 A
25.00 keV	1.668E+01	1.435E+00	945 A	587 A	494 A
27.50 keV	1.770E+01	1.368E+00	1031 A	617 A	524 A
30.00 keV	1.868E+01	1.309E+00	1115 A	644 A	552 A
32.50 keV	1.962E+01	1.255E+00	1198 A	669 A	578 A
35.00 keV	2.052E+01	1.206E+00	1279 A	692 A	603 A
37.50 keV	2.139E+01	1.162E+00	1358 A	714 A	626 A
40.00 keV	2.224E+01	1.121E+00	1436 A	734 A	648 A
45.00 keV	2.386E+01	1.048E+00	1589 A	771 A	690 A

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50.00 keV	2.540E+01	9.861E-01	1736 A	804 A	728 A
55.00 keV	2.686E+01	9.318E-01	1878 A	833 A	763 A
60.00 keV	2.826E+01	8.840E-01	2017 A	859 A	795 A
65.00 keV	2.960E+01	8.416E-01	2151 A	883 A	825 A
70.00 keV	3.089E+01	8.036E-01	2282 A	905 A	853 A
80.00 keV	3.331E+01	7.383E-01	2534 A	944 A	904 A
90.00 keV	3.556E+01	6.840E-01	2775 A	977 A	950 A
100.00 keV	3.766E+01	6.381E-01	3006 A	1006 A	991 A
110.00 keV	3.962E+01	5.988E-01	3228 A	1032 A	1028 A
120.00 keV	4.145E+01	5.645E-01	3443 A	1055 A	1062 A
130.00 keV	4.316E+01	5.345E-01	3651 A	1076 A	1094 A
140.00 keV	4.478E+01	5.078E-01	3853 A	1094 A	1123 A
150.00 keV	4.629E+01	4.840E-01	4050 A	1111 A	1150 A
160.00 keV	4.772E+01	4.625E-01	4242 A	1127 A	1176 A
170.00 keV	4.907E+01	4.432E-01	4430 A	1141 A	1200 A
180.00 keV	5.034E+01	4.255E-01	4613 A	1155 A	1223 A
200.00 keV	5.269E+01	3.945E-01	4971 A	1180 A	1265 A
225.00 keV	5.530E+01	3.623E-01	5401 A	1207 A	1312 A
250.00 keV	5.759E+01	3.354E-01	5816 A	1230 A	1355 A
275.00 keV	5.961E+01	3.126E-01	6218 A	1252 A	1394 A
300.00 keV	6.140E+01	2.929E-01	6610 A	1270 A	1430 A
325.00 keV	6.298E+01	2.759E-01	6993 A	1288 A	1463 A
350.00 keV	6.438E+01	2.609E-01	7368 A	1304 A	1495 A
375.00 keV	6.561E+01	2.476E-01	7737 A	1318 A	1524 A
400.00 keV	6.670E+01	2.357E-01	8101 A	1332 A	1552 A
450.00 keV	6.850E+01	2.154E-01	8815 A	1358 A	1604 A
500.00 keV	6.987E+01	1.985E-01	9515 A	1382 A	1651 A
550.00 keV	7.088E+01	1.844E-01	1.02 um	1404 A	1696 A
600.00 keV	7.159E+01	1.722E-01	1.09 um	1425 A	1738 A
650.00 keV	7.207E+01	1.617E-01	1.16 um	1444 A	1777 A
700.00 keV	7.235E+01	1.526E-01	1.22 um	1462 A	1815 A
800.00 keV	7.243E+01	1.372E-01	1.36 um	1502 A	1888 A
900.00 keV	7.205E+01	1.249E-01	1.50 um	1539 A	1956 A
1.00 MeV	7.136E+01	1.148E-01	1.63 um	1575 A	2022 A

Multiply Stopping by	for Stopping Units
1.0000E+00	eV / Angstrom
1.0000E+01	keV / micron
1.0000E+01	MeV / mm
1.2500E-02	keV / (ug/cm2)
1.2500E-02	MeV / (mg/cm2)
1.2500E+01	keV / (mg/cm2)
1.1635E+00	eV / (1E15 atoms/cm2)
1.2700E-01	L.S.S. reduced units

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