

Ti11-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	6993.166	7431.902	7701.472	7786.267	8027.828	8175.815
[MPa]	Std Dev	423.173	149.398	129.747	74.737	98.758	84.896
EIT (O&P)	Mean	80.143	78.052	78.52	78.751	79.925	80.664
[GPa]	Std Dev	1.948	1.018	0.561	0.416	0.413	0.38
E* (O&P)	Mean	84.497	82.292	82.786	83.029	84.267	85.046
[GPa]	Std Dev	2.054	1.074	0.592	0.438	0.435	0.401
Er (O&P)	Mean	78.695	76.781	77.211	77.423	78.498	79.173
[GPa]	Std Dev	1.782	0.934	0.514	0.381	0.378	0.347
hm (O&P)	Mean	73.207	193.645	357.799	470.319	677.241	834.015
[nm]	Std Dev	1.586	1.573	1.795	1.703	2.491	2.632
Fm (O&P)	Mean	1.001	5.005	15.037	25.031	50.081	75.075
[mN]	Std Dev	0.002	0.005	0.003	0.038	0.004	0.008
m (O&P)	Mean	1.85	1.489	1.426	1.417	1.388	1.406
[]	Std Dev	0.274	0.054	0.031	0.025	0.022	0.018
Ti12-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	7798.341	7621.866	7685.997	7712.513	7885.263	7962.179
[MPa]	Std Dev	436.77	197.596	106.505	72.717	82.509	90.304
EIT (O&P)	Mean	78.131	75.576	76.265	76.639	77.589	78.125
[GPa]	Std Dev	2.112	0.658	0.574	0.404	0.262	0.216
E* (O&P)	Mean	82.376	79.682	80.408	80.802	81.804	82.369
[GPa]	Std Dev	2.227	0.694	0.605	0.426	0.276	0.228
Er (O&P)	Mean	76.851	74.504	75.138	75.483	76.356	76.849
[GPa]	Std Dev	1.939	0.607	0.529	0.372	0.24	0.198
hm (O&P)	Mean	70.939	194.023	360.19	474.573	684.504	845.562
[nm]	Std Dev	1.722	1.782	1.723	1.478	1.885	2.61
Fm (O&P)	Mean	1.001	5.007	15.035	25.042	50.08	75.073
[mN]	Std Dev	0.005	0.015	0.023	0.049	0.031	0.037
m (O&P)	Mean	1.55	1.452	1.448	1.44	1.425	1.413
[]	Std Dev	0.157	0.038	0.033	0.03	0.02	0.015
Ti13-CS	No.	39	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	7505.641	7240.265	7310.611	7396.678	7503.199	7563.422
[MPa]	Std Dev	422.599	175.43	87.994	88.76	66.078	63.778
EIT (O&P)	Mean	77.594	74.074	74.387	74.716	75.533	75.638
[GPa]	Std Dev	2.525	0.881	0.326	0.462	0.297	0.267
E* (O&P)	Mean	81.318	77.629	77.957	78.302	79.158	79.268
[GPa]	Std Dev	2.646	0.923	0.341	0.484	0.311	0.28
Er (O&P)	Mean	75.928	72.706	72.994	73.296	74.046	74.142
[GPa]	Std Dev	2.306	0.81	0.299	0.424	0.272	0.245
hm (O&P)	Mean	72.385	198.008	367.364	484.544	699.547	863.441
[nm]	Std Dev	1.72	1.515	1.045	2.002	1.936	1.957
Fm (O&P)	Mean	1.001	5.007	15.036	25.034	50.079	75.077
[mN]	Std Dev	0.002	0.004	0.009	0.039	0.007	0.007
m (O&P)	Mean	1.546	1.474	1.462	1.443	1.434	1.427
[]	Std Dev	0.153	0.05	0.025	0.025	0.019	0.014

Ti14-CS	N	38	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	7362.572	6911.976	6873.443	6953.772	7006.052	6978.045
[MPa]	Std Dev	420.403	165.522	157.071	69.049	65.371	92.761
EIT (O&P)	Mean	75.69	72.121	71.676	72.117	72.599	72.128
[GPa]	Std Dev	2.455	0.819	0.682	0.428	0.277	0.562
E* (O&P)	Mean	79.182	75.448	74.983	75.444	75.948	75.455
[GPa]	Std Dev	2.568	0.857	0.713	0.447	0.29	0.588
Er (O&P)	Mean	74.063	70.79	70.38	70.786	71.23	70.796
[GPa]	Std Dev	2.239	0.754	0.628	0.394	0.255	0.518
hm (O&P)	Mean	73.523	201.885	376.98	498.445	720.41	890.716
[nm]	Std Dev	1.646	1.271	2.723	2.137	2.363	4.286
Fm (O&P)	Mean	1.002	5.008	15.035	25.015	50.079	75.077
[mN]	Std Dev	0.002	0.003	0.011	0.028	0.007	0.007
m (O&P)	Mean	1.586	1.484	1.462	1.454	1.457	1.432
[]	Std Dev	0.155	0.064	0.036	0.024	0.016	0.013

Ti22-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	7760.577	7815.977	7896.415	7960.966	8218.404	8300.094
[MPa]	Std Dev	399.255	215.385	165.805	134.725	102.863	60.229
EIT (O&P)	Mean	80.78	78.512	79.328	79.391	80.633	81.541
[GPa]	Std Dev	2.352	0.997	0.495	0.726	0.286	0.269
E* (O&P)	Mean	85.417	83.019	83.881	83.948	85.261	86.222
[GPa]	Std Dev	2.487	1.055	0.524	0.768	0.302	0.284
Er (O&P)	Mean	79.491	77.413	78.163	78.221	79.36	80.192
[GPa]	Std Dev	2.156	0.916	0.455	0.666	0.262	0.246
hm (O&P)	Mean	70.087	190.543	354.271	466.043	671.261	828.657
[nm]	Std Dev	1.542	2.202	2.132	2.383	2.001	1.532
Fm (O&P)	Mean	1.001	5.006	15.037	25.035	50.082	75.078
[mN]	Std Dev	0.003	0.005	0.004	0.039	0.003	0.035
m (O&P)	Mean	1.683	1.44	1.44	1.405	1.375	1.385
[]	Std Dev	0.167	0.032	0.027	0.03	0.018	0.02

Ti23-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	8063.952	8097.794	8097.581	8194.531	8424.626	8587.125
[MPa]	Std Dev	395.113	278.412	182.99	117.915	115.949	92.541
EIT (O&P)	Mean	83.2	80.377	81.723	81.588	83.617	84.348
[GPa]	Std Dev	2.572	0.799	0.626	0.442	0.308	0.352
E* (O&P)	Mean	88.019	85.033	86.457	86.315	88.46	89.234
[GPa]	Std Dev	2.721	0.845	0.662	0.468	0.326	0.373
Er (O&P)	Mean	81.739	79.162	80.395	80.272	82.124	82.791
[GPa]	Std Dev	2.34	0.733	0.573	0.405	0.281	0.321
hm (O&P)	Mean	68.111	187.261	349.525	459.051	661.236	815.198
[nm]	Std Dev	1.987	2.442	1.72	1.868	2.376	2.05
Fm (O&P)	Mean	1.001	5.005	15.038	25.017	50.082	75.079
[mN]	Std Dev	0.002	0.004	0.003	0.028	0.007	0.004
m (O&P)	Mean	1.758	1.427	1.437	1.375	1.364	1.362
[]	Std Dev	0.163	0.039	0.045	0.026	0.02	0.018

Ti24-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	8035.029	8113.87	8362.674	8308.684	8576.018	8723.169
[MPa]	Std Dev	804.943	172.701	172.836	125.339	136.524	88.12
EIT (O&P)	Mean	83.47	82.126	83.667	83.733	85.56	86.686
[GPa]	Std Dev	2.963	0.99	0.544	0.47	0.556	0.419
E* (O&P)	Mean	88.349	86.927	88.558	88.627	90.562	91.753
[GPa]	Std Dev	3.136	1.048	0.576	0.497	0.588	0.443
Er (O&P)	Mean	82.022	80.8	82.208	82.268	83.932	84.955
[GPa]	Std Dev	2.706	0.906	0.496	0.429	0.505	0.38
hm (O&P)	Mean	68.706	186.027	344.899	453.97	654.064	806.091
[nm]	Std Dev	2.355	1.541	1.958	1.931	3.372	2.415
Fm (O&P)	Mean	1.001	5.007	15.039	25.019	50.081	75.077
[mN]	Std Dev	0.003	0.005	0.004	0.032	0.005	0.009
m (O&P)	Mean	1.619	1.437	1.396	1.39	1.376	1.373
[]	Std Dev	0.231	0.053	0.039	0.025	0.025	0.019

Ti25-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	8148.614	8142.693	8320.962	8281.484	8587.713	8728.021
[MPa]	Std Dev	477.034	212.161	157.685	109.851	107.241	84.177
EIT (O&P)	Mean	84.589	82.381	83.939	83.792	85.812	86.803
[GPa]	Std Dev	2.237	0.901	0.512	0.431	0.306	0.417
E* (O&P)	Mean	89.533	87.196	88.845	88.69	90.828	91.877
[GPa]	Std Dev	2.367	0.953	0.542	0.456	0.324	0.441
Er (O&P)	Mean	83.044	81.033	82.456	82.322	84.161	85.061
[GPa]	Std Dev	2.037	0.824	0.467	0.393	0.278	0.378
hm (O&P)	Mean	67.828	185.744	344.939	454.648	653.629	806.044
[nm]	Std Dev	1.739	1.967	1.983	1.788	2.218	2.197
Fm (O&P)	Mean	1.002	5.006	15.036	25.03	50.082	75.081
[mN]	Std Dev	0.002	0.004	0.005	0.038	0.007	0.005
m (O&P)	Mean	1.544	1.425	1.407	1.38	1.365	1.363
[]	Std Dev	0.179	0.068	0.028	0.026	0.019	0.018

Ti26-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	8415.317	8299.808	8520.837	8519.76	8739.83	8890.508
[MPa]	Std Dev	486.137	232.305	252.243	120.835	85.886	80.075
EIT (O&P)	Mean	84.126	82.951	84.043	84.389	86.595	87.375
[GPa]	Std Dev	2.295	0.655	1.173	0.461	0.424	0.315
E* (O&P)	Mean	89.133	87.888	89.044	89.411	91.748	92.575
[GPa]	Std Dev	2.431	0.694	1.242	0.488	0.45	0.333
Er (O&P)	Mean	82.7	81.63	82.627	82.943	84.951	85.659
[GPa]	Std Dev	2.093	0.599	1.073	0.42	0.385	0.285
hm (O&P)	Mean	66.51	183.918	342.449	449.847	648.78	800.826
[nm]	Std Dev	1.831	1.632	3.815	1.491	1.789	1.546
Fm (O&P)	Mean	1.001	5.006	15.034	25.01	50.085	75.08
[mN]	Std Dev	0.003	0.003	0.006	0.017	0.005	0.006
m (O&P)	Mean	1.586	1.464	1.399	1.364	1.366	1.352
[]	Std Dev	0.147	0.064	0.033	0.028	0.018	0.015

Ti27-CS	No.	39	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	9021.887	8570.702	8706.143	8648.082	8947.307	9116.38
[MPa]	Std Dev	1040.854	242.478	117.995	121.163	122.776	83.926
EIT (O&P)	Mean	87.05	85.158	87.179	87.494	89.506	90.683
[GPa]	Std Dev	3.353	0.866	0.543	0.508	0.401	0.352
E* (O&P)	Mean	92.371	90.363	92.507	92.841	94.976	96.226
[GPa]	Std Dev	3.558	0.919	0.576	0.539	0.426	0.373
Er (O&P)	Mean	85.476	83.761	85.601	85.887	87.711	88.776
[GPa]	Std Dev	3.039	0.789	0.493	0.461	0.363	0.318
hm (O&P)	Mean	64.383	180.884	337.101	443.675	639.588	787.992
[nm]	Std Dev	1.639	1.58	1.273	1.801	2.116	2.312
Fm (O&P)	Mean	1.002	5.006	15.039	25.023	50.081	75.076
[mN]	Std Dev	0.002	0.003	0.004	0.033	0.026	0.033
m (O&P)	Mean	1.601	1.43	1.406	1.378	1.352	1.356
[]	Std Dev	0.131	0.064	0.034	0.03	0.026	0.014

Ti32-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	7825.62	7777.585	7867.685	7877.262	8037.161	8177.15
[MPa]	Std Dev	405.775	173.388	163.046	87.625	89.179	99.122
EIT (O&P)	Mean	78.235	76.634	77.597	77.487	78.877	79.541
[GPa]	Std Dev	2.43	0.841	0.401	0.472	0.234	0.296
E* (O&P)	Mean	82.525	80.836	81.852	81.736	83.202	83.903
[GPa]	Std Dev	2.563	0.887	0.423	0.498	0.247	0.312
Er (O&P)	Mean	76.98	75.512	76.398	76.297	77.573	78.182
[GPa]	Std Dev	2.23	0.774	0.369	0.434	0.215	0.271
hm (O&P)	Mean	70.819	192.168	356.675	470.366	678.292	836.815
[nm]	Std Dev	1.892	1.362	1.859	1.659	1.938	2.613
Fm (O&P)	Mean	1.002	5.006	15.037	25.035	50.079	75.075
[mN]	Std Dev	0.003	0.003	0.005	0.038	0.003	0.007
m (O&P)	Mean	1.553	1.441	1.443	1.415	1.417	1.397
[]	Std Dev	0.161	0.049	0.038	0.026	0.021	0.019

Ti33-CS	No.	40	20	20	20	20	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	7870.475	7705.545	7778.656	7857.801	8107.323	8260.631
[MPa]	Std Dev	343.694	160.133	106.205	81.818	85.141	69.649
EIT (O&P)	Mean	79.199	76.943	77.686	78.008	79.571	80.129
[GPa]	Std Dev	2.633	0.844	0.567	0.562	0.305	0.262
E* (O&P)	Mean	83.422	81.046	81.828	82.167	83.814	84.401
[GPa]	Std Dev	2.774	0.889	0.597	0.592	0.321	0.276
Er (O&P)	Mean	77.759	75.695	76.377	76.673	78.105	78.615
[GPa]	Std Dev	2.412	0.775	0.52	0.516	0.279	0.24
hm (O&P)	Mean	70.331	192.494	357.579	469.525	675.6	833.306
[nm]	Std Dev	1.727	1.197	1.42	1.597	1.922	1.793
Fm (O&P)	Mean	1.001	5.007	15.036	25.022	50.085	75.083
[mN]	Std Dev	0.002	0.005	0.005	0.034	0.006	0.006
m (O&P)	Mean	1.586	1.461	1.451	1.448	1.413	1.402
[]	Std Dev	0.144	0.05	0.029	0.026	0.017	0.016

Ti34-CS	N	39	20	20	20	19	20
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN
HIT (O&P)	Mean	7916.486	7650.048	7757.376	7761.173	7917.492	8097.829
[MPa]	Std Dev	301.667	135.802	117.056	81.774	95.499	81.897
EIT (O&P)	Mean	78.869	76.794	77.704	77.938	79.1	79.648
[GPa]	Std Dev	2.993	0.965	0.626	0.478	0.417	0.347
E* (O&P)	Mean	83.035	80.85	81.809	82.055	83.278	83.856
[GPa]	Std Dev	3.151	1.016	0.659	0.504	0.439	0.366
Er (O&P)	Mean	77.421	75.524	76.361	76.575	77.639	78.141
[GPa]	Std Dev	2.739	0.887	0.575	0.439	0.382	0.318
hm (O&P)	Mean	70.354	192.965	357.795	471.577	680.645	838.462
[nm]	Std Dev	1.671	1.217	1.724	1.813	2.262	2.42
Fm (O&P)	Mean	1.002	5.008	15.039	25.023	50.083	75.076
[mN]	Std Dev	0.002	0.004	0.004	0.033	0.004	0.01
m (O&P)	Mean	1.564	1.484	1.46	1.448	1.44	1.418
[]	Std Dev	0.181	0.065	0.026	0.027	0.027	0.018

Ti35-CS	N	40		20		20		20		20	
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN				
HIT (O&P)	Mean	7524.356	7566.026	7610.681	7687.092	7816.097	7954.15				
[MPa]	Std Dev	365.106	156.306	117.786	68.351	68.857	75.541				
EIT (O&P)	Mean	80.166	77.042	77.221	77.541	78.894	79.585				
[GPa]	Std Dev	2.264	1.353	0.406	0.349	0.353	0.274				
E* (O&P)	Mean	84.401	81.112	81.3	81.637	83.061	83.789				
[GPa]	Std Dev	2.384	1.424	0.427	0.367	0.372	0.289				
Er (O&P)	Mean	78.61	75.752	75.917	76.211	77.451	78.083				
[GPa]	Std Dev	2.067	1.239	0.372	0.32	0.323	0.251				
hm (O&P)	Mean	71.181	193.369	359.828	473.682	683.263	841.812				
[nm]	Std Dev	1.341	1.664	1.44	1.424	1.779	1.92				
Fm (O&P)	Mean	1.002	5.006	15.039	25.024	50.079	75.076				
[mN]	Std Dev	0.002	0.004	0.004	0.034	0.004	0.007				
m (O&P)	Mean	1.839	1.49	1.482	1.445	1.455	1.442				
[]	Std Dev	0.194	0.063	0.036	0.03	0.024	0.022				
Ti36-CS	N	40		20		20		20		20	
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN				
HIT (O&P)	Mean	7121.624	7281.82	7343.792	7496.603	7657.03	7785.153				
[MPa]	Std Dev	395.774	279.025	180.241	114.594	92.26	97.748				
EIT (O&P)	Mean	77.336	75.044	74.993	76.214	77.541	78.112				
[GPa]	Std Dev	2.817	1.369	0.927	0.611	0.299	0.298				
E* (O&P)	Mean	81.499	79.083	79.03	80.316	81.715	82.317				
[GPa]	Std Dev	2.969	1.443	0.977	0.644	0.315	0.314				
Er (O&P)	Mean	76.084	73.979	73.933	75.058	76.279	76.803				
[GPa]	Std Dev	2.591	1.265	0.856	0.563	0.275	0.274				
hm (O&P)	Mean	73.689	196.605	365.786	479.238	689.882	849.628				
[nm]	Std Dev	1.697	2.611	3.088	2.976	2.521	2.666				
Fm (O&P)	Mean	1.001	5.007	15.037	25.023	50.081	75.078				
[mN]	Std Dev	0.002	0.004	0.005	0.034	0.004	0.005				
m (O&P)	Mean	1.621	1.51	1.467	1.458	1.46	1.445				
[]	Std Dev	0.161	0.057	0.038	0.023	0.021	0.02				
Ti37-CS	N	40		20		20		20		20	
		1 mN	5 mN	15 mN	25 mN	50 mN	75 mN				
HIT (O&P)	Mean	7261.631	7277.627	7364.94	7574.728	7734.391	7790.799				
[MPa]	Std Dev	457.751	375.662	258.538	137.949	90.948	84.977				
EIT (O&P)	Mean	79.392	76.832	77.47	78.011	79.237	79.601				
[GPa]	Std Dev	2.928	1.766	1.423	0.768	0.441	0.529				
E* (O&P)	Mean	83.392	80.702	81.372	81.941	83.229	83.612				
[GPa]	Std Dev	3.076	1.855	1.495	0.807	0.463	0.555				
Er (O&P)	Mean	77.731	75.393	75.979	76.475	77.596	77.929				
[GPa]	Std Dev	2.671	1.623	1.306	0.703	0.403	0.483				
hm (O&P)	Mean	72.503	195.385	362.301	475.012	684.68	846.142				
[nm]	Std Dev	1.919	3.922	5.054	3.773	2.955	3.295				
Fm (O&P)	Mean	1.002	5.005	15.034	25.026	50.08	75.073				
[mN]	Std Dev	0.003	0.01	0.005	0.036	0.005	0.008				
m (O&P)	Mean	1.756	1.571	1.55	1.492	1.477	1.46				
[]	Std Dev	0.206	0.056	0.032	0.03	0.025	0.014				