

# PHYSICAL PROPERTIES

## NON-STRUCTURAL STUD PHYSICAL PROPERTIES

Section	Design Thickness (in)	Gross Properties						33 ksi Effective Properties					50 ksi Effective Properties					Torsional Properties				
		Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>xx</sub> (in <sup>4</sup> )	I <sub>yy</sub> (in <sup>4</sup> )	I <sub>xy</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	Ma (in-k)	Va (lb)	Y <sub>cg</sub> (in)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	Ma (in-k)	Va (lb)	Y <sub>cg</sub> (in)	J <sub>x</sub> <sup>1000</sup> (in <sup>4</sup> )	C <sub>w</sub> (in <sup>2</sup> )	X <sub>o</sub> (in)	R <sub>o</sub> (in)	β
162S125-18	0.0188	0.080	0.27	0.038	0.686	0.016	0.447	0.034	0.033	0.65	302	0.939					0.009	0.009	-1.061	1.340	0.373	
162S125-27	0.0283	0.120	0.41	0.056	0.682	0.023	0.443	0.055	0.053	1.05	494	0.901					0.032	0.013	-1.049	1.327	0.375	
162S125-30	0.0312	0.131	0.45	0.061	0.681	0.026	0.441	0.060	0.061	1.21	543	0.882					0.043	0.014	-1.046	1.323	0.376	
162S125-33	0.0346	0.145	0.49	0.067	0.679	0.028	0.440	0.066	0.071	1.41	601	0.862					0.058	0.015	-1.042	1.319	0.376	
250S125-18	0.0188	0.097	0.33	0.099	1.014	0.019	0.439	0.089	0.062	1.23	258	1.370					0.011	0.023	-0.930	1.444	0.585	
250S125-27	0.0283	0.144	0.49	0.147	1.009	0.027	0.434	0.145	0.098	1.93	685	1.341					0.039	0.033	-0.919	1.432	0.589	
250S125-30	0.0312	0.159	0.54	0.161	1.008	0.030	0.433	0.159	0.112	2.20	832	1.322					0.052	0.036	-0.915	1.429	0.590	
250S125-33	0.0346	0.176	0.60	0.178	1.006	0.033	0.431	0.175	0.128	2.53	975	1.302					0.070	0.039	-0.911	1.425	0.591	
250S125-43	0.0451	0.227	0.77	0.228	1.001	0.041	0.426	0.225	0.177	3.50	1265	1.265					0.154	0.049	-0.899	1.412	0.594	
250S125-54	0.0566	0.280	0.95	0.277	0.994	0.049	0.419	0.277	0.218	4.98	1553	1.260	0.274	0.217	6.51	2353	1.260	0.299	0.059	-0.890	1.398	0.595
250S125-68	0.0713	0.345	1.18	0.334	0.984	0.057	0.408	0.334	0.266	6.30	1891	1.252	0.334	0.266	7.98	2866	1.252	0.585	0.069	-0.880	1.381	0.594
350S125-18	0.0188	0.115	0.39	0.215	1.366	0.021	0.423	0.202	0.076	1.51	180	2.132					0.014	0.049	-0.819	1.648	0.753	
350S125-27	0.0283	0.173	0.59	0.320	1.361	0.030	0.418	0.315	0.131	2.58	614	2.016					0.046	0.071	-0.809	1.637	0.756	
350S125-30	0.0312	0.190	0.65	0.351	1.359	0.033	0.417	0.346	0.152	3.01	824	1.967					0.062	0.077	-0.805	1.634	0.757	
350S125-33	0.0346	0.210	0.72	0.387	1.358	0.036	0.415	0.382	0.179	3.54	1024	1.915					0.084	0.085	-0.802	1.630	0.758	
350S125-43	0.0451	0.272	0.93	0.498	1.352	0.046	0.410	0.495	0.259	5.11	1739	1.816					0.184	0.106	-0.790	1.619	0.762	
350S125-54	0.0566	0.337	1.15	0.608	1.344	0.055	0.402	0.608	0.328	6.49	2253	1.778	0.603	0.321	9.62	3372	1.801	0.360	0.127	-0.781	1.605	0.763
350S125-68	0.0713	0.417	1.42	0.739	1.332	0.064	0.391	0.737	0.409	8.08	2774	1.753	0.737	0.407	12.19	4202	1.759	0.706	0.151	-0.770	1.587	0.765
362S125-18	0.0188	0.118	0.40	0.234	1.409	0.021	0.421	0.220	0.079	1.57	173	2.218					0.014	0.053	-0.807	1.677	0.768	
362S125-27	0.0283	0.176	0.60	0.347	1.404	0.031	0.416	0.342	0.136	2.68	592	2.097					0.047	0.077	-0.797	1.667	0.771	
362S125-30	0.0312	0.194	0.66	0.381	1.402	0.033	0.415	0.376	0.159	3.13	794	2.047					0.063	0.084	-0.794	1.664	0.772	
362S125-33	0.0346	0.215	0.73	0.421	1.400	0.037	0.413	0.415	0.186	3.68	1024	1.994					0.086	0.092	-0.790	1.660	0.774	
362S125-43	0.0451	0.278	0.95	0.540	1.395	0.046	0.408	0.537	0.269	5.32	1739	1.890					0.188	0.115	-0.779	1.649	0.777	
362S125-54	0.0566	0.344	1.17	0.661	1.386	0.055	0.400	0.661	0.343	6.78	2341	1.849	0.655	0.335	10.03	3372	1.874	0.367	0.138	-0.769	1.635	0.779
362S125-68	0.0713	0.426	1.45	0.803	1.374	0.065	0.389	0.802	0.430	8.51	2884	1.816	0.802	0.426	12.75	4370	1.828	0.721	0.164	-0.758	1.617	0.780
400S125-18 <sup>1</sup>	0.0188	0.125	0.42	0.294	1.536	0.021	0.414	0.279	0.088	1.74	156	2.478					0.015	0.066	-0.774	1.769	0.809	
400S125-27 <sup>1</sup>	0.0283	0.187	0.64	0.438	1.531	0.031	0.410	0.431	0.151	2.99	533	2.345					0.050	0.096	-0.764	1.759	0.811	
400S125-30 <sup>1</sup>	0.0312	0.206	0.70	0.481	1.529	0.034	0.408	0.474	0.177	3.49	715	2.289					0.067	0.105	-0.761	1.756	0.812	
400S125-33 <sup>1</sup>	0.0346	0.228	0.77	0.531	1.527	0.038	0.407	0.524	0.208	4.11	976	2.231					0.091	0.115	-0.757	1.752	0.813	
400S125-43 <sup>1</sup>	0.0451	0.295	1.00	0.682	1.521	0.048	0.402	0.680	0.302	5.97	1739	2.115					0.200	0.145	-0.746	1.742	0.816	
400S125-54 <sup>1</sup>	0.0566	0.365	1.24	0.835	1.512	0.057	0.394	0.835	0.387	7.65	2603	2.064	0.829	0.376	11.27	3372	2.097	0.390	0.174	-0.737	1.728	0.818
400S125-68 <sup>1</sup>	0.0713	0.452	1.54	1.017	1.499	0.066	0.383	1.015	0.492	9.72	3215	2.016	1.015	0.482	14.43	4871	2.041	0.767	0.206	-0.725	1.709	0.820
550S125-18 <sup>1</sup>	0.0188	0.153	0.52	0.630	2.029	0.023	0.390	-	-	-	-	-					0.018	0.138	-0.666	2.171	0.906	
550S125-27 <sup>1</sup>	0.0283	0.229	0.78	0.938	2.023	0.034	0.385	0.898	0.247	4.88	382	3.146					0.061	0.202	-0.657	2.162	0.908	
550S125-30 <sup>1</sup>	0.0346	0.279	0.95	1.139	2.019	0.041	0.382	1.110	0.342	6.75	699	2.991					0.112	0.242	-0.651	2.156	0.909	
550S125-33 <sup>1</sup>	0.0451	0.362	1.23	1.468	2.013	0.052	0.377	1.458	0.501	9.90	1550	2.832					0.246	0.304	-0.641	2.146	0.911	
550S125-43 <sup>1</sup>	0.0566	0.450	1.53	1.805	2.002	0.061	0.369	1.805	0.647	12.79	2739	2.764	1.790	0.626	18.73	3093	2.812	0.481	0.366	-0.631	2.132	0.912
550S125-68 <sup>1</sup>	0.0713	0.559	1.90	2.209	1.987	0.072	0.358	2.205	0.801	18.94	4347	2.753	2.205	0.801	23.97	5350	2.753	0.948	0.437	-0.620	2.112	0.914
600S125-18 <sup>1</sup>	0.0188	0.162	0.55	0.778	2.189	0.024	0.382	-	-	-	-	-					0.019	0.169	-0.637	2.312	0.924	
600S125-27 <sup>1</sup>	0.0283	0.243	0.83	1.160	2.183	0.035	0.377	1.096	0.272	5.37	349	3.474					0.065	0.247	-0.628	2.303	0.926	
600S125-30 <sup>1</sup>	0.0312	0.268	0.91	1.275	2.181	0.038	0.376	1.217	0.319	6.30	468	3.391					0.087	0.270	-0.625	2.300	0.926	
600S125-33 <sup>1</sup>	0.0346	0.297	1.01	1.409	2.179	0.042	0.374	1.359	0.377	7.45	638	3.304					0.118	0.296	-0.622	2.297	0.927	
600S125-43 <sup>1</sup>	0.0451	0.385	1.31	1.817	2.173	0.053	0.369	1.807	0.556	10.98	1416	3.124					0.261	0.373	-0.612	2.287	0.928	
600S125-54 <sup>1</sup>	0.0566	0.479	1.63	2.236	2.161	0.063	0.362	2.236	0.727	14.37	2739	3.031	2.218	0.695	20.80	2823	3.102	0.511	0.449	-0.603	2.273	0.930
600S125-68 <sup>1</sup>	0.0713	0.595	2.02	2.740	2.146	0.073	0.351	2.735	0.911	21.53	4347	3.003	2.735	0.909	27.22	5350	3.006	1.008	0.536	-0.592	2.253	0.931
800S125-18 <sup>1</sup>	0.0188	0.200	0.68	1.587	2.817	0.025	0.354	-	-	-	-	-					0.024	0.329	-0.543	2.891	0.965	
800S125-27 <sup>1</sup>	0.0283	0.300	1.02	2.370	2.810	0.037	0.350	-	-	-	-	-					0.08	0.481	-0.535	2.882	0.966	
800S125-30 <sup>1</sup>	0.0312	0.330	1.12	2.606	2.808	0.040	0.349	2.362	0.436	8.61	347	4.728					0.107	0.525	-0.533	2.880	0.966	
800S125-33 <sup>1</sup>	0.0346	0.366	1.25	2.881	2.806	0.044	0.347	2.650	0.517	10.22	474	4.611					0.146	0.576	-0.530	2.877	0.966	
800S125-43 <sup>1</sup>	0.0451	0.475	1.62	3.721	2.799	0.056	0.342	3.580	0.774	15.29	1051	4.356					0.322	0.727	-0.521	2.867	0.967	
800S125-54 <sup>1</sup>	0.0566	0.592	2.01	4.593	2.786	0.066	0.335	4.566	1.035	20.46	2091	4.200	4.416	0.972	29.11	2091	4.325	0.632	0.877	-0.512	2.852	0.968
800S125-68 <sup>1</sup>	0.0713	0.738	2.51	5.653	2.768	0.078	0.324	5.644	1.375	27.18	4221	4.053	5.627	1.303	39.02	4221	4.161	1.250	1.050	-0.501	2.832	0.969

## PROPERTIES TABLE NOTES

- Web depth for track sections equals nominal depth plus 2 x design thickness plus bend radius.
- Hems on non-structural track sections are ignored.
- Effective properties include the strength increase from cold-work of forming per NASPEC section A7.2 where applicable.
- Tabulated gross properties are based on the full, unreduced section away from punch-outs.
- Effective properties of all 'S' sections based on punched sections. Track sections are considered unpunched.
- For deflection determination, use the effective moment of inertia. Effective moment of inertia is based on Procedure 1 of the NASPEC.
- For sections with properties listed for both 33 ksi and 50 ksi yield point, the required yield point should be specified in the design documents.
- Where effective properties are not listed for a section at 33 or 50 ksi yield, web depth-to-thickness or flange width-to-thickness limits from the NASPEC are exceeded. Only gross properties are available.
- Where section designations include a superscript '1', web height-to-thickness exceeds 200. Web stiffeners are required at all supports and concentrated loads.

# PHYSICAL PROPERTIES

## NON-STRUCTURAL TRACK PHYSICAL PROPERTIES

Section	Design Thickness (in)	Gross Properties						33 ksi Effective Properties						Torsional Properties				
		Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>xx</sub> (in <sup>4</sup> )	R <sub>x</sub> (in)	I <sub>yy</sub> (in <sup>4</sup> )	R <sub>y</sub> (in)	I <sub>xx</sub> (in <sup>4</sup> )	S <sub>xx</sub> (in <sup>3</sup> )	M <sub>a</sub> (in-k)	V <sub>a</sub> (lb)	Y <sub>cg</sub> (in)	J <sub>x</sub> <sup>1000</sup> (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	X <sub>o</sub> (in)	R <sub>o</sub> (in)	β	
162T125-18	0.0188	0.078	0.26	0.042	0.733	0.013	0.411	-	-	-	-	0.009	0.007	-0.891	1.225	0.471		
162T125-27	0.0283	0.117	0.40	0.063	0.735	0.020	0.410	0.050	0.044	0.87	541	1.048	0.031	0.010	-0.886	1.221	0.474	
162T125-30	0.0312	0.129	0.44	0.070	0.735	0.022	0.409	0.057	0.050	1	597	1.038	0.042	0.012	-0.884	1.220	0.475	
162T125-33	0.0346	0.143	0.49	0.077	0.736	0.024	0.408	0.066	0.058	1.15	663	1.026	0.057	0.013	-0.882	1.219	0.476	
162T150-18	0.0188	0.087	0.30	0.049	0.749	0.021	0.496	-	-	-	-	-	0.010	0.011	-1.120	1.436	0.391	
162T150-27	0.0283	0.131	0.45	0.074	0.750	0.032	0.495	0.055	0.045	0.9	541	1.092	0.035	0.017	-1.115	1.432	0.394	
162T150-30	0.0312	0.144	0.49	0.081	0.751	0.035	0.494	0.062	0.052	1.03	597	1.082	0.047	0.019	-1.113	1.431	0.395	
162T150-33	0.0346	0.160	0.54	0.090	0.751	0.039	0.494	0.072	0.060	1.19	663	1.07	0.064	0.021	-1.111	1.429	0.395	
250T125-18	0.0188	0.094	0.32	0.104	1.052	0.015	0.399	-	-	-	-	-	0.011	0.018	-0.779	1.368	0.676	
250T125-27	0.0283	0.141	0.48	0.157	1.053	0.022	0.398	0.129	0.079	1.56	685	1.519	0.038	0.027	-0.774	1.366	0.679	
250T125-30	0.0312	0.156	0.53	0.173	1.053	0.025	0.397	0.145	0.090	1.77	832	1.507	0.051	0.030	-0.773	1.365	0.679	
250T125-33	0.0346	0.173	0.59	0.192	1.054	0.027	0.397	0.166	0.103	2.03	1024	1.492	0.069	0.033	-0.771	1.365	0.680	
250T150-18	0.0188	0.103	0.35	0.120	1.077	0.025	0.488	-	-	-	-	-	0.012	0.029	-0.994	1.544	0.586	
250T150-27	0.0283	0.156	0.53	0.181	1.078	0.037	0.486	0.139	0.082	1.61	685	1.576	0.042	0.044	-0.989	1.542	0.588	
250T150-30	0.0312	0.172	0.58	0.199	1.078	0.040	0.486	0.157	0.093	1.83	832	1.563	0.056	0.048	-0.988	1.541	0.589	
250T150-33	0.0346	0.190	0.65	0.221	1.079	0.045	0.485	0.179	0.107	2.11	1024	1.548	0.076	0.054	-0.986	1.540	0.590	
250T200-18	0.0188	0.122	0.42	0.152	1.114	0.053	0.661	-	-	-	-	-	0.014	0.064	-1.441	1.938	0.447	
250T200-27	0.0283	0.184	0.63	0.229	1.116	0.080	0.659	-	-	-	-	-	0.049	0.096	-1.436	1.934	0.449	
250T200-30	0.0312	0.203	0.69	0.253	1.116	0.088	0.659	-	-	-	-	-	0.066	0.106	-1.434	1.933	0.450	
250T200-33	0.0346	0.225	0.76	0.280	1.117	0.097	0.658	0.203	0.112	2.22	1024	1.647	0.090	0.118	-1.432	1.932	0.450	
350T125-18	0.0188	0.113	0.38	0.220	1.395	0.016	0.382	-	-	-	-	-	0.013	0.038	-0.684	1.600	0.817	
350T125-27	0.0283	0.170	0.58	0.331	1.396	0.025	0.381	0.277	0.128	2.53	590	2.044	0.045	0.057	-0.680	1.599	0.819	
350T125-30	0.0312	0.187	0.64	0.365	1.396	0.027	0.380	0.312	0.145	2.86	790	2.030	0.061	0.063	-0.679	1.598	0.820	
350T125-33	0.0346	0.207	0.71	0.405	1.397	0.030	0.379	0.354	0.165	3.27	1024	2.014	0.083	0.070	-0.677	1.598	0.820	
350T150-18	0.0188	0.122	0.42	0.250	1.430	0.027	0.472	-	-	-	-	-	0.014	0.062	-0.884	1.746	0.744	
350T150-27	0.0283	0.184	0.63	0.377	1.431	0.041	0.470	0.298	0.132	2.62	590	2.111	0.049	0.093	-0.879	1.745	0.746	
350T150-30	0.0312	0.203	0.69	0.416	1.432	0.045	0.469	0.336	0.150	2.96	790	2.097	0.066	0.103	-0.878	1.744	0.747	
350T150-33	0.0346	0.225	0.76	0.461	1.432	0.049	0.469	0.382	0.171	3.39	1024	2.080	0.090	0.114	-0.876	1.743	0.747	
350T200-18	0.0188	0.141	0.48	0.311	1.485	0.059	0.649	-	-	-	-	-	0.017	0.136	-1.305	2.081	0.607	
350T200-27	0.0283	0.212	0.72	0.469	1.487	0.089	0.648	-	-	-	-	-	0.057	0.203	-1.300	2.079	0.609	
350T200-30	0.0312	0.234	0.80	0.517	1.487	0.098	0.647	-	-	-	-	-	0.076	0.224	-1.299	2.078	0.609	
350T200-33	0.0346	0.259	0.88	0.574	1.487	0.108	0.647	0.428	0.181	3.57	1024	2.199	0.103	0.248	-1.297	2.077	0.610	
362T125-18	0.0188	0.115	0.39	0.238	1.437	0.017	0.380	-	-	-	-	-	0.014	0.041	-0.674	1.632	0.829	
362T125-27	0.0283	0.173	0.59	0.358	1.438	0.025	0.378	0.301	0.135	2.66	569	2.109	0.046	0.062	-0.670	1.631	0.831	
362T125-30	0.0312	0.191	0.65	0.395	1.438	0.027	0.378	0.339	0.152	3.01	762	2.095	0.062	0.068	-0.669	1.630	0.832	
362T125-33	0.0346	0.212	0.72	0.438	1.438	0.030	0.377	0.384	0.174	3.44	1024	2.079	0.085	0.075	-0.667	1.630	0.832	
362T150-18	0.0188	0.125	0.42	0.271	1.474	0.027	0.470	-	-	-	-	-	0.015	0.068	-0.872	1.775	0.759	
362T150-27	0.0283	0.187	0.64	0.408	1.475	0.041	0.468	0.323	0.140	2.76	569	2.177	0.050	0.101	-0.868	1.774	0.761	
362T150-30	0.0312	0.207	0.70	0.449	1.475	0.045	0.467	0.364	0.158	3.12	762	2.162	0.067	0.111	-0.866	1.773	0.761	
362T150-33	0.0346	0.229	0.78	0.499	1.475	0.050	0.467	0.414	0.180	3.56	1024	2.146	0.091	0.123	-0.865	1.772	0.762	
362T200-18	0.0188	0.143	0.49	0.336	1.530	0.060	0.648	-	-	-	-	-	0.017	0.147	-1.290	2.104	0.624	
362T200-27	0.0283	0.216	0.73	0.506	1.532	0.090	0.646	-	-	-	-	-	0.058	0.220	-1.286	2.101	0.626	
362T200-30	0.0312	0.238	0.81	0.558	1.532	0.099	0.645	-	-	-	-	-	0.077	0.242	-1.284	2.101	0.626	
362T200-33	0.0346	0.264	0.90	0.619	1.532	0.110	0.645	0.464	0.190	3.76	1024	2.267	0.105	0.269	-1.282	2.100	0.627	
400T125-18	0.0188	0.122	0.42	0.298	1.561	0.017	0.374	-	-	-	-	-	0.014	0.052	-0.645	1.730	0.861	
400T125-27	0.0283	0.184	0.63	0.449	1.562	0.025	0.372	0.380	0.156	3.08	515	2.306	0.049	0.077	-0.641	1.729	0.862	
400T125-30	0.0312	0.203	0.69	0.495	1.562	0.028	0.371	0.427	0.176	3.49	689	2.289	0.066	0.085	-0.640	1.729	0.863	
400T125-33	0.0346	0.225	0.76	0.549	1.563	0.031	0.371	0.484	0.201	3.97	940	2.272	0.090	0.094	-0.639	1.728	0.863	
400T150-18	0.0188	0.132	0.45	0.338	1.601	0.028	0.463	-	-	-	-	-	0.016	0.085	-0.838	1.866	0.798	
400T150-27	0.0283	0.198	0.67	0.509	1.602	0.042	0.461	0.409	0.154	3.04	515	2.420	0.053	0.127	-0.834	1.864	0.800	
400T150-30	0.0312	0.218	0.74	0.561	1.603	0.046	0.461	0.458	0.183	3.61	689	2.359	0.071	0.139	-0.833	1.864	0.800	
400T150-33	0.0346	0.242	0.82	0.622	1.603	0.051	0.460	0.519	0.208	4.12	940	2.342	0.097	0.154	-0.831	1.863	0.801	
400T200-18	0.0188	0.150	0.51	0.417	1.664	0.062	0.642	-	-	-	-	-	0.018	0.183	-1.248	2.177	0.672	
400T200-27	0.0283	0.226	0.77	0.628	1.665	0.093	0.640	-	-	-	-	-	0.060	0.275	-1.243	2.174	0.673	
400T200-30	0.0312	0.250	0.85	0.692	1.666	0.102	0.639	-	-	-	-	-	0.081	0.303	-1.242	2.174	0.674	
400T200-33	0.0346	0.277	0.94	0.768	1.666	0.113	0.639	0.581	0.220	4.34	940	2.469	0.110	0.335	-1.240	2.173	0.674	
550T125-18	0.0188	0.150	0.51	0.630	2.046	0.018	0.349	-	-	-	-	-	0.018	0.107	-0.553	2.148	0.934	
550T125-27	0.0283	0.226	0.77	0.948	2.046	0.027	0.348	0.786	0.192	3.79	372	3.464	0.060	0.160	-0.550	2.147	0.934	
550T125-30	0.0312	0.250	0.85	1.045	2.046	0.030	0.347	0.897	0.226	4.47	499	3.385	0.081	0.176	-0.549	2.147	0.935	
550T125-33	0.0346	0.277	0.94	1.159	2.046	0.033	0.346	1.029	0.270	5.33	680	3.302	0.110	0.194	-0.547	2.146	0.935	
550T150-18	0.0188	0.160	0.54	0.703	2.098	0.031	0.437	-	-	-	-	-	0.019	0.175	-0.727	2.263	0.897	
550T150-27	0.0283	0.241	0.82	1.059	2.098	0.046	0.436	0.893	0.207	4.1	372	3.460	0.064	0.262	-0.724	2.262	0.898	
550T150-30	0.0312	0.265	0.90	1.168	2.098	0.050	0.435	0.995	0.251	4.96	499	3.349	0.086	0.288	-0.723	2.262	0.898	
550T150-33	0.0346	0.294	1.00	1.295	2.099	0.055	0.434	1.115	0.310	6.12	680	3.224	0.117	0.319	-0.721	2.261	0.898	
550T200-18	0.0188	0.179	0.61	0.851	2.182	0.068	0.616	-	-	-	-	-	0.021	0.379	-1.104	2.522	0.808	
550T200-27	0.0283	0.269	0.91	1.282	2.183	0.101	0.614	-	-	-	-	-	0.072	0.568	-1.100	2.521	0.810	
550T200-30	0.0312	0.296	1.01	1.413	2.184	0.112	0.614											