



IMPERIAL- PACKAGING CORP.

The following neck finish standards are provided by the Society of Plastics Industry (SPI) and designed to assist bottle & closure manufacturers in making parts that work together in form and function.

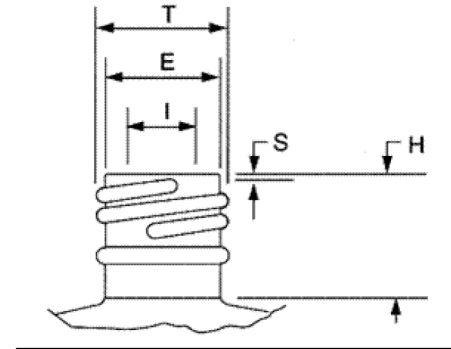
“H” Dimension: Measured from the top sealing surface of the neck finish to the point where the neck intersects the shoulder of the bottle or an obstruction that would limit the travel of the closure. This measurement expresses the limit of the overall internal height of the closure.

“S” Dimension: Measured from the top of the neck finish to the top edge of the uppermost thread. The ‘S’ dimension controls the orientation of the closure.

“I” Dimension” The inner diameter of the neck finish. The ‘I’ dimension normally is expressed as a minimum dimension and affects seal integrity for plug style closures and fill tube clearance.

“T” Dimension: The outside diameter of the tread. The ‘T’ & ‘E’ dimension controls the application and removal of the closure from the bottle.

“E” Dimension: The measurement of the outside, or root diameter, of the neck finish without the thread. The ‘T’ & ‘E’ dimension controls the application and removal of the closure from the bottle



MM	T		E		400H		410H		415H		S		I	THDS/ IN.
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Min	
13	0.514	0.502	0.454	0.442					0.467	0.437	0.052	0.022	0.218	12
15	0.581	0.569	0.521	0.509					0.572	0.542	0.052	0.022	0.258	12
18	0.704	0.688	0.620	0.604	0.386	0.356	0.538	0.508	0.632	0.602	0.052	0.022	0.325	8
20	0.783	0.767	0.699	0.683	0.386	0.356	0.569	0.539	0.757	0.727	0.052	0.022	0.404	8
22	0.862	0.846	0.778	0.762	0.386	0.356	0.600	0.570	0.852	0.822	0.052	0.022	0.483	8
24	0.940	0.924	0.856	0.840	0.415	0.385	0.661	0.631	0.972	0.942	0.061	0.031	0.516	8
28	1.088	1.068	0.994	0.974	0.415	0.385	0.723	0.693	1.097	1.067	0.061	0.031	0.614	6
33	1.265	1.241	1.171	1.147	0.418	0.388			1.289	1.259	0.061	0.031	0.791	6
38	1.476	1.452	1.382	1.358	0.418	0.388					0.061	0.031	0.987	6
53	2.067	2.032	1.973	1.938	0.423	0.393					0.061	0.031	1.578	6
63	2.461	2.426	2.367	2.332	0.423	0.393					0.061	0.031	1.972	6
89	3.511	3.476	3.391	3.356	0.550	0.520					0.075	0.045	2.918	5
110	4.331	4.296	4.211	4.176	0.612	0.582					0.075	0.045	3.737	5
120	4.724	4.689	4.604	4.569	0.700	0.670					0.075	0.045	4.131	5