

## Kazan, Eşanjör ve Genel Kullanım İçin ASTM/ASME A/SA -249/269 Normunda Östenitik Paslanmaz Çelik Tüpler

ET KALINLIĞI			DIŞ ÇAP																										
BWG	inç	mm	1/4"	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 5/8"	1 3/4"	1 7/8"	2"	2 1/4"	2 1/2"	2 3/4"	3"	3 1/4"	3 1/2"	4"	4 1/2"	5"	inç	
			6,35	9,53	11,11	12,70	15,88	19,05	22,23	25,40	28,57	31,75	34,92	38,10	41,27	44,45	47,62	50,8	57,55	63,50	69,85	76,20	82,55	88,9	101,6	114,3	127	mm	
22	0,028	0,71	0,099	0,155	0,183	0,211	0,267	0,323	0,379	0,435	0,490	0,546	0,602																lbs/foot
			0,066	0,104	0,122	0,141	0,179	0,217	0,254	0,292	0,329	0,366	0,404																kg/m
20	0,035	0,89	0,120	0,190	0,225	0,260	0,331	0,401	0,471	0,541	0,611	0,681	0,751	0,821															lbs/foot
			0,080	0,127	0,151	0,174	0,222	0,269	0,316	0,363	0,410	0,457	0,504	0,551															kg/m
19	0,042	1,07	0,140	0,224	0,266	0,308	0,393	0,477	0,561	0,646	0,730	0,814	0,898	0,983	1,067	1,151	1,236	1,320											lbs/foot
			0,094	0,150	0,178	0,206	0,264	0,320	0,376	0,434	0,490	0,546	0,603	0,660	0,716	0,773	0,830	0,886											kg/m
18	0,049	1,24	0,157	0,255	0,303	0,352	0,450	0,548	0,645	0,743	0,841	0,938	1,036	1,134	1,231	1,329	1,427	1,525	1,732	1,916									lbs/foot
			0,105	0,171	0,203	0,236	0,302	0,368	0,433	0,499	0,565	0,630	0,696	0,762	0,827	0,893	0,958	1,024	1,163	1,287									kg/m
17	0,058	1,47	0,294	0,351	0,409	0,525	0,641	0,757	0,873	0,988	1,104	1,220	1,336	1,452	1,568	1,683	1,799	2,045	2,263	2,494	2,726								lbs/foot
			0,197	0,235	0,274	0,352	0,460	0,508	0,586	0,663	0,741	0,819	0,897	0,975	1,053	1,130	1,208	1,374	1,520	1,675	1,831								kg/m
16	0,065	1,65	0,322	0,387	0,452	0,582	0,712	0,842	0,972	1,102	1,232	1,362	1,492	1,622	1,752	1,882	2,012	2,289	2,532	2,792	3,052	3,312	3,572						lbs/foot
			0,216	0,260	0,303	0,391	0,478	0,565	0,653	0,740	0,827	0,915	1,002	1,089	1,177	1,264	1,351	1,538	1,701	1,876	2,050	2,225	2,400						kg/m
15	0,072	1,83				0,493	0,638	0,782	0,926	1,070	1,214	1,358	1,502	1,647	1,791	1,935	2,079	2,224	2,530	2,800	3,089	3,377	3,666	3,954	4,531	5,108	5,684		lbs/foot
						0,331	0,428	0,525	0,622	0,719	0,815	0,912	1,009	1,106	1,203	1,300	1,397	1,494	1,700	1,881	2,075	2,269	2,463	2,656	3,044	3,432	3,819		kg/m
14	0,083	2,11				0,721	0,887	1,055	1,219	1,385	1,552	1,718	1,884	2,050	2,217	2,383	2,549	2,903	3,214	3,547	3,879	4,212	4,544	5,210	5,875	6,540		lbs/foot	
						0,484	0,596	0,708	0,819	0,930	1,042	1,154	1,265	1,377	1,489	1,601	1,712	1,950	2,159	2,383	2,606	2,830	3,053	3,500	3,947	4,394		kg/m	
13	0,095	2,41				0,995	1,185	1,375	1,564	1,754	1,944	2,134	2,324	2,514	2,704	2,894	3,298	3,653	4,033	4,413	4,793	5,173	5,932	6,692	7,452		lbs/foot		
						0,668	0,796	0,923	1,050	1,178	1,306	1,433	1,561	1,689	1,817	1,944	2,216	2,454	2,710	2,965	3,220	3,476	3,986	4,496	5,007			kg/m	
12	0,109	2,77				1,555	1,773	1,992	2,210	2,428	2,646	2,865	3,083	3,301	3,765	4,175	4,611	5,048	5,484	5,921	6,794	7,667	8,540				lbs/foot		
						1,044	1,191	1,338	1,485	1,631	1,778	1,925	2,071	2,218	2,529	2,805	3,098	3,393	3,685	3,978	4,565	5,151	5,738					kg/m	
11	0,120	3,05										2,443	2,653	2,893	3,133	3,373	3,614	4,125	4,575	5,056	5,537	6,017	6,498	7,459	8,421	9,382		lbs/foot	
												1,642	1,782	1,944	2,105	2,266	2,428	2,771	3,074	3,397	3,720	4,043	4,366	5,012	5,658	6,304		kg/m	

## Toleranslar ASTM A 450'ye uygun

NOMINAL W.T	DIŞ ÇAP						UZUNLUK			
			+		-		+		-	
Medium -Sized Minimum	Size	inç	mm	inç	mm	inç	mm	inç	mm	
+10% +18%	<1"	0,004	0,101	0,004	≈0,101	1/8"	3,18	0	0	
	1" : 1 1/2"	0,006	0,152	0,006	≈0,152					
-10% -0%	1 5/8" : 1 7/8"	0,008	0,203	0,008	≈0,203					
Butun Ölçüler	2" : 2/4"	0,010	0,254	0,010	≈0,254	3/16"	4,76	0	0	
	2 1/2" : 2 3/4"	0,012	0,304	0,012	≈0,304					
+10% +20%	3" : 4"	0,015	0,381	0,015	≈0,381					
-10% -0%	4" 1/2" : 5"	0,015	0,381	0,025	≈0,635					

Tubes according to NF A 49-247 DIN 28181