

**ASTM A519-89/ASME SA519 SEAMLESS CARBON AND ALLOY STEEL MECHANICAL TUBING**

1. Scope

1.1 this specification covers several grades of carbon and alloy steel seamless mechanical tubing. The grades are listed in Tables 1, 2, and 3. When welding is used for joining the weldable mechanical tube grades, the welding procedure shall be suitable for the grade, the condition of the components, and the intended service.

1.2 This specification covers both seamless hot-finished mechanical tubing and seamless cold-finished mechanical tubing in sizes up to and including 12 3/4 in.(322.8mm) outside diameter of round tubes with wall thickness as required.

1.3 The tubes shall be furnished in the following shapes, as specified by the purchaser: round, square, rectangular, and special sections.

1.4 Supplementary requirements of an optional nature are provided and when desired shall be so stated in the order.

1.5 The values stated in inch-pound units are to be regarded as the standard.

JIS Number and Corresponding Foreign Standards

JIS			ASTM			BS			DIN			NF			ISO			Index Number
Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	
G3445	STKM11A	C	A512	MT1010	C	1717	ERWC1	C	2391	St30Si	C				3304	R28	C	C017
			A513	MT1010	C					St30A1	C				3305	"	C	
									2393	St28	C				3306	"	C	
										RSt28	C							
									2394	St28	C							
										USt28	C							
										RSt28	C							
	STKM12A	C	A512	MT1015	C	1717	ERWC2	C	2391	St37-2					3304	R33	C	
			A513	MT1015	C	6323	HFS3	C		RSt37-2					3305	"	"	
	STKM12B	C	A512	MT1015	C				2394	St37-2					3306	"	"	
			A513	MT1015	C					Ust38-2								
			A519	MT1015	C					RSt-2								
	STKM12C	C				1717	CEWC2	C				A49-322	TU37b	C				

						"	CFSC3	C				A49-327	TU37b	C				
						6323	CFS3	C										
						"	CFS3A	C										
	STKM13A	C	A312	MT1020	C	1717	ERWC3	C	2391	St45	C	A49-324	TU37b	C	2937	TS4	C	
			A513	MT1020	C				2393	St44-2	C	A49-330	TU37b	C	3304	R37	"	
									2394	St44-2	C	A49-343	TU38b	C	3305	"	"	
	STKM13B	C	A513	MT1020	C										3306	"	"	
	STKM13C	C				1717	CEWC3	C										
						"	CFSC4	C										
						6323	CFS4	C										
	STKM14A	C	A513	MT1020	C	6323	HFS4	C							2937	TS9	C	
															3304	R42	"	
	STKM14B	C				6323	HFS5	C							3305	R42	C	
	STMK14C	C													3306	"	"	
	STKM15A	C	A513	1030	C													
			A519	1030	C													
	STKM15C																	
	STKM16A	C	A519	1040	C							A49-311	TUXC35	C				
												A49-312	TUXC35	C				
	STKM16C	C																
	STKM17A	C	A519	1050	C	6323	HFS8	C										
	STKM17C	C				6323	CFS8	C										
	STKM18A	C	A519	1518	C	1717	ERWC5	C				A49-310	TU52b	C				
												A49-311	TU52b	C				
												A49-312	TU52b	C				

	STKM18B	C									A49-321	TU52b	C				
											A49-323	TU52b	C				
											A49-326	TU52b	C				
	STKM18C	C									A49-330	TU52b	C				
											A49-341	TS42a	C				
											"	TS47a	C				
											A49-343	TS18M5	C				
	STKM19A	C	A519	1524	C				2391	ST52	C			2937	TS18	C	
									2393	ST52-3	C			2938	Gr.1	C	
									2394	ST52-3	C			3304	R50	C	
														3305	R50	C	
														3306	R50	C	
	STKM20A	C															

JIS Number and Corresponding Foreign Standards

JIS			ASTM			BS			DIN			Index Number
Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	
G3441	SCr420TK	Cr										C018
	SCM415TK	CrMo										
	SCM418TK	CrMo				6323	CFS10	CrMo				
	SCM420TK	CrMo	A519	5120	CrMo							
	SCM430TK	CrMo	A519	4130	CrMo							
	SCM435TK	CrMo	A519	4135	CrMo							
	SCM440TK	CrMo	A519	4140	CrMo	6323	CFS10	CrMo				