

Fillet Welding

Simplified Travelling Carriage with Various Models

It is necessary to support the weight of the welding torch and maintain wire target position correctly in order to obtain an excellent welding bead in semiautomatic welding. This requires a skilled welder, Carriage hold the welding torch for welding operators and carry out stable welding by travelling and tracking vertical plate by itself. It solves at a stroke, therefore, the problems of welding fatigue and skill required for high quality welding. Carriage are small and convenient welding carriages and there are various types for different purposes and applications. One operator can handle several machines at a time increasing operational efficiency per operator.

APPLICATIONS

Automatization of welding of ships, steel frames, bridges, etc.

CHARACTERISTICS

1. Putting stress on portability. Travelling is stable in horizontal fillet welding of even inclined or curved plates since, while the four-wheel carriages travel.
2. Little skilled welding technique is required since they travel stably tracking along the vertical plate.
3. They are small, light and easy to handle and, therefore, can be used for a wide range of applications.
4. Due to an automatic stop mechanism, one operator can handle several Carriage simultaneously assuring high efficiency and labor saving.

RECOMMENDED WELDING WIRES

Base metal	Brand Name	Type of Wire
Mild Steel and 490MPa High Tensile Strength Steel	SF-1 SM-1F	Seamless Flux Cored Arc Welding Wire
	YM-26 YM-28	Gas Metal Arc Welding Wire

TYPICAL FILLET WELDING CONDITIONS OF SF-1

Position	Wire Dia. mm	Leg Length mm	Welding Conditions		
			Current A	Voltage V	Speed cm/min
Horizontal fillet	1.2	4	220	27	70
		6	270	29	50
		8	300	30	35
	1.4	4	260	28	70
		6	320	31	50
		8	350	33	35
	1.6	4	300	29	80
		6	350	32	50
		8	400	34	35
Flat fillet	1.2	6	280	29	50
	1.2	8	280	29	40
	1.4	14	380	38	20~23