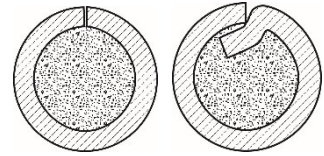


GRADE
CLASSIFICATION FEATURES
STRUCTURE TYPE
PP-Sv-08G2S

 TUU 25.9-21459234-022:2015
 AWS A5.20 E71T-1

 Diameter: 1.2 – 4.0 mm
 Shielding: flux, CO₂, Ar + CO₂
 Structure: tubular, overlapping
 Core type: rutile

General description

Flux-cored wire of **PP-Sv-08G2S** grade is designed for submerged-arc or gas-shielded arc welding of carbon and low-alloy structural steel grades, as well as for repair hardfacing or subbing before hardfacing with wear-resistant hard-alloy wire grades. It is desirable to weld on metal over 3 mm thick using reversed polarity direct current.

Welding process properties

- Steady arcing, fine-droplet metal transfer, reduced spattering.
- Good weld formation, easy slag separation, high cracking resistance.
- Wire consumption ratio $K_C = 1.05 \sim 1.15$.

Operating conditions (Ar + CO₂-shielded)

Wire diameter, mm	Current, A	Voltage, V	Wire stick-out, mm
1.6	150 – 250	22 – 26	15 – 30
2.0	150 – 300	22 – 29	15 – 30
2.2	180 – 320	23 – 30	15 – 30
2.4	200 – 350	24 – 30	20 – 35

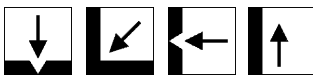

Typical chemical composition and mechanical properties of the weld metal

C	Mn	Si	S	P
max 0.1	1.1...1.5	0.3...0.9	max 0.025	max 0.030

Ultimate tensile strength, UTS, MPa	Yield point, σ_Y , MPa	Tensile strain, δ , %	Impact toughness, KCV, α_{notch} , J/cm ² , at t°C			
			+ 20	- 20	- 30	- 40
520 – 650	min 440	min 20	-	-	-	-

Process features

- The wire can be made in a version for welding with the arc submerged in flux of **EFA-1**, AN-348A, OSTs-45, AN-60, AN-47 grades.

- Welding positions: \varnothing 1.6 – 1.8 mm:  \varnothing 2.0 – 4.0 mm: 

- Wire diameters up to 2.2 mm can be supplied on metal spools K-300 (15 kg).

Application

Welding of various machinery assemblies, vessels, tanks, process pipelines, construction metal structures, ship superstructures, etc. Can be used for repair hardfacing or as a subbing layer before hardfacing of high-strength and wear-resistant alloys.

