

## Classification

AWS A5.9

EN ISO 14343-A

ER308L

S 19 9 L

## Characteristics and typical fields of application

**Avesta S 308L S** is designed for submerged arc welding of stainless steels grade like 1.4301/ASTM 304. The wire can also be used for welding titanium and niobium stabilised steels such as ASTM 321 and ASTM 347 in cases where the construction will be used at temperatures not exceeding 400°C. For higher temperatures a niobium stabilised consumable such as Avesta 347/MVNB is required.

## Base Materials

ASTM 304, 304L, 304LN 321

EN 1.4301, 1.4307, 1.4311, 1.4541

## Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Cr	Ni
Wire	0.02	0.40	1.70	19.8	9.4

## Typical mechanical properties of all-weld metal

Avesta S 308L S with flux combination	Yield strength R <sub>e</sub> N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J		
	MPa	MPa	%	+20°C	-40°C	-196°C
Avesta 805	410	580	36	85	60	-
Avesta C 807	400	570	44	110	-	35
Marathon 431	410	580	36	85	-	32

## Welding Recommendation

Re-drying of sub arc Flux 250-300°C, for 2 hours

Intepass temperature : Max. 150°C  
Heat Input : Max. 2.0 KJ/mm

## Size and Packaging

Size mm	Spooling	Weight (Kg)
2.0	Basket (K415)	25
2.4	Basket (K415)	25
3.2	Basket (K415)	25
4.0	Basket (K415)	25