Choosing the Right Solar Flux Product for Your Project

Types of Solar Flux

Solar Flux Type B
For welding all steels, especially stainless steels, **except** high nickel alloys (those containing over 25% nickel). See Application Chart, below.

Solar Flux Type I
For welding high nickel alloys (those containing at least 25% nickel). See Application Chart, below.

Note: The type of Solar Flux needed is determined by the nickel content of the base metal only. With limited exceptions, the welding method used will not be a factor in determining the correct Solar Flux type for the project.

Solar Flux Application Chart

In cases where two choices are listed below, the type of Solar Flux listed first is preferable.

Material	Shielded Metal Arc (SMAW)	Gas Metal Arc (GMAW-MIG) Gas Tungsten Arc (GTAW-TIG) Flux Cored Arc (FCAW) Submerged Arc (SAW) Atomic Hydrogen (AHAW)	Oxyacetylene
For mild and low alloy steels, e.g.			
AISI 1010	B	B	B
" 1020	B	B	B
" 1030	B	B	B
" 4130	B	B	B
" 4140	B	B	B
" 4340	B	B	B
For the 18-8 stainless steels			
AISI 301	B	B	B
" 302	B	B	B
" 302B	B	B	B
" 304	B	B	B
" 304L	B	B	B
" 305	B	B	B
" 308	B	B	B
" 316	B	B	B
" 316L	B	B	B
" 317	B	B	B
" 317L	B	B	B
" 321	B	B	B
" 347	B	B	B
" 348	B	B	B
For other stainless steels			
AISI 201	B	B	B
" 202	B	B	B
" 309	B	I or B	I or B

Material	Shielded Metal Arc (SMAW)	Gas Metal Arc (GMAW-MIG) Gas Tungsten Arc (GTAW-TIG) Flux Cored Arc (FCAW) Submerged Arc (SAW) Atomic Hydrogen (AHAW)	Oxyacetylene
For other stainless steels, cont'd			
AISI 309S	B	I or B	I or B
" 310	B	I or B	I or B
" 310S	B	I or B	I or B
" 314	B	I or B	I or B
" 403	B	B	B
" 405	B	B	B
" 409	B	B	B
" 410	B	B	B
" 412	B	B	B
" 414	B	B	B
" 416	B	B	B
" 420	B	B	B
" 430	B	B	B
" 431	B	B	B
" 442	B	B	B
" 446	B	B	B
" 501	B	B	B
" 502	B	B	B
" 505	B	B	B
For precipitation hardening stainless steels, chrome-moly steels, and all other alloys containing less than 25% nickel			
Various	B	B	B
For high nickel super alloys containing 25% nickel or over, e.g. Monel, Inconel, Incoloy, and similar grades			
Various	I	I	I