



## UNITED ALLOY # STERLIUM PLUS

Be insured in quality, Be insured in service, Be insured in “United Alloys.

UNITED ALLOY is uniquely different from other available alloys. Combining the highest purity metals available, stringent quality control, special de-oxidizers and grain refiners, produce trouble-free, superior quality castings and fabrication or rolling (hand-made).

UNITED ALLOY # STERLIUM PLUS™ is a proprietary deoxidized Germanium Based Sterling Silver for Superior Sterling Silver. This sterling silver grain contains the technical element metals for excellent tarnish resistance, high hardness and the unique metallic silver color with very high luster in finished product and better solidification characteristics to reduce shrinkage porosity, and eliminate fire scale to make less finishing rejects. This Germanium Sterling Silver Grain can be used for regular casting, stone set in place casting, rolling (hand-made) and also continuous casting Machine.

This Sterling Silver grain is already mixed can be used without adding any metal.

1.) Melt Temperature for Casting : 1,000 - 1050 °C

2.) Flask Temperature :

WEIGHT	CENTRIFUGAL CAST	VACUUM CAST
Light	530 - 550 °C	620 - 680 °C
Medium	490 - 520 °C	550 - 590 °C
Heavy	450 - 480 °C	480 - 540 °C

3.) Quench Time : After casting, wait 20 - 25 minutes before quenching flask.

4.) Pickling : United's Brite-Cast™ (Ammonium Bi-fluoride), Sparex # 2 (sodium bisulfate), 10% - 20% Sulfuric Acid.

Rubber gloves and safety glasses are recommended when using acid pickle.

5.) Re-using : We recommend a 50% fresh / 50% Scrap mix, Cleans scrap well before re-melting.

6.) Specific Gravity : 10.33

7.) Hardening : Place in a pre-heated oven set at 300 °C for 2 hour and air cool.

8.) Soldering : United Silver Solder Alloy # SSA or already mixed silver solder sheet.

Laser welding is recommendation for matching metallic white color.

9.) Notes : Melt temperature may vary with type of unit.

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