

MIL-S-24149/2D (SH)

REQUIREMENTS:

1. Materials:

- (a) Studs – Aluminum Alloy
- (b) Arc shields (ferrules) – Heat resistant ceramic

2. Tensile strength of stud – 35,000 ln/in², minimum.

3. Chemical composition – Stud shall be of the chemical compositions indicated in table XV at the option of the contractor.

TABLE XV. Chemical composition (single values are maximum).

Alloy no.	Copper	Magnesium	Manganese	Silicon	Iron	Zinc	Titanium	Chromium	Others		Aluminum
									Each	Total	
5083	0.10	4.0/4.9	0.30/1.0	0.40	0.40	0.40	0.15	0.05/.25	0.05	0.15	Remainder
5086	.10	3.5/4.5	.20/.70	.40	.50	.25	.15	.05/.25	.05	.15	Remainder
5356	.10	4.5/5.5	.05/.20	.25	.46	.10	.06/.20	.05/.20	.05	.15	Remainder
5456	.10	4.7/5.5	.50/1.0	.25	.46	.25	.20	.05/.20	.05	.15	Remainder

- 4. Weld-end design – The stud manufacturer shall be responsible for design of weld ends that will provide a sound weld when used with the proper ferrule.
- 5. Part number – The part number consists of the prefix letter “M” and the specification sheet number plus the applicable dash number.

Examples:

M24149/2-7 Type III, class 1 welding stud, 0.1900-32 UNF-2A thread, 2.000 inch length

M24149/2-708 Type IV, class 5 welding stud, 0.2500-20 UNC-2B thread, 2.000 inch length

NOTES:

- 1. Changes from previous issue – Revisions letters are not used to denote changes due to the extensiveness of the changes.

Preparing activity:
Navy – SH
(Project 5307-N025)