



## All dimensions are in inches.

	Thread Size	Туре		Thread	Ohank		Min.	Hole Size	0	-	-	Min. Dist.
		Steel	Stainless Steel	Code	Code	A Max.	Sheet Thickness	In Sheet +.004000	Max.	+.000010	±.004	Hole C/L To Edge
	.112-40 (#4-40)	WN	WNS	440	0	.030	.030	.173	.171	.31	.063	.15
ΙED	.138-32 (#6-32)	WN	WNS	632	0	.030	.030	.193	.191	.34	.093	.17
UNIF	.164-32 (#8-32)	WN	WNS	832	0	.030	.030	.218	.216	.37	.107	.18
	.190-24 (#10-24)	WN	WNS	024	0	.030	.030	.250	.248	.44	.155	.22
	.190-32 (#10-32)	WN	WNS	032	0	.030	.030	.250	.248	.44	.155	.22
	.250-20 (1/4-20)	WN	WNS	0420	0	.048	.050	.316	.315	.52	.185	.26

## All dimensions are in millimeters.

METRIC	Thread Size x Pitch	Туре		Thread	Chank		Min.	Hole Size		E	т	Min. Dist.
		Steel	Stainless Steel	Code	Code	Max.	Sheet Thickness	In Sheet +0.1	Max.	-0.25	±0.1	Hole C/L To Edge
	M3X0.5	WN	WNS	M3	0	0.76	0.77	4.4	4.37	7.85	1.5	4.47
	M4X0.7	WN	WNS	M4	0	0.76	0.77	5.6	5.57	9.4	2.6	5.2
	M5X0.8	WN	WNS	M5	0	0.76	0.77	6.4	6.33	11.2	3.8	5.65
	M6X1	WN	WNS	M6	0	1.24	1.25	8.1	8.03	13.2	4.6	6.7

Fastener Material: WN – Carbon Steel

WNS – 300 Series Stainless Steel

Threads: Internal, ANSI B1.1, 2B/ANSI/ASME B1.13M, 6H

**Finish:** WN – CU - Copper Flash

WNS – Passivated and/or tested per ASTM A380.

## **INSTALLATION**

- With a PEM weld nut inserted in the punched or drilled hole of the proper size (see above), bring the electrode force up sufficiently to clamp the projections of the fastener firmly against the sheet without embedding any portion of the projections. Be sure the electrodes are centered, and that the electrode faces are flat so that the force is applied evenly to all three projections.
- 2. Set the current or heat regulator on the low side and adjust along with the weld time until a good weld is produced. For mild steel, which has a medium electrical resistance, there is a wide range of adjustments possible. For austenitic stainless steel, which has a high electrical resistance, the range is narrow at low heat.
- Adjust squeeze time so that there is adequate time for the electrodes to close and develop proper forces (suggested initial setting 35 cycles). The weld period should be established by starting with the settings

suggested in the tables on page WN-4. As indicated above for current adjustments, a wide range of time is possible with mild steel, but there is a limited range with stainless steel. If weld time starts too soon, and proper welding is not achieved, the squeeze time should be lengthened. Also, the electrodes should be moved closer together so that they require less travel time to close on the work. Longer squeeze times will have no effect on the quality of the weld. However, they do affect productivity and decrease the number of weld nuts that can be installed per hour. Hold time is set long enough to permit cooling and solidification of the weld before removing the electrodes. Start with 15 cycles and lengthen if necessary.