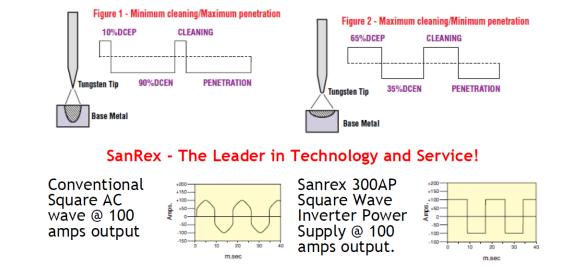
## **AC TIG Wave Shapes**

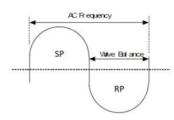
## Effects of Wave Balance Adjustment on AC/GTAW - Complete Welding Control.

The 300AP AC output uses advanced embedded micro-processor technology. This control of the wave form changes the amount of time spent on DCEP (cleaning) and DCEN (penetration) parts of each cycle, increasing arc stability. The DCEP cycle insures that the aluminum oxide is thoroughly removed, allowing the DCEN cycle a thorough penetration of the base metal. Both cycles enhance weld quality and significantly improve performance. When a conventional system changes its wave balance, there can be as much as a 50% increase in amperage draw. Sanrex® 300AP amperage draw is unaffected by any adjustments. The 300AP increases efficiency and eliminates tungsten spitting and enables the use of a smaller diameter tungsten electrodes to operate at a higher current levels. Figures 1 & 2 show the difference in TIG torch electrode.

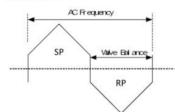


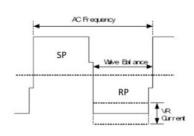
## **300AP AC Waveshapes**

AC Soft









AC Soft includes all the benefits of AC square wave with the addition of maximum puddle control and good wetting action of the weld puddle which helps to overcome surface tension.

Triangle Wave provides the punch of the peak amperage, while reducing overall heat input. Fast puddle formation increases travel speed, limiting heat input and reducing weld distortion, especially on thin materials.

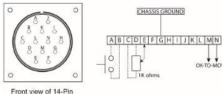
VR Current (Variable of Reverse Polarity Current) is the independent adjustment of the RP Current half cycle of the AC wave to precisely control the heat input to the work and the electrode.

The SP amperage controls the amount of heat directed to the work, while the RP amperage effects the arc cleaning action.

VR Current along with AC Wave Balance dramatically effects the RP cleaning action. Reducing VR Current will reduce the heat input to the TIG Torch and reduce electrode geometry degradation and increases heat input to the work piece for increased travel speeds. Increasing VR Current will enhance cleaning when welding on a dirty work piece.

Simple Automation Interface for Fixed, hard and Robotic automation applications includes Remote Weld ON/OFF, Remote Amperage Control, OK-to-Move Weld Arc ON signals.

OK-TO-MOVE



Front view of 14-Pin Socket Receptacle