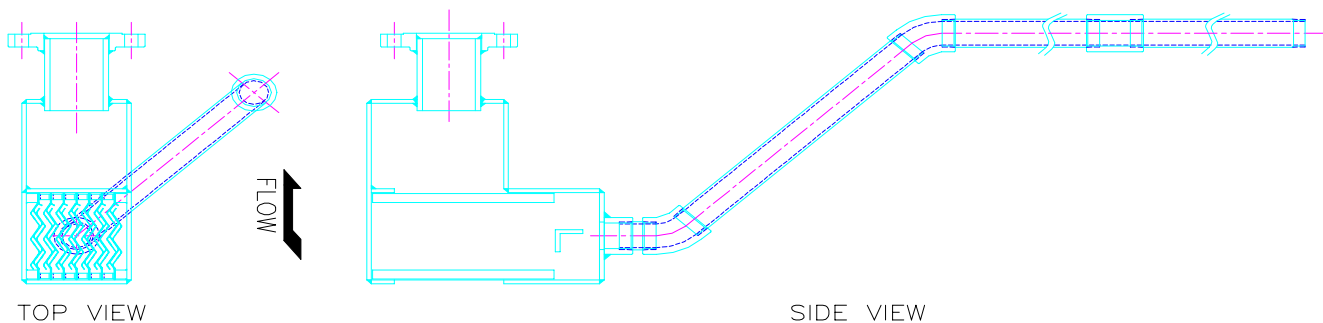


AVB VANE BUNDLE INSTALLATION INSTRUCTIONS



INSTALLATION & OPERATION

1. VANE UNIT WILL BE SHIPPED FULLY ASSEMBLED; DOWNCOMER PIPING WILL BE SHIPPED LOOSE.
2. PASS VANE BUNDLE INTO VESSEL THROUGH VESSEL MANWAY.
3. MOUNT VANE BUNDLE INTO PLACE BY BOLTING VANE BUNDLE'S 3" - 150# RFSO FLANGE TO VESSEL'S INTERNAL 3" - 150# RFSO FLANGE. INSTALL APPROPRIATE GASKET BETWEEN THE TWO FLANGES. TIGHTEN FLANGE BOLTS.
4. PASS DOWNCOMER PIPING THROUGH VESSEL MANWAY, AND ASSEMBLE IN ACCORDANCE WITH ANDERSON DRAWING 51L-5086.
5. DOWNCOMER PIPE MUST BE SECURED TO VESSEL WALL BY MEANS OF A BRACE. THIS BRACE PREVENTS DAMAGE TO THE VANE BUNDLE FROM POSSIBLE VIBRATION. BRACE AND INSTALLATION OF BRACE BY OTHERS.
6. ONCE VANE BUNDLE IS SECURED VIA FLANGE AND BRACING, THE VESSEL CAN BE SEALED AND IS READY FOR OPERATION.
7. BEFORE OPERATION, WE RECOMMEND THE VESSEL BE FILLED WITH WATER TO A LEVEL APPROX. 6" ABOVE THE BOTTOM OF THE DOWNCOMER. THIS WILL PREVENT GAS FROM BYPASSING THE SEPARATION VANES AND RISING THROUGH THE DOWNCOMER. WE RECOMMEND THIS MINIMUM LIQUID LEVEL BE MAINTAINED THROUGHOUT OPERATION.

MAINTENANCE

1. WE RECOMMEND INSPECTION INTERVALS OF; ONCE A YEAR MINIMUM, OR YOUR STANDARD MAINTENANCE SCHEDULE.
2. DURING INSPECTION, VERIFY THAT VANE AND DOWNCOMER ARE SECURELY HELD IN PLACE BY FLANGE AND BRACE. VISUALLY INSPECT VANE FACE FOR SIGNS OF SOLIDS BUILD UP OR SCALING. IF PRESENT REMOVE VANE BUNDLE, BY REVERSING INSTRUCTIONS ABOVE, AND EITHER STEAM CLEAN, OR ACID DIP IN A SOLUTION THAT WILL NOT HARM VANES OR BOXING, BUT WILL DISSOLVE SOLIDS BUILD UP.
3. RE-INSTALL IN ACCORDANCE WITH ABOVE.