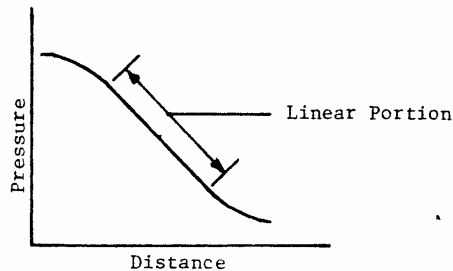




INSTRUCTIONS AIR TOOLING INSPECTION

TRUE ZERO POSITION OF AIR TOOLING ON THE PRESSURE/DISTANCE CURVE



The above diagram depicts the basic Pressure/Distance Curve (P.D.C.) against which the Mahr Federal Inc. Dimensionair System is based. It is the straight or linear portion of the curve that we use to provide assurance of obtaining linear readings and setting with a single master.

To accomplish this, it is necessary to calibrate the air tooling so that the distance, in combination with a fixed preset pressure, fall on, or very near the center of the linear portion of the P.D.C. with a correct setting master in place. (We define distance as a specified air flow characteristic and it should not be confused with any single physical dimension of the jet). This distance will be affected in usage by jet wear caused by air erosion and minute jet scratching. The affect of any distance change will become evident by the gradual shifting of the Dimensionair hand to the left of the True Zero Position (T.Z.P.). As the hand position changes, so does the operating range of the air tooling change until the air system is no longer operating in the linear portion of the P.D.C.

A recommended procedure to monitor hand shift from T.Z.P. on the P.D.C. is through use of a zero restrictor by comparing its zero position on the Dimensionair with that of the air tooling and master.

NOTE: Allowable hand shift from wear is allowed to within limits of the attached chart.

Before repair or replacement of the air tooling is recommended, the following procedure should be followed:

1. Air tooling and master must be thoroughly cleaned with solvent. Cleaning air escape grooves and jet recess may require use of a wooden stick or non-scratch brush.
2. Check the linearity of the Dimensionair according to the instructions on the inside cover of the appropriate AMR Kit.

3. Tooling Inspection

- 3.1 Place the zero restrictor, as normally used, on the front of the Dimensionair or end of hose.
- 3.2 Set zero on Dimensionair by adjusting the zero setting knob.
- 3.3 Replace the zero restrictor with the air tooling to be checked and place master on/in the air tooling so that the jets are at the approximate mid-point of the master. Without any adjustment of the zero adjustment knob, the hand on the Dimensionair should fall within the limits specified on the following chart.

DIMENSIONAIR	<u>MEASURING SIZE</u>	<u>ACCEPTABLE LIMITS</u>	
D-2500/D-4000	.123" - .140"	Left .0003"	Thru Right .0005"
D-2500/D-4000	.140" - .185"	Left .0005"	Thru Right .0005"
D-2500/D-4000	.185" - .248"	Left .0007"	Thru Right .0005"
D-2500/D-4000	.248" - UP	Left .001"	Thru Right .0005"
D-5000/D-8000	.123" - .140"	Left .00015"	Thru Right .0005"
D-5000/D-8000	.140" - .185"	Left .00025"	Thru Right .0005"
D-5000/D-8000	.185" - .248"	Left .00035"	Thru Right .0005"
D-5000/D-8000	.248" - UP	Left .0005"	Thru Right .0005"
D-10000/D-16000	.062" - UP	Left .0003"	Thru Right .0003"
D-20000/D-32000	.062" - UP	Left .00015"	Thru Right .00015"

4. Excessive reading to right on dial is caused only by contamination and air tooling should be re-cleaned.
5. Readings to left of acceptable limits indicates potential dial readings beyond the linear portion of the P.D.C. and air tooling should be reworked or replaced.