

FOR DUAL MASTER SYSTEMS . . .

SERIES 10 COMPARATORS

Western Gage Corporation
Edmunds Gage
Moore Products
Air Gage Products
Sheffield A-E columns
Other adjustable dial type gages & adjustable
air-electronic columns

SERIES 40 COMPARATORS

Sheffield flow meter (glass tube) columns (air
gage members with two $\varnothing.078$ " nozzles).
Series 40 members not available in sizes
below .323".

SERIES 50 COMPARATORS

Sheffield flow meter columns used with small
nozzle gaging members. These members
require the use of fractional amplification
scales:

Jet size	Scale correction
.078	full amplification
.047	3/4 amplification
.031	1/2 amplification
.023	3/8 amplification

FOR SINGLE MASTER SYSTEMS . . .

SERIES 63 COMPARATORS

Mahr-Federal Dimensionair D-5000, D-8000 /
EAG-32XXX
Scale $\pm.00075$ " Tool Code 20

SERIES 64 COMPARATORS

Mahr-Federal Dimensionair D-2500, D-4000 /
EAG-31XXX
Scale $\pm.0015$ " Tool Code 50

SERIES 71 COMPARATORS

Mahr-Federal Dimensionair D-20000, D-32000 /
EAG-34XXX
Scale $\pm.00015$ " Tool Code 5

SERIES 72 COMPARATORS

Mahr-Federal Dimensionair D-10000, D-16000 /
EAG-33XXX
Scale $\pm.0003$ " Tool Code 10

SERIES 85 COMPARATORS

Mahr-Federal Dimensionair D-1250 / EAG(N.A.)
Scale $\pm.003$ " Tool Code 100

Series classifications are used to define air gage members and air comparator instruments that are normally interchangeable. Order codes for gaging members utilize the series classification numbers with the last digit modified to indicate the nominal operating clearance between the gaging member and the workpiece. In all cases, the best accuracy will be obtained by specifying gaging members with the lowest practical clearances. See the gaging member specifications on pages 16, 18 & 20 for additional data on air probes and air ring gages.

Series 10 comparators are back pressure type instruments that incorporate adjustable flow restrictors. These instruments accommodate a wide range of nozzle sizes, so practically all sizes of gaging members can be operated. The wide range of adjustment of these instruments permit them to also operate members made for flow meter type column gages (series 40 & 50). Being user calibrated, two setting masters are required for each gaging member.

Series 40 & 50 are flow meter type column instruments. Series 40 columns have "full amp" scales that match the magnification labels on the flow tubes. Obtaining the correct magnification on these columns requires that the gaging member have a minimum jet size of .062". Series 50 columns utilize special scales that allow for the reduction in magnification that occurs when smaller than standard jets are incorporated in a gaging member. The appropriate "fractional amp" scales for various jet sizes are shown in the table to the left. (e.g. an air probe with .047 \varnothing jets would be engraved "3/4-AMP". When the probe is used on a column with a 10,000:1 tube, the 7,500:1 scale should be used). Series 10 gaging members have significantly larger nozzle recess depths than the series 40 & 50 members and, generally, will not operate on flowmeter columns. Like series 10 instruments, two setting masters are required for each gaging member.

Series 60, 70 & 80 comparator instruments are back pressure type instruments in which the flow restrictors are not user adjustable. These instruments are factory calibrated to predetermined pneumatic scale factors using master orifices. Gaging members made for these instruments also have gaging nozzles that are sized to the matched scale factor for the comparator series they are to be used with. Since scale factors of both the comparator and the gaging member are standardized, gaging members for these instruments require only a single setting master. Series 70 gaging members utilize smaller jets, cost more and have less gaging range than the series 60 members. Consequently it is recommended that they be used only in applications requiring the small jet holes.