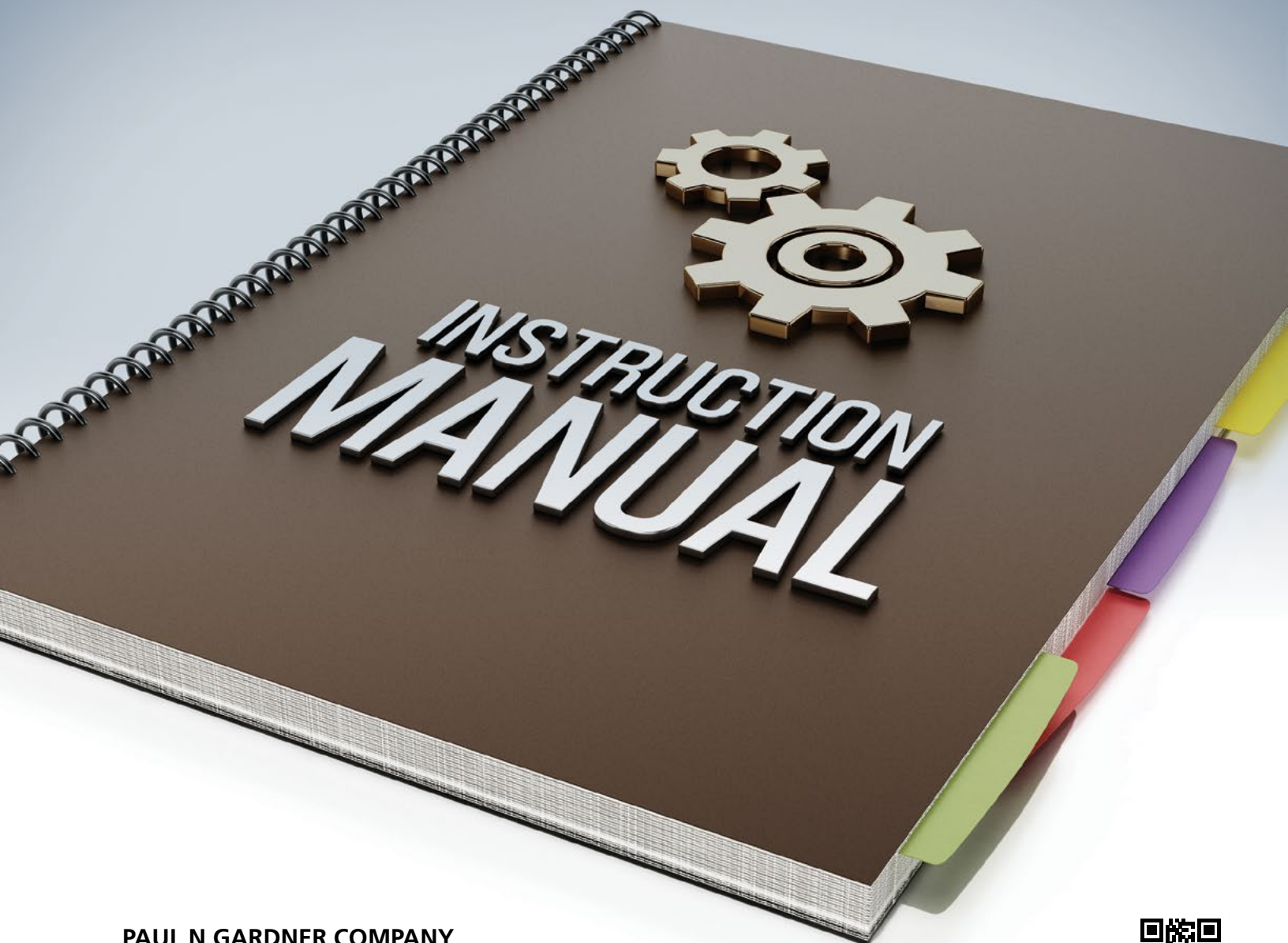




PAUL N GARDNER COMPANY
9104 GUILFORD ROAD, SUITE H
COLUMBIA, MD 21046 USA

EMAIL: GARDCO@ALTANA.COM
PHONE: +1-954-946-9454



INSTRUCTIONS

GARDCO DISTRIBUTED PRODUCTS



Pentagon Mandrel Bend Test

Quick Start Manual

INSTRUCTIONS FOR USE

1. The preparation of the test specimens must be made with considerable care if good comparative and reproducible results are to be obtained. Improper base cleaning, resulting in poor adhesion, will normally result in a lower tolerated elongation. Coating thickness and uniformity is of paramount importance, not only due to the usual relationship of thickness with most physical characteristics but also due to the direct effect in the mandrel bend test. The test panels should be prepared in a manner and with a coating thickness as near as possible to that which will be encountered by the base - coating system process. Compensate for the direct effect of coating thickness in the Pentagon Mandrel Bend Test by adding the appropriate correction factor for each mil of coating thickness to the base.
2. Place the test panel with the uncoated side over, and in contact with, the selected mandrel with a minimum of two inches overhang and insure that there is clearance for the other end of the panel to pass the adjacent mandrel.
3. Using a steady pressure of the fingers, bend the panel approximately 180 degrees around the mandrel in about one second. Remove the panel and examine immediately for cracking of the coating visible to the unaided eye.
4. If cracking has not occurred, repeat the procedure using successively smaller diameter mandrels until cracking of the coating occurs or until the smallest diameter mandrel has been used. Record the smallest mandrel accommodated by the base-coating system or the total elongation determined.

