

PERFORMANCE INDICATORS pi SERIES
M(pi): Performance indicators for Magnetic Particle Inspection
AUTOMAG SHIMS

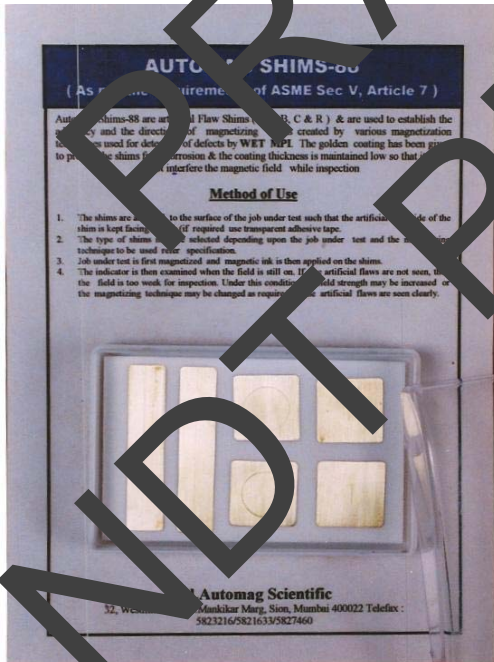
Automag Shims are used for establishing field direction and strength in multidirectional magnetization. It is vitally important that the field intensity in such magnetization is balanced in all direction so that field of one direction does not overwhelm the the other.

These shims are made of 1005 low carbon steel foil and are in accordance with MIL-STD-1949A and ASME section V, article 7 as regards the thickness of the foil and the depth and width of artificial flaws. There are three different types of shims designated as B, C, and R type.

PROCEDURE

1. The shims are attached by means of cello tape to various locations on the job such that the flat side is facing the job (type of shims depends upon the magnetization technique).
2. The job is then magnetized and magnetic ink is applied on the shim.
3. The particles are allowed to settle on the shims for 5 to 10 seconds.
4. The indicator is examined while the field is ON.

If the field is weak, the flaws will not be seen clearly. Under this condition the field shall be increased or the magnetization technique may be changed suitably and repeat the above procedure.



BENEFITS:

1. It is the most simplified procedure.
2. It improves productivity by minimizing magnetic shots.
3. Confirms reliability of the system by verifying direction and strength.
4. If properly used and stored, can be used for many applications.

IMPORTANT:

1. Gauss meter reading should be taken at the point of shim attachment.
2. The shim must be in close contact With the part and there should be not be any air gap.
3. Surface opposite to flaw should not be covered.