



CGM CIGIEMME S.p.A.



Controlli Non Distruttivi - Non Destructive Testing

TOOL STEEL RING



DESCRIPTION

The AS 5282 Tool Steel Ring is a useful accessory: it has holes of increasing depth starting from the edge, designed to simulate surface discontinuities. It is used to evaluate the penetration capacity of the magnetic field as a function of the current type, the current intensity and the type of magnetic powder used. The Tool Steel Ring is supplied with a certificate of conformity.

In compliance with: ASTM 1444/E1444M; ASME V; MIL-STD-1949A; McDonnell Douglas P.S. 21201; DPS 4.704; SAE-AS5282.

USER INSTRUCTIONS

STEP-BY-STEP DESCRIPTION

- 1. Equipment preparation:** place the ring on a non-ferrous central conductor with a diameter between 2.5 and 3.2 cm.
- 2. Amperage setting:** secure the central conductor between the head and tail of the test device and set the amperage of the equipment to the preset levels specified in the reference standard (AS 5282).



CGM CIGIEMME S.p.A.

Via Adda, 21 - 20073 Opera (MI) Italy - Tel.: +39 02 57.600.400 - Fax: +39 02 57.603.618

Web: www.cgm-cigiemme.com - Mail: cgm@cgm-cigiemme.it

N. Registro Imprese, C.F. e P.I.: 05732470967 - N. REA: Mi -1843908 - Capitale Sociale: EURO 500.000.00 I.V.

Informativa ex art. 13 D.Lgs 196/2003 e art. 13 del Reg. UE 2016/679 disponibile sul sito www.cgm-cigiemme.com, sezione "privacy policy"





CGM CIGIEMME S.p.A.



Controlli Non Distruttivi - Non Destructive Testing

- 3. Magnetization and particles application:** magnetize the ring according to the correct procedure, then apply the magnetic particles (wet or dry).
- 4. Check indications:** observe the ring to verify the presence of indications in artificial defects (drilled holes). The number of indications must meet or exceed the minimum requirement for the specific test setting.
- 5. Repeat for multiple settings:** if testing multiple amperages, proceed from the lowest value to the highest, demagnetizing the ring between tests.
- 6. Demagnetization and final cleaning:** after use, demagnetize the ring, clean it with a solvent (Velnet/Solnet is recommended) and apply a rust inhibitor for proper protection.

USAGE

The Tool Steel Ring can be used for the following purposes:

- **Verify equipment performance:** confirm (or otherwise) that the magnetization equipment is functioning correctly.
- **Verify process capability:** ensures that the entire magnetic particle inspection process is capable of detecting specific types of defects.
- **Monitor performance over time:** by performing periodic tests, any drops in equipment performance can be detected.

AVAILABLE MODELS

PART NUMBER	DESCRIPTION	REF.
04099890	Tool Steel Ring type AS 5282	88.7



CGM CIGIEMME S.p.A.

Via Adda, 21 - 20073 Opera (MI) Italy - Tel.: +39 02 57.600.400 - Fax: +39 02 57.603.618

Web: www.cgm-cigiemme.com - Mail: cgm@cgm-cigiemme.it

N. Registro Imprese, C.F. e P.I.: 05732470967 - N. REA: Mi -1843908 - Capitale Sociale: EURO 500.000.00 I.V.

Informativa ex art. 13 D.Lgs 196/2003 e art. 13 del Reg. UE 2016/679 disponibile sul sito www.cgm-cigiemme.com, sezione "privacy policy"

