

Micro Arc Oxidation (MAO) Processes

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Micro Arc Oxidation Processes on Aluminium, Magnesium and Titanium Alloys. These coatings find application in requirements like High electrically insulating surface, hard, abrasion resistance surface, corrosion resistance surface and for desired thermo-optical properties.



MAO Coated Components

Salient Features

Micro Arc Oxidation (MAO) process imparts hard Ceramic like coating on Aluminium, Magnesium and Titanium Alloys alloy substrates suitable for variety of applications.

Four surface engineering processes developed and qualified are:

- ✦ Micro arc Oxidation on Aluminium Alloys for thermal control application.
- ✦ Micro arc Oxidation based High Insulation (Electrical) coating on Aluminium Alloys for Bus-bar application.
- ✦ Micro arc Oxidation on Magnesium Alloy (AZ31-B) for thermal control application.
- ✦ Micro arc Oxidation on Titanium Alloy (Ti-6Al-4V) for thermal control application.

Technology Transfer

URSC-ISRO offers to transfer this technology Micro Arc Oxidation Processes developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

Technology Transfer & Industry Coordination Division (TTID),
Programme Planning and Evaluation Group (PPEG),

📍 U R Rao Satellite Centre (URSC), ISRO, HAL Airport Road,
Vimanapura Post, Bangalore – 560 017.

✉ Email-id: tt-icd@ursc.gov.in

🌐 <https://www.ursc.gov.in/industry/index.jsp>