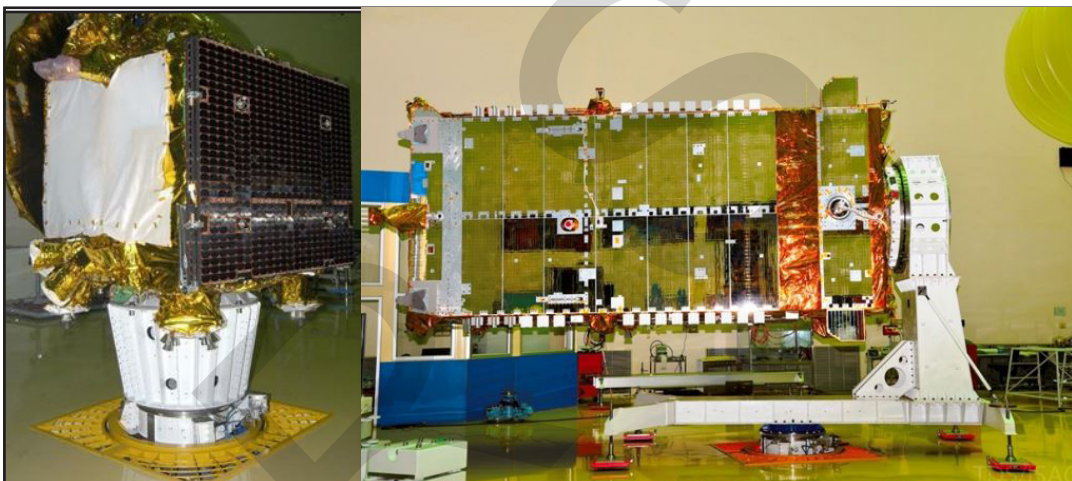


Mass Properties Measurement Machine

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Mass Properties Measurement Machine. It is designed and developed in-house at URSC and built with the support of Indian Industries. A single machine enables measurement of mass properties, avoids multiple handling of spacecraft and multiple machine referencing. Saves clean room area for positioning of three independent machines.



Salient Features

- ✦ Combines Mass, CG and MI measurement.
- ✦ Works on Air bearing to produce frictionless motion during measurements.
- ✦ Auto controlled during measurement processes.
- ✦ Adopts unique measurement methods and Error Minimizing Techniques, proprietary to URSC.
- ✦ Know-how for independent machines, lower range measurement available.
- ✦ New dual range variant design with higher and lower capacity is under realization.

Major Specifications

- ✦ Max. mass : 5500 Kg (Satellite with Positioning Devices)
- ✦ Sensitivity on mass : 10 gms
- ✦ Accuracy on mass : Better than ± 0.018 % of measured value
- ✦ Accuracy on CG Coordinate : 0.12 mm
- ✦ Max. Moment of Inertia(MOI) : 7500 Kg m^2
- ✦ Accuracy on MOI : 0.25 % of measured value

Technology Transfer

URSC-ISRO offers to transfer this technology of developed Mass Properties Measurement Machine 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),

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