

ASSEMBLY REFERENCE

Overmolded Magnets

Define the magnetic function, mechanical interface and verification plan together. Final requirements belong on the project drawing and agreed specification.



Product illustration. Geometry and configuration are project-specific.

Define the application.

Polymer environment

Specify temperature, chemicals, humidity, pressure, UV, sterilization, flame rating and expected service life for the polymer shell.

Insert definition

Provide magnet grade, coating, magnetization state, insert datum, keep-out zones, adhesive and the allowable magnetic shift.

Molded interface

Show clips, seals, ribs, bosses, draft, parting line, gate preference, ejection constraints and critical assembly dimensions.

Volume and process

State annual volume, cycle target, cavity strategy, traceability, cosmetic limits and any automotive or medical documentation needs.

VALIDATION PLANNING

Agree what success means.

Insert position

Measure magnet location, orientation, stand-off and critical molded dimensions against the functional drawing.

Magnetic output

Test flux, pull, switching or sensor response on the final molded component, not only on the loose magnet.

Environmental aging

Run the agreed temperature, humidity, chemical, pressure or sterilization exposure and retest function afterward.

Bond and shell integrity

Inspect voids, cracks, flash, weld lines, pull-off or torque retention and any leak or sealing requirement.

Define the next step.

Share your drawing, application conditions and target quantity for a material or assembly review.

Empire Magnets | rfq@china-empire.com | +86 574 8791 5261

Contact: Ningbo Empire Advanced Material Co., Ltd.
No. 2432 East Baizhang Road, Ningbo 315040, Zhejiang, China

ABOUT THIS EDITION

New editorial reference edition 2026.09-R1, compiled 2026-09-27. Catalogue data and selection questions are reorganized for clarity. This edition does not record an engineering approval or certify a measured production result.

Source: Empire Magnets existing product catalogue and technical-library archive. For a project-controlled specification, request an engineering review.