

ASSEMBLY REFERENCE

Halbach Arrays

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.

Working volume

Provide the field target, measurement plane, useful volume, air gap, field direction and allowable uniformity variation.

Array geometry

Share length, diameter, segment count, pole count, magnetization angle, keying features and non-magnetic structural parts.

Thermal and structural

Define temperature, vibration, centrifugal or transport loads, adhesive or mechanical retention and service-life requirements.

Assembly safety

Plan magnetized or unmagnetized assembly, handling fixtures, keep-away zones, polarity marking and packaging constraints.

VALIDATION PLANNING

Agree what success means.

3D field map

Map the field across the specified working volume using a calibrated Hall system and the released fixture or coordinate system.

Pole orientation

Verify segment polarity, magnetization angle, sequence and indexing before final bonding or encapsulation.

Uniformity and leakage

Report field uniformity in the working zone and stray-field readings at agreed external locations.

Mechanical retention

Test the final array under temperature, vibration or centrifugal conditions that represent the application.

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.