Rotary Hinge

**Company:** Advanced Materials Technology

**Application Sector:** Consumer Goods

**Requirements:** A normal clamshell phone provides more space for a bigger display than a Candy-bar phone, but clamshell phones with the rotary hinge help to create more viewing angles. The 2-degree-of-freedom movement made possible by the rotary hinge gives the consumers a swivel screen that fulfils the function of the phone and the camera.

**Benefits:** The characteristics of MIM in high strength, complex geometry and high volume production, enables it to be the preferred manufacturing technique for such metal hinges in consumer electronics. In particular, the use of rotary hinge allows the manufacturers to differentiate its products through strength, reliability and style. In essence the rotary MIM hinge portrayed a very strong product differentiation, and an ingenuity that will inspire others.

**Product Density:** 7.6g/cm³
**Product Tensile Strength:** 950MPa as sintered
**Product Hardness:** 25 HRC
**Final Weight:** Sintered part: Shaft (1.652g), Plate (1.639g)
**Finishing:** Shot peening, passivation, sizing

Promoting Powder Metallurgy Technology

www.epma.com/spotlightonpm