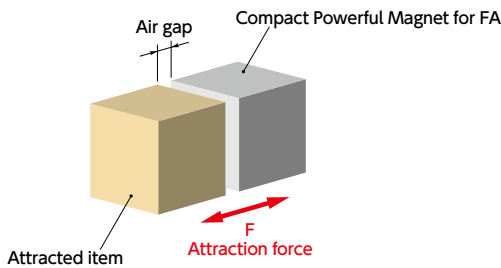
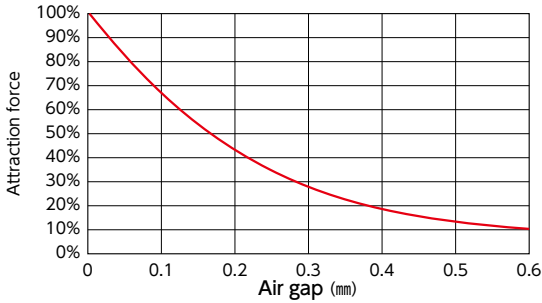


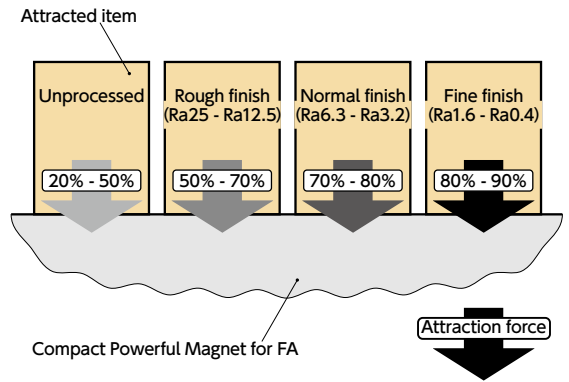
## Effect of air gap

The attraction force changes depending on the gap (air gap) between the compact powerful magnet for FA and the object to be attracted.



## Effect of surface roughness

The attraction force changes depending on the surface roughness of the object to be attracted. If a large attraction force is required, ensure that the surface of the object to be attracted has a suitable finish.



## Effect of material

The attraction force changes depending on the material of the object to be attracted.

Attraction force	Material
100%	Pure iron
99%	FCD400
95%	S15C
94%	SS400
93%	SM490
90%	S45C
90%	FC200
86%	SUS430
86%	S60C
84%	SCM440
65%	SKD2
0%	Non-iron materials

## Additional Modification

Hard ferrites, samarium-cobalt, and neodymium materials used for compact powerful magnets for FA are extremely hard and brittle materials, so additional machining is not possible. Alnico can be cut or polished using diamond tools.