There are basically two ways to increase the dielectric strength of the vacuum gap to the value needed for insulation at HV:

1. Increase the contact distance in a two contact configuration:
   breakdown in vacuum is a surface effect, completely governed by the contact surface condition. In SF6, breakdown is merely a volume effect that scales linearly with the gap length. The breakdown process is then mainly determined by the insulating medium and its pressure rather than by the contact configuration and condition.
   The dielectric strength linearly increases with the contact gap in case of gas; however, that in a vacuum shows good dielectric strength with small gap (even 2–4 mm gap) but gradually saturates for a longer gap length.

2. Place two or more gaps in series (multi break circuit breakers that typically ensure the
uniform voltage distribution across all breaks during normal and switching with grading capacitor): in case of ideal voltage sharing between the gaps, the necessary withstand voltage level can be achieved with a total contact distance smaller than it would be with a single gap.

Photo show two type of Siemens company VI for 72.5& 145 kv.