1. Reasons for selecting the theme (within 100 words)

A globe embodies geographical and humanistic meanings and symbolizes the vast world. This work adopts elements of globe latitudes-longitudes and continental outlines and transforms them into a metal craft ornament. It features both ornamental and popular-science values and demonstrates the exquisite beauty of precision metal craftsmanship.

2. Reasons for material selection (within 100 words)

SUS304 stainless steel boasts excellent rust and corrosion resistance, high strength and favorable machinability with premium metallic texture. DA-finish drawing treatment delivers prominent grain performance, which is suitable for fabricating metal crafts with rich details.

3. Key featured parts / positions (within 100 words)

This globe consists of 130 special-shaped components assembled from 268 parts. Interference fit and spherical latitude-longitude structure enable high-precision splicing. Precise engagement realizes a smooth spherical shape and fully restores detailed continental outlines.

4. Most challenging parts (within 100 words)

4.1 Assembly of 130 special-shaped components and 268 parts brings great difficulty in controlling spherical clip assembling sequence to guarantee spherical roundness.
4.2 Tolerance of clip interference fit is controlled within -0.02~+0.02 mm. Laser cutting parameters require fine-tuning to meet tolerance requirements.

5. Key takeaways from drawing design to actual machining (within 100 words)

Given numerous complex spherical components, clip interference-fit tolerances shall be optimized in drawing design for spherical assembly. Strict precision control for clips and holes ensures smooth multi-part splicing, spherical roundness and stable post-assembly structure.