



What is VISAC System?

VISAC (= Vixen Sixth-Order Aspherical Catadioptric) optical system is basically composed of a concave primary mirror and a convex secondary mirror like Cassegrain or Ritchey-Chretien telescopes. However, its concave primary mirror is of sixth order, and also it has a 3-element field corrector. This new optical system is designed taking into consideration mass production.

High-Precision Sixth-Order Aspherical Mirror

Although spherical mirrors can be polished by machine, parabolic mirrors are obliged to be produced mainly by hand and have problems in mass production and quality stability. Under the circumstances, Vixen has succeeded in developing a new production system of aspherical mirrors to meet demands for high-precision optics. The new production system is "High-Precision Poly-Order Aspherical Mirror Molding Technique" that is completely different from the production method we used to have.

The parabolic primary mirrors of the already offered and well reputed Newtonian GP-R200SS have been produced with this new production system used. Utilizing the new production technique to the full, the poly-order aspherical mirrors (including the sixth-order), which are so difficult to produce with the old production system, come to be offered steadily at a moderate price.

Good-Quality-Image Flat Field

The VISAC optical system has been developed with a view to having a good quality image in the full photographic field wihout any aberration. On the VC200L, a star image is less than 15 microns even at the edge of 35mm film and its focal plane is so flat.

VC200L Specifications

(3) Field corrector:

(1) Primary mirror : Effective aperture 200mm

Focal length 1800mm (F9)

Material Pyrex

(2) Secondary mirror: Effective aperture 77mm

Material Pyrex 3-element 3-group, multi-coated

(4) Optical tube Length 530mm (front tube ring to rear tube ring)

700mm (front tube ring to eyepiece holder)

Outside diameter - 232mm

Weight - about 6kg

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