## **STARLINN**

**Novacon Pioneers a New Telescope Profile** 

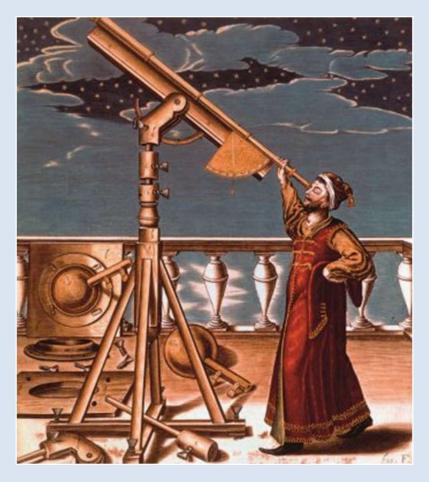
Here we have an absolutely new product all over the world!

A new way of seeing!

The first radically new design approach... since the telescope invention in 1609, and its various changes.



#### **General comments:**



**Johannes Hevelius Drawing** 

#### Introduction:

# This telescope is a new idea where difficulties in observing a night long in a conventional telescope turns the observer tired the next day.

That way we focused on n building an "ergometric type" telescope. Optical systems could not be suddenly and radically modified, but combining the construction ideas of the large observatory telescopes, the seeing mood of the researchers in table microscopes, and not forgetting the primitive way of heaven observation , the "naked eye", we fused all together which resulted in a new design and compactness.

After a trial we choose the good sounding name "Starlinn" and developed an insignia based on a "flying fairy".

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#### **Description:**

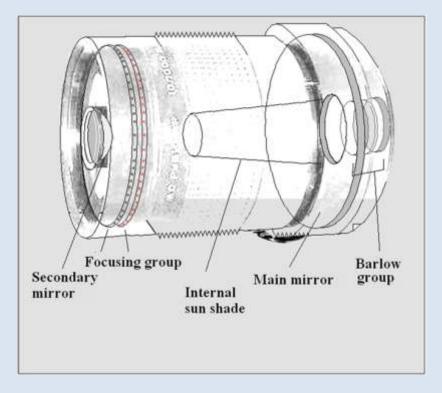
Our first proposal was decided in choosing a reliable existing optics and we opted for the Rubinar 1000 as first choice followed by the Astele 95 as ideal sources. We arranged the elements in the conventional manner but used an internal coudé system as could be seen in the following drawings. The telescope construction is the same for both optical systems and fittings are done through "O" rings, also intended to act as lens shock absorber for greater durability. The full set of previous enclosed drawings completely details its construction.



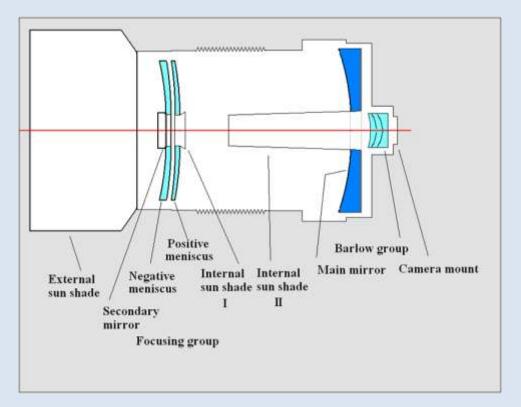
First option: The Rubinar.1000.

Second option: LOMO Astele 95.





#### Internal parts view



Optical and mechanical Schematic diagram on both optics

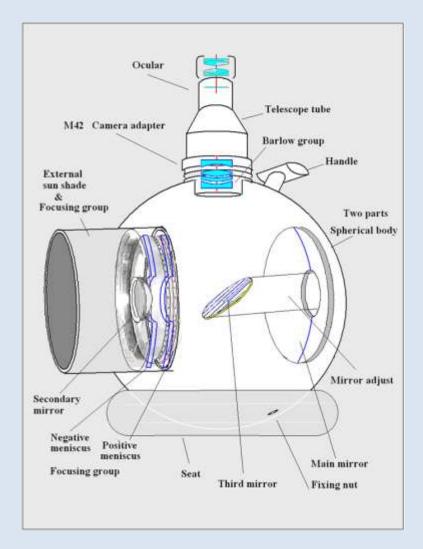
The Telescope construction:

#### **Characteristics:**

The idea was born. The departure shape was a unique ball, resembling a giant eye. Its shape leads us to new observation techniques and brings us several interesting advantages. First of all, is avoiding the costly giant tripod and head needing only a near costless kind of rubber tire; the movements are completely free at an unreached level by any kind of existing telescopes, due its unique own shape. The high quality optics allied with the lowest possible manufacturing price, is due using less component parts in its construction and minor hand work adjustments offers a better product on the market.

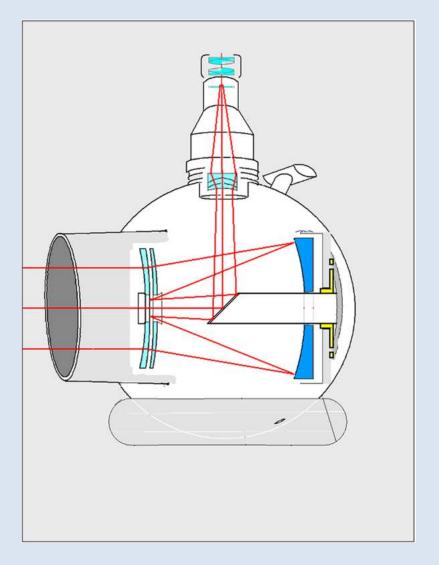
Its isobaric characteristic Inherent of the ball geometry lets a self equilibrium in any position.

#### The Result: The Starlinn spherical telescope.

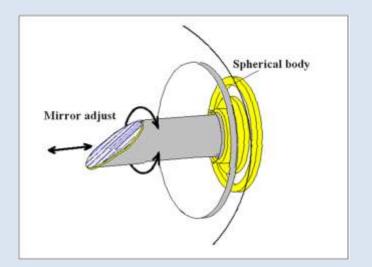


We learned its shape though the greatest optical instrument known: "The Eye".

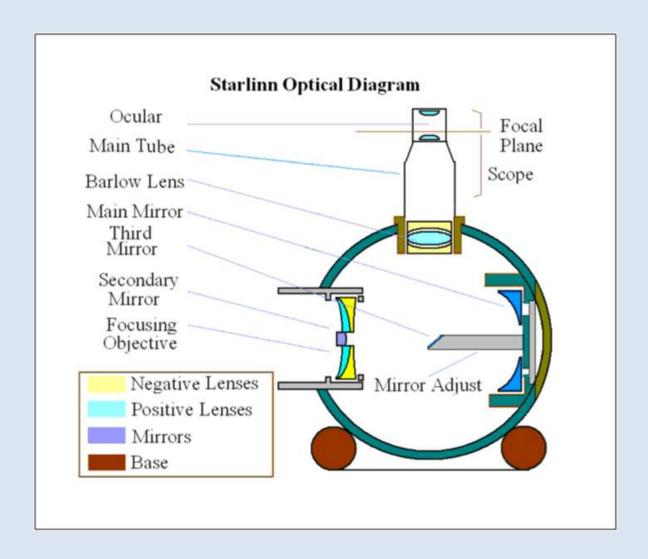
#### Internal parts lay–out



Light path



Third mirror adjust

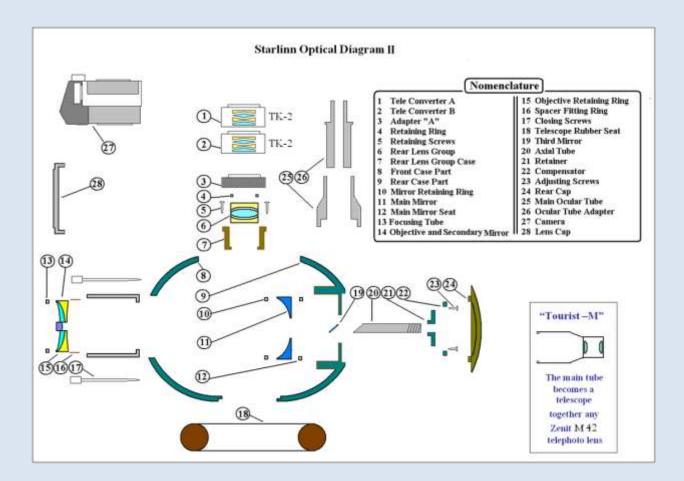


#### Parts descriptions

As an extra, the new version of this telescope has a detachable universal M42x1 eye-piece coupler which enables using together all cameras in the market and the bonus of be separately used together with any M42x1 lenses (Zenit Type) being a potential extra accessory for every one having other telephoto lenses.

The Starlinn can also be used with any interchangeable lens camera type

And the ocular tube becomes a hand telescope with any normal or telephoto M42 Lens



Uses of the main objective.

Its construction turns itself light and portable, its ball design turns itself isobaric, isoform, and totally ergometric. The observer needs not be contortionist, and have no fatigue. Stellar observation becomes a double pleasure!

\*Absolutely free from vibrations due having no swiveling points or principal axles.

Simple to operate and its affordable price turn itself onto a technology winner.

A giant 1200 mm (or 1000mm\*) objective in a 26cm sphere! Places this piece in the highest amateur class telescopes.

\* According to the telescope elements used

## **Starlinn General Basic Specifications:**

Optical System. Ocular magnifications Angular field.	Maksutov-Wild modified system 39X up to 140X ( with zoom ocular) 55' - 15'
Main mirror diameter	95mm
Fixed ocular magnifications.	
25mm single	~ 48X
10mm single	~ 110X

#### Objective

Focal length	1200mm (1000mm)
Diameter Main mirror	95mm/ 82mm
Exit pupil	~8.5mm
Focusing range	60m to INF
Spherical diameter body	250mm
Mass	2,10kg

#### Other:

Camera coupling ability. (Digital or Analogical) Isostatic construction enables stable equilibrium in any position. Free from vibrations in its dampening circular support. 3/8" tripod bush. Uses common telescope eyepieces. "T" type carrying handle on top. Plastic body with fiber glass for strength

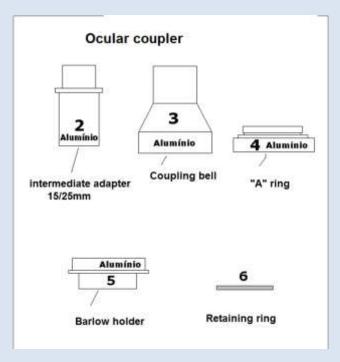
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## Views of the Starlinn Telescope



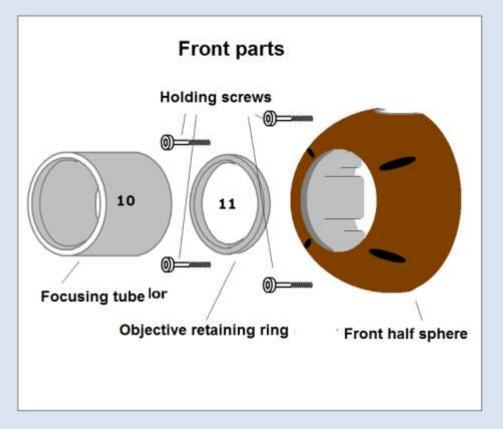
Portable bag in Various Colors similar to a Bowling Ball Carrying Case Internal Pocket For Telescope Accessories.

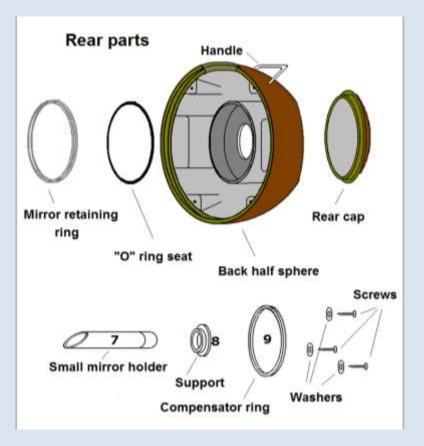




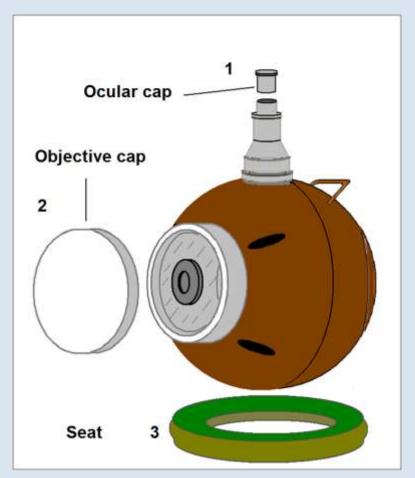
## Parts and Telescope Costruction:







Body Parts & Drawings 2:





Front and Rear Hemispheres and rear cap.

## **Internal Parts:**



Flange, Ring and Tube for Third Mirror Support; Retaining Ring, Spacer and Objective Focusing tube; Main Mirror Retaining Ring.



Screws and Washers.



The "A" ring.



Ocular 14x, M42x1 Cannon, "A" ring, Barlow Lens Retainer.



"A" coupler in camera, Ocular 14x, M42x1 Cannon, "A" ring, Barlow Lens Retainer.

Multicoated eyepieces



Super Plossl 52°: 6.3mm, 7.5mm, 10mm, 12.5mm, 17mm, 20mm, 25mm, 32mm; Plossl 42°: 40mm;

2x, 3x, 4x Barlow lenses

#### **Color Filters**



red, green, yellow, blue, black, gray

1.25" Super wide angle eyepieces



1.25" Multi-coated 5-elements Super wide angle 65°: 15mm, 20mm and 60°: 10mm



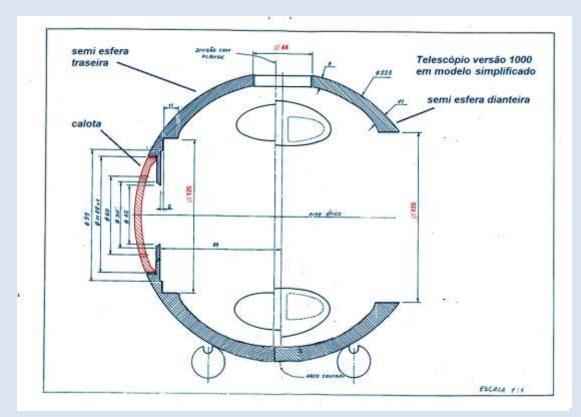


Multi-coated Ultra wide angle 80°: 6-elements 15mm (1.25"), 20mm (2"), 25mm (2"); 8 elements 24mm (2")

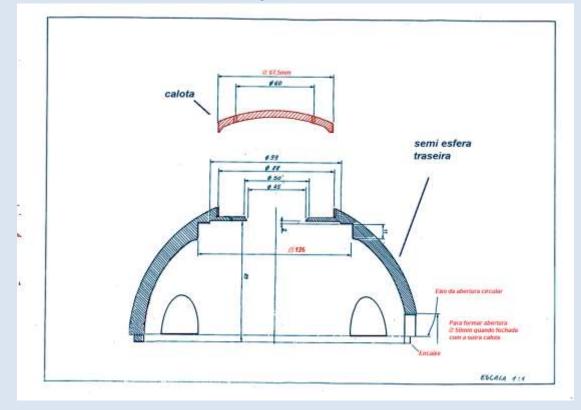
Eyepiece Review Pitfalls by Bill Brady from June 2001 at the Cloudy Nights Telescope Reviews

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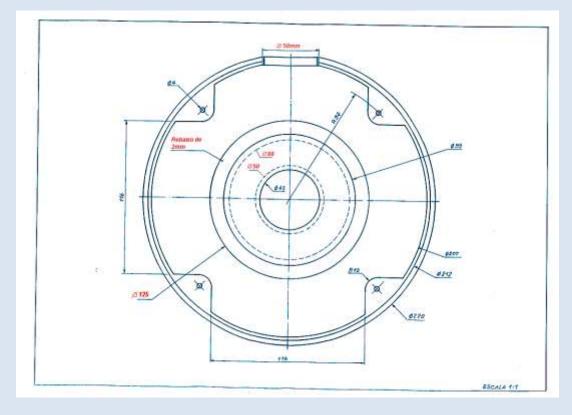
## **TELESCOPE DRAWINGS**



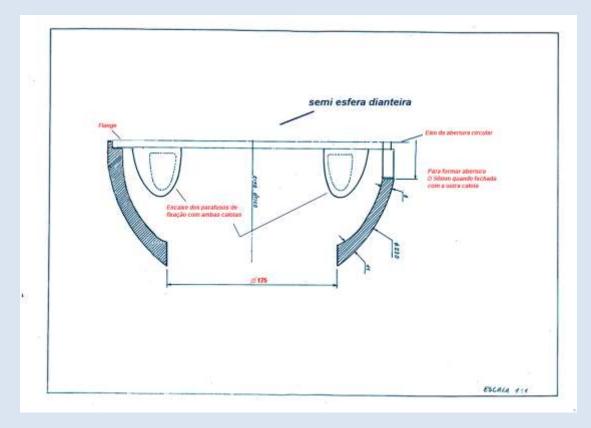
## Two half spheres assembled



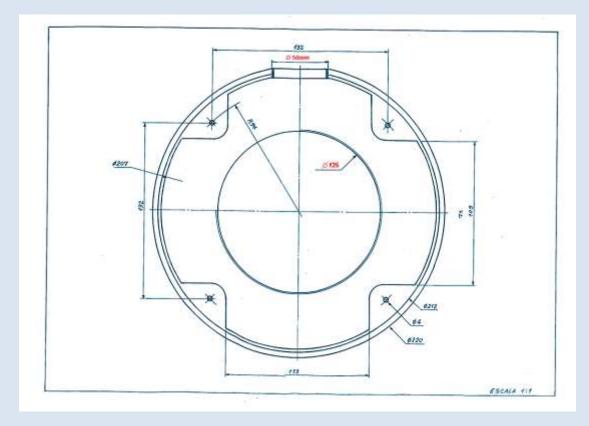
## Rear half sphere and hub



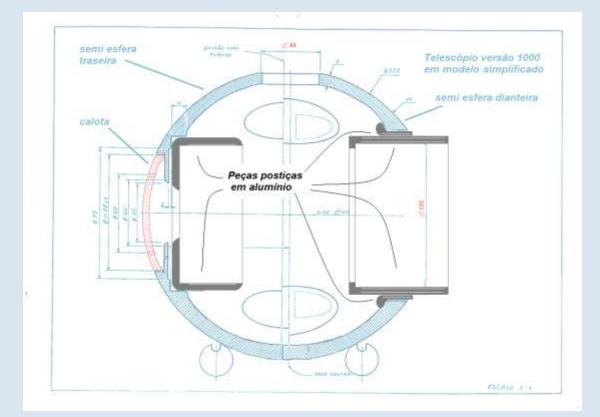
Interior view of the rear half



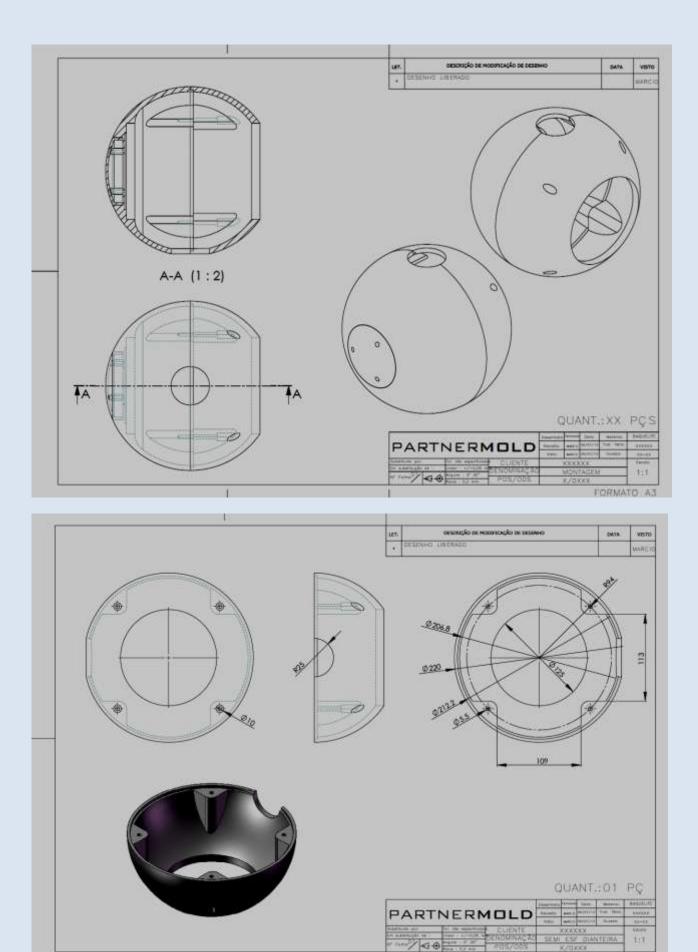
Cut away of the half sphere



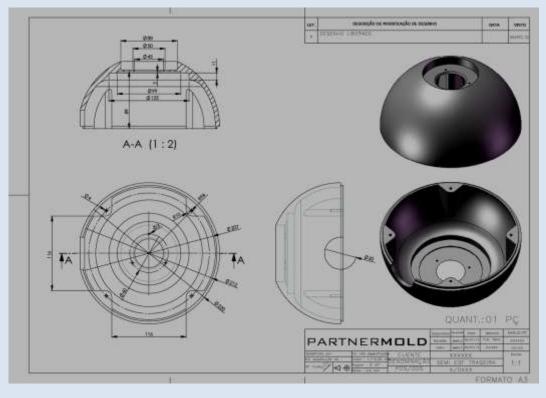
Interior view of the front half

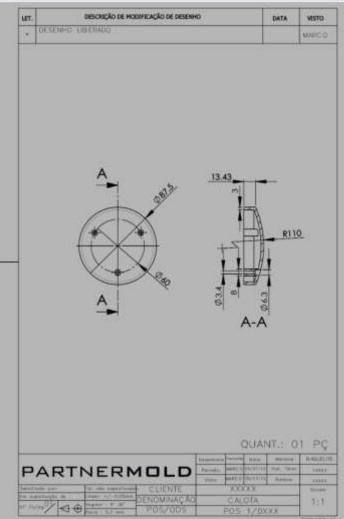


**Internal aluminum parts** 



FORMATO A3





## Molding tools











**Ready parts** 





