

ASTOR

LASER SYSTEMS FOR PATIENT ALIGNMENT IN RT





PERFECT INTEGRATION

The characteristic features of LAP laser systems are sophisticated technology, quality and design for more than 30 years. This level of excellence has made us the global market leader for patient alignment in radiotherapy.

In radiotherapy precise, reproducible and fast positioning of patients are required for successful treatments and high patient throughput.

After the initial patient marking process at CT or MRI the patient will be repositioned on the LINAC using cross hair and sagittal line lasers. The fixed lasers are aligned to the isocenter of the LINAC and enable isocentric positioning of the patient.

Integrated in a superior aluminium housing our ASTOR room laser combines advanced optics, high precision mechanics and state of the art electronics to ensure the highest level of stability and reliability.

Offering various configurations the ASTOR lasers are perfectly suited to meet all room requirements.

LAP – WE KNOW PATIENT ALIGNMENT

- Since 1984
- Global market leader
- In-house hardware and software development
- Scientific collaborations
- Worldwide service network
- Certified in accordance to ISO 9001 and ISO 13485
- Made in Germany

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PROJECTION COLORS
AVAILABLE:
RED, GREEN

ASTOR - UNIQUE TECHNOLOGY

CHOOSE YOUR LASER COLOR

All ASTOR room lasers come equipped with long-life red or green laser diodes. Depending on your personal preferences, ambient room light or room design you can choose your laser color.



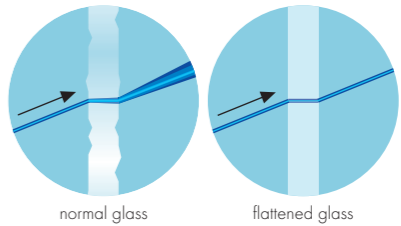
PRECISE

LAP ULTRALINE is the result of advanced mechanical components and unique optoelectronics used to generate and align laser lines for medical applications. The ultra-fine and long lines meet the highest quality requirements for linearity and brightness distribution.



DISTORTION-FREE

LAP ASTOR lasers are fitted with unbreakable, specially flattened glass windows. This minimizes scattering and guarantees ultra-fine lines at all transition angles.



(real size)

COMPACT DESIGN

ULTRA-FINE PRECISE LINES

DISTORTION-FREE WINDOWS

ASTOR - HIGH PRECISION TOOLS FOR PATIENT POSITIONING

EASY TILT ADJUSTMENT

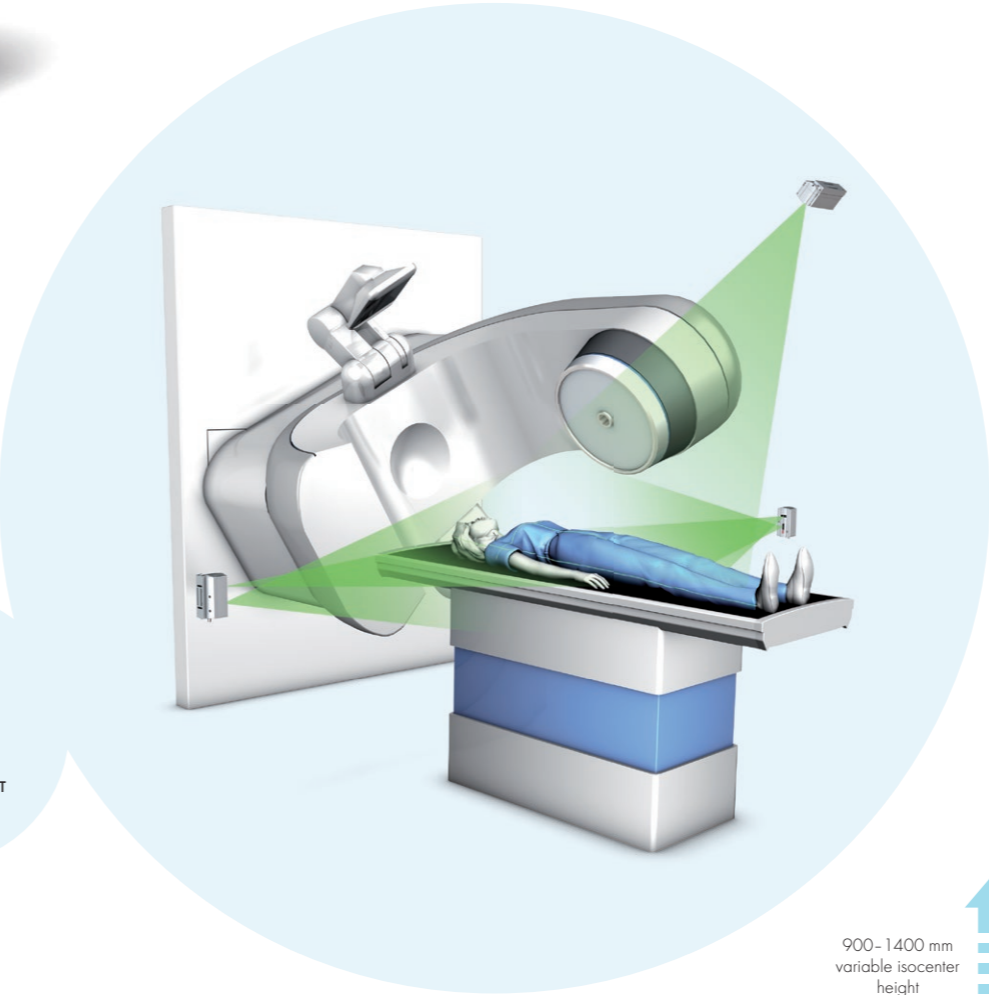
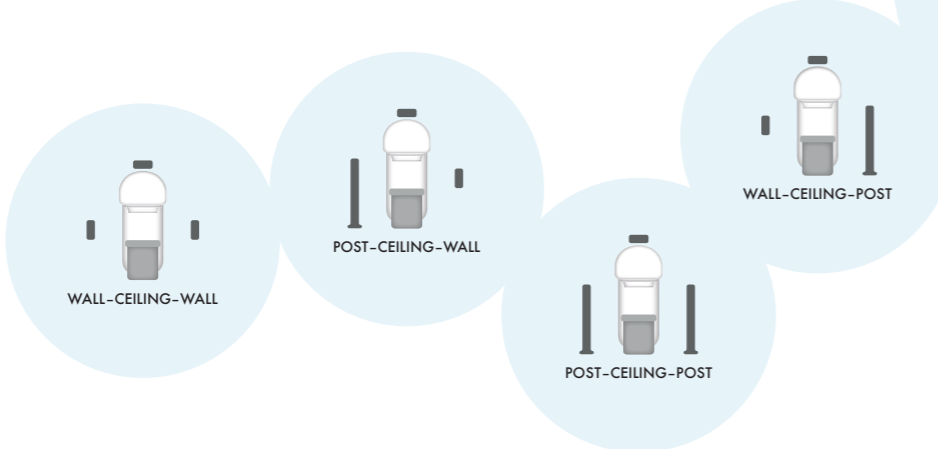
The ASTOR laser's horizontal and vertical tilt can be easily adjust without removing the cover. Translation, rotation and focus are adjusted after removing the cover via the convenient quick lock mechanism.

- 1 Tilt vertical plane
- 2 Tilt horizontal plane



MOUNTING VERSIONS

For patient alignment each LINAC room is equipped with at least three room lasers. One laser projects a sagittal line and two cross hair lasers project the transverse and horizontal lines. You are free to select from four mounting versions to perfectly match your existing room situation.



BRACKET FOR FALSE CEILINGS
Custom mounting brackets are available for large distances between the mounting plates and the false ceiling or wall recess.

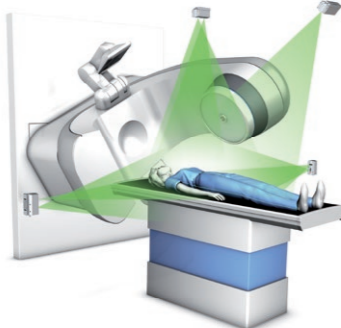


TILT BRACKET
LAP ASTOR lasers are equipped with adjustable tilting brackets allowing for rotation up to 45°. The ASTOR's compact design makes it an ideal solution for tight mounting locations.



900-1400 mm variable isocenter height

FREE STANDING COLUMN
For locations where wall mounts are not possible the LAP ASTOR laser can be equipped with an optional free standing column.



+ DID YOU KNOW?
To avoid shadowing effects from the LINAC gantry a fourth ASTOR cross hair can be installed overhead.

TECHNICAL DATA

Laser color	red (638 nm), green (520 nm)
Laser class	2
Line width up to 4 m distance	< 1 mm
Line length at 3 m distance	> 3 m
Power supply	100 ... 240 V AC
Internal voltage	24 V DC
Operating Temperature	15 ... 30 °C
Dimensions (H × W × D)	182 × 86 × 90 mm
Weight	1.4 kg



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