Intelligent conformance that is truly multifunctional
Intelligent beam shaping

Agility is the next generation, high resolution beam shaping solution from Elekta. Built on a strong understanding of the factors that are critical to patient plan optimization and treatment delivery, Agility is designed to meet the needs of modern radiotherapy facilities.

Agility offers excellent clinical flexibility and efficiency, while ensuring that patient safety and comfort remain a priority.

- 40 x 40 cm field size
- 160 interdigitating leaves with 5 mm width at isocenter
- Integrated digital control of leaves and dynamic leaf guides
- Accurate leaf positioning with Rubicon optical technology
- Rapid leaf speed
- Extremely low leaf transmission (<0.5%)
- 45 cm isocentric clearance

Agility is not licensed for sale in all markets. Please contact your local Elekta representative for details.
Expand your treatment capabilities

Improve return on investment

Enhance treatment delivery

Reduce integral dose

Accurate and reliable beam shaping
Can you treat everything you want to?

Agility is ideal for the treatment of large or small field shapes and for the delivery of static or dynamic treatment plans for conventional or stereotactic techniques. You can even deliver off-center, non-coplanar treatment plans.

Agility offers high resolution beam shaping, including interdigitation, across the 40 x 40 cm field size.

Synchronized intelligent dynamic leaf guide movement and individual leaf movement achieves enhanced leaf speed and removes the need for a split field for seamless delivery of each prescribed beam shape. These features combined with a market-leading 45 cm isocentric clearance ensure that your linac is truly multi-functional.
The high leaf and diaphragm speed provided by Agility increases the speed of delivery and allows higher dose rates to be used for more effective modulation. Not only does this help to improve plan quality, but it also shortens treatment times considerably. Shorter treatment times mean that more patients can be treated in a working day.

“Another important feature of this new MLC design is the high speed of the collimating elements, where the use of integrated dynamic leaf guides can increase the effective leaf speed up to 65 mm/s.”

Cosgrove et al (2009) ¹

Are you happy with your patient throughput?
The robust and reliable Rubicon optical positioning system provides valuable real-time assurance of accurate leaf positioning. Agility’s Rubicon optical technology offers advanced real-time leaf monitoring and positioning. Ultraviolet light from an LED source produces infrared fluorescence when it falls on the ruby tips of the multileaf collimator leaves. This infrared fluorescence, detected by an infrared camera, is used to reliably monitor and accurately position the leaves and can be viewed in real-time on the linear accelerator’s display screen.

In addition, Integrity™, the fully integrated Elekta digital control system, provides:

- Continuous monitoring and control throughout treatment for confidence in beam shaping and treatment delivery
- Verification that the field being delivered matches the prescribed treatment parameters
- Inherent safety features that supervise and check that all systems are operating correctly

Are you confident that your patient is receiving the treatment you planned?
Are you concerned about unwanted dose to the patient?

Agility has exceptionally low leaf transmission at less than 0.5% across the entire field\(^1\). This is important for a number of reasons:

- It reduces unwanted dose to organs at risk and healthy tissue
- Low integral dose reduces the risk of inducing secondary tumors
- It reduces off-axis dose when performing off-axis beam shaping
- It improves treatment plan quality

“The transmission and penumbra measurements indicate a significant improvement on the published data for comparable equipment. In particular, leaf transmission is extremely low, less than 0.5%.”

Cosgrove et al (2009)\(^1\)
A human care company, Elekta pioneers significant innovations and clinical solutions for treating cancer and brain disorders. Elekta provides intelligent and resource-efficient technologies that improve, prolong and save patient lives. We go beyond collaboration seeking long-term relationships built on trust with a shared vision, offering confidence to healthcare providers and their patients.

References