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A Elekta

Empresa sueca de tecnologia médica que desenvolve soluções para o tratamento de câncer e doenças do cérebro.



3,600
colaboradores

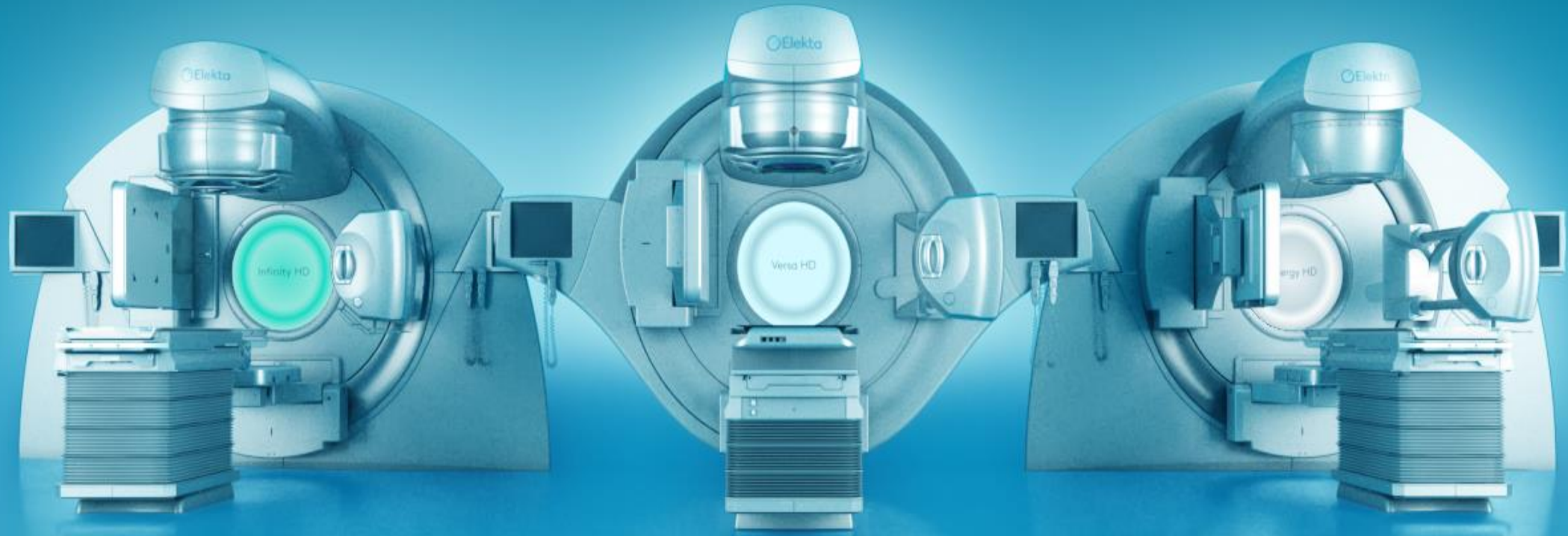


Sede em
Estocolmo



120 países

Elekta Family



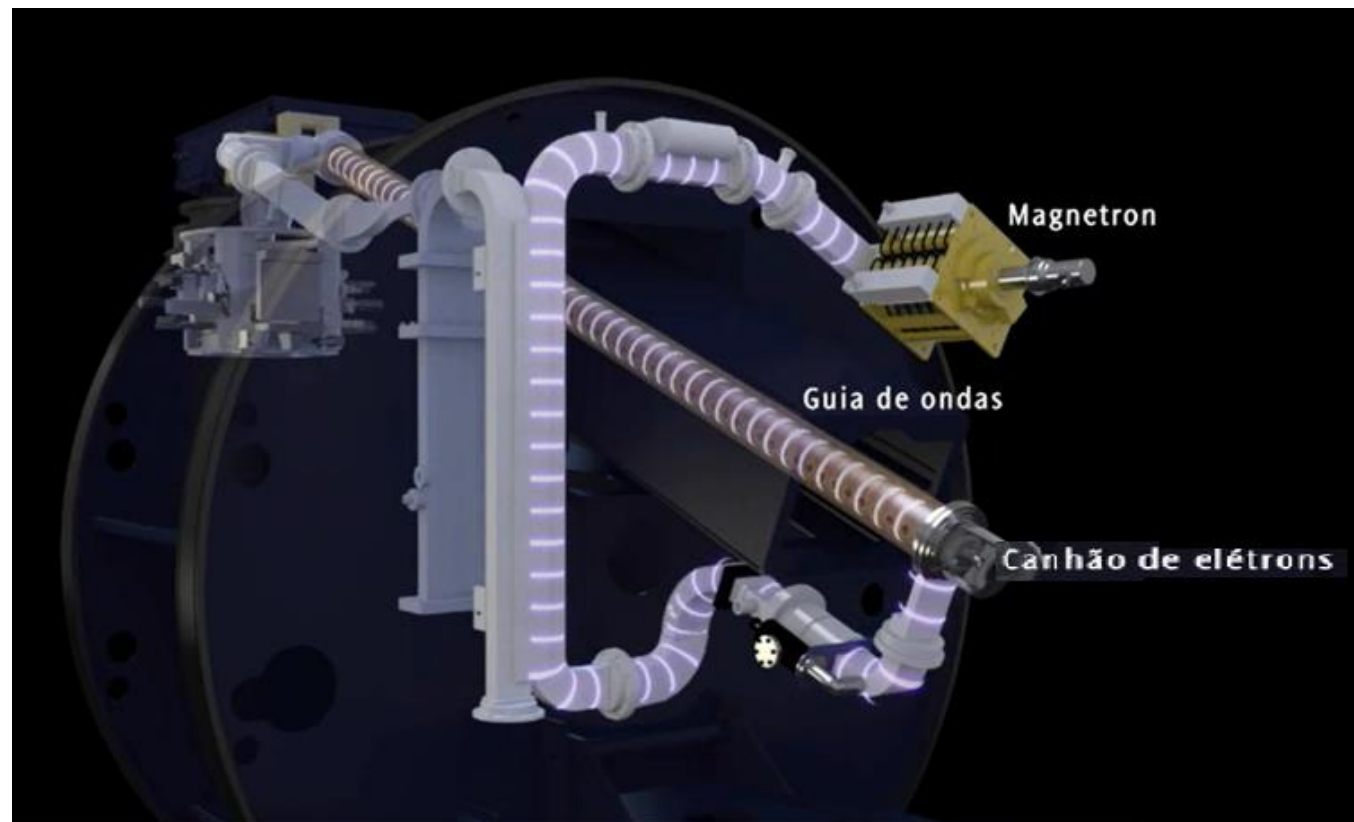
ACELERADOR LINEAR DIGITAL



7th Geração de Controle Digital

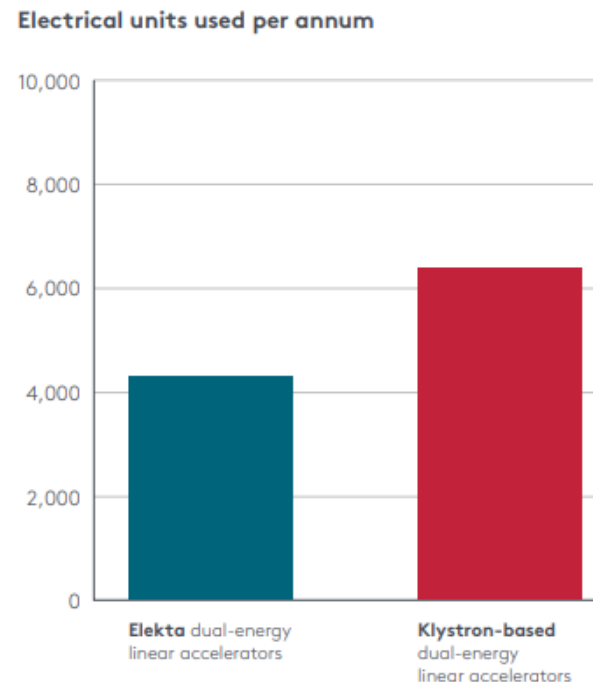
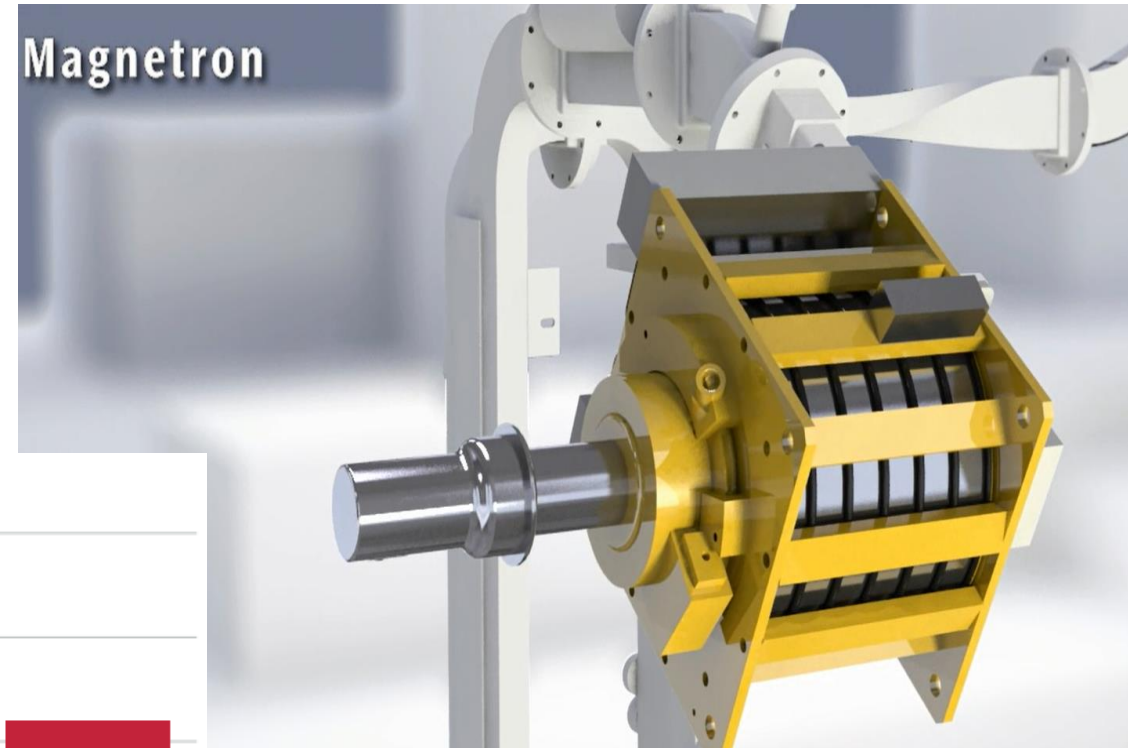
Acelerador Linear Digital – Características Técnicas

- ✓ Magnetron
- ✓ Canhão de Elétrons
- ✓ Guia de Ondas
- ✓ Isocentro
- ✓ Console Digital



Acelerador Linear Digital – Magnetron

- ✓ 30% menos consumo
- ✓ Economia de Eletricidade
- ✓ Menos geração de calor
- ✓ Preservação do Meio Ambiente



Acelerador Linear Digital – Magnetron

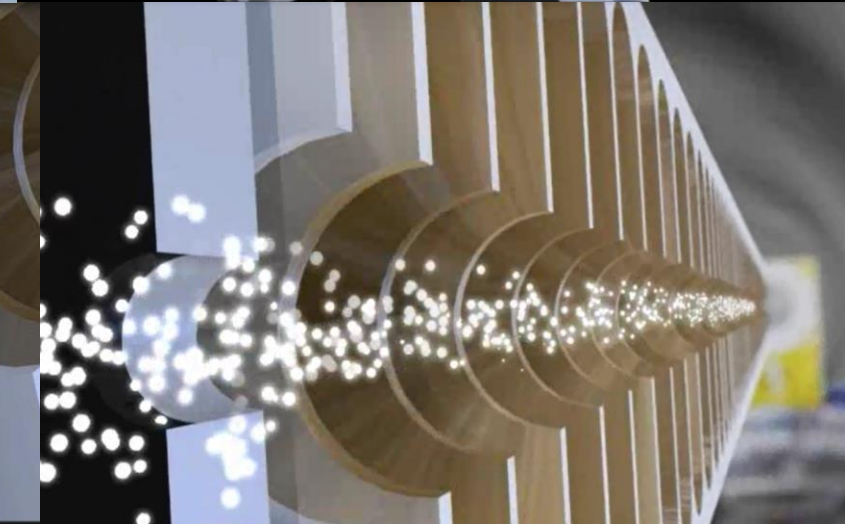
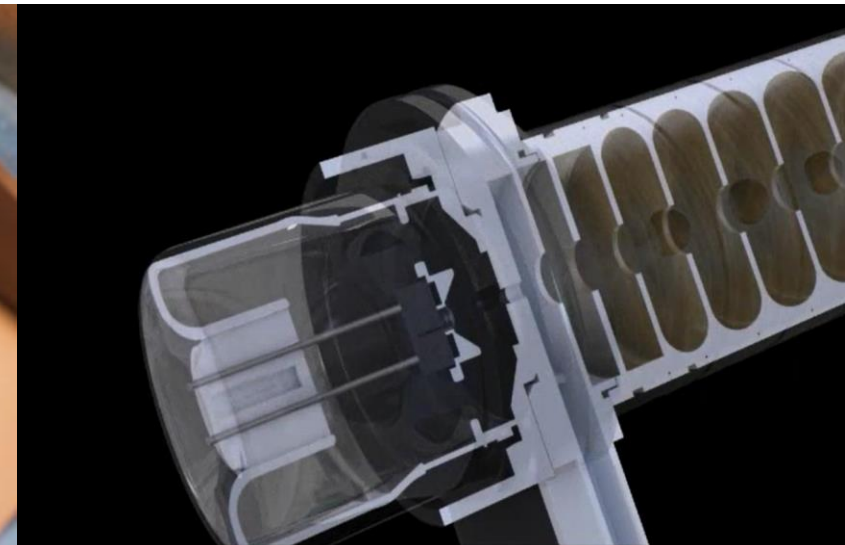
- ✓ Potência de pico – 5MW (megawatt)
- ✓ Sintonia rápida (fast tuning)
- ✓ Baixa Temperatura de Operação
- ✓ Não exige sistema especial de dispersão de calor
- ✓ Não gera radiação ionizante
- ✓ Tempo curto de aquecimento (6 minutos)
- ✓ Totalmente desligada quando o Linac não está em uso
- ✓ Mais de 7 anos de vida útil



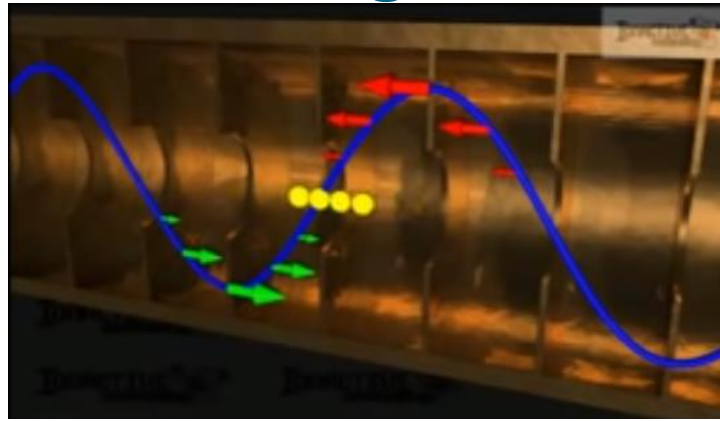
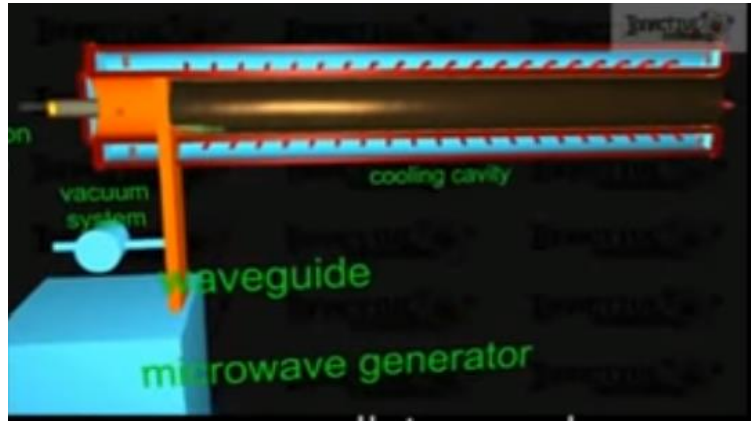
Acelerador Linear Digital – Canhão de Elétrons (GUN)



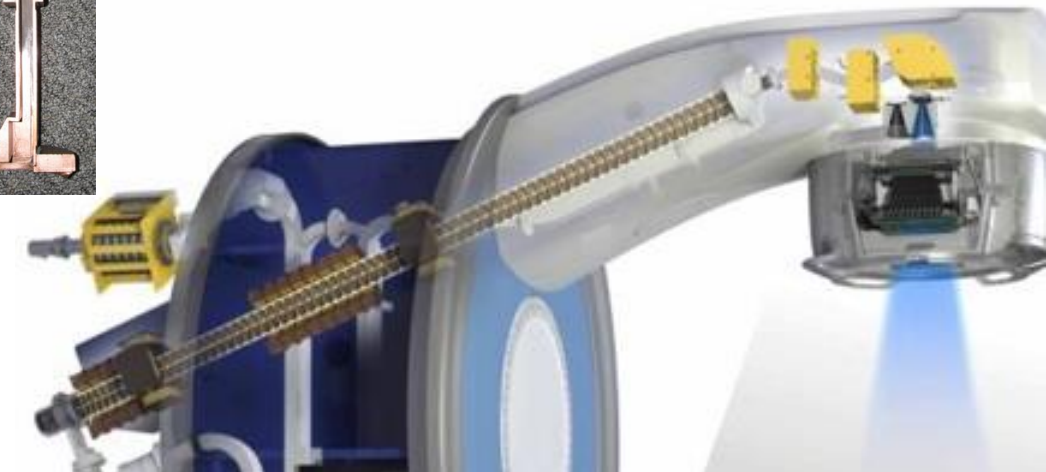
- ✓ Filamento Tungstênio
- ✓ Localização Externa
- ✓ Passível de troca



Acelerador Linear Digital – Guia de Ondas

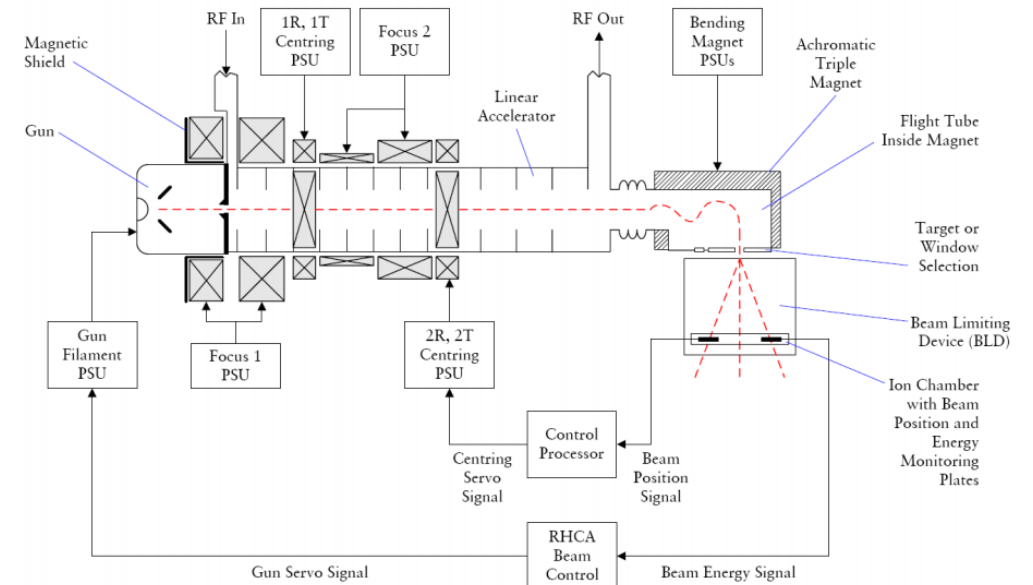
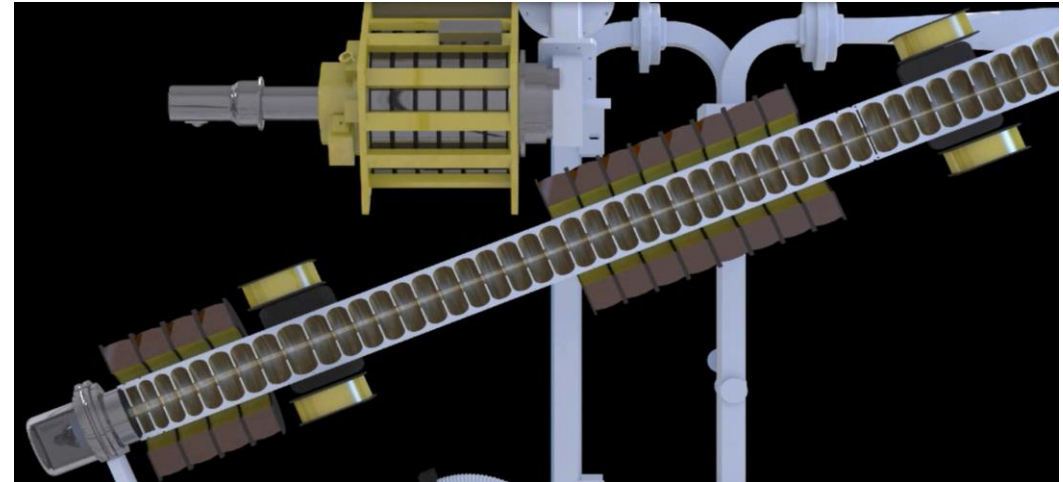


- ✓ Guia de Ondas Viajante (Travelling Waveguide)
- ✓ Vácuo por meio de Bombas Iônicas Externas
- ✓ Passível de Manutenção

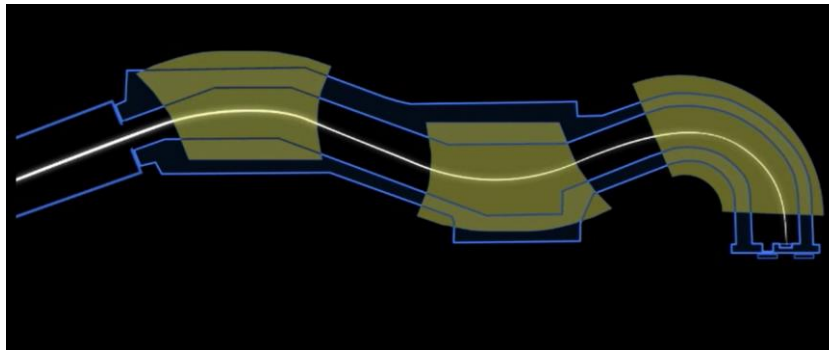
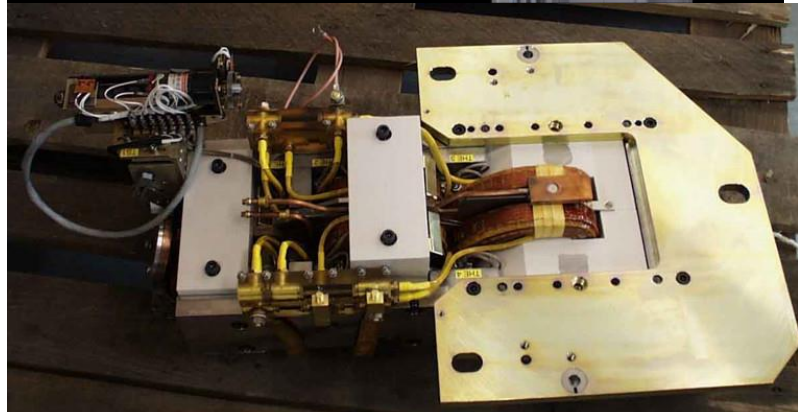
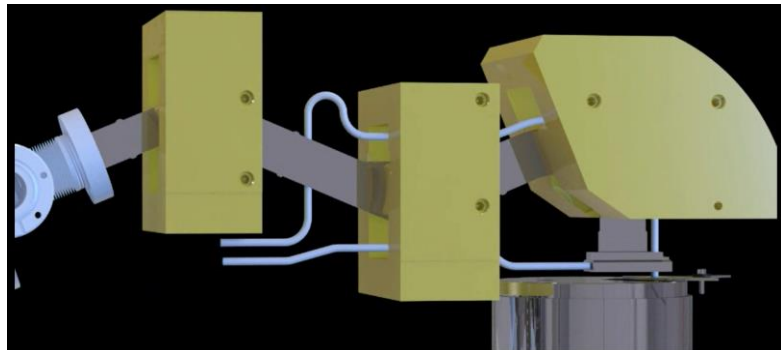


Acelerador Linear Digital – Guia de Ondas

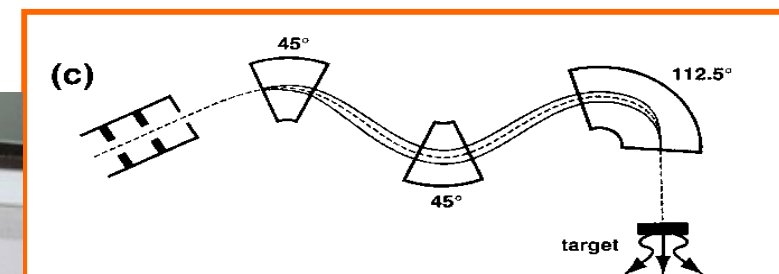
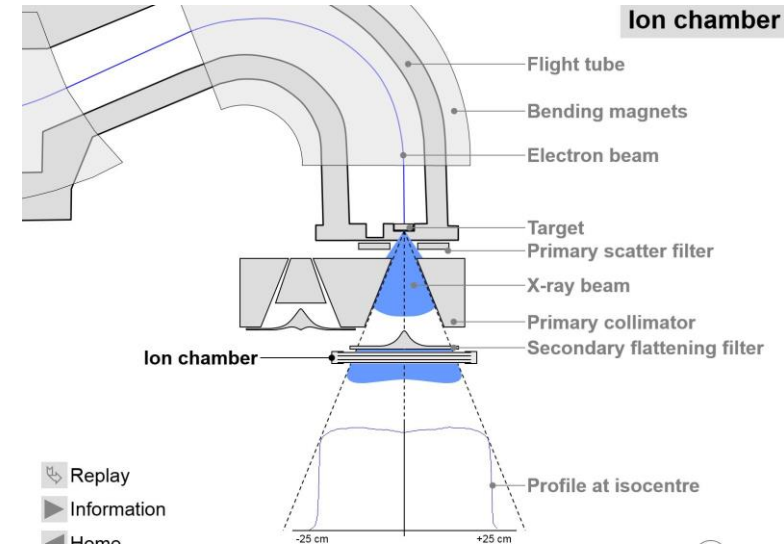
- ✓ Bobinas Focalizadoras
- ✓ Sistema de Resfriamento Contínuo
- ✓ Ajustável para melhor saída



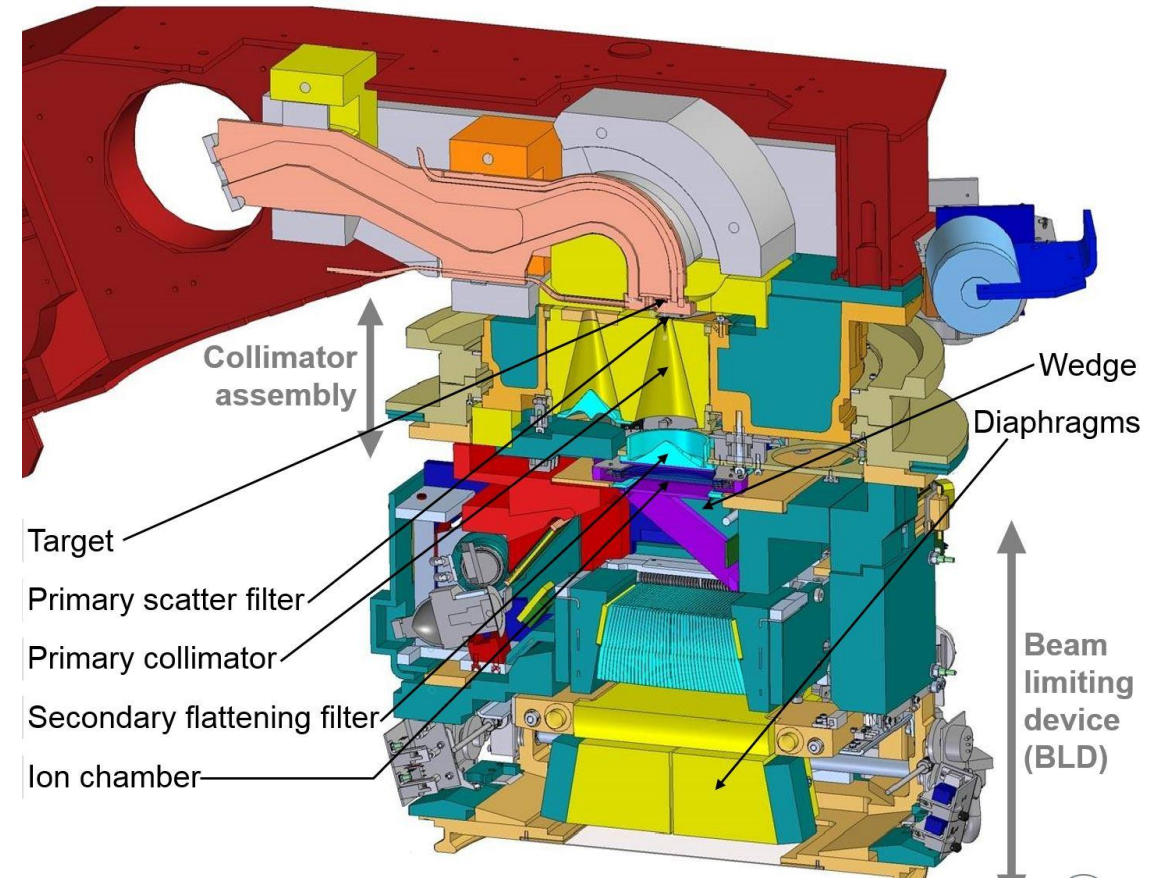
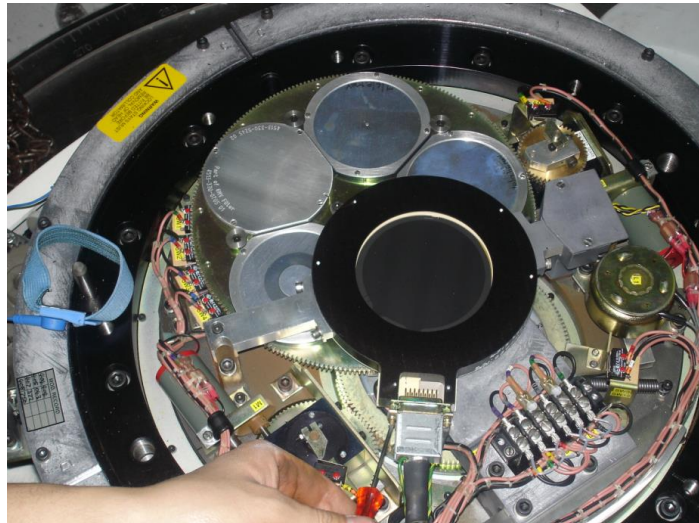
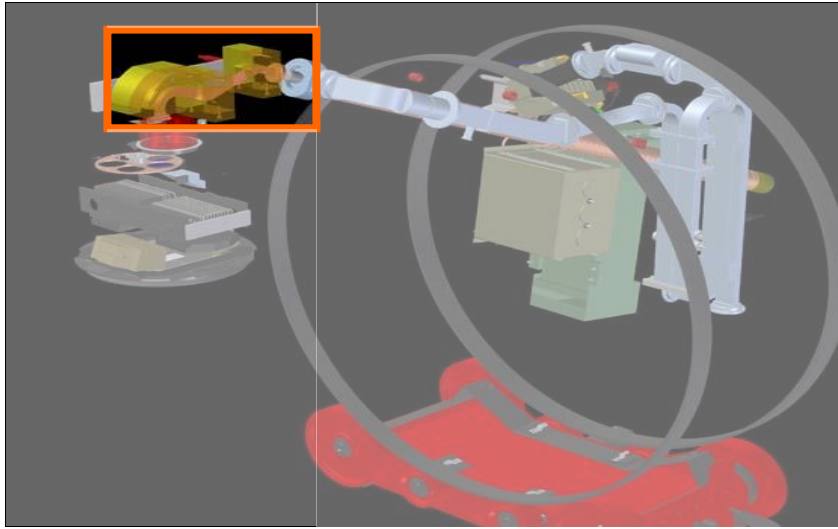
Acelerador Linear Digital – Controle de Feixe



- ✓ Elétrons entram no Flighttube
- ✓ Focaliza diâmetro de 1mm
- ✓ Funcionamento Acromático

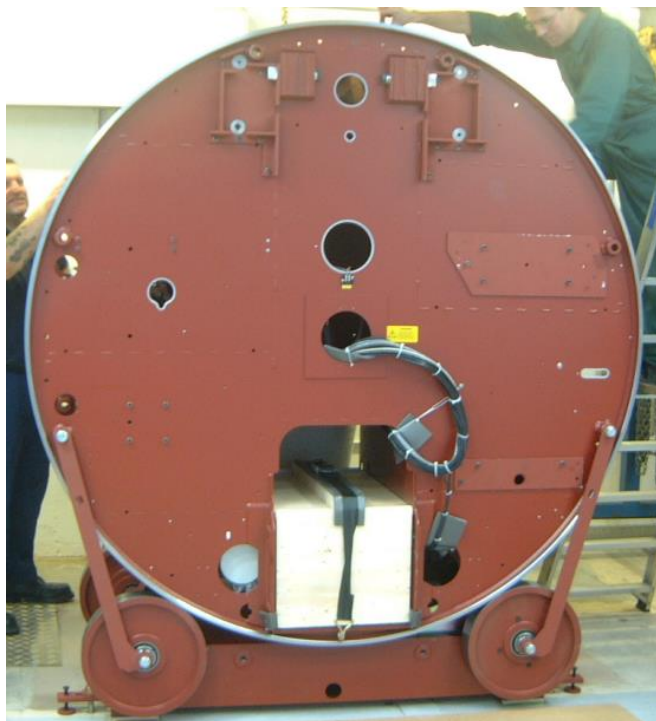


Acelerador Linear Digital – Câmara de Ionização

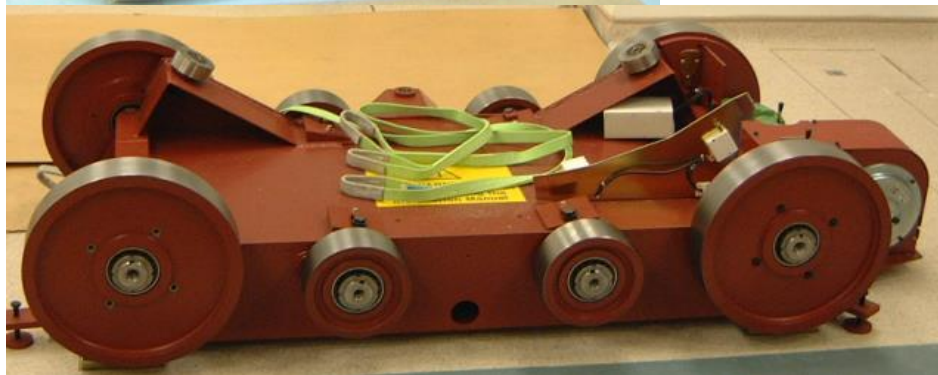
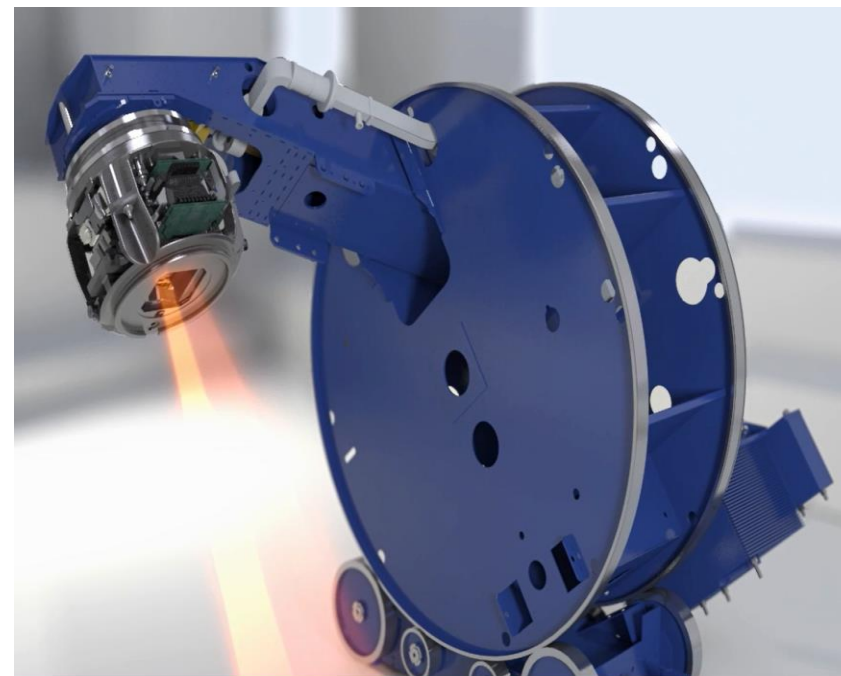


✓ Câmara de Ionização aberta

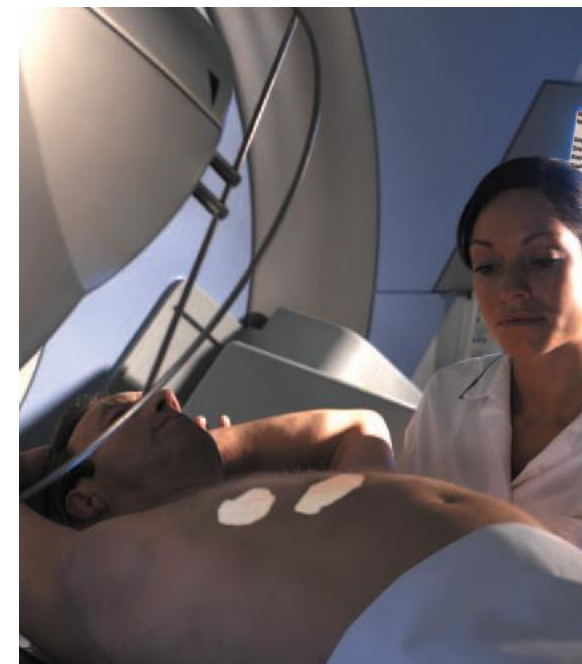
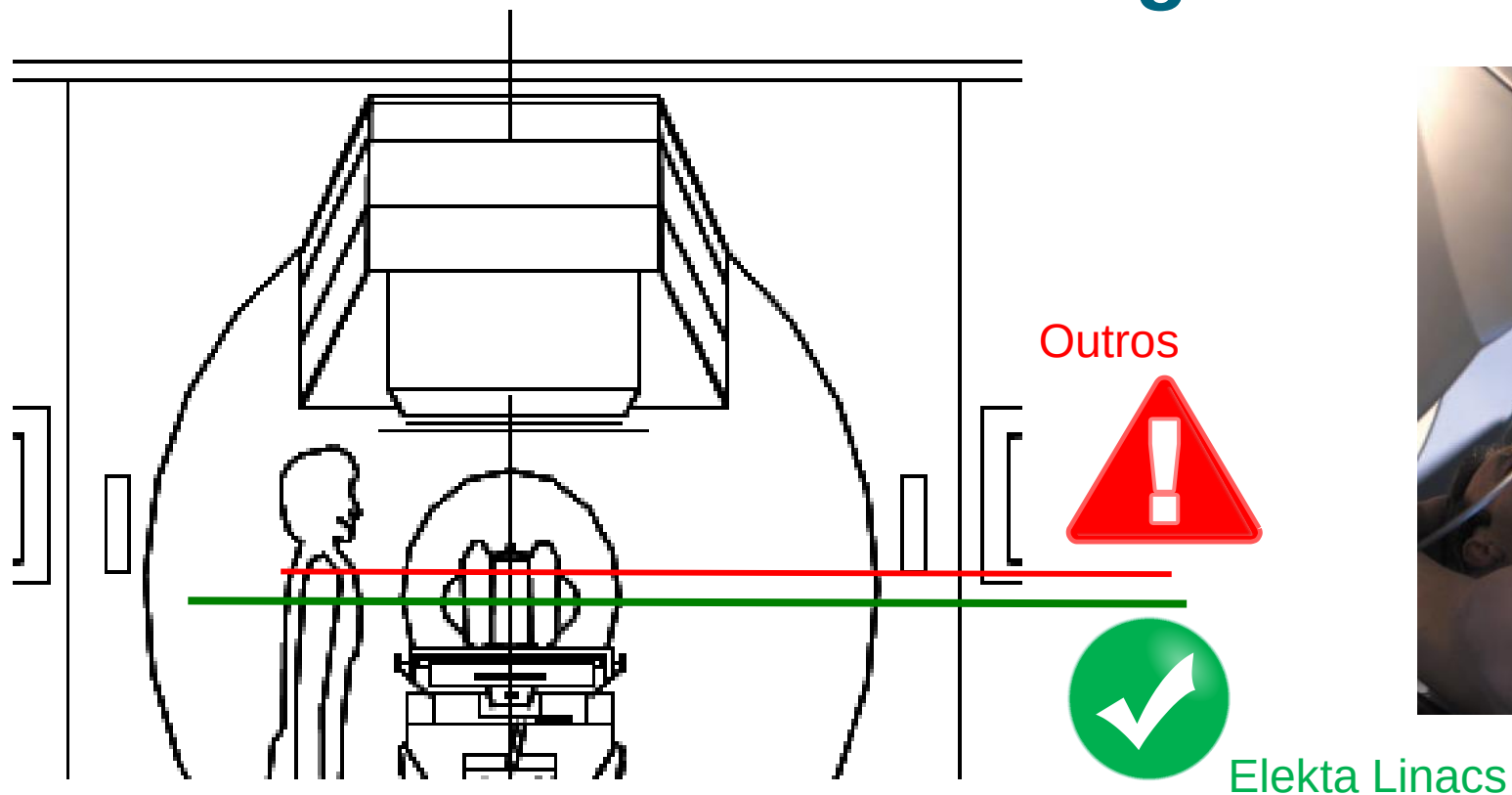
Acelerador Linear Digital – Isocentro e Balanceamento



- ✓ Sistema Modular
- ✓ Balanceamento e Precisão
- ✓ Passível de Ajuste e Manutenção
- ✓ Isocentro < 1mm de Raio
- ✓ Tamanho do equipamento reduzido

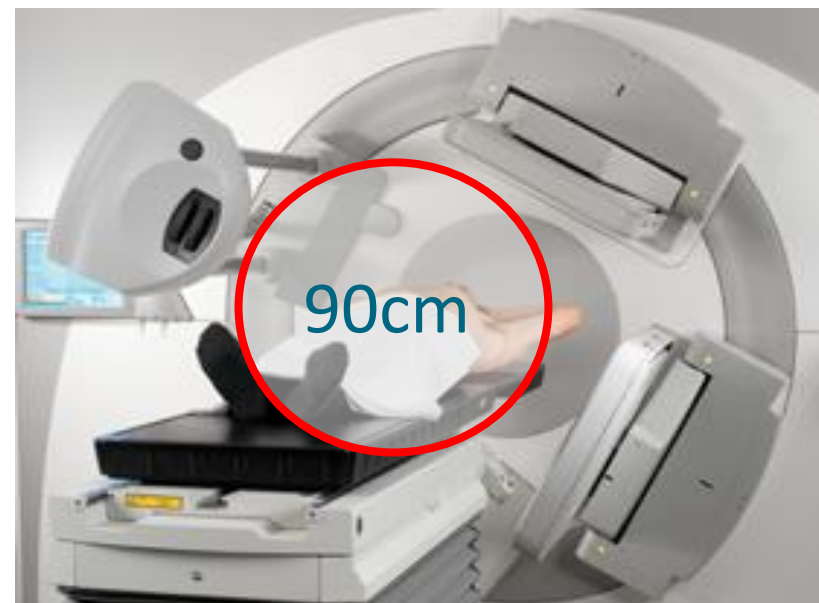


Acelerador Linear Digital – Clearance



Mais fácil para posicionamento e alinhamento do paciente

Acelerador Linear Digital – Clearance

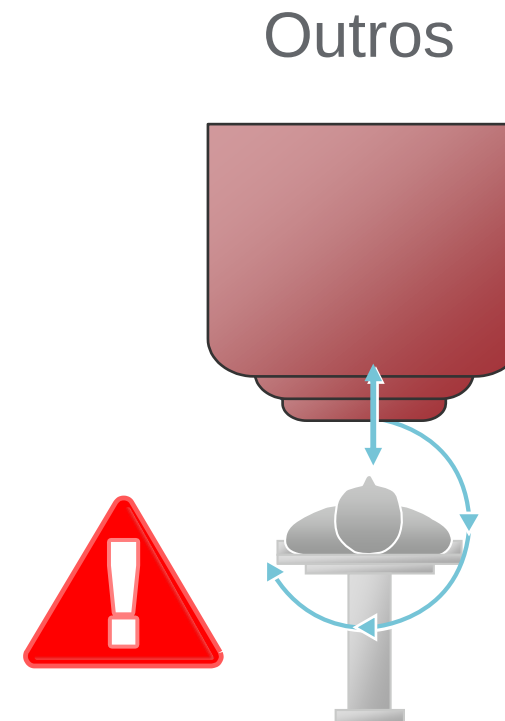
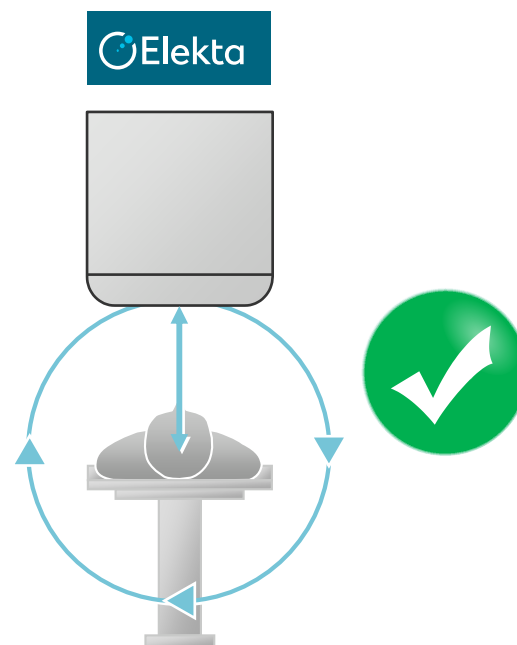
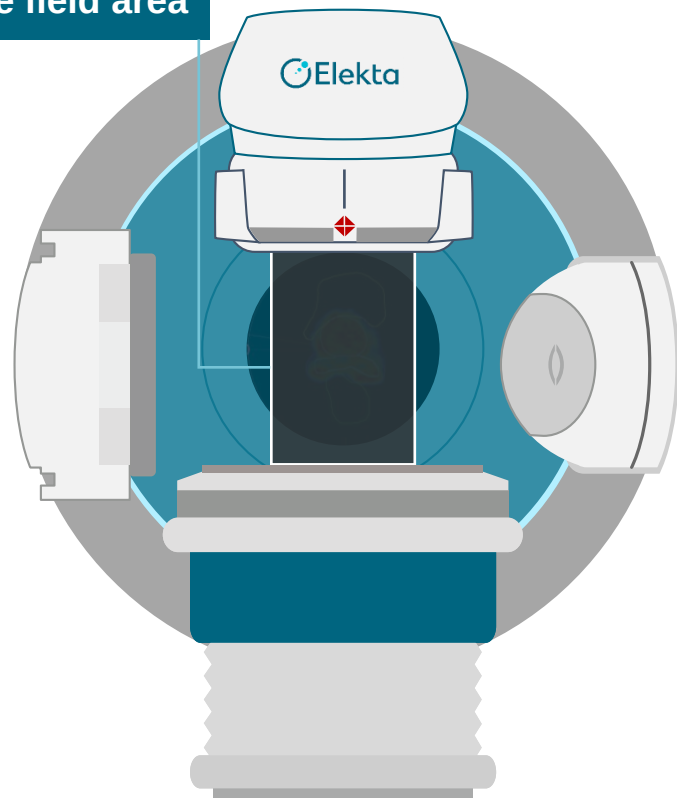


Vantagem em tratamentos dinâmicos

Acelerador Linear Digital – Clearance

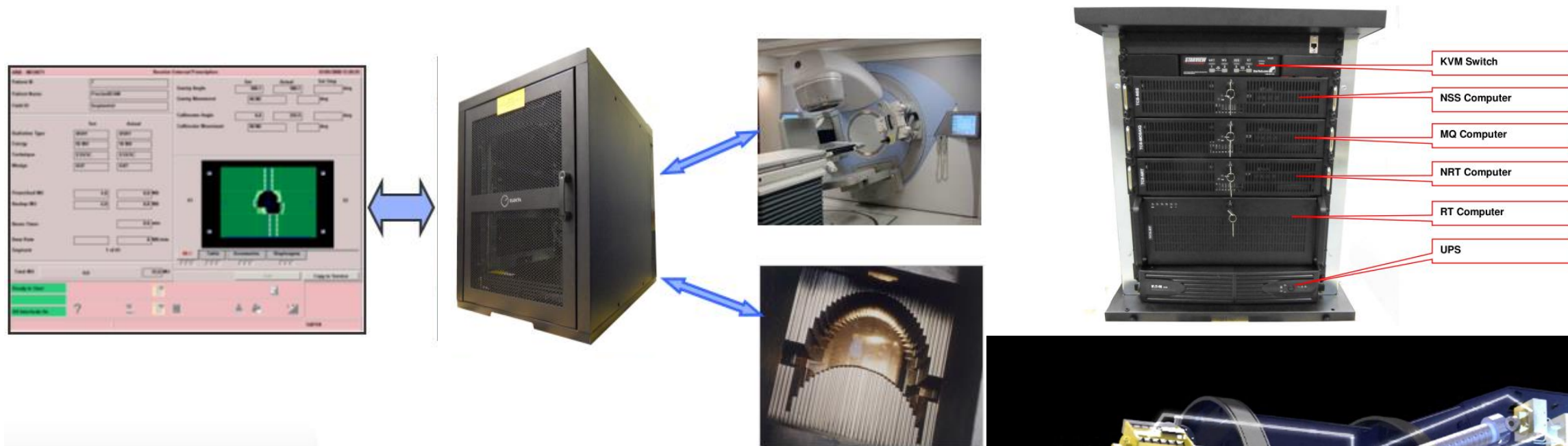
Elekta

Large field area

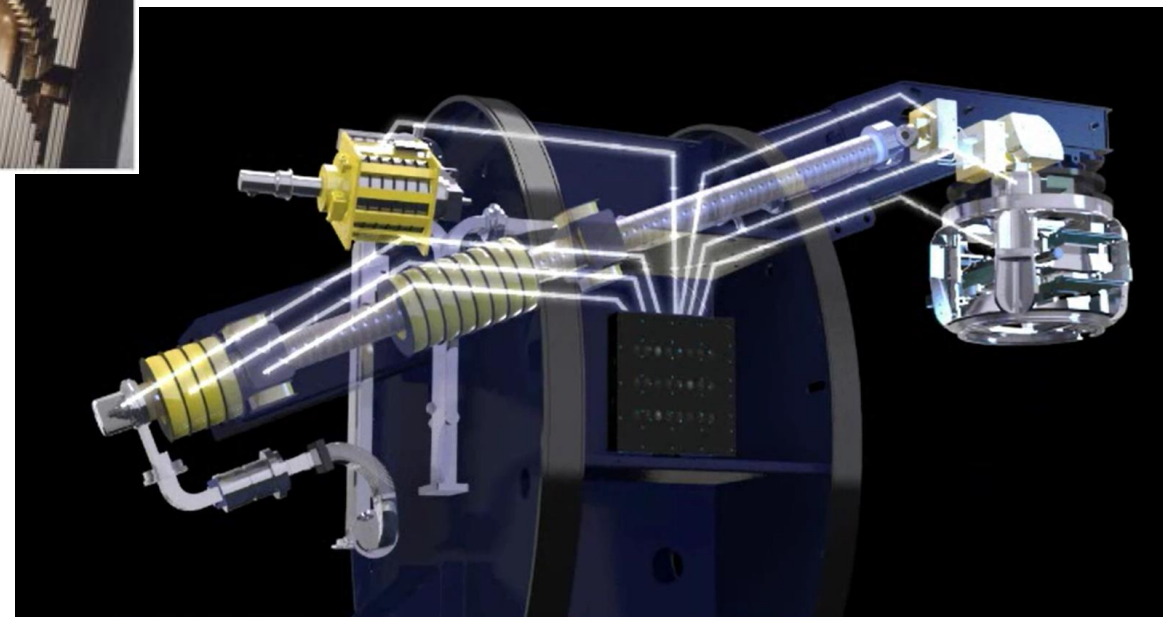


Exemplo: Técnica de mama com suporte de braço.

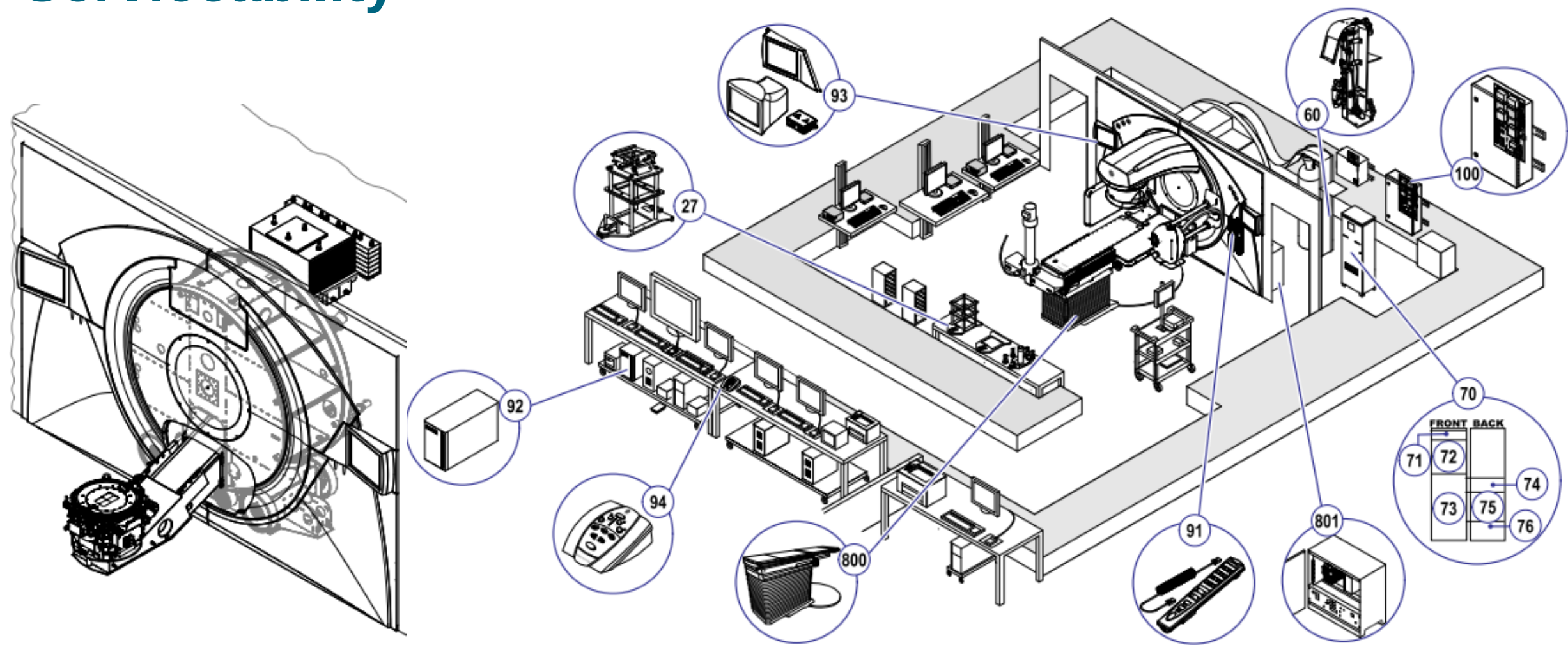
Acelerador Linear Digital – Controle Digital



- ✓ Único Controle Computadorizado Linac MLC
- ✓ Integração de Controles
- ✓ Não Existe atrasos na Comunicação
- ✓ Comunicação segura e rápida



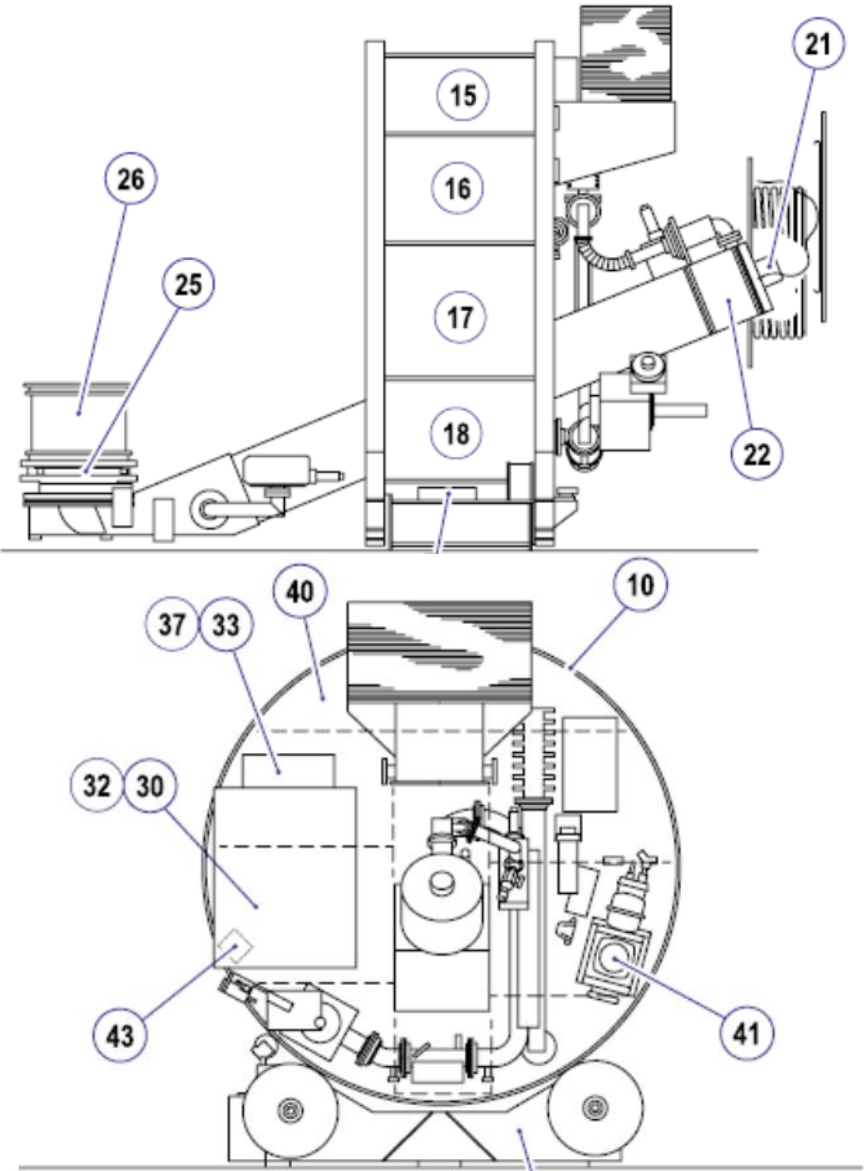
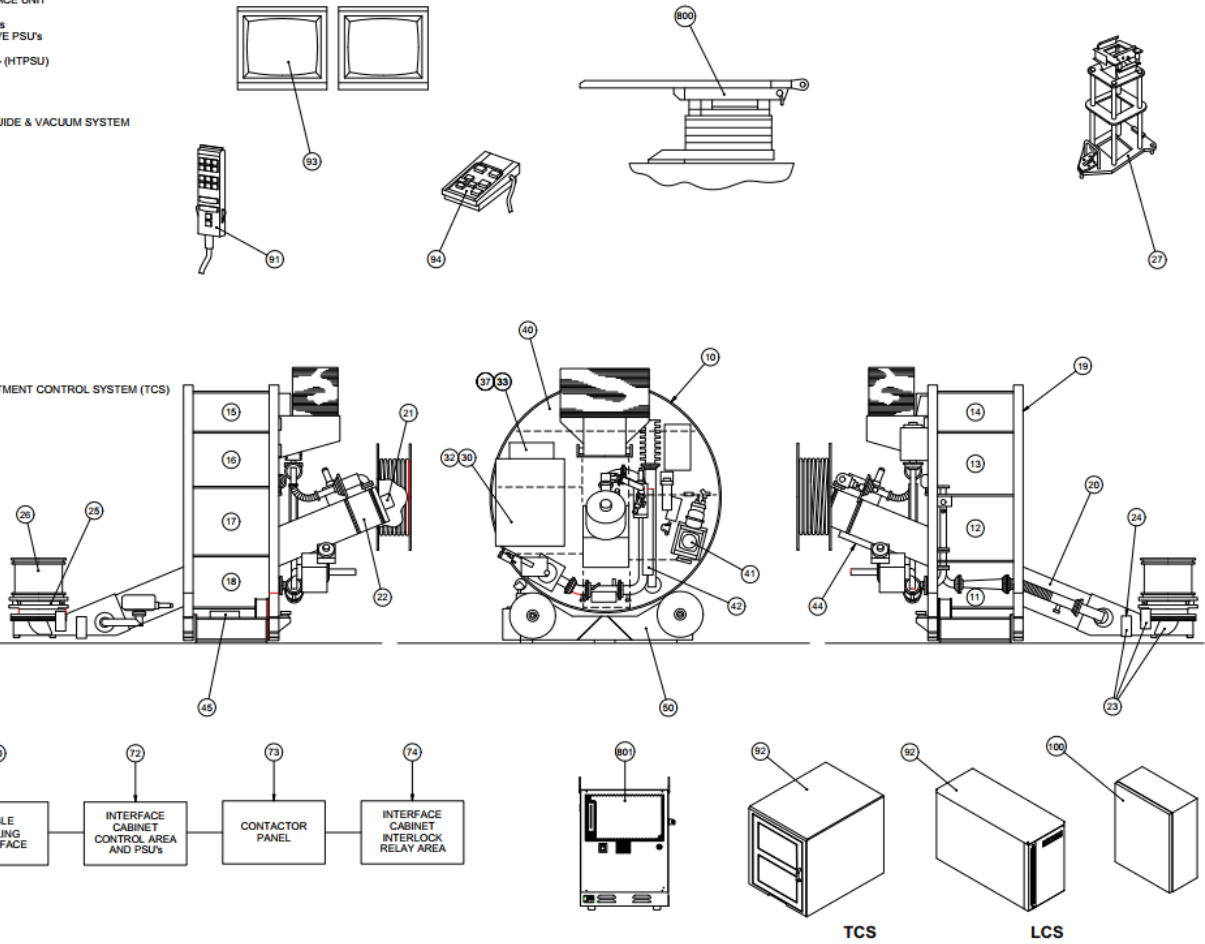
Serviceability



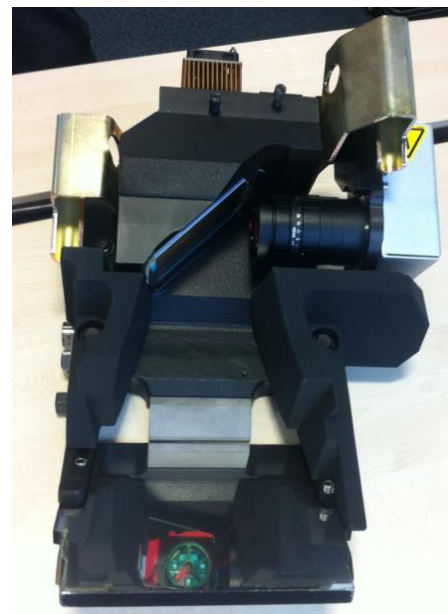
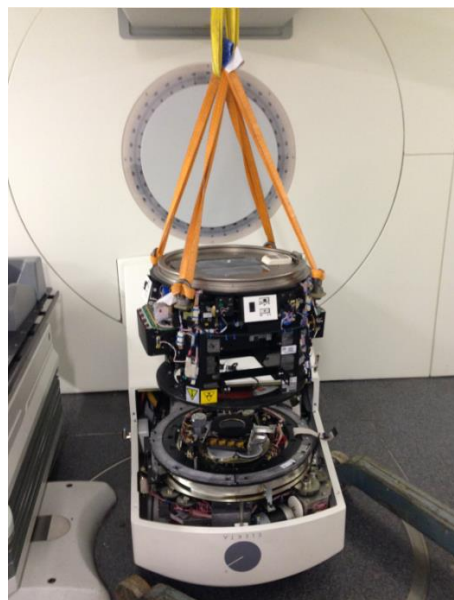
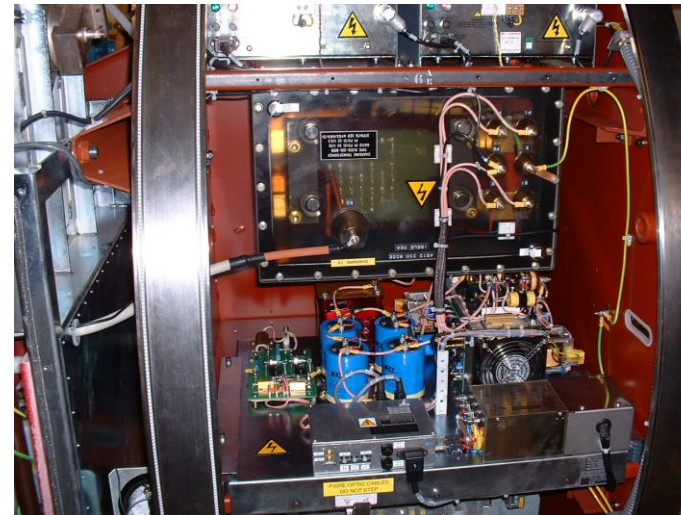
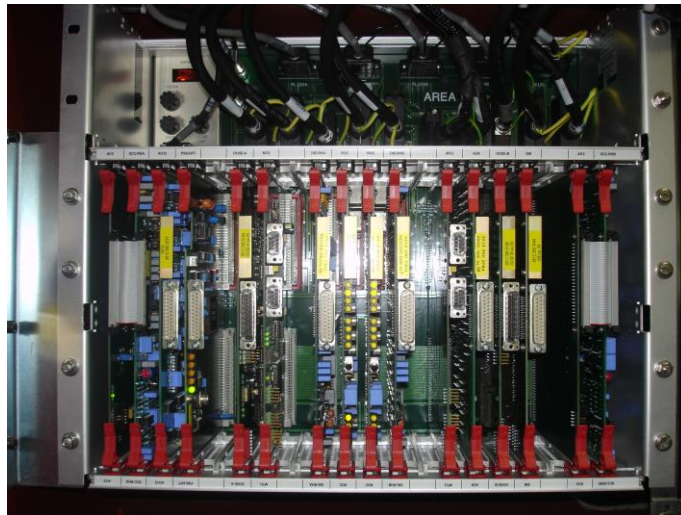
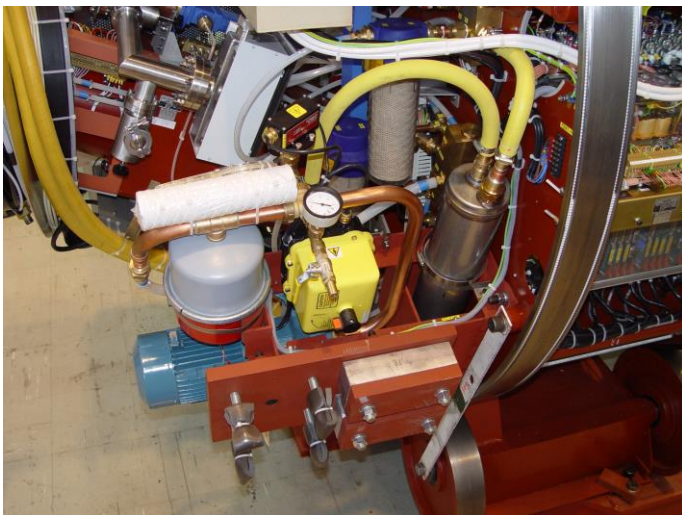
Serviceability

AREA CODES

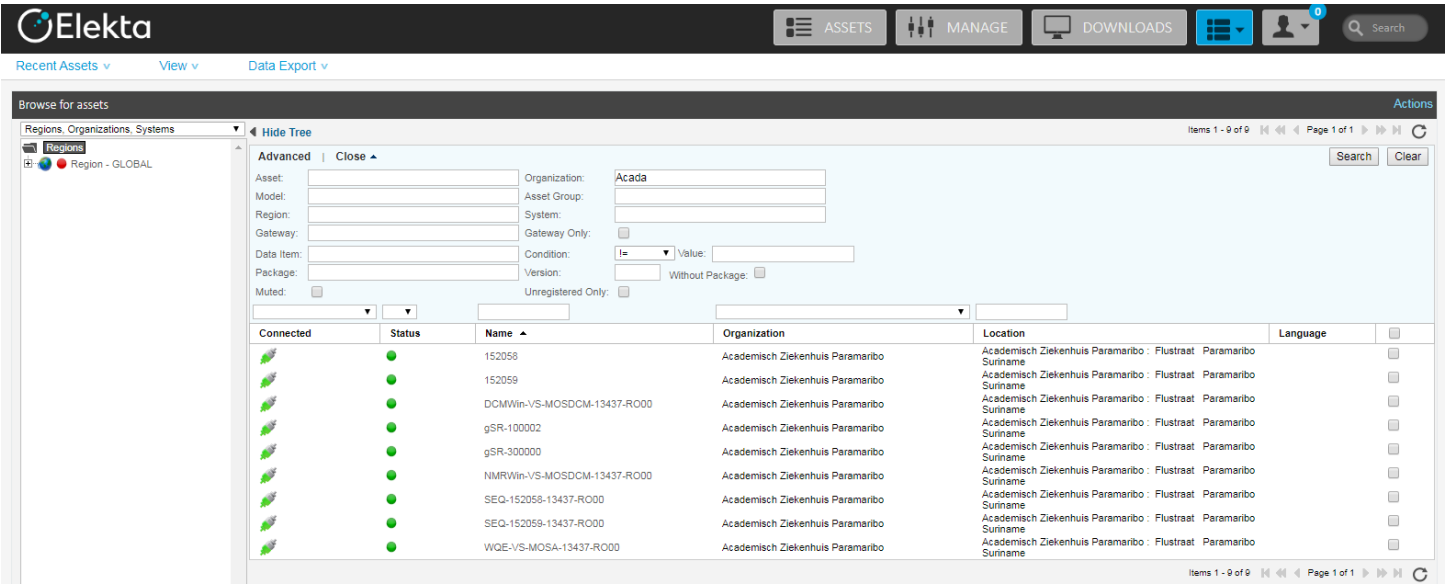
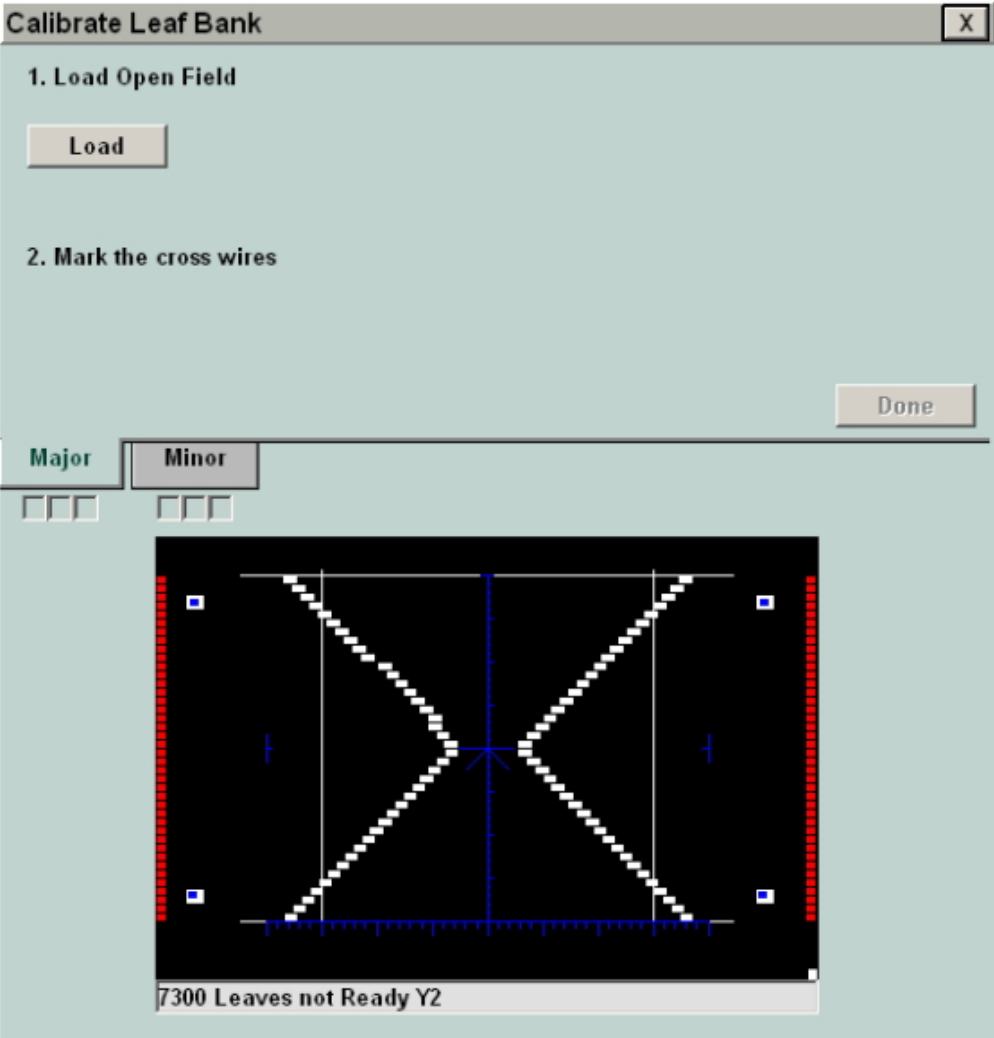
- 10 GANTRY DRUM
- 11 MOTOR DRIVE AREA
- 12 RADIATION HEAD CONTROL AREA AND MLC INTERFACE UNIT
- 13 LV PSU
- 14 GANTRY INTERLOCK RELAY RACK, ANCILLARY PSU's
- 15 DIELECTRIC GAS EVACUATION PUMP & MOTOR DRIVE PSU's
- 16 HT CONTROL AREA
- 17 PULSE FORMING NETWORK (PFN) CHARGING ASSY - (HTPSU)
- 18 ION PUMP CONTROLLER UNIT
- 19 LASER BACK POINTER
- 20 GANTRY ARM
- 21 ELECTRON GUN
- 22 CENTRING & FOCUS COILS, ACCELERATOR WAVEGUIDE & VACUUM SYSTEM
- 23 BENDING MAGNET ASSY
- 24 FLIGHT TUBE & TARGET DRIVE
- 25 RADIATION HEAD COLLIMATOR ASSY
- 26 RADIATION HEAD DIAPHRAGM ASSY
- 27 APPLICATORS
- 30 MODULATOR
- 32 THYRATRON PULSER UNIT
- 33 MAG FILL PSU
- 37 FAST TUNING MAGNETRON (FTM)
- 40 GANTRY DRUM MISC ITEMS
- 41 HEAT EXCHANGER
- 42 PHASE SHIFT DRIVE, RECTANGULAR WAVEGUIDE
- 44 CABLE REELING INTERFACE (DRUM)
- 45 PHASE ERROR DETECTOR
- 50 GANTRY BASE
- 60 CABLE REELING INTERFACE (RIC)
- 70 REELING INTERFACE CABINET (RIC)
- 72 INTERFACE CABINET CONTROL AREA AND PSU's
- 73 CONTACTOR PANEL
- 74 INTERFACE CABINET INTERLOCK RELAY AREA
- 91 HAND HELD CONTROLLER
- 92 LINAC CONTROL SYSTEM (LCS) CABINET AND TREATMENT CONTROL SYSTEM (TCS)
- 93 MONITORS
- 94 FUNCTION KEYPAD
- 100 CITB
- 800 PRECISE TREATMENT TABLE (PTT)
- 801 ELECTRICAL INTERFACE MODULE (PTT)



Serviceability



Serviceability

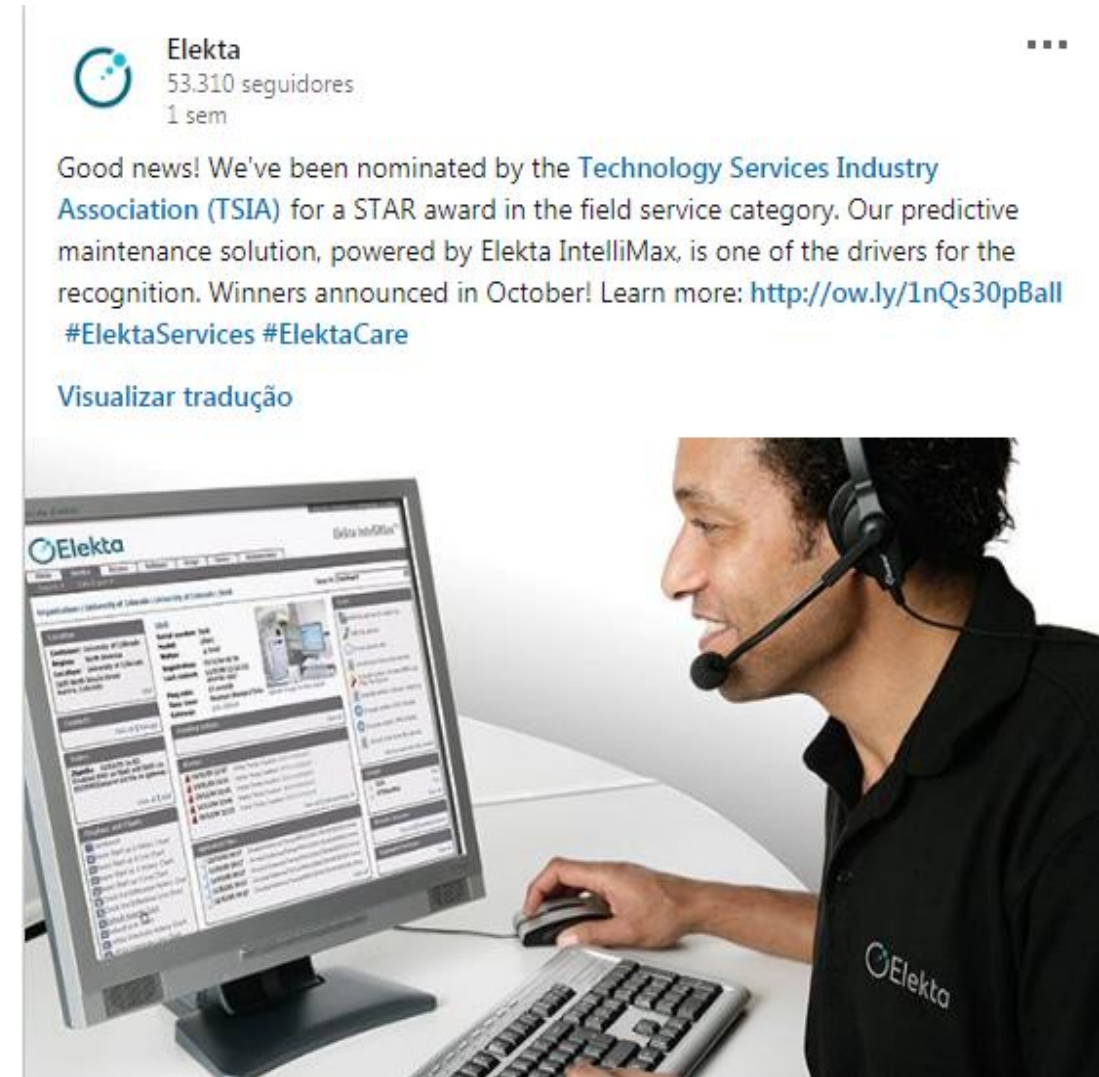


Serviceability

Elekta IntelliMax[®]

Personalized proactive support & predictive maintenance for your Elekta solutions

Serviceability



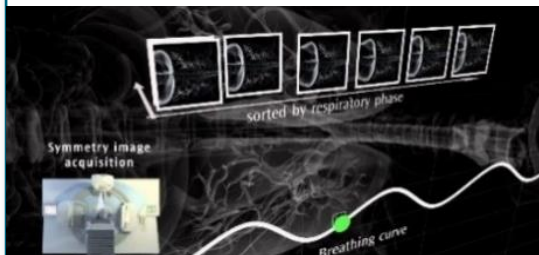
Elekta recognized as a STAR with our predictive support

- ✓ Elekta foi indicada para receber a ESTRELA pela TSIA – Technology Services Industry Association, pelo trabalho realizado nos chamados preditivos

Radiation Precision Medicine

LINAC RT & SRS/SBRT

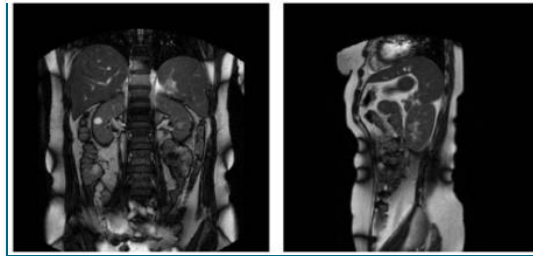
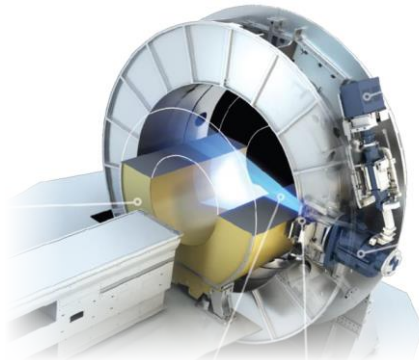
HD Dynamic Radiosurgery
and 4D XVI



Isocentro 0,7mm de Raio

MR LINAC RT

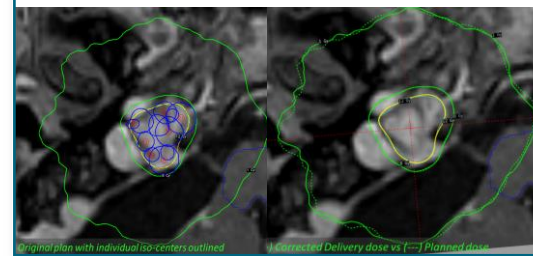
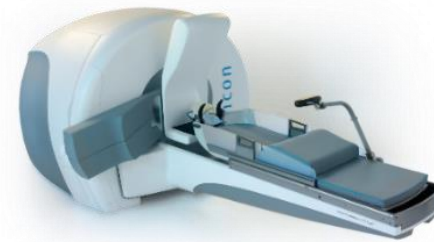
MR Adaptive RT



Isocentro 0,5mm de Raio

GAMMA KNIFE RADIOSURGERY

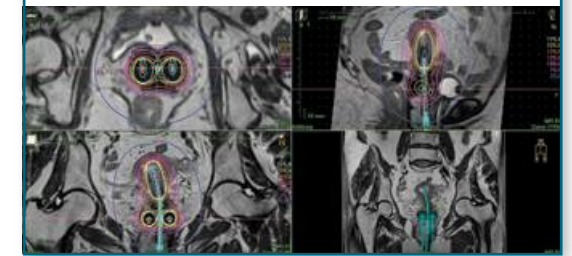
On-line adaptive and ultra
precise



Isocentro 0,038mm de Raio

BRACHYTHERAPY

Image-guided adaptive
brachytherapy



Isocentro 0mm na lesão

>100 installed equipment in Brazil

>100 installed equipment in distributors markets



Thank you Muito Obrigado

Gustavo Alves

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