



Servo-Torq[®] Medi rotary cutter

With integral Accra-Feed[™] UA belt infeeder

The Servo-Torq[®] Medi is our premier cutting system for medical tubing. It is designed to accurately handle micro-bore tubing at high linespeeds. The twin belts have been engineered to precisely feed the tube into the cutter. The knife blade is directly powered by a high acceleration servo motor.

The main benefits to the user are:

- Designed to handle all medical grades; PVC, PU, PE, TPE, FEP, PEEK & silicone.
- Lenze i700 multi-axis AC servo control for optimum speed & accuracy.
- Cutter blade directly driven at high speed for a clean, square, cut end.
- Built-in blade lubrication with medical-grade clear anodized cutter block & lid.
- Twin direct drive servo motors powering the puller belts via planetary gearboxes.
- Infeeder belt design gives maximum support to the tube as it enters the cutter.
- FDA approved medical finish as standard; ready to use in the clean-room.
- Easy-to-use Siemens 178 mm (7") colour touch-screen control panel.
- Bubble, taper, bump & cuffed tube control upgrades available.



Servo-Torq[®] Medi rotary cutter with Accra-Feed[™] caterpillar infeeder

The Servo-Torq[®] uses a rotary 'flying knife' method to cut through the extrudate.

The ultra-thin knife blade is rotated at high speed through 360°. During part of this rotation the blade slices through the extrusion as it is fed forward by the integral caterpillar infeeder. Inlet & outlet bushes guide the blade & the extrusion during the cutting operation.

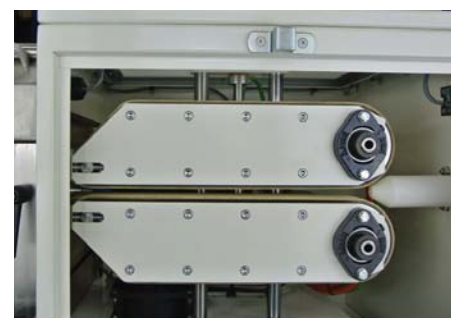
On receipt of a signal to cut, the AC servo motor accelerates from rest to full speed. When the blade hits the material it is travelling at up to 2500 rpm. After the cut has been completed, the knife blade decelerates to a stop and waits for the next cut signal.

Twin AC servo motors drive the belts of the integral caterpillar infeeder. The extrusion is measured as it passed through the belts to a resolution of 0.025 mm. A high-level servo controller then compares the measured length to the required cut length before activating the cutting action.

The whole machine is controlled via the latest Siemens Comfort touch-screen control panel. Gillard have configured the software to create a very user friendly operator interface.

A range of options are available, such as bubble/bump tube cutting mode & cuff tube detectors.

Further details are on the rear of this data sheet.



| Servo-Torq [®] Medi - with caterpillar infeeder: | | | | | | |
|-----------------------------------------------------------|-----------------------|--------------------|---------------------|---------------------|---------------|-----------------------------|
| Rotary cutter & caterpillar infeeder: | Max. cutting capacity | Cutter motor (Nm): | Cutter torque (Nm): | Infeed motors (Nm): | Gearbox type: | Infeed belt size W x L (mm) |
| ST-Medi/30A-D with Accra-Feed UA50M | 30 mm OD | 3.8 | 14.8 | 1.5 (twin) | Planetary | 50 x 250 |

www.gillardcutting.com

For more information on our product range.

© 2018 Peter Gillard & Co. Limited
 Servo-Torq[®] is a registered trademark of Peter Gillard & Co. Limited
 Accra-Feed[™] is a trademark of Peter Gillard & Co. Limited



Servo-Torq[®] Medi rotary cutter

Extrusion rotary cutter - Accra-Feed[™] Combi



| | |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical specification¹: | <ul style="list-style-type: none"> 1000 mm ± 50 mm line height. Alternatives available. Right-to-left product feed. Left-to-right available. Clear anodized finish aluminium cutter block with stainless drip tray. Stainless steel option available. Light-weight aluminium blade holder fitted directly onto cutter servo motor; no belts to wear or fray. Slide-away cutter head for easy line start-up. Poly-vee caterpillar belts covered in heavy-duty cellular polyethylene or FDA approved rubber. Single hand-wheel adjustment of both caterpillar belts around the machine centre-line. Robust fabricated steel base fitted with 75 mm diameter white plastic swivel castors. |
| Blade & caterpillar infeed AC servo motor/drive technology¹: | <ul style="list-style-type: none"> Lenze brushless AC servo motors with integral high resolution encoder feedback control. Lenze i700 multi-axis servo drive control. Very high torque even at high speeds. Low inertia/fast acceleration for dynamic performance. Rugged construction with encoders decoupled from the motor shaft. IP65 protected motor casings. Temperature sensors fitted into motor windings for protection against over-heating. |
| Cutting speed & modes¹: | <ul style="list-style-type: none"> Adjustable blade speed up to 2,500 RPM. Automatic stepless cutting from 1 - 2,500 cuts/minute. |
| Operator control panel¹: | <ul style="list-style-type: none"> Siemens TP700 Comfort 178 mm (7") touch-screen. Robust IP65 protected front panel. Widescreen TFT with 16 million colours. Backlit LED screen - size 800 x 400 pixels. Front panel size 214 mm x 158 mm. 12 MB user memory SD card slot for program back-ups & updates. ProfiNET (Ethernet) & USB communications. Safety guards okay lamps with re-set soft button. |
| Software, PLC & motion control¹: | <ul style="list-style-type: none"> Siemens WinCC Comfort operating software. Siemens S-7 PLC with digital & analog modules. Lenze motion controller with EtherCAT comms. Communication facilities via ProfiNET & Ethernet. |
| Remote internet support¹: | <ul style="list-style-type: none"> eWON industrial VPN router with Ethernet switch. Secure connectivity for remote back-up & support. |
| Safety guarding¹: | <ul style="list-style-type: none"> PILZ Class 3 coded magnet safety sensors fitted to cutter lid, outlet cutter guide bush, slide-away cutter heads & caterpillar access door. All IP65 protected. Pre-belt inlet safety tunnel guard (RAL 2004 orange). Internal safety relay with re-set push button. Two emergency stop push buttons. Compliance with EN & ISO Standards. Fitted with a CE plate and provided with a Certificate of Conformity or Certificate of Incorporation². |
| Blade lubrication system: | <ul style="list-style-type: none"> Clear anodized aluminium bath lubrication reservoir. Lubrication level indicator & drain tap provided. Stainless steel tray below reservoir to catch drips. |
| Tooling & blades: | <ul style="list-style-type: none"> One pair stainless steel cutter guide bushes. Aluminium RAZOR blade holder - tube up to 10 mm. 50 off RAZOR blades - stainless steel - 0.25 mm. Aluminium CHIP blade holder - tube up to 30 mm. 8 off CHIP blades - stainless steel - 0.38 mm thick. |

1. Specifications subject to change without notice. Please consult the factory for details of any changes.
2. Which Certificate will depend upon the exact configuration of the machine and the way it is installed.

| | |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical specification¹: | <ul style="list-style-type: none"> Approximately 800 mm long x 900 mm deep x 1750 mm high (based on 1000 mm line height). Approximately 400 Kgs without options fitted. |
| Power: | <ul style="list-style-type: none"> 400V three phase 50 Hz supply with neutral and earth. 25 Amp supply. Alternatives available. |
| Support: | <ul style="list-style-type: none"> One year parts warranty with express delivery during warranty period. Consumables excluded. |

Touch-screen control interface:



The Start-up Screen:

- The touch-screen panel controls all normal machine operations



The Control Screen:

- Enter the cut length, linespeed & batch quantity. Lengths from 10.0 to 999,999.9 mm can be entered.



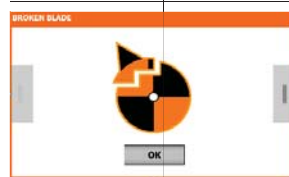
The Setup Screen:

- Blade speed adjustment from 50% to 100% of full speed.
- Stepless cutting from 1 - 2,000 cuts.
- Caterpillar local/remote speed selection.



The Tools Screen :

- Set the control panel language
- Adjust machine parameters.
- Enter the password protected area.



The Options Screens:

- Individual options can have their own screen, such as the broken blade option. A warning screen appears when a broken blade is detected.



- The bubble & cuff tube options feature larger touch-screens; normally 228 mm (9").

Many options are available. Please contact us for more details.

Gillard Cutting Technology

Alexandra Way, Ashchurch Business Centre, Tewkesbury Gloucestershire, GL20 8NB, England - UK.

Tel: +44 (0) 1684 290 243

Email: sales@gillardcutting.com

www.gillardcutting.com

