



## Servo-Torq<sup>®</sup> LT & MT Combi rotary cutters - belt drive version

With integral Accra-Feed<sup>™</sup> UA belt infeeder

The Servo-Torq<sup>®</sup> LT & MT Combi are our premier cutting systems for a wide range of extrusions. They are designed to accurately handle high accuracy cutting at high linespeeds. The knife blade is powered by a direct-drive high acceleration servo motor.

### The main benefits to the user are:

- Cutter blade belt driven at high speed for a clean, square, cut end.
- Easy-to-use Siemens 178 mm (7") wide-screen colour touch-screen control panel.
- Lenze i700 multi-axis AC servo control for optimum speed & accuracy.
- Blade lubrication system as standard with a robust aluminium cutter block.
- Twin direct drive servo motors powering the puller belts via planetary gearboxes.
- Slide-away cutter head for easy extrusion line start-up & blade change.
- Powerful cut thanks to low inertia - high acceleration servo motors.
- New technology reduces maintenance downtime significantly.



## Servo-Torq<sup>®</sup> Combi rotary cutter with Accra-Feed<sup>™</sup> caterpillar infeeder

The Servo-Torq<sup>®</sup> LT & MT use a rotary 'flying knife' method to cut through the extrusion.

An 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.

The blade is fitted to a light-weight aluminium holder. This in-turn is fitted directly onto a drive shaft. The motor is connected to the drive shaft using a robust timing belt.

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.

The whole machine is controlled via the latest Siemens 178 mm (7") widescreen touch-screen control panel.



### Servo-Torq<sup>®</sup> LT & MT - Combi versions - with caterpillar infeeder:

Rotary cutter & caterpillar infeeder Model number:	Max. OD cutting capacity (mm):	Cutter motor (Nm):	Cutter torque (Nm):	Infeed motors (Nm):	Infeed gearbox type:	Infeed belt size W x L (mm):
ST-LT/40B-B-UA75	40	7.5	24.7	2 x 2.3	Planetary	75 x 550
ST-LT/50B-B-UA75	50	7.5	24.7	2 x 2.3	Planetary	75 x 550
ST-MT/40C-B-UA75	40	11.0	41.5	2 x 2.3	Planetary	75 x 550
ST-MT/50C-B-UA75	50	11.0	41.5	2 x 3.8	Planetary	75 x 550
ST-MT/75C-B-UA75	75	11.0	41.5	2 x 2.3	Planetary	75 x 550



[www.gillardcutting.com](http://www.gillardcutting.com)

For more information on our product range.

© 2018 Peter Gillard & Co. Limited

Servo-Torq<sup>®</sup> is a registered trademark of Peter Gillard & Co. Limited

Accra-Feed<sup>™</sup> is a trademark of Peter Gillard & Co. Limited

# Servo-Torq® LT & MT Combi rotary cutters

Extrusion rotary cutter - Accra-Feed™ Combi



<b>Mechanical specification<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>1000 mm + 50 mm (1000 mm - 1050 mm) line height. Alternatives available.</li> <li>Right-to-left product feed. Left-to-right available.</li> <li>Aluminium cutter block with stainless drip tray.</li> <li>Light-weight aluminium blade holder with knife shaft &amp; belt drive to cutter servo motor.</li> <li>Slide-away cutter head for easy line start-up.</li> <li>Poly-vee caterpillar belts covered in heavy-duty cellular Polyethylene (PU). Alternatives are available.</li> <li>Single hand-wheel adjustment of both caterpillar belts around the machine centre-line.</li> <li>Robust fabricated steel base fitted with 75 mm diameter white plastic swivel castors.</li> </ul>
<b>Blade &amp; caterpillar infeed AC servo motor/drive technology<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>Lenze brushless AC servo motors with integral high resolution encoder feedback control.</li> <li>Lenze i700 multi-axis servo drive control.</li> <li>Very high torque even at high speeds.</li> <li>Low inertia/fast acceleration for dynamic performance.</li> <li>Rugged construction with encoders decoupled from the motor shaft. IP65 protected motor casings.</li> <li>Temperature sensors fitted into motor windings for protection against over-heating.</li> </ul>
<b>Cutting speed &amp; modes<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>Adjustable blade speed up to 2,000 RPM.</li> <li>Automatic stepless cutting from 1 - 2,000 cuts/minute.</li> </ul>
<b>Operator control panel<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>Siemens TP700 Comfort 178 mm (7") touch-screen.</li> <li>Robust IP65 protected front panel.</li> <li>Widescreen TFT with 16 million colours.</li> <li>Backlit LED screen - size 800 x 400 pixels.</li> <li>Front panel size 214 mm x 158 mm.</li> <li>12 MB user memory</li> <li>SD card slot for program back-ups &amp; updates.</li> <li>ProfiNET (Ethernet) &amp; USB communications.</li> <li>Safety guards okay lamps with re-set soft button.</li> </ul>
<b>Software, PLC &amp; motion control<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>Siemens WinCC Comfort operating software.</li> <li>Siemens S-7 PLC with digital &amp; analog modules.</li> <li>Lenze motion controller with EtherCAT comms.</li> </ul>
<b>Safety guarding<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>PILZ Class 3 coded magnet safety sensors fitted to cutter lid, outlet cutter guide bush, slide-away cutter heads &amp; caterpillar access door. All IP65 protected.</li> <li>Pre-belt inlet safety tunnel guard (RAL 2004 orange).</li> <li>Internal safety relay with re-set push button.</li> <li>Two emergency stop push buttons.</li> <li>Compliance with EN &amp; ISO Standards.</li> <li>Fitted with a CE plate and provided with a Certificate of Conformity or Certificate of Incorporation<sup>2</sup>.</li> </ul>
<b>Blade lubrication system:</b>	<ul style="list-style-type: none"> <li>Aluminium bath lubrication reservoir.</li> <li>Lubrication level indicator &amp; drain tap provided.</li> <li>Stainless steel tray below reservoir to catch drips.</li> </ul>
<b>Tooling &amp; blades:</b>	<ul style="list-style-type: none"> <li>One pair stainless steel cutter guide bushes.</li> <li>2 off curved blades - spring steel - 0.6 mm thick.</li> </ul>
<b>Extra cost upgrade to Plus machine specification<sup>1</sup></b>	<ul style="list-style-type: none"> <li>Remote machine support via the internet.</li> <li>eWON industrial VPN router with Ethernet switch.</li> <li>Secure connectivity for remote back-up &amp; support.</li> <li>Digital counter showing distance between the belts.</li> <li>Stainless steel drip tray under the belts.</li> <li>Traffic light beacon to indicate machine status.</li> </ul>
<b>Value pack with extra features over Standard specification:</b>	

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.

<b>Physical specification<sup>1</sup>:</b>	<ul style="list-style-type: none"> <li>Approximately 1000 mm long x 1000 mm deep x 1750 mm high (based on 1000 mm line height).</li> <li>Approximately 450 Kgs without options fitted.</li> </ul>
<b>Power:</b>	<ul style="list-style-type: none"> <li>400V three phase 50/60 Hz supply with neutral and earth. 30 Amp supply. Alternatives available.</li> </ul>
<b>Support:</b>	<ul style="list-style-type: none"> <li>One year parts warranty with express delivery during warranty period. Consumables excluded.</li> </ul>

Touch-screen control interface:



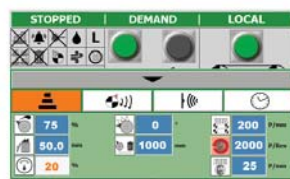
The Start-up Screen:

- 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.



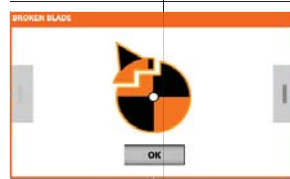
The Setup Screen:

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



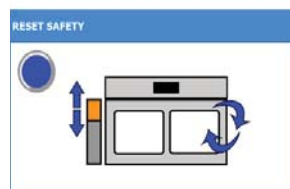
The Tools Screen :

- 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 Safety Screens:

- Easy-to-follow screens inform the operator on the machine status, with visual instructions on what to do.

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