

# Servo-Torq® XXHD Combi rotary cutters

With integral Accra-Feed™ UA belt infeeder

The Servo-Torq® XXHD Combi is our cutting system for the heaviest & toughest extrusions. A torque enhancer gearbox is added to the cutter motor to give a massive amount of cutting power. Up to 278 Nm of torque is available.

### The main benefits to the user are:

- Torque enhancer gearbox system designed to handle extra heavy-duty extrusions.
- 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.

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

The Servo-Torq® XXHD Combi uses 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.

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 touch-screen control panel. Gillard have configured the software to create a very user friendly operator interface.

Servo-Torq® XXHD - Con	q® XXHD - Combi versions - with caterpillar infeeder:						
Rotary cutter & Caterpillar infeeder Model number:	Max. OD cutting capacity (mm):	Cutter motor (Nm):	Cutter torque (Nm) <sup>1</sup> :	Infeed motors (Nm):	Infeeder belt size W x L (mm):		
ST-XXHD/40F-B-UA95L	40	17.0	208	2 x 2.3 (4.5)	95 x 800		
ST-XXHD/40F-B-UA95XL	40	17.0	208	2 x 2.3 (4.5)	95 x 1000		
ST-XXHD/100F-B-UA95L	50	17.0	208	2 x 2.3 (4.5)	95 x 800		
ST-XXHD/100F-B-UA95XL	100	17.0	208	2 x 2.3 (4.5)	95 x 1000		
ST-XXHD/150F-B-UA150L	150	17.0	208	2 x 2.3 (4.5)	150 x 800		
ST-XXHD/150F-B-UA150XL	150	17.0	208	2 x 2.3 (4.5)	150 x 1000		
ST-XXHD/40G-B-UA95L	40	17.0	278	2 x 2.3 (4.5)	95 x 800		
ST-XXHD/40G-B-UA95XL	40	17.0	278	2 x 2.3 (4.5)	95 x 1000		
ST-XXHD/100G-B-UA95L	100	17.0	278	2 x 2.3 (4.5)	95 x 800		
ST-XXHD/100G-B-UA95XL	100	17.0	278	2 x 2.3 (4.5)	95 x 1000		
ST-XXHD/150G-B-UA150L	150	17.0	278	2 x 2.3 (4.5)	150 x 800		
ST-XXHD/150G-B-UA150XL	150	17.0	278	2 x 2.3 (4.5)	150 x 1000		

<sup>&</sup>lt;sup>1</sup> 208 Nm with 3:1 gearbox; 278 Nm with 4:1 gearbox.

# www.gillardcutting.com

For more information on our product range.







# Servo-Torq® XXHD Combi rotary cutters

# Extrusion rotary cutter - Accra-Feed™ Combi



#### 1000 mm ± 50 mm line height. Alternatives available. specification1: Right-to-left product feed. Left-to-right available. Aluminium cutter block with stainless drip trav ■ Light-weight aluminium blade holder fitted directly onto drive shaft. Torque enhancer planetary gearbox fitted onto the front of the cutter servo motor. Either 3:1 or 4:1 ratio. Slide-away cutter head for easy line start-up. Poly-vee caterpillar belts covered in heavy-duty cellular PU Polyethylene (alternatives available). Twin hand-wheel adjustment; one for the upper caterpillar belt; one for the lower caterpillar belt. Robust fabricated steel base fitted with 75 mm diameter white plastic swivel castors. Blade & Lenze brushless AC servo motors with integral high caterpillar resolution encoder feedback control. infeeder AC Lenze i700 multi-axis servo drive control. servo motor/ Very high torque even at high speeds. drive Low inertia/fast acceleration for dynamic technology1: 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 Adjustable blade speed up to 2,000 RPM. & modes1: Automatic stepless cutting from 1 - 2,000 cuts/minute. Operator Siemens TP700 Comfort 178 mm (7") touch-screen. control panel1: 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, Siemens WinCC Comfort operating software. PLC & motion ■ Siemens S-7 PLC with digital & analog modules. control1: Lenze motion controller with EtherCAT comms. Safety ■ PILZ Class 3 coded magnet safety sensors fitted to guarding1: 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).

	<ul> <li>Internal safety relay with re-set push button.</li> <li>Two emergency stop push buttons.</li> </ul>	
	■ Compliance with EN & ISO Standards.	
	Fitted with a CE plate and provided with a Certific of Conformity or Certificate of Incorporation <sup>2</sup> .	ate
Blade	Aluminium bath lubrication reservoir.	

lubrication
system:

- Lubrication level indicator & drain tap provided.
- Stainless steel tray below reservoir to catch drips.

#### Tooling & blades:

- One pair stainless steel cutter guide bushes.
- 2 off curved blades spring steel 0.6 mm thick.

#### Upgrade to Plus machine specification1

Value pack with extra

Standard specification:

features over

- Remote machine support via the internet.
- eWON industrial VPN router with Ethernet switch.
- Secure connectivity for remote back-up & support.
- Digital counters showing distance between the belts.
- Stainless steel drip tray under the belts

2. Which Certificate will depend upon the exact configuration of the machine and the way it is installed.

Traffic light beacon to indicate machine status.

	Physical specification <sup>1</sup> :	<ul> <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>
	Power:	400V three phase 50 Hz supply with neutral and earth. 30 Amp supply. Alternatives available.
	Support:	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.



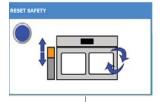
#### The Tools Screen:

- 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 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

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