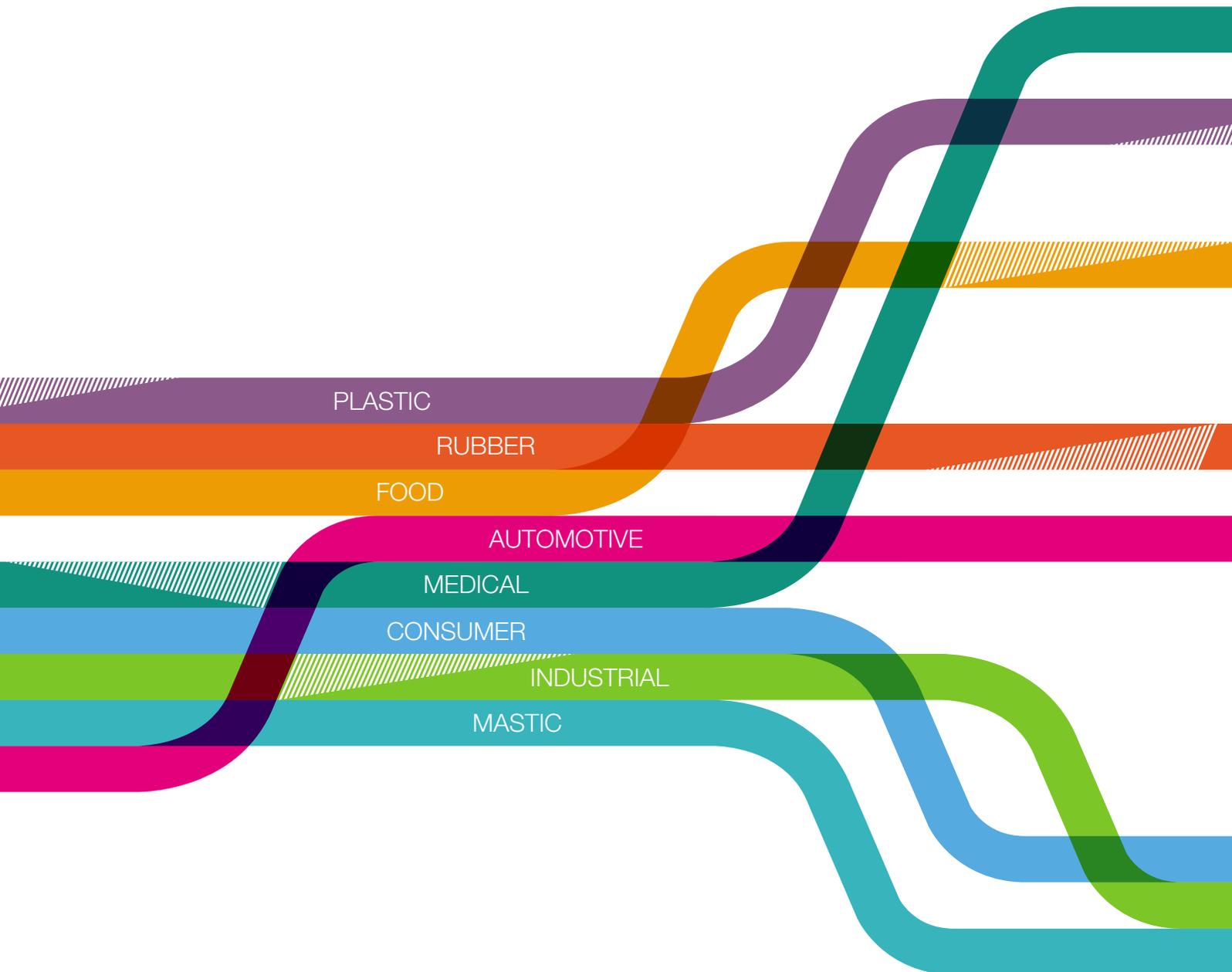




Innovators in Extrusion Cutting Technology



Solving your extrusion cutting problems

www.gillardcutting.com



Committed to Extrusion Cutting Excellence

Welcome to the latest Gillard catalogue. Founded in 1968, we are a leading world specialist in extrusion cutting and downstream handling.

Innovation, combined with decades of experience, has resulted in one of the most technically advanced ranges of extrusion cutting machines on the market.

All machines are designed and manufactured at our modern factory in south-west England. Here our experienced workforce skillfully construct products for customers who expect the best.

Raising the bar on cut length accuracy

Every millimetre counts. That's our philosophy. We are constantly improving our products to squeeze cut length tolerances ever tighter.

Increased productivity starts here

Higher cut rates and faster linespeeds mean one thing; more profit for our customers. Users of our machines get the competitive edge; more cut pieces in less time.

Designed for maximum uptime

Reduced maintenance downtime means increased production uptime. Our equipment is designed to make product not increase service bills.

Value-for-money for a quick pay-back

Performance needs to be financially justifiable. That's why we produce cost effective machines which pay for themselves in the shortest time possible.

Custom-made at a standard cost

Every requirement is unique. So why accept a standard solution? We offer a customised machine package to satisfy every specification and budget.

Durability as standard

Solid engineering and the best available components mean a machine lifespan which is measured in decades rather than years.

Solving your extrusion cutting problems

FREE CUTTING TRIALS

Please send us your samples or contact us at:
sales@gillardcutting.com



Plastics Extrusion

Everything from flexible PVC to polyurethane tubing, rigid ABS to high-impact polystyrene profiles, foam insulation to large diameter PE pipe, we can cut it all.

As one of our core markets, our experience in cutting plastic extrusions is extensive. Our in-house knowledge of blade technology provides affordable solutions for the vast majority of plastic tube, hose, pipe & profile cutting applications.

Automotive Extrusion

From the toughest Kevlar® reinforced hose – to the most complicated cuffed multi-layered nylon fuel tube – we have the cutting solution.

With decades of experience in the automotive market, we manufacture machines designed for 24/7 operation in the most demanding environments. This gives our customers a competitive edge in this most demanding of all markets.

Food Extrusion

Our rotary cutters are ideal for the in-line cutting of extruded food products such as dog chews and dental sticks, croutons, flat bread & bread sticks.

We can cut product straight in-line after the extruder. Our cutters are optimised for the food extrusion market. This means improved hygiene standards, integrated dust extraction, heat resistant components & the ability to cut multiple lanes of product.

Mastic Extrusion

Cutting extruded adhesive, gel, epoxy putty & other mastics can be tricky. But we have years of experience in this market.

Mastic materials need careful handling. They are usually soft and often sticky. This is where our knowledge can be invaluable. Our tailored solutions are based on a comprehensive understanding of the problems that come with cutting mastics.

Rubber Extrusion

Cured, uncured, silicone & sponge, they can all be cut with our equipment. This includes profiles & hoses reinforced with Kevlar®, steel wire or aluminium carrier.

Our machines are engineered for cutting rubber under challenging conditions, where water & anti-tack solutions are often present. We can handle hot & sticky materials thanks to standard features such as blade lubrication.

Medical Extrusion

A wide variety of medical devices can be cut with our Servo-Torq® technology. These include all types of tubing, including bubble, bump, taper & cuffed tube.

All our medical cutters are configured to work in a clean-room environment. This means FDA approved finishes where appropriate. Proven technology ensures our machines can work in-line at high linespeeds. Off-line systems are also available.

Consumer Extrusion

The list is almost endless – everything from pen tubes to soap bars, crayons to garden hose. If your product is extruded, then we can probably cut it ...

We have particular expertise in cutting non-polymer based extrusions, such as toilet blocks & gels and play dough. Using our expertise, we provide a customised cutting machine at an affordable price.

Industrial Extrusion

Heavy-duty cutting solutions where robustness of construction goes hand-in-hand with in-line cutting performance.

Many of our users are surprised by what our Servo-Torq® rotary cutters can cut. With the correct blade technology & high torque motors we can successfully cut products such as aluminium tube & solid graphite profiles.



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for more detailed information on our product range.



Servo-Torq®

Rotary cutters for all extruded products

The Servo-Torq® series of fly-knife rotary cutters extend from table-top versions to ultra-high performance machines. Cutting capacities range up to 300 mm outer diameter with six levels of cutting power.

Every Servo-Torq® cutter uses the latest digital AC servo technology to control the rotary blade cutting action. The high speed slicing cut action ensures optimum cut quality. Advanced software guarantees precise cut length control at the highest cut rates.

Two performance levels are available to ensure that your cutting requirements & budget can be precisely matched:

Servo-Torq® Standard

Robust all-round performance at an affordable price

- Widest range of cutting capacities & motor powers
- Colour touch screens – 90 mm (3.5") or 150 mm (6")
- Digital AC servo drive technology from Lenze
- Blade lubrication facility for improved cut quality

Servo-Torq® Plus

For the highest cut rates & tightest length tolerances

- Automatic step-less cutting from 1 to 2,000 cuts/minute
- High resolution colour touch screens – 150 mm (6"), 200 mm (8") or 250 mm (10")
- Siemens Simotion multi-axis digital AC servo drive control system
- Remote support with integrated internet router and wireless antenna



Servo-Torq® Free standing

Ø 40 - 50 - 100 - 150 - 200 - 250 - 300 mm

A stand-alone rotary cutter for when you already have a caterpillar infeed/puller machine.

All machines come complete with an encoder length control system, including a measuring wheel designed to run on the caterpillar belt or directly on the product. Cutter power ranges from light-duty to super-heavy-duty. Torque enhancer gearboxes are available to increase the cutting torque to over 260 Nm (equivalent to 46 kW).



Servo-Torq® Mini Combo

Ø 30 mm

Our compact rotary cutter is aimed at lighter duty cutting applications. Despite the small footprint, this machine can perform.

Available as a table-top unit for off-line use or as an in-line version complete with a floor-standing base & slide-away cutter head. The machine can also be supplied as part of a complete off-line cutting cell.



Servo-Torq® Medi Combo

Ø 30 mm

Precision engineered for cutting medical tubing. A clean-room finish is standard. Very high linespeeds are combined with an ultra-precise cut, ideal for high accuracy applications.

The integral Accra-Feed™ caterpillar puller belts have been specially designed to ensure optimum feeding of even the smallest tube into the cutting area. A slide-away cutter head is standard.

Options available include bubble, taper, bump & cuffed tube cutting functions.



Servo-Torq® LT & MT Combo

Ø 40 - 50 - 100 mm

Our workhorse rotary cutters combined with an integral Accra-Feed™ caterpillar infeed/puller fitted with 550 mm or 600 mm long belts. A slide-away cutter head is standard to assist with line start-up & blade changing.

These are “full-on” production machines suitable for all medium-duty cutting applications. Designed for 24/7 production at most linespeeds, these general-purpose machines can handle a wide range of products.



Servo-Torq® HD & XHD Combo

Ø 40 - 50 - 100 - 150 mm

Our heavy-duty rotary cutters with integral Accra-Feed™ caterpillar infeed/puller.

The cutter motors can be rated up to 21 Nm (18.5 kW). If more cutting force is needed we can fit a torque enhancer gearbox to take the power level up to a massive 46 kW. The integrated puller/infeeder is available with belt lengths of 600 mm, 800 mm or 1000 mm.

These heavier-duty units are capable of cutting tough extruded products such as rigid plastic pipe & profile and Kevlar® reinforced rubber hose.



Servo-Torq® Cuffed tube cutters

Ø 25 - 50 mm

Designed for cuffed tube applications such as complex automotive fuel & washer pipes, medical respirator tubing and concertina plumbing pipe.

Two types of technology are available to detect the cuff: laser & digital camera. Both constantly monitor the tube as it passes by at normal extrusion speed. The specially developed software handles the data to ensure accurate cutting on the cuff. A number of different cut lengths can be handled per corrugation chain, along with several scrap lengths.

In most cases there is no need to stop the tube to cut, allowing higher linespeeds to be achieved. When we do need to stop, our unique IRIS clamp provides a quick & flexible method of holding the tube.



Servo-Torq® Multi-lane food extrusion cutting

These cutting machines are optimised for the food extrusion market. This means upgraded hygiene standards, an integrated dust extraction system, heat resistant components & the ability to operate with multiple lanes of extruded product.

Products as varied as toasted flat bread, croutons, dog chews & dental sticks can be cut with our system.



Servo-Torq® Standard & Plus - Rotary cutter range

Model	Maximum outer diameter capacity (mm)	Servo motor size (Nm)	Servo drive rating (A)	Peak Torque (Nm)	Equivalent motor power (kW)
ST-Mini	30	3.0	5.0	9.0	1.5
ST-Medi	30	4.0 ¹	5.0	12.0	2.7
ST-LT	40, 50	7.5 (8.0) ¹	9.5 (18.0) ¹	22.5 (24.0) ¹	4.0 (9.7) ¹
ST-MT	40, 50, 100	11.0	13.0	29.0	5.5
ST-HD	40, 50, 100, 150	14.0	16.5	55 – 137 ²	7.5 – 18.7 ²
ST-XHD	40, 50, 100, 150, 200, 250, 300	17.0 (18.0) ¹	23.5 (30.0) ¹	77 – 154 ² (54) ¹	11.0 – 27.5 ² (16.0) ¹
ST-XXHD	40, 50, 100, 150, 200, 250, 300	21.0	39.0	105 – 262 ²	18.5 – 46 ²

¹ higher figure applies for the Plus version of the machine.

² higher figure applies when a torque enhancer gearbox is fitted.

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for more detailed information on our product range.

Accra-Pull™ & Accra-Feed™

Caterpillar belt haul-off/pullers

A range of tough twin-belt caterpillar belt units designed to handle the vast majority of extrusion pulling & feeding requirements.

All our caterpillar machines now feature direct-drive motors; one motor/drive per belt, for improved pulling power via sealed-for-life gearboxes.

Both the **Accra-Pull™** (free-standing units) & **Accra-Feed™** (combined with a cutting machine) are available in two performance levels:

VS Vector Standard

The choice for general-purpose pulling

- Digital AC Vector drive technology for near-servo performance
- Twin direct-drive motors with tough worm reduction gearboxes
- Dual Vector drives for perfect belt speed synchronisation
- Analog 10-turn potentiometer belt speed control (digital control available)

UA Servo

For high linespeeds & the tightest extrusion tolerances

- Digital AC servo drive technology
- Twin direct-drive servo motors with zero backlash planetary gearboxes
- Dual digital servo drives for the ultimate in belt speed synchronisation & control
- Ultra-precise digital belt speed adjustment with colour touch-screen control



Low-medium duty pulling

Belt length 250 - 550 mm

Ideal for smaller flexible & semi-rigid extrusions being pulled at all linespeeds. These machines have a compact foot-print, so perfect where space is at a premium.



Medium-heavy duty pulling

Belt length 600 - 800 - 1000 mm

The work-horse machines in our range. They are designed for the majority of pulling requirements. They can handle a wide range of general-purpose extrusion hauling needs. This includes flexible, semi-rigid & rigid hose, pipe & profile.



Extra-heavy duty pulling

Belt length 1000 - 1500 - 1800 mm

Designed for the toughest pulling jobs. These haul-offs are designed for heavier wall rigid pipe & profile. Options include a pneumatic floating upper belt to handle lumps & bumps at start-up.



Accra-Pull™ & Accra-Feed™ - Caterpillar range

Model	Belt width (mm)	Belt length (mm)	Motor size - VS AC Vector (kW)	Motor size - UA AC servo (Nm)
VS50 - UA50	50	250	2 x 0.18	2 x 1.5
VS75 - UA75	75	550	2 x 0.37 (0.55)	2 x 2.3 (3.8)
VS95 - UA95	95	600, 800, 1000	2 x 0.55 (0.75)	2 x 2.3 (3.8)
VS150 - UA150	150	600, 800, 1000	2 x 0.55 (0.75)	2 x 2.3 (3.8)
VS225 - UA225	225	1000, 1300, 1800	2 x 1.1 (1.5)	2 x 3.8 (4.5)
VS300 - UA300	300	1000, 1300, 1800	2 x 1.1 (1.5)	2 x 3.8 (4.5)

Circular blade cutters & saws

Travelling saws

Servo & air driven moving carriage Ø 50 - 100 - 150mm

Up-stroke saws for cutting rigid plastic pipe & profile. The moving carriage can be moved by either servo motor or by air.

The fully adjustable clamp system guarantees a square cut end, while the swarf extraction system keeps the cut end clean. An optional swivel cutter head is available to allow angled cuts ends to be achieved. A range of tilt tables are offered to go after the saw to collect the cut lengths.



Model	Max. capacity round (mm)	Max. capacity flat (mm)	Saw blade diameter (mm)	Saw carriage travel (mm)	Saw motor size (kW)
602	50	140	250	300	1.1
604	100	260	300	600	2.2
606	150	400	500	600	4.0

Metal-Cut™

The cost effective solution to cutting automotive sealing profiles Ø 50 - 100 mm

Designed to cut all types of metal reinforcement, including wire, punched or stamped strip & continuous rolled profile. A high speed circular blade slices through the extrusion. The cutter head is driven in & out of the product by a servo ball-screw assembly.

Two versions of the machine are available; a fixed-head cutter for flexible extrusions and a moving-head version for rigid profiles.

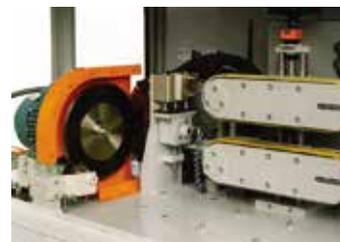


Braid-Cut™

Cut stainless steel braided PTFE & rubber hose cleanly Ø 25 - 40 mm

This advanced machine cuts through stainless braided hose cleanly, using an integral welding head to fuse the wire ends together. An anneal mode is also available.

The PTFE or rubber inner hose is left with a perfect cut finish. The Braid-Cut™ is fully PLC controlled, with an advanced program to ensure total synchronisation between the welding, annealing & cutting.



Conveyor cut-piece collection systems

A conveyor belt positioned after the cutter will automate cut piece collection. It gives improved cut length accuracy & cut quality, by supporting the extrudate as it exits the cutter. They can also enhance quality by automatically separating scrap lengths from good product.

The most popular type of collection system is the high pressure air jet option, where cut lengths are blown off the side of the belt.

The air nozzle design spreads the air blast over the widest belt area, to ensure a smooth discharge of the cut length into the collection bin.

Mechanical plough & push-off arms are also available. Multiple bin collection systems can be configured, with separate zones for scrap lengths.



Belt width (mm)	Belt length (mm)	Collection methods
50, 75, 150, 200	500, 1000, 2500, 3800	High velocity air jet
250, 300	4800, 6000	Mechanical sweep arms
-	-	Plough push-off system



Off-line cutting

For cutting flexible plastic & rubber off-line from coils.

Off-line cutting cell with sonar loop & pay-off

The cutting cell is based around our Servo-Torq® Mini rotary cutter.

The product is either de-coiled from a motorised drum pay-off or pulled off a braked turntable using a nip-roll unit.

The speed of the pay-off is controlled by the sonar device. The sonar is vital to avoid product stretch & distortion. This tension control enables very accurate cutting, even off-line from coiled material.

A medical grade paint finish with FDA approved components is available for clean-room use.

Ink-jet printing & flaw detection units can be added as required.

Pay-off systems - Motorised & braked

We have a range of pay-off units for use with coiled material when cutting off-line.

These range from table-top units to multiple-head de-coilers capable of handling metal drums.



Coiling machines

Low tension semi-automatic coilers designed for flexible tube & profile, where a more delicate coil is required.

Single or twin coilers

Vertical & horizontal format

The twin coilers can have the reeling heads mounted in the vertical plane (one on top of the other) or side-by-side in a horizontal format.

Coiling speed is adjusted by a low tension control system, ideal for delicate products such as medical tubing. Heavier products can be coiled with a dancer arm or a sonar loop control system.

Coil layering

Servo traverse control is provided for precise layering & high speed coiling. A colour touch-screen is standard so all parameters can be easily controlled and recalled from memory.

For general purpose applications a mechanical layering device is available.

Coil-head options

A range of reels, drums or collapsible core mandrels are available to suit a variety of products & coiling requirements.

Model	Coil head	Maximum coil outer diameter (mm)	Coil format	Traverse control method
504/1	Single	600	Horizontal	Servo or mechanical
504/2	Twin	600	Vertical or Horizontal	Servo or mechanical
504HD	Twin	1000	Horizontal	Servo or mechanical



Gillard

Committed to Extrusion Cutting Excellence
Established 1968

Gillard Cutting Technology

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