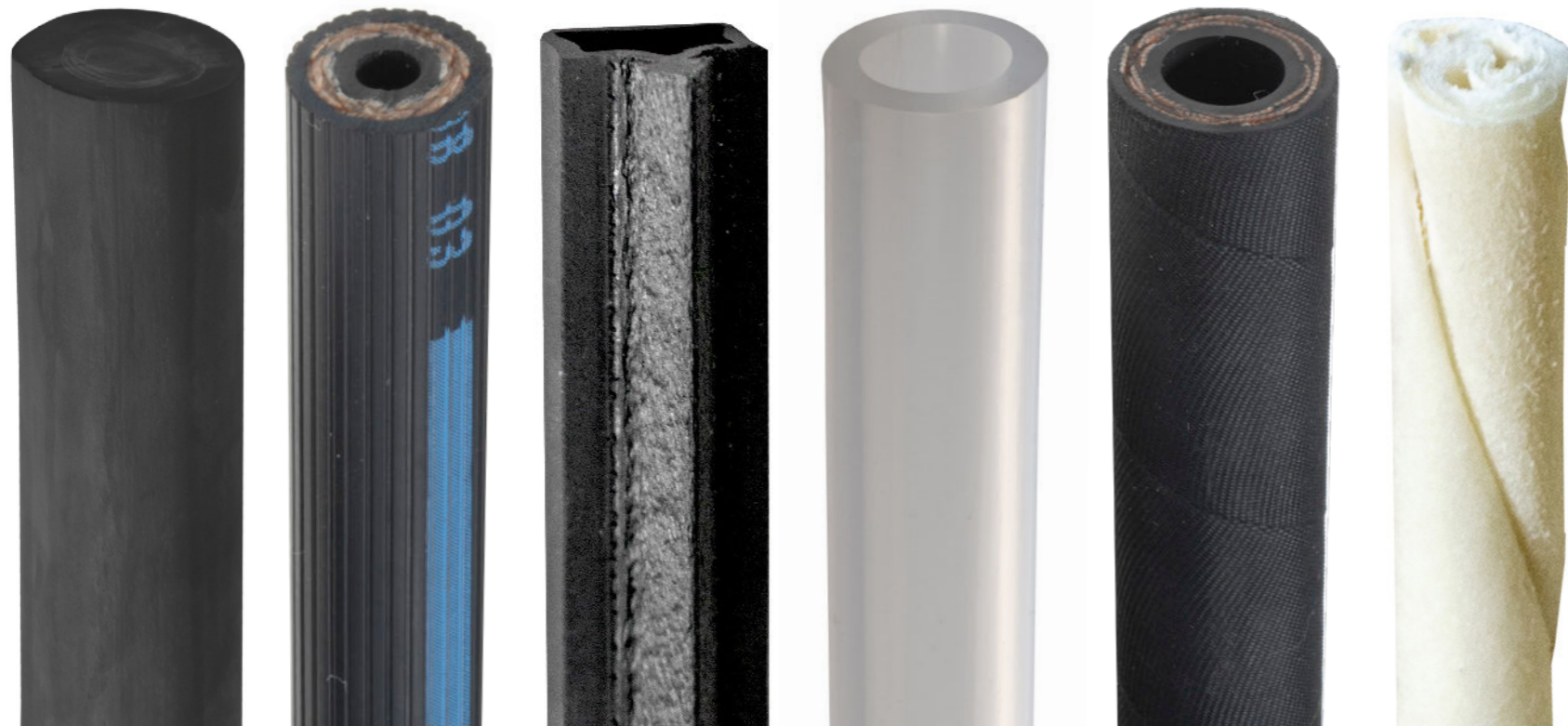




# **METZNER DYNAMAT FLY-KNIFE CUTTING MACHINES**

EXCELLENT CUTTING QUALITY AND PERFORMANCE UP TO 400 CUTS PER MINUTE



## PRECISE CUTTING AT HIGH SPEED

The »Dynamat series« of fly-knife cutting machines offers high performance cutting for tubes and round materials. Up to 4,000 cuts per minute means that these cutting machines are useful in all fields where production quantities are very high.

Metzner Dynamat machines work reliably with elastic materials with a diameter of up to 120mm and the results can be reproduced exactly. The machines are ideal for many products, from silicone tubes for medical use to strengthened textile tubes used in the automotive industry. Metzner cutting machines are available with either »Stop-and-Go« or continuous cutting, this is chosen to meet individual requirements.

To ensure the highest precision and optimum cutting results, all guide sleeves are set and purpose built for the necessary material diameter. Material buckling is therefore kept to a minimum, making sure that the cut is very even and square. The positive outcome of this is, that even soft and thin materials can be cut to an outstandingly high quality and this can be done at high speeds.

## INDIVIDUAL POSSIBLE USES

### CUSTOMIZED SOLUTION FOR YOUR REQUIREMENTS

The Dynamat machines process elastic materials with precision and high repeatability – from silicone tubing for medical applications, textile-reinforced hoses to profiles. It makes no difference whether the material comes from a single extruder or is unwound from a reel.



#### FLEXIBLE TUBES

- Silicon tubes
- PA tubes
- EPDM rubber tubes
- Catheter tubes
- Shrink tubes



#### REINFORCED TUBES

- Brake hoses
- Textile and fabric tubes
- Cooling tubes
- Air tubes



#### ROUND MATERIALS

- Solid rubber round materials
- Round rubber cords



The cutting knife works in a fully enclosed working space. This not only gives working protection but also allows both wet or dry cutting. With certain rubber compounds, it is essential that the knife is moistened and cooled to achieve a quality cut. Metzner Dynamat machines are equipped with this facility as standard.

## METZNER DYNAMAT RANGE

HIGH SPEED CUTTING: YOU DETERMINE THE REQUIREMENTS, WO OFFER THE SERVICE

Metzner offers four different basic models, each work with different diameters:

- Metzner Dynamat 20
- Metzner Dynamat 40
- Metzner Dynamat 80
- Metzner Dynamat 120

All machines are available in three different versions: »Red – Green – Blue«



Red: Continuous cutting only, attractive price, combination with peripherals as stand-alone units



Green: Choice of »Stop-and-Go« cut (up to 400 cuts/min) or continuous cut, practical PLC controls



Blue: Cutting performance of up to 800 cuts per minute with »Stop-and-Go«, high speed PLC control

### DYNAMAT 20



- Compact bench model for material up to 20 mm diameter
- Equipped for micro-mist knife lubrication
- Belt conveyor 30mm wide, electrically adjustable



### DYNAMAT 40



- Fly-knife cutting machine for material up to 40 mm diameter
- Equipped for micro-mist knife lubrication
- Integrated take-off belt as standard
- Belt conveyor 100 mm wide, centrally adjustable via handwheel

## DYNAMAT 80



- The solution for large diameters up to 80 mm
- Equipped for micro knife humidification
- Extended safety equipment
- Integrated discharge conveyor
- Belt conveyor 100 mm or 200 mm wide, centrally adjustable with handwheel



## DYNAMAT 120



The Dynamat 120 offers the same features as the Dynamat 80 with the exception that it processes diameters up to 120 mm.

## TECHNICAL DATA

Performance Data	Metzner Dynamat 20	Metzner Dynamat 40	Metzner Dynamat 80	Metzner Dynamat 120
Material dimensions width max.	20 mm   0.79"	40 mm   1.57"	80 mm   3.15"	120 mm   4.72"
Material dimensions height max.	20 mm   0.79"	40 mm   1.57"	80 mm   3.15"	120 mm   4.72"
Length intervall	0,1 mm   0.004"	0,1 mm   0.004"	0,1 mm   0.004"	0,1 mm   0.004"
Typical repeatability exactness <sup>1)</sup>	± 0,2%	± 0,2%	± 0,2%	± 0,2%

Technical Data	Metzner Dynamat 20	Metzner Dynamat 40	Metzner Dynamat 80	Metzner Dynamat 120
Electrical connection	3~400 V, 50/60 Hz, 10 A	3~400 V, 50/60 Hz, 10 A	3~400 V, 50/60 Hz, 10 A	3~400 V, 50/60 Hz, 10 A
Dimensions (LxWxH)	600 x 510 x 700 mm   24 x 20 x 28"	2100 x 838 x 1650 mm   83 x 33 x 65"	2500 x 600 x 1400 mm   98 x 24 x 55"	3100 x 1000 x 1800 mm   122 x 39 x 71"
Weight	60 kg   132 lbs	200 kg   441 lbs	315 kg   694 lbs	400 kg   882 lbs

Red-Green-Blue Equipment	Red	Green	Blue	Red	Green	Blue	Red	Green	Blue	Red	Green	Blue
Feeding speed m/min   feet/sec	30 1.6	45 2.4	60 3.3	30 1.6	60 3.3	120 6.6	45 2.4	60 3.3	120 6.6	45 2.4	60 3.3	120 6.6
Cutting rate »continuous cuts/min <sup>2)</sup>	4000	4000	4000	3200	3200	3200	3200	3200	3200	3200	3200	3200
Cutting rate »Stop & Go« cuts/min <sup>2)</sup>	—	400	800	—	400	800	—	400	800	—	400	800
Integral interface for peripheral equipment	—	●	●	—	●	●	—	●	●	—	●	●
Control via PC und software	—	●	●	—	●	●	—	●	●	—	●	●
Integration into factory IT-network	—	●	●	—	●	●	—	●	●	—	●	●
Control <sup>3)</sup>	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC	PLC

<sup>1)</sup> depending on material; tolerance min ± 0,5 mm | 0.02" | <sup>2)</sup> at cutting length 5 mm | 0.2" | <sup>3)</sup> PLC= Metzner PLC-controls with color touch-screen (5,7") and CoDeSys programming | ● = standard, ○ = optional, — = not available | Specifications are subject to change without notice.

## PROPERTIES AND FEATURES

ENSURING OPTIMUM CUTTING RESULTS AND EASY HANDLING



### Excellent cutting performance

The rotating blade of the fly-knife cutting machines offers outstanding cutting performance with speeds of up to 4000 cuts per minute, which is ideal for cutting a large number of items.



### Wide range of blade contours

Metzner offers a wide range of different blade contours to suit various materials. This ensures optimum cutting for both, reinforced fabric materials and solid rubber, or even strongly elasticated tubes.



### Ready for micro spray system

All fly-knife cutting machines come, as standard, ready to be integrated with an optional micro spray system. Lubricating the fly-knife ensures that the cut quality is clearly increased and that the cutting knife is protected.



### Quickly interchangeable guides

Changing to cutting another material diameter takes just a few simple steps. Due to the Metzner quick change system, all guides can be swapped in a few simple steps and without a specific tool. This ensures that the machine is ready for the next task in the quickest time possible.



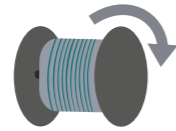
### Choose the control system

Depending on individual requirements, Dynamat machines can be fitted with different control systems: a micro-controller system, PLC control with touch screen operation or the Allen Bradley control system. All control systems have several things in common: they are all practice-approved, simple to operate and program and the operator does not need any special training.

## EFFECTIVE PROCESSING LINES

A PROFITABLE EXPANSION FOR HIGHER EFFICIENCY

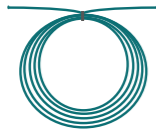
As well as high quality machines for processing rubber and plastic, Metzner also offers quick, careful and cost effective peripheral equipment that increases the automatic processing line. We classify our peripheral equipment into the following categories:



Unwinding and feeding



Printing and marking



Take-off and winding



Remote controls



Software solutions and PC integration





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