

A WELL-KNOWN BRAND FOR MORE THAN 80 YEARS

**TAPPING MACHINES FOR THE FIXTURES
AND FIXING COMPONENTS INDUSTRY**

A well-known brand for more than 80 years

Our company is located in the south of Germany, at Lake Constance. We specialize in the design and construction of tapping machines for the fixtures and fixing components industry.

Although our machines have ranked for years among the top leading products on the international market, we are continually improving their design and construction with the cooperation of renowned users. We are represented in many countries outside Germany. Meanwhile, almost 2,000 machines have been delivered into more than 70 countries worldwide. Our production facilities and modern machine tools offer a working environment with optimum conditions for product quality and performance.

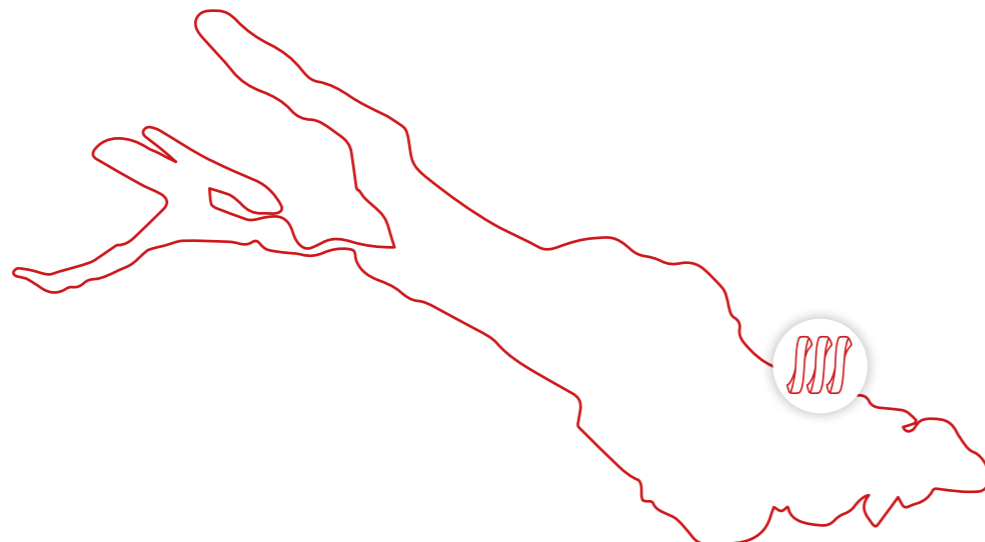
Our top priority is to provide an optimum level of advice and consultation for our customers as well as a fast solution for their problems. From a wide range of machines, we are able to select a suitable machine for any tapping problem. We always consider individual requirements and use all technical options to guarantee the best possible final products. The advanced features found in every Streicher machine are the results of many years of experience and we will continue to offer modern technically and economically efficient solutions while meeting the highest standards.

A clear lead in advanced technology is our objective!

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TOP-CUT

AUTOMATIC NUT TAPPING MACHINE

The demand by our customers for machines that offer a favourable price to performance relationship has resulted in the development of our “TOP-CUT” automatic nut tapping machine.

The machine functions in accordance with the overtravel principal (bent shank) and provides high output at a low price. The implementation of mechanical controls with electrical monitoring assures uniform high quality for manufactured parts. Simple operation and quick tooling changeovers keep downtime to a minimum. The drum type feed unit has been integrated into the head stock assembly in order to keep the machine as compact as possible.

Applications:

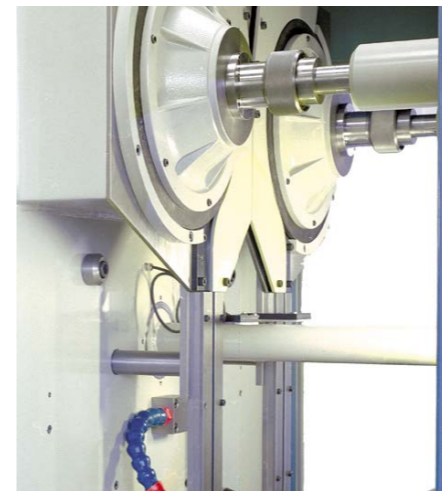
The Top-Cut is suited for highly efficient thread tapping for standard, flange and round nuts as well as special parts. Blanks can be either turned, stamped or forged.

Standard nuts are held between inverted vee guides for tapping, whereas a carriage with mechanically actuated clamping is used for flange nuts. Round and special parts are tapped in a carriage with pneumatic clamping. Electrical proximity switches monitor the clamping motion.

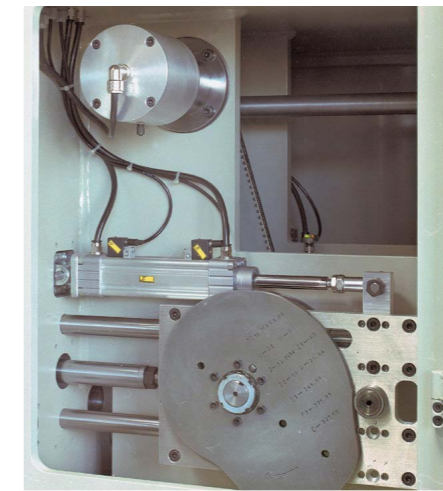
Operation:

Simple design allows for safe and easy machine operation. The working area is illuminated with bright LED lighting and is easily accessible. There are no troublesome corners or edges which collect chips and contaminants.

Simple tooling design keeps change-over time to a minimum. The cams are housed in a spacious enclosure and can be changed without the use of special tools. Work operations can be viewed through the large windows in the protective doors.



Working area with flange nut carriage



Cam housing with feed system



Cam drive with interchangeable sprockets

Function:

Blanks are sorted by the drum feed unit and slide down the feed track to the vee guides or clamping jaws for tapping. If blanks should become jammed during sorting, an adjustable mechanical clutch is disengaged and the jam is cleared.

Standard Nuts:

Standard nuts are positioned and advanced to the tap by means of a pusher. The nuts are fed into precision ground vee guides during the tapping operation and are secured against turning. After the nut has fully engaged the tap, the plunger returns to the home position.

Flange and round nuts:

Flange and round nuts drop from the feed track into mechanically actuated clamping jaws which are mounted on a carriage. The nuts are axially clamped and secured radially against turning. The carriage is then advanced to the tap. As soon as the tapping operation is complete, the clamp is opened mechanically, the nut is discharged and the carriage returns to the home position.

Advance is controlled by a cam and is dependent upon spindle speed and thread pitch. Advance speed thus always precisely corresponds to threading requirements. Damaging axial forces at the thread flanks are avoided which results in the highest quality threads.

The steep progression at the cam flanks for rapid advance and reverse travel results in high level output rates. To ensure that machine and tooling are effectively protected against damage, should collision occur, the advance mechanism moves back out of the way and the machine is shut down immediately.

The feeding of blanks is monitored by proximity switches. If the feed of blanks is interrupted, the machine is stopped and the signal lamp lights up.

A precisely adjustable torquemeter, for switching off the machine in case of dull tools is also available.

Drive System:

There is a broad speed range thanks to the infinitely adjustable spindle drive. This means that it is always possible to select the ideal tapping speed for large or small threads.

Advance travel is mechanically linked to the tapping spindle. This means that cycle time has a fixed relationship to spindle speed. An easily interchangeable gear set allows for the implementation of any desired step down ratio. For example, a ratio of 1:52 for flange nuts which must be clamped during the entire tapping operation, or a ratio of 1:33 for standard nuts, which need only be fed to the vee guides.

Advance travel can be controlled manually from the HMI, which greatly simplifies machine set-up. The advance mechanism can also be stopped immediately if collision should occur, if the feed of blanks is interrupted or if the emergency stop button is activated.

Coolant / Chip Discharge:

The large coolant tank in the base of the machine provides for a uniform, low coolant temperature even with multiple shift operation.

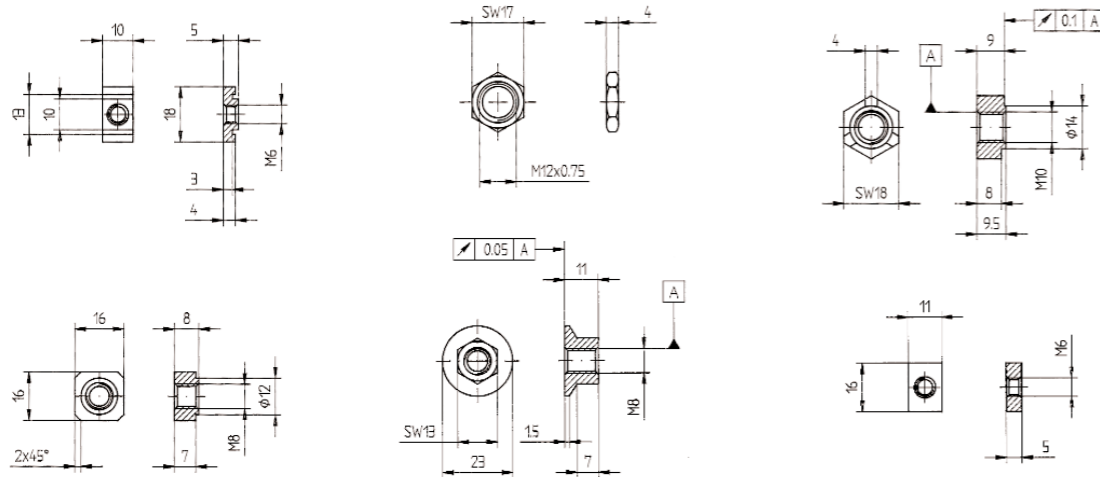
A magnetic drum installed into the front of the machine base separates the chips generated in the tapping operation.

The nearly oil-free chips are automatically discharged from the machine through a chute when this magnetic drum is fitted. The threaded nuts are discharged at the other side in an almost oil-free condition.

Mechanical Design:

Well defined lines highlight the compact design of the machine. The two-colour paint finish provides for an attractive, modern appearance. Machines may also be painted to colours of customers choice. The integrated U-profile at the machine base provides for stability, and allows operating personnel to assume a natural, ergonomic stance.

The Top-Cut represents the latest state of the art technology and fulfills CE machinery requirements.

**Performance / Economy:**

- Favourable price to performance relationship.
- Simple, easy operation thanks to well defined, compact machine concept.
- Quick travel and minimum delay times result in maximised productivity.
- Possibility of unmanned operation due to the advanced electronics and torquemeter.
- No servicing is required thanks to oilbath lubrication for all mechanical components.
- Mechanical and electrical safety devices ensure ideal protection for the operator and the machine.

VARIMAC

AUTOMATIC REVERSING SINGLE-SPINDLE TAPPING MACHINE

The result of decades of experience combined with the application of advanced technologies is our

Automatic Reversing Single-Spindle Tapping Machine "VARIMAC"

The advanced, perfected performance and shape of this machine sets new standards in terms of versatility, precision of manufactured part and optimum efficiency.

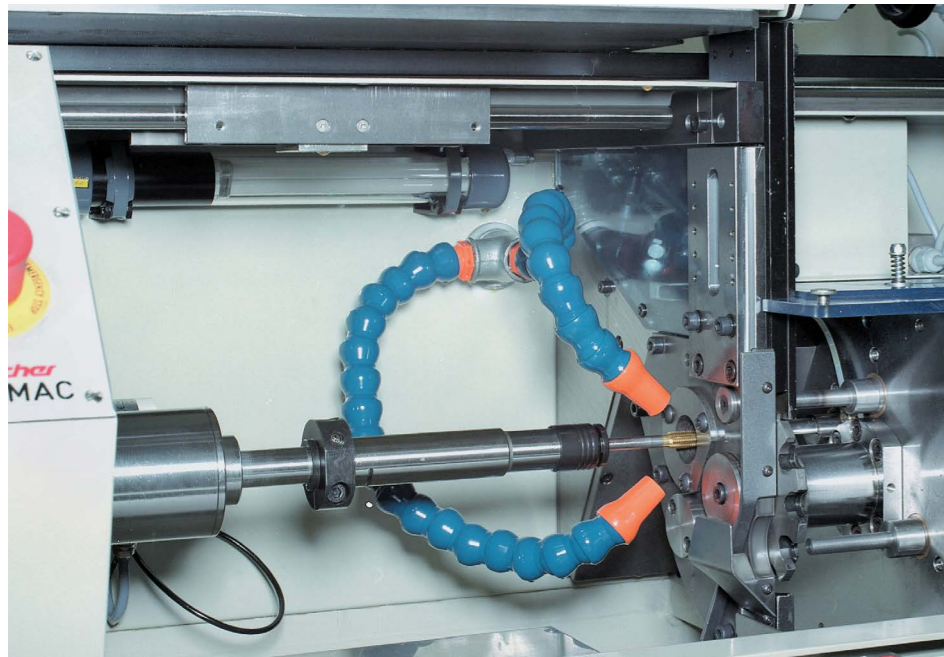
Field of Application:

The machine is suitable for the efficient boring, counterboring and tapping of blind, shouldered and tubular parts, all types of nuts and similar parts such as

punched, turned, forged or cast parts. The Varimac models 10, 20 and 30 cover thread sizes of M3 to M36 and handle component maximum outside diameters of up to 80 mm, with maximum lengths up to 100 mm.

Machine	TOP-CUT 10 D	TOP-CUT 16 D	TOP-CUT 33 D
Thread dimension	M5 - M10	M5 - M16	M16 - M33
Number of spindles	2	2	2
Max. outside diameter	25 mm	32 mm	60 mm
Max. width across flats (standard nuts)	22 mm	27 mm	50 mm
Spindle Motor	4 kW	9,7 kW	13,2 kW
Speed range	400 - 5000 rpm	400 - 5000 rpm	200 - 1600 rpm
Machine control system	Mechanical/PLC	Mechanical/PLC	Mechanical/PLC
Max. output (square/hex nuts)	19700 pcs/h	19700 pcs./h	5950 pcs/h
Max. output (flange nuts)	11090 pcs/h	11090 pcs./h	3530 pcs/h
Max. output (round nuts)	8800 pcs/h	8800 pcs/h	3530 pcs/h
Coolant volume	160 litres	270 litres	380 litres
Weight	1600 kg	2700 kg	4600 kg
Dimensions (LxWxH) mm Subject to technical modification	1495x1010x2019	1800x1330x2425	2100x1520x2585





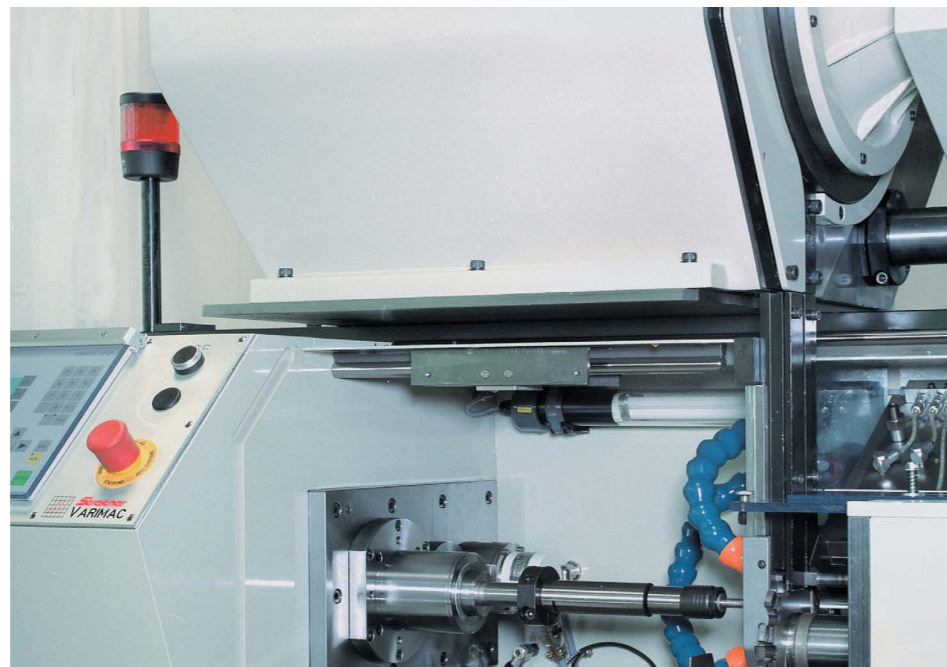
Working area

Handling:

The handling of the machine is extremely simple and can be learned easily by unskilled operators. The clear machine construction requires only minimal maintenance and service. The ergonomic, internally lit, well arranged working area ensures easy access and control of all tools and machine parts. The electrically locked protection doors offer increased operating convenience in line with maximum safety. The changing of tools can be achieved quickly and easily.

Operation / Working Mode:

The automatic feed of the parts is realized by a rotary hopper or an electromagnetic vibratory bowl. An index ring which is driven by a step-by-step motion linkage, ensures the part transport from the feed track to the tapping position and then to the output position. The radial and axial clamping of the parts is made by pneumatic cylinders controlled by limit switches. Depending on the requirements, the order of the clamping cylinders can be changed by a selector switch. The Varimac has a large tank which always ensures a low coolant temperature even when multishift operations are in use.



Working area

Drive:

The work spindle is driven by a powerful reversing servo motor, via a belt and exchangeable pulleys. A frequency controller is standard, making the advance and return speeds continuously variable. The advance and return speeds can also be set independently.

Control:

Electronic controls that ensure proper operation are essential for all modern machines. The interface was designed to be as simple as possible for easy handling of the machine.

Upon request, an adjustable torque-meter for switching off the machine in case of a dull tool is available. With this attachment, optimum product quality is ensured and increased productivity also becomes available via unmanned operation. Furthermore, an interface for external connection to a data retrieval system can be provided if requested.

Chip disposal / Coolant:

The standard version uses a chip box for collecting the chips that are produced. However, it is recommended that a magnetic chip separator or conveying belt be incorporated into the ma-

chine body, for transporting the nearly oil-free chips out of the machine.

The almost oil-free finished parts are then transported to the internal collecting box or to an external container. An optional oil filtration system ensures the efficient and reliable elimination of the finest chips coolant. This gives a maximum tap life and a considerable reduction to the wear taking place of all moving parts. This ensures that the optimum working conditions are maintained for an increased period of time.

Machine Design / Construction:

All components in the working area of the machine are easy to reach allowing the operator to maintain a natural ergonomic position. Well defined lines highlight the compact design of the machine. The two-colour paint finish provides for an attractive, modern finish. Customers may also choose their own colours based on the RAL standard.

The design and construction of the machine corresponds to the latest state of the art technology, and fulfills CE machinery requirements.



electric compartment



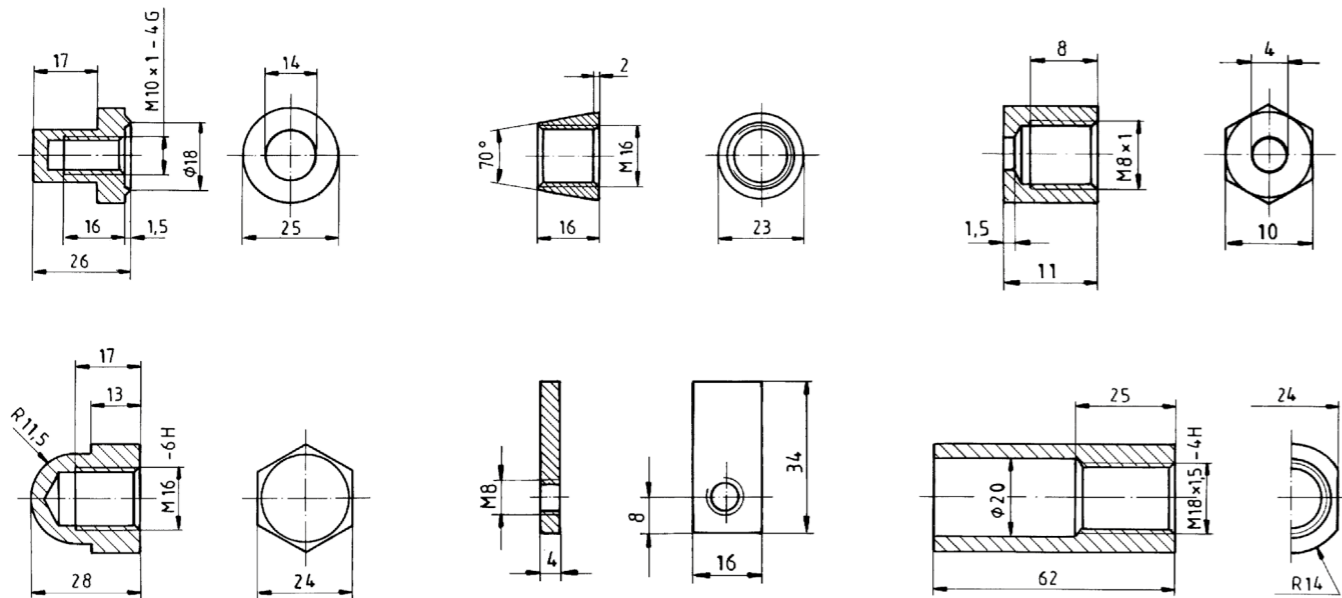
Rear View

Performance / Efficiency:

- The proven machine concept ensures consistent high quality of the final products.
- Maximum flexibility with respect to range and shape of products.

- Optimum product quality and „ghost shift operation” via torque meter.
- Easy tapping of English, metric, NPT and BSW threads as well as right and left hand threads.

- Increased tap life and minimum machine wear due to efficient coolant treatment.
- Mechanical and electrical safety devices ensure the maximum protection for all staff and the machine.



Machine	Varimac 10	Varimac 20	Varimac 30
Thread dimension	M4 - M12 1/8" - 1/2"	M6 - M20 1/4" - 3/4"	M16 - M33 5/8" - 1.3/4"
Spindle Count	1	1	1
Max. outside diameter	25 mm	50 mm	80 mm
Max. length	70 mm	70 mm	100 mm
Spindle Motor	5,9 kW	6,9 kW	13,2 kW
Speed range	0 - 4000 rpm	0 - 2300 rpm	0 - 1400 rpm
Machine Control System	PLC	PLC	PLC
Max. output	3600 pcs/h	2700 pcs/h	1200 pcs/h
Coolant volume	150 l	150 l	180 l
Weight	1900/2280 kg	1900/2280 kg	3200/4000 kg
Dimensions (LxWxH) mm Subject to technical modification	2100x980x1900	2100x980x1900	2700x1165x2050

DW30

OVALISATION MACHINE

The DW-30 produces locknuts and moulded locking parts by ovalization of the nut body. Two rotating rollers, situated opposite to each other, are the central feature of the machine. The distance between the rollers is set slightly less than the across flats of the nut that is being fed through. This causes the nut to be slightly deformed and a change in thread geometry. The distance between the rollers is adjustable; thus all standard nut sizes can be deformed by means of just one machine type.

Each roller is driven by a flange mounted reduction gear motor. The bearing housings are positioned between two strong round shafts.

The distance of the rollers can be adjusted with precision. The robust adjuster unit will hold the rollers in their set positions even under extreme load situations.

In order to provide for a force dependent deformation, one roller is loaded via a synthetic spring. This feature can also be blocked so that both rollers remain completely rigid.

The DW-30 is largely resistant to external influences, easy to change over to different products, and economically mass-produced if required.



Working Area

Machine	DW 30
Thread measurement	M10 - M33 3/8" - 1.1/4"
Width of deformation	0 - 80
Force of deformation	0 - 120 kN
Roller diameter	300 mm
Roller speed	10 rpm
Power of gear motors	2 x 0,75 kW
max. output quantity (depends on size of parts)	10.000 - 30.000 p/h



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