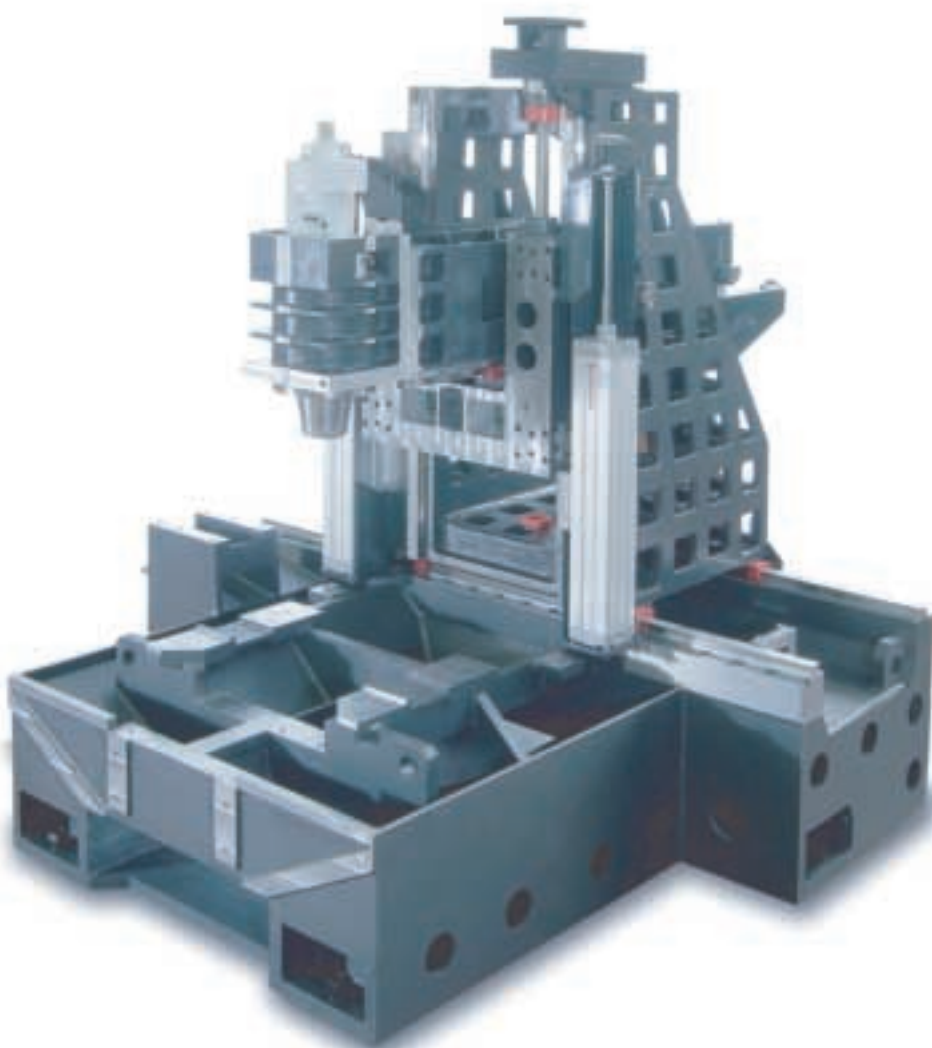


High precision and low maintenance with MONORAIL

SCHNEEBERGER roller guides and lubrication system for a new generation of machine tools with vertical mobile drive column.

The department SERRTECH of the Italian company SERRMAC S.p.A chose SCHNEEBERGER's MONORAIL MR for its new machine tool.

Basic structure with Roller-MONORAIL MR and SPL Lubrication Plates



SERRTECH

SERRMAC

SERRMAC presents its SERRTECH system

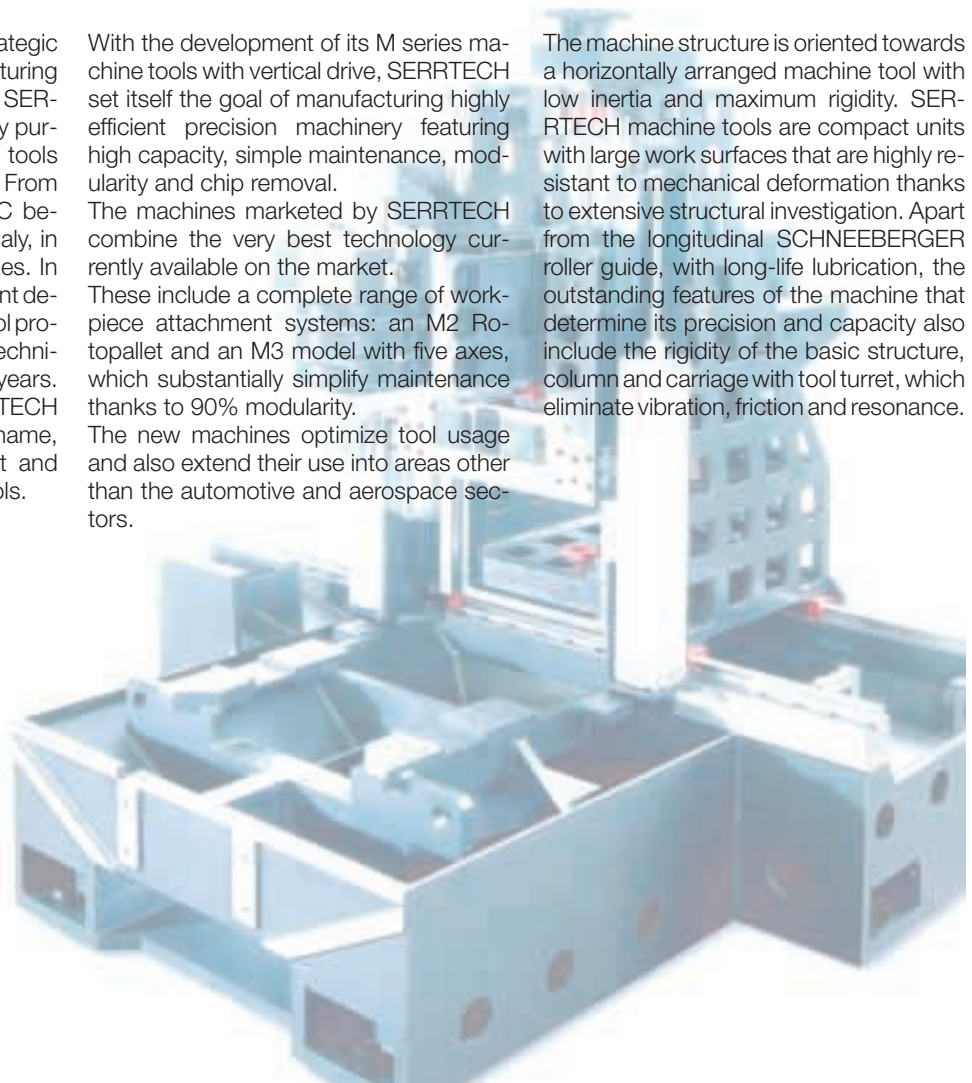
The Ruffati brothers, as part of a strategic separation of machine-tool manufacturing and industrial drill production formed SERRMAC S.p.A. in 1973. The company pursued the development of machine tools and industrial drills in two divisions. From its formation until 2004, SERRMAC became the leading manufacturer in Italy, in the field of industrial drilling machines. In 2004, SERRMAC's new management decided to concentrate on machine-tool production, thereby combining all the technical experience gained in previous years. 2005 saw the formation of the SERRTECH department with the same brand name, which stands for the development and manufacture of vertical machine tools.

A technical duel

With the development of its M series machine tools with vertical drive, SERRTECH set itself the goal of manufacturing highly efficient precision machinery featuring high capacity, simple maintenance, modularity and chip removal. The machines marketed by SERRTECH combine the very best technology currently available on the market. These include a complete range of workpiece attachment systems: an M2 Rotopallet and an M3 model with five axes, which substantially simplify maintenance thanks to 90% modularity. The new machines optimize tool usage and also extend their use into areas other than the automotive and aerospace sectors.

Solid, compact structure

The machine structure is oriented towards a horizontally arranged machine tool with low inertia and maximum rigidity. SERRTECH machine tools are compact units with large work surfaces that are highly resistant to mechanical deformation thanks to extensive structural investigation. Apart from the longitudinal SCHNEEBERGER roller guide, with long-life lubrication, the outstanding features of the machine that determine its precision and capacity also include the rigidity of the basic structure, column and carriage with tool turret, which eliminate vibration, friction and resonance.



Balance

Structure of Vertical Machining centre Type M1

Balance in the Z-axis is maintained by two hydraulic cylinders fitted at the sides. These compensate for any one-sided mechanical loads that occur during a duty cycle. These cylinders also prevent the axis from lowering in the event of a power failure.

High precision and operating speeds

Short dead times are largely achieved through the high speed of the drive shaft of the axes, as well as by the tool magazine and other major components. The sum total of these features results in the high degree of availability and efficiency of the entire machine.

Ergonomics and functionality for a comfortable working environment

The precision and availability of SERRTECH products are also essential prerequisites for effective ergonomics and functionality, which not only make an operator's work easier but also safer and more efficient. In addition, investigations into ergonomics prior to the design phase, resulted in simple access to all parts requiring cleaning or servicing.



SCHNEEBERGER MONORAIL and lubricating plate in the machine:

MR 45-B2-2150-25/25-G0-V3
MR 45-B2-1520-25/25-G0-V3
MR 35-B2-1558-19/19-G0-V3
SPL 45-MR
SPL 35-MR

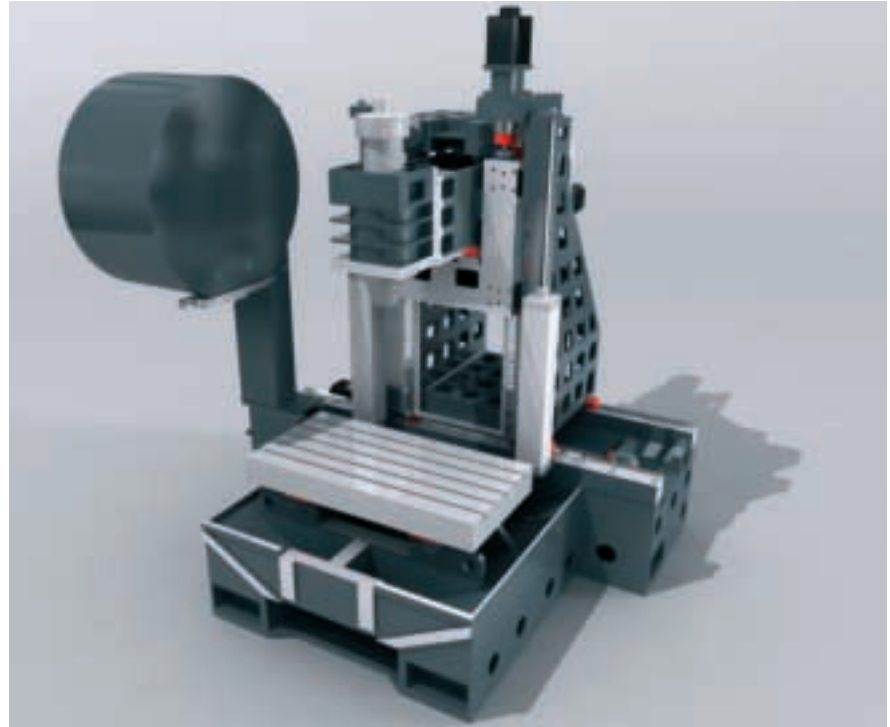
Conclusion

- High rigidity due to the "O" configuration of the rolling elements of SCHNEEBERGER carriages.
- High load capacity due to the direct contact of the roller-guideway.
- Excellent running characteristics because of the profile of the rolling elements.
- Low travel pulsation due to the optimised recirculation of the rolling elements.
- Minimum differential sliding movement in the contact zone between the rolling element and the guideway.
- Fast, axial transfer movement due to the special shape of SCHNEEBERGER recirculating units and the low-noise coating of their tracks in the guideways.

This decision was also determined by the availability and technical support offered by SCHNEEBERGER.

For its new machine tools, SERRTECH chose SCHNEEBERGER's MONORAIL roller guides with SPL lubrication system for extended lubrication intervals.

This decision was also determined by the availability and technical support offered by SCHNEEBERGER.



Guarding of machine Type M1

For further information, please contact:

SCHNEEBERGER S.p.A
Alberto Perin
Regional Sales Manager Northeast
Via San Gottardo 10
21021 Angera VA

Phone +39 0331 93 20 10
Fax +39 0331 93 16 55

E-Mail: aperin@schneeberger.com

News-Contacts

SCHNEEBERGER AG
Lineartechnik
Rosalia Haller
St. Urbanstrasse 12
CH-4914 Roggwil/BE

SWITZERLAND

SCHNEEBERGER AG
4914 Roggwil/BE
Phone +41 62 918 41 11
Fax +41 62 918 41 00

E-Mail:
info-ch@schneeberger.com
www.schneeberger.com

GERMANY

SCHNEEBERGER GmbH
75339 Höfen/Enz
Phone +49 7081 782-0
Fax +49 7081 782-124

E-Mail:
info-d@schneeberger.com

ITALY

SCHNEEBERGER S.p.A
21021 Angera VA
Phone +39 0331 93 20 10
Fax +39 0331 93 16 55

E-Mail:
info-i@schneeberger.com

USA

SCHNEEBERGER Inc.
Bedford, MA 01730
Phone +1 781-271-0140
+1 800-854-6333
Fax +1 781-275-4749

E-Mail:
info-usa@schneeberger.com

JAPAN

Nippon SCHNEEBERGER KK
Tokyo 154-0002
Phone +81 3 5779 7339
Fax +81 3 3487 6010

E-Mail:
info-j@schneeberger.com

CHINA

SCHNEEBERGER (Shanghai) Co., Ltd.
Shanghai 201108, China
Phone +86 21 6209 0037 / 27
Fax +86 21 6209 0102

E-Mail:
info-cn@schneeberger.com