

Zeitschrift: The Swiss observer : the journal of the Federation of Swiss Societies in the UK

Herausgeber: Federation of Swiss Societies in the United Kingdom

Band: - (1973)

Heft: 1656

Rubrik: Technical items

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. [Siehe Rechtliche Hinweise.](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. [Voir Informations légales.](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. [See Legal notice.](#)

Download PDF: 14.03.2025

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

TECHNICAL ITEMS

PRECISION EXPANDING CHUCK

A new tool considerably simplifying the machining of inside bores has been developed by a Geneva engineer. It is called an RCD Expanding Centering Jaw, and is an expanding chuck for machining hollow parts between lathe centres. This tool replaces the use of jaws, or centre pieces of grade tolerances usually required for the concentric machining of inside bores.

AUTOMATIC DEVICE FOR DRILLING JEWELS

A new automatic appliance for drilling ultra-hard materials (watch jewels, industrial bearings) has won an award at the last Exhibition of Inventions and New Processes in Geneva. This automatic machine makes simple work of an operation that was previously extremely difficult. With this instrument, drilling is fully automatic, the manual part of the process is reduced to filling a magazine holding about 5,000 jewels ready for drilling which can be carried out by an unskilled worker. An electronic signal announces the end of the drilling and the next jewel is fed in automatically: the drilled jewel drops into a receptacle while an undrilled jewel is automatically fitted into the clamp from the magazine. At this point, a drop of liquid specially designed for drilling (mixed with abrasive diamond dust) is deposited on the jewel.

As soon as this operation is completed, the broach advances. The comparatively fine bit (drilling wire) necessarily undergoes a certain wear, which is checked and measured electronically. As soon as the drilling wire is worn down to a certain length, the broach is automatically opened and the drilling wire pulled out or replaced by another from the magazine. The broach being fitted with a very high precision clamp, the bit is always accurately centered in the axis of rotation. The amount of drilling wire contained in the broach is sufficient for drilling about 200 holes. When the bit becomes worn, the drilling wire can be advanced the required amount. The advance of the drilling wire and the fitting of a new bit are carried out by means of a special device which makes it possible at the same time to keep a constant check on its quality. An extremely modern electronic system has been designed for the automatic control and checking operations. The advantages of the *Cristalperce* (as the machine is called) over other drilling systems such as compressed air and laser beams are many. The percentage of waste is considerably reduced and the appliance is designed for drilling holes of small, medium and large diameters without preliminary adjustments. The new machine being almost fully automatic, it also makes for a considerable saving in labour. One or two unskilled workers are sufficient for manning 100 of these automatic machines.

FIRST SALES MINI-COMPUTER

While big companies and offices have now been using computers for twenty years, small and medium-size concerns are still comparatively unfamiliar with electronic data processing. Data processing equipment is very expensive and often wasted for want of rational use. Aware of the gap existing on the computer market, a Swiss firm has produced a mini-computer, the *Hermes Data System 210*, a sort of compromise between a big computer and the classical calculating machine. What makes it different from the ordinary office machines is its internal memory for storing data as well as its ability to take logical decisions based on this data. This new computer works on the same principle as the big models, but its capacity is particularly suited to the needs of small firms. Consequently, large groups wishing to have efficient decentralized set-ups are interested in it too: a big Swiss chemical works for example, which already possesses several large electronic computers, has purchased about twenty of these small computers, whose field of application is very wide, ranging from book-keeping to invoicing, and administrative, technical and scientific calculations.

(by courtesy of the Swiss Office for Expansion of Trade).



TRAVEL TWICE MONTHLY TO AND FROM SWITZERLAND AND ENGLAND

Providing DOOR TO DOOR SERVICES

with vans specially equipped to carry

- Household Removals. — Exhibition Goods..
- Works of Art. — Machinery.

For full information contact

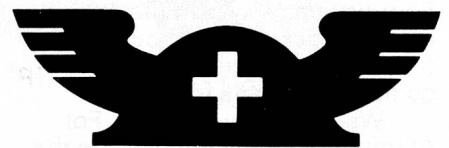
In Switzerland

KEHRLI + OELER LTD.,
3001 Berne,
Bubenbergplatz 9.
Tel. 031 22 00 22.
Telex. 32414 Kerolch

In England

LEP PACKING LTD.,
Corney Road,
Chiswick,
London, W.4.
Tel: 01-995 1300

57th Swiss
Industries Fair
April 7-17, 1973
Basle



The Spring Fair of Switzerland
as a clearly arranged fair with a completely new structure

- The first European Watch, Clock and Jewellery Fair with more than 680 exhibitors from nine European countries on a hall area of 44,000 m²
- Swiss Furniture Centre at a new location with attractive atmosphere
- Construction Fair with foreign offers
- Fascinating textile displays
- Numerous special displays, service organizations, etc.

All in all, a range of exhibits from the consumer goods, constructional and technical industries from 2,500 companies on an exhibition area of 170,000 m²

New hours of opening:
from 9 am to 6 pm. Tickets on sale from 8.30 am.
Reduced price of admission for foreign visitors on all days Sfr. 4.-.

Information, prospectuses, Fair passes, catalogue available from:

Swiss Embassy, 16-18 Montagu Place,
London W1 H 2BQ,
Phone: 01-723 0701.