

People and things

Not a cleverly camouflaged piece of artillery, but the CERN two-metre bubble chamber, packed and ready for transit to its new home at the Deutsches Museum, Munich.

(Photo CERN 385.11.78)

usefully much basic work and hence concentrate on the physics analysis. In one Collaboration, Solution 2 is generally adopted for minor papers but for major results of the Collaboration Solution 1 is used with names in strictly alphabetical order. Solution 3 using only the principal authors is rarely used, except when the Collaboration is dying.

There is an alternative solution which is applied but rarely discussed. The authors are listed in alphabetical order to avoid controversy, but people who do outstanding work are rewarded in other ways. One way is to promote them or to give them strong recommendations that enable them to get a good position in another Laboratory — however this solution is not very successful as it is not obviously correlated with a paper and anyway most people who are promoted or highly recommended do not consider it, and rightly so, as a reward but as their due.

A better and more immediate solution is to arrange that the principal authors present the results at seminars or international conferences. This is very effective and commonly done though not everyone realizes that it is a replacement of the use of authors in non-alphabetical order.

The qualification for a person to be an author is usually that he has contributed to the experiment and is fully able to defend the paper in public. Normally this restricts the authorship to physicists, but not infrequently a non-physicist who has made an important contribution has his name added to a paper.

In summary, the question of authorship in large Collaborations is a controversial one, involving strong feelings. There is no perfect solution and generally the policy adopted is to name all participants, following the principle of preferring minor dissatisfaction of the many to great unhappiness for the few.



On people

On 30 November, Abdus Salam was presented with the Royal Medal of the Royal Society in the UK. The citation notes that 'his work on renormalization theory and the neutrino greatly added to our understanding of the weak atomic interactions.'

It was with great sadness that we learned of the death in Paris on 8 August of Mme Stéphanie Tixier. All who were privileged to know her during her years at CERN, from 1954 to 1967, recognized in Stéphanie Tixier very great qualities both in mind and heart. The part she played during the negotiations for the Headquarters Agreement and later in those concerned with the first extension of the site in France, which made the ISR project possible, was an extremely valuable contribution to the progress

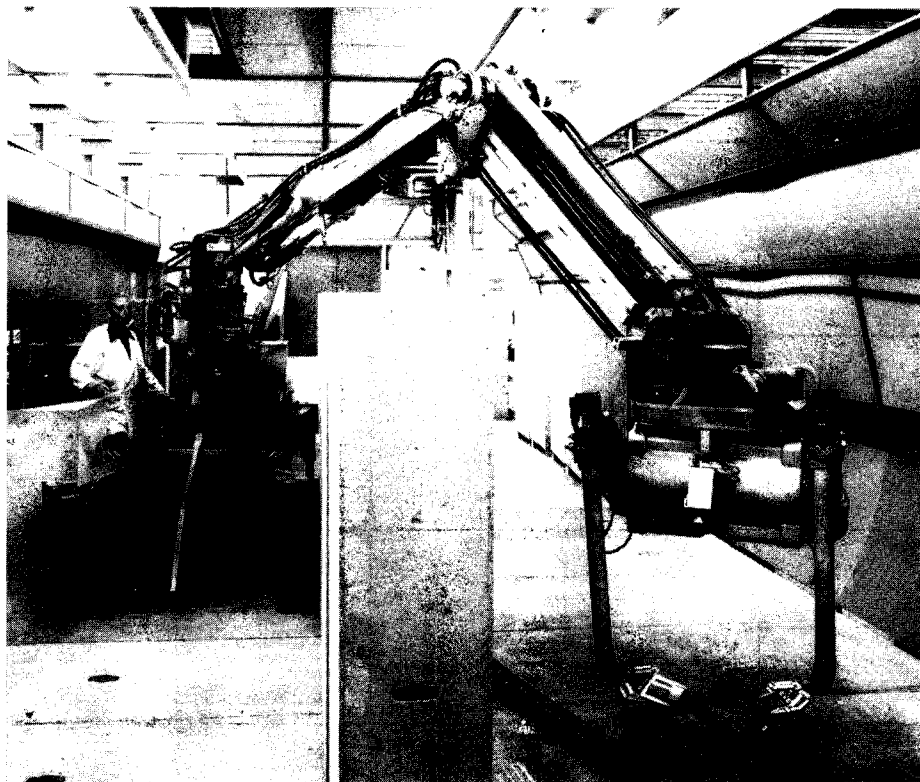
of the Organization. The older staff members of CERN pay tribute to the memory of a very dear friend.

Meetings

The sixth in the series of joint Schools organized by the Joint Institute for Nuclear Research (Dubna) and CERN will be held at Dobogoko near Budapest in Hungary from 2-15 September 1979. The School is aimed at young experimental high energy physicists mainly from the Member States of JINR and CERN. The programme will cover neutrino physics, quantum chromodynamics, new particles, large P_T phenomena and electron-positron physics as main topics. Further information may be obtained until 1 May from Mrs. T.S. Donskova, JINR, 10 1000 Moscow, Head Post Office, P.O. Box 79 or from Miss D.A. Caton, CERN, CH-1211 Geneva 23, Switzerland, or, after 1 May, from Dr. K. Szego, Central

Science fiction becoming science fact. Seen here on test in a tunnel mock-up is MANTIS—MANipulator Transport and Inspection System — a mobile remote manipulator specially developed at CERN for maintenance and repair jobs where radiation restricts personnel access.

(Photo CERN 304.6.78)



Research Institute for Physics,
H-1525 Budapest, P.O. Box 49,
Hungary.

The 1979 International Symposium on Lepton and Photon Interactions at High Energies will be held from 23-29 August at Fermilab. Attendance at the conference is by invitation and persons who are interested in attending are encouraged to write to the symposium secretary, Dr. C. Brown, Physics Department, Fermilab, P.O. Box 500, Batavia, Illinois 60510.

An International Seminar on 'The Great European Projects' is being organized by the European Physical Society for Rome on 26-27 March 1979. The LEP electron-positron colliding beam project, TeV fixed target proton synchrotrons and large synchrotron radiation sources will be amongst the subjects to be presented and discussed. A limited number of

places have been reserved for people with a particular reason to be present and further information can be obtained from the EPS Secretariat, European Physical Society, P.O. Box 69, CH-1213 Petit-Lancy 2, Switzerland.

Mantis

CERN's own remote manipulator system will soon be available for use anywhere on site for jobs where the radiation level restricts access by maintenance staff. Called MANTIS - MANipulator Transport and Inspection System — it is already assisting in external repair and recuperation work on radioactive beamline components placed in a shielded storage compound. During the forthcoming shutdown, it will start internal maintenance work actually within the machine areas.

MANTIS comprises a 'slave' vehicle which enters the working zone, a master control station which remains in a safe area up to 400 m away and a communications system which links the two.

The operator controls MANTIS with the help of 'hearing' and 'touch' sensors, and several television cameras, three of which are mounted on the slave vehicle, while an independent camera system — nicknamed 'Private Eye' — can take up any chosen vantage point.

When folded for transport, MANTIS is compact enough to negotiate narrow access routes but once in position it can extend to reach 8 m, wielding loads of up to 500 kg, even over the top of shielding walls.

Column rising

The November issue of the NSF Newsletter reports that the building construction at the Daresbury Nuclear Structure Facility is virtually complete. Machine installation has started in the tower which is to house the 30 MeV tandem with the lowering into place of the first modules of the high voltage column.

Epilogue

To close the 1978 Volume of CERN COURIER, we would like to record our thanks to all those who have so readily provided us with information and assistance for our articles. This thanks goes especially to the Laboratory correspondents listed inside our front cover who have been a major source of input. Our next issue goes to press in February and will be available early in March 1979. Breaking with previous tradition, this issue will be cover-dated March. We look forward in 1979 to an exciting year of development and discovery in particle physics, and as always the CERN COURIER will aim to keep its readers well-informed of progress worldwide.

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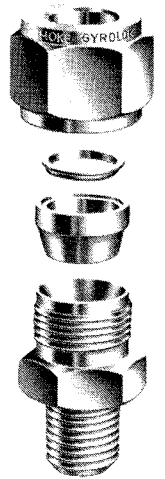
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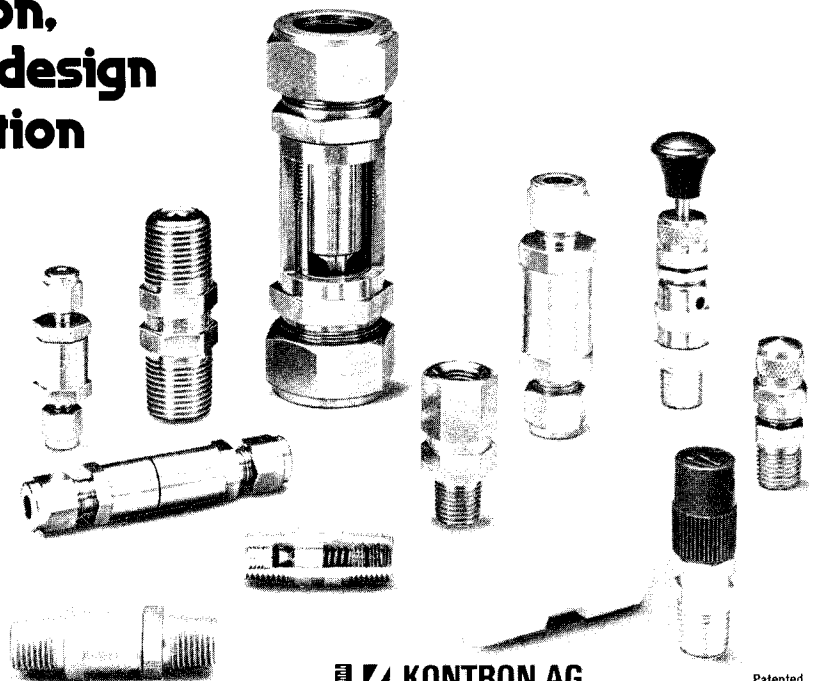
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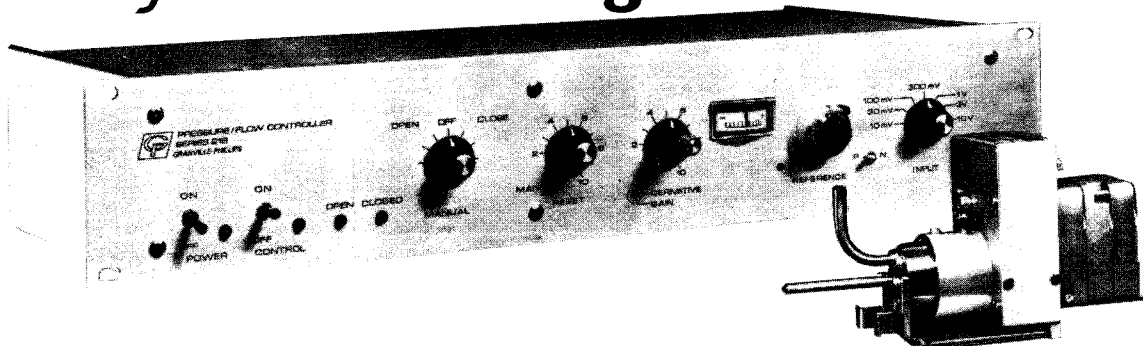
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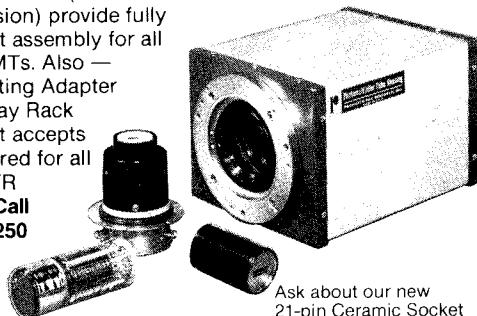
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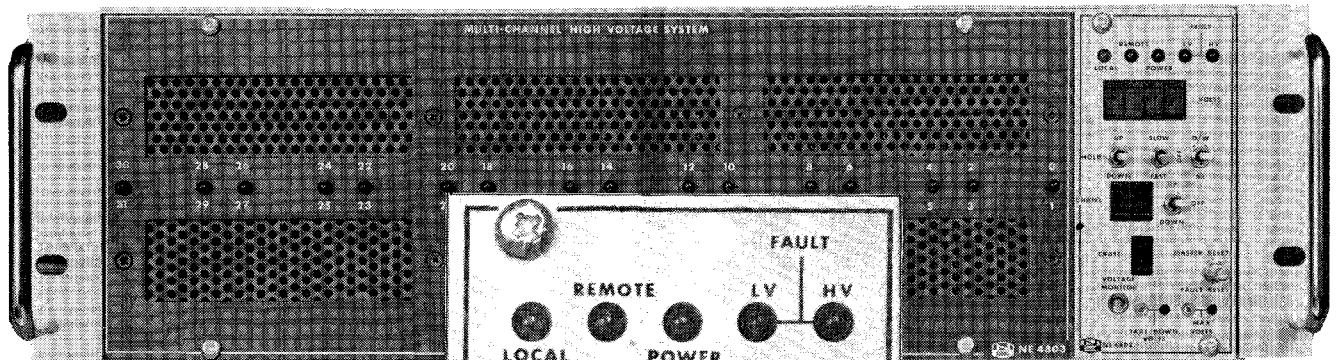
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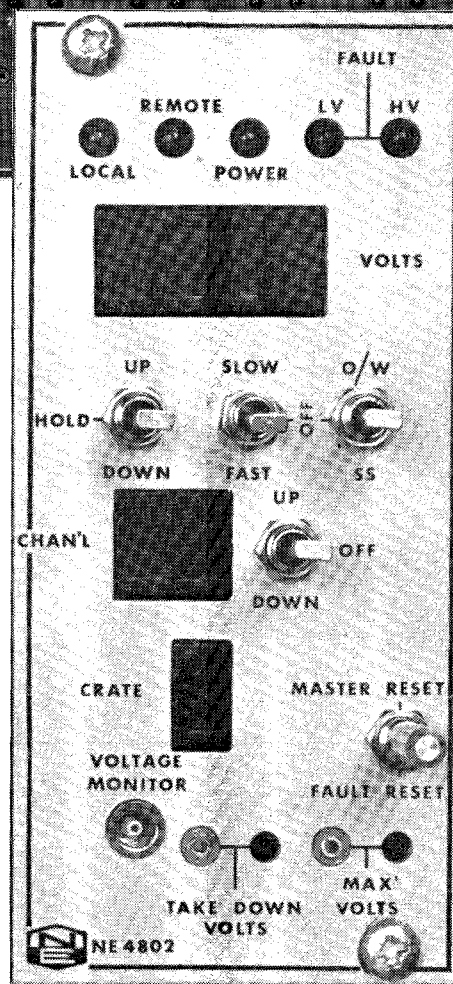


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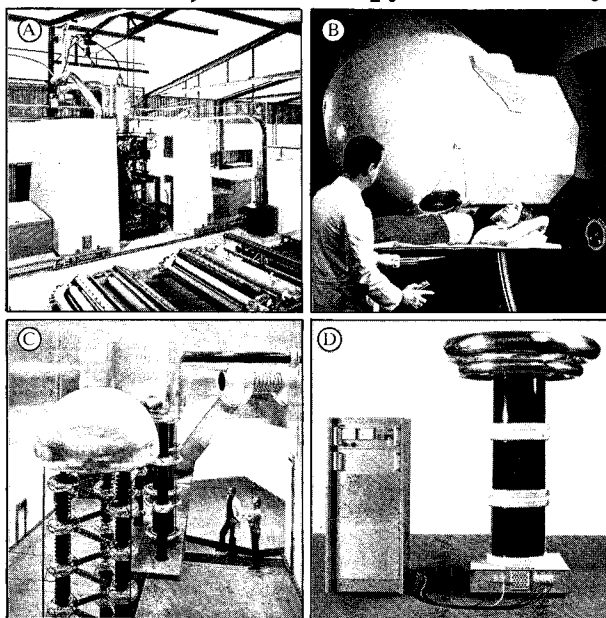
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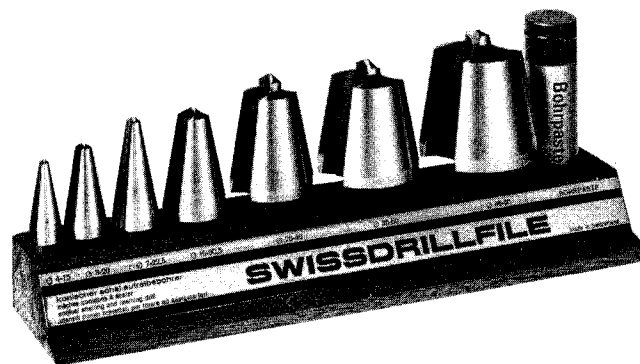
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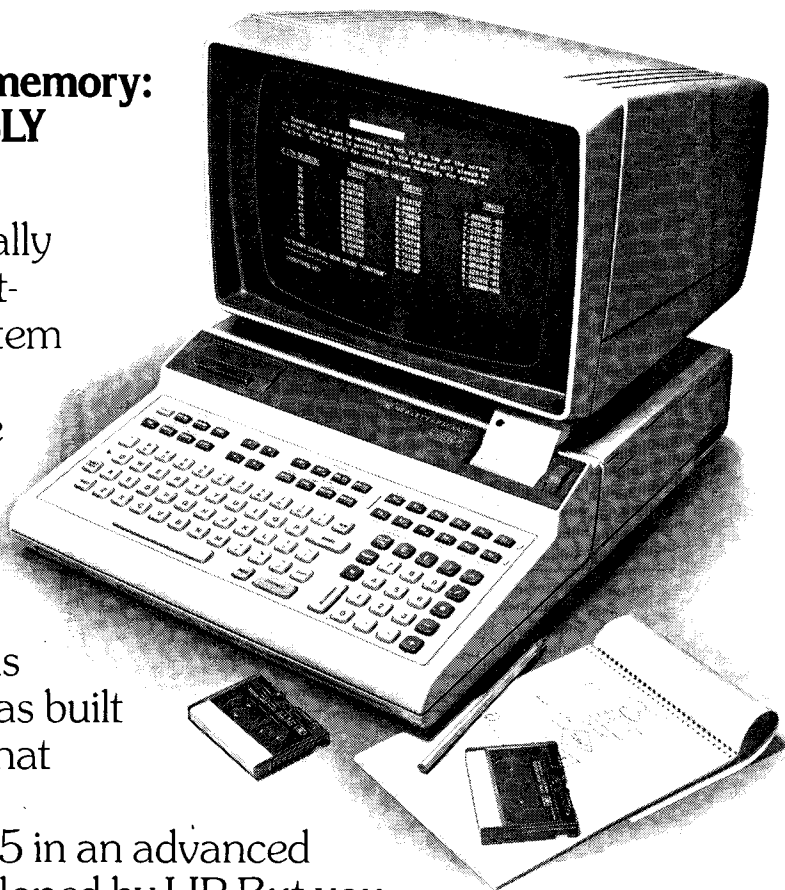
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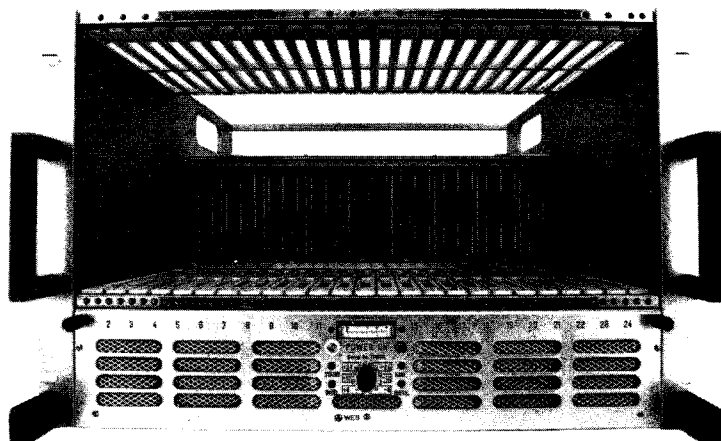


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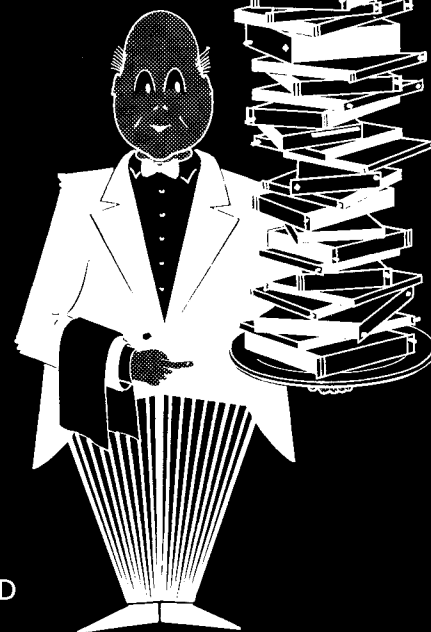
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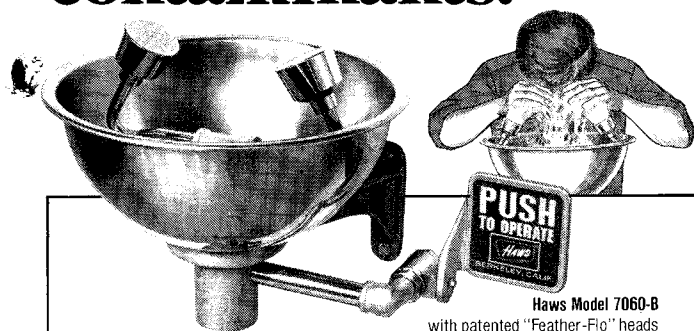


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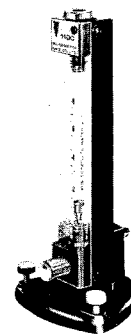
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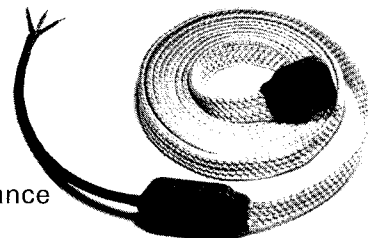
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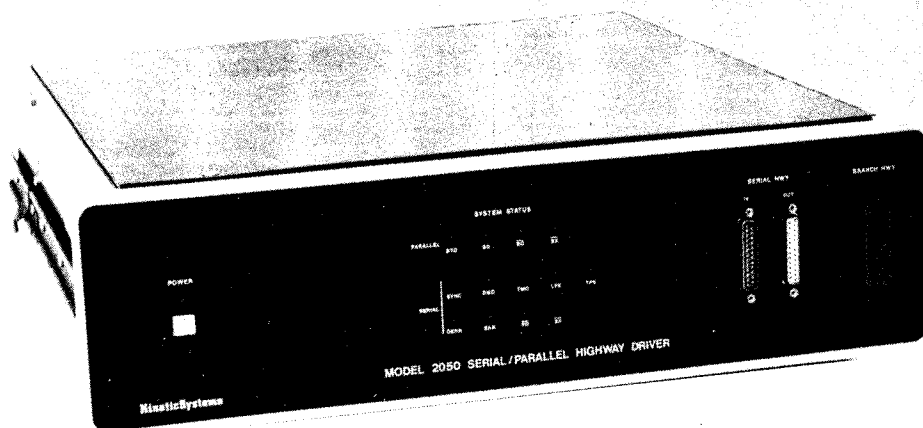


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Good news for all PDP-11® users! Our new 2050 provides an efficient interface between the PDP-11 Unibus and CAMAC Dataway via the two CAMAC highways. It is available as a parallel highway driver, a serial highway driver, or a combination of the two. Operating modes utilize the CAMAC Dataway's use of Q responses for block transfers and the ability of Unibus devices to access memory directly via nonprocessor requests (NPR). Various serial highway conditioning (U-port) options are also available.

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FEATURES OF THE 2050

- resides in one PDP-11 system unit (BB11)
- controls up to seven parallel and/or 62 serial highway crates
- operates in bit or byte serial mode up to 5 MHz
- includes eight operating modes
 - one programmed transfer - five DMA/block transfers - two special parallel highway functions
- complete serial system error analysis and recovery procedure derived by methods outlined in the ESONE/SD/02 recommendations
- twelve registers occupying 16 word addresses on the Unibus formatted for easy use
- four independently enabled interrupt vectors
- full 18-bit Unibus memory addressing

A WEALTH OF APPLICATIONS

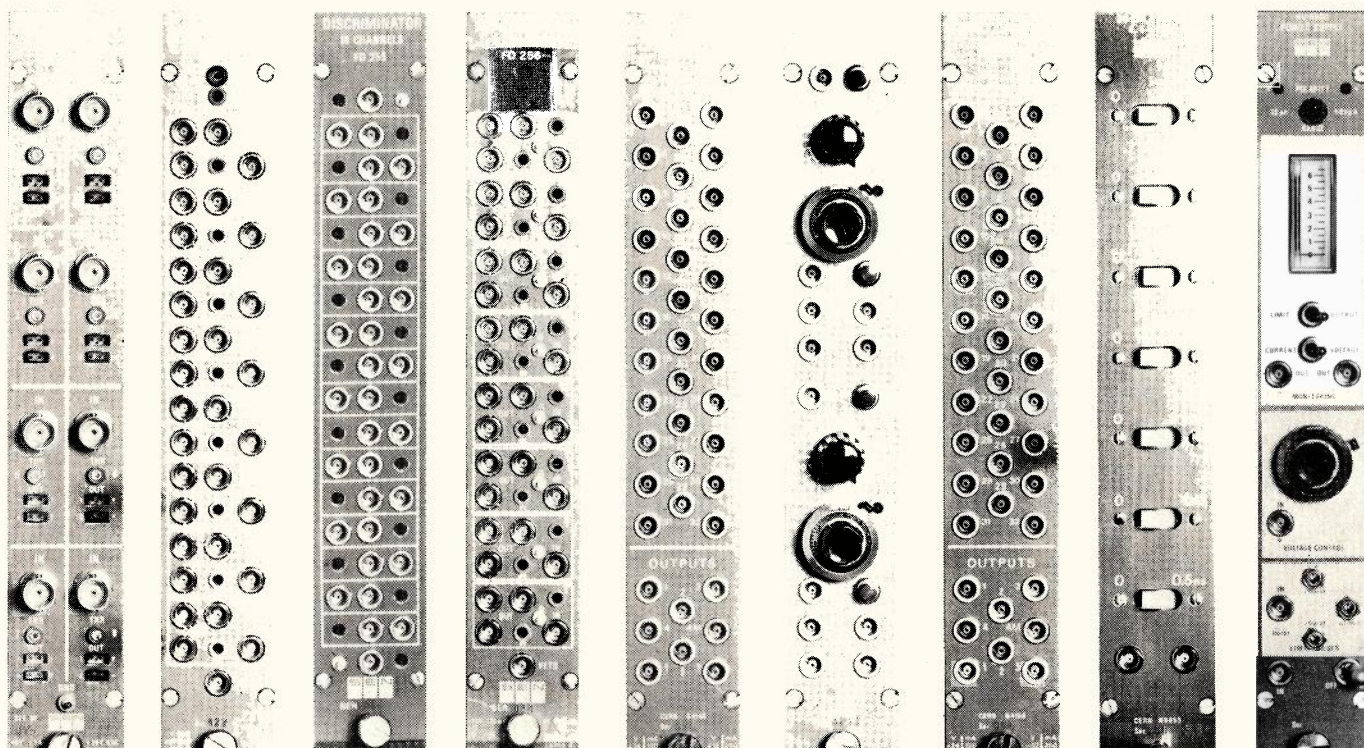
- distributed process control and data acquisition systems with the CAMAC serial highway
- local high-speed process control and data acquisition systems on the parallel highway
- distributed intelligence systems where the serial highway for host-to-remote or remote-to-host block transfer is under control of the host computer
- high-speed systems requiring minimum software overhead

Please contact us for additional information

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width: $\leq 5\text{ ns}$ to 45 ns
fast veto
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width: $\leq 5\text{ ns}$ to 45 ns
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FD 256

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width: $\leq 5\text{ ns}$ to 45 ns
fast veto
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analogue majority output

TU 277

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local/remote start/stop
NIM input/outputs

LU 278

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analogue majority output

DU 290

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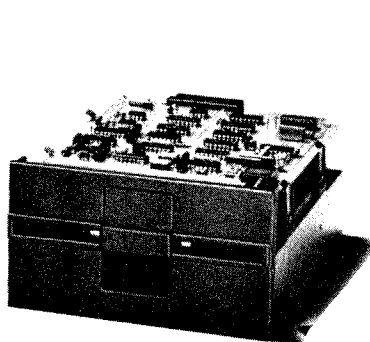
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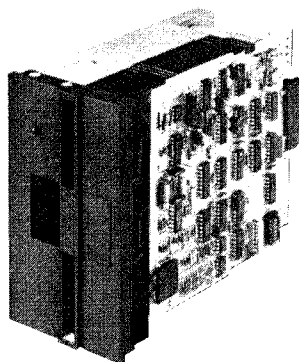
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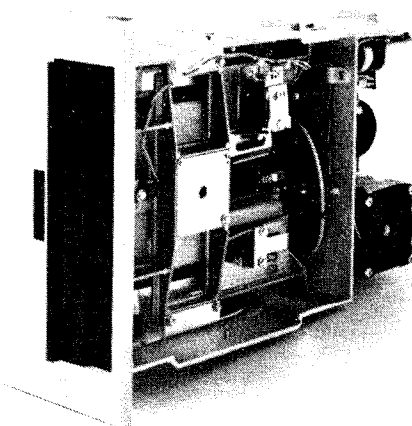
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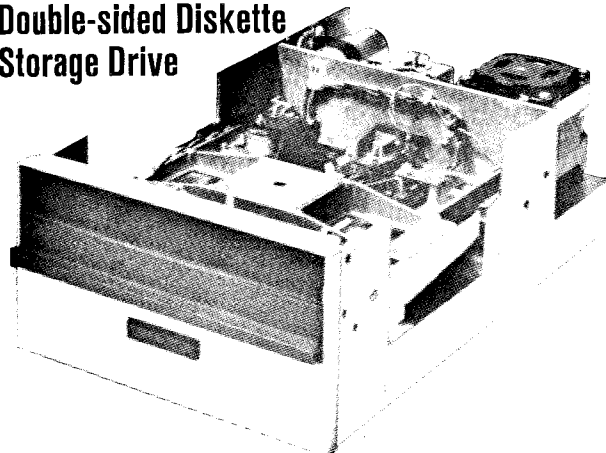
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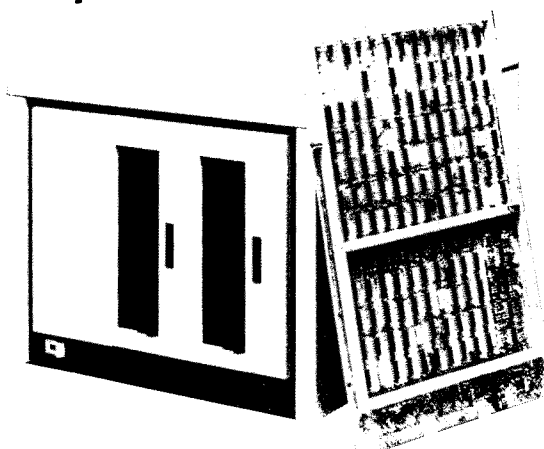
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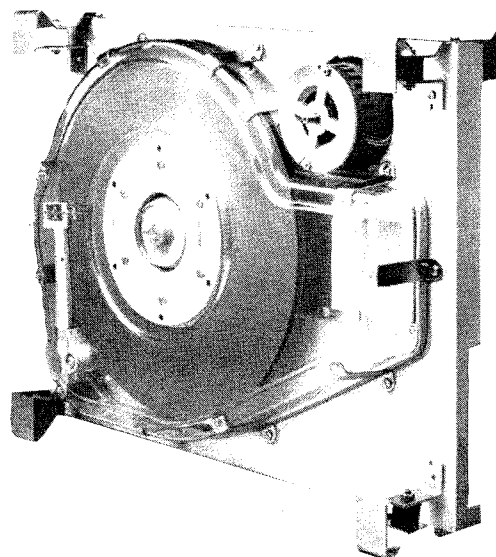
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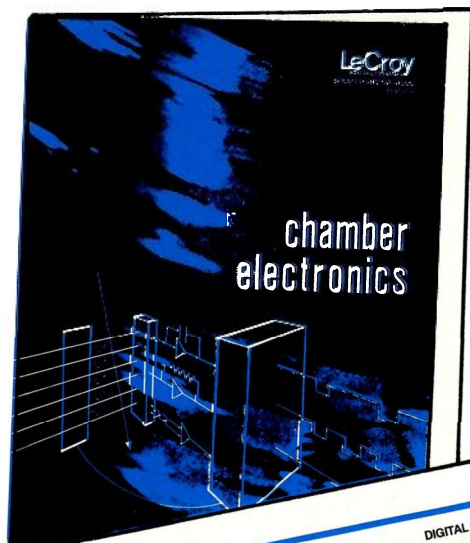


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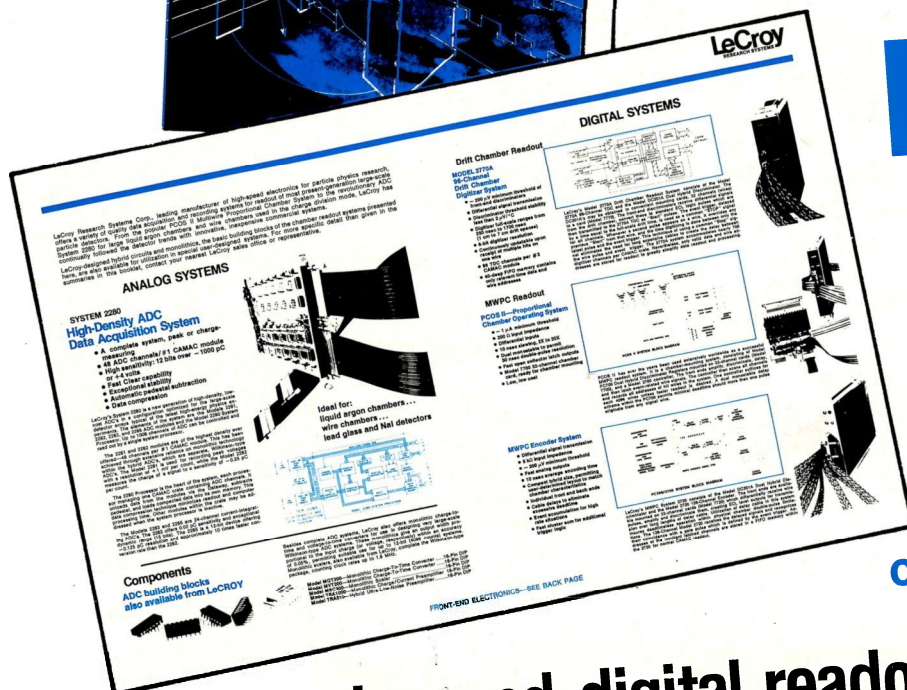


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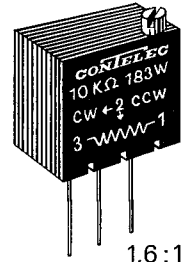
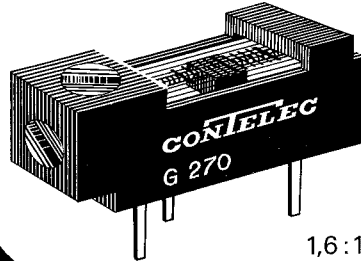
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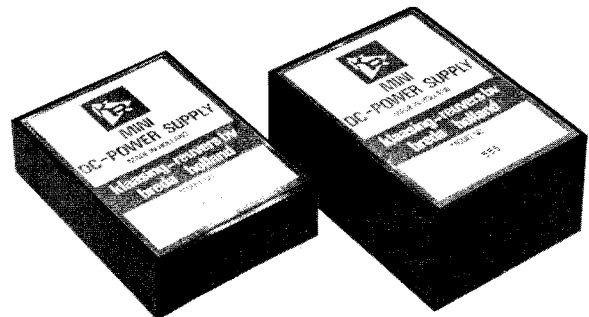
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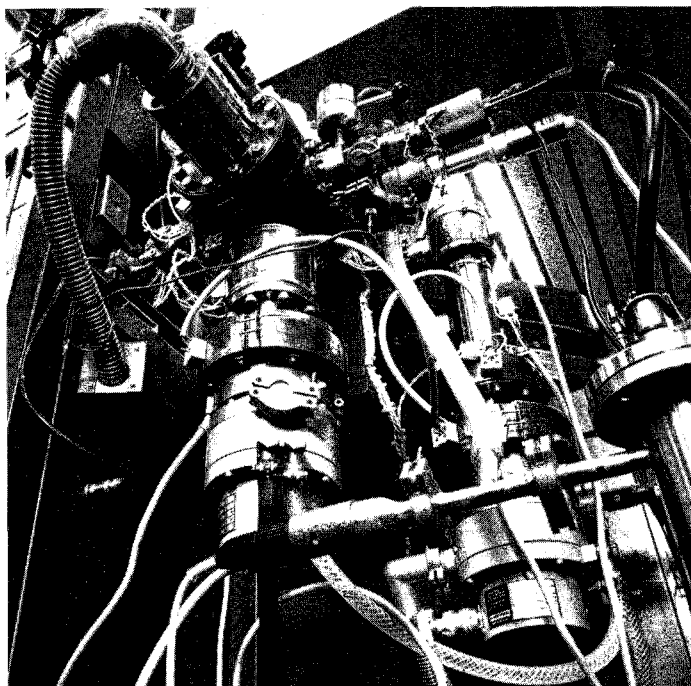
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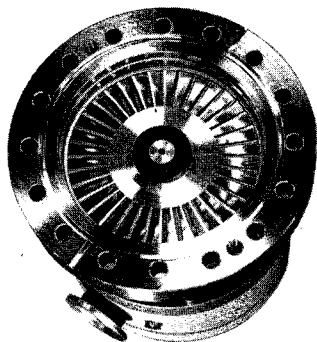
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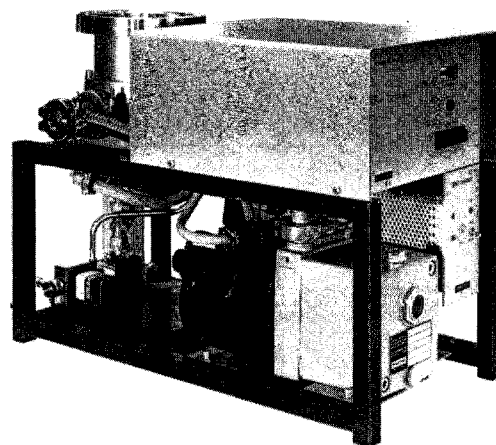
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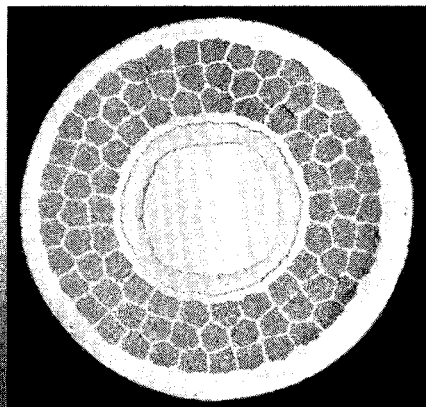
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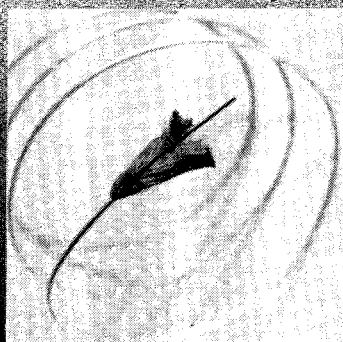
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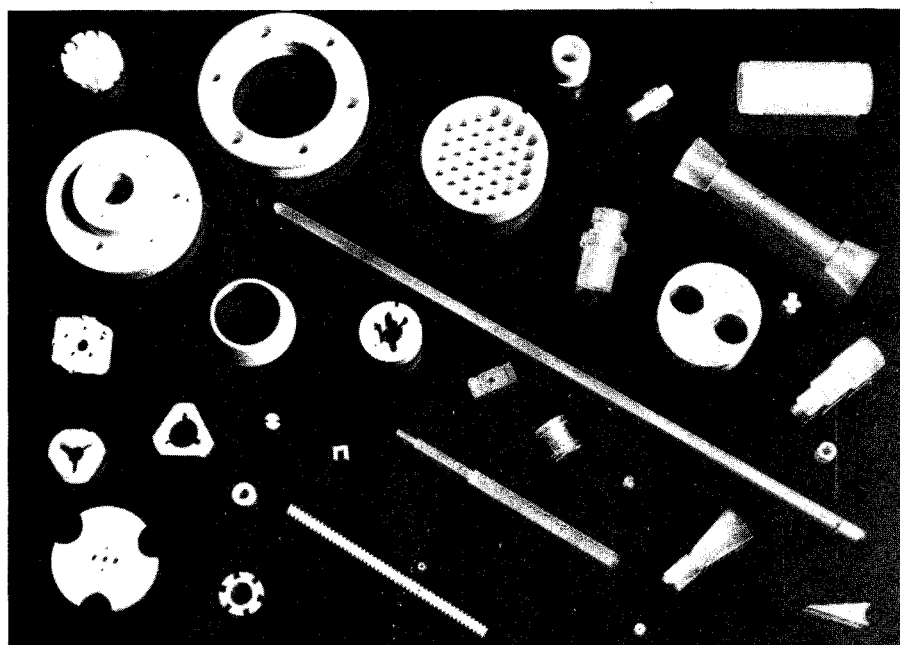
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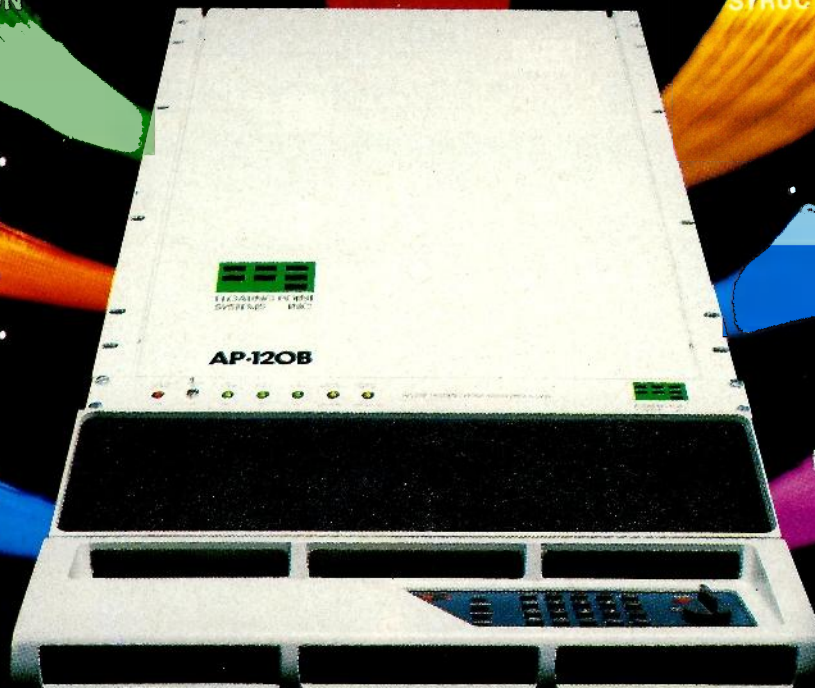
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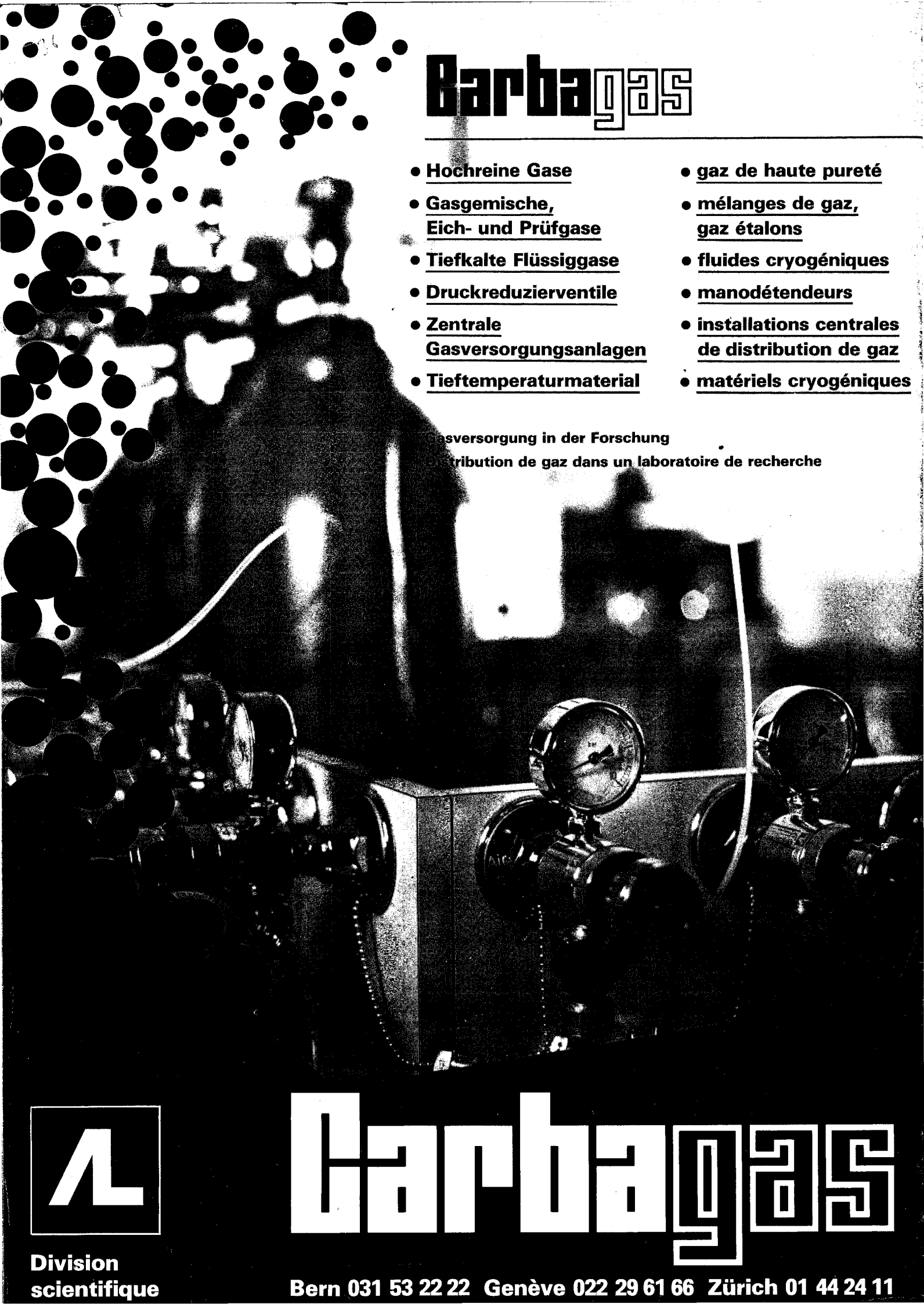
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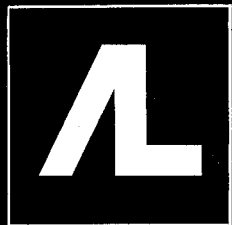


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