

products and prototypes. Optical assembly and alignment facility which includes a laminar air flow bench, lasers and optical benches. Drafting facilities for mechanical, electronic and printed circuit boards.

Machining – CNC Mill/Precision engine lathe and other machine shop facilities to manufacture precision components.

Experience: Sci-Tec's main experience has been its research and development, manufacturing and marketing involvement with its three main products. The "Brewer Ozone Spectrophotometer" was jointly developed by Sci-Tec and the Canadian Government. The Brewer is a highly sophisticated instrument capable of monitoring ozone (O₃) and sulfur dioxide (SO₂) atmospheric overburdens and vertical concentration profiles. In addition, this instrument is presently being used in monitoring the horizontal irradiance in the ultraviolet and has been further developed to provide automatic azimuth and elevation tracking with additional features allowing for unattended operation. The Brewer is sold world wide to various governments, universities and scientific organizations.

The "Cosmos Tracking System" was developed to meet demand for a two-axis, microcomputer controlled point/tracking system. Applications for this device include pointing specialized scientific or industrial instruments at celestial objects and tracking as it moves through the objects' trajectory. Because of the medium load capability (100 lbs maximum), they expect the market to expand in the near future to cover a wide range of industrial, space and military applications.

An exclusive manufacturing and marketing license was secured for the "High Line Data Acquisition System" (HILDA). This instrument is the foremost system for measuring vibration on high voltage (730 kV) transmission lines. The ability of the system to provide remote, unattended measurements over a long time frame is expected to increase utility and maintenance/installation groups' demand for this instrument.

Keywords: 5 = Communications; 7 = Electronics; 9 = Environment; 10 = Image Processing & Optics; 12 = Machining; 17 = Software Services; 18 = Space Systems; 19 = Testing/Test Equipment; 20 = Miscellaneous; PCM Encoders = 5, 7, 18; Telemetry Systems = 5, 7, 17, 18; Data Acquisition Systems = 7, 17, 18, 20; Microprocessor Circuits & Software = 5, 7, 17, 18, 19, 20; Remote Sensing = 5, 7, 9, 17, 18; System Design & Engineering = 5, 7, 9, 10, 17, 18, 19, 20; Instrumentation = 7, 9, 10, 12, 17, 18, 19, 20; Remote Control Systems = 5, 7, 10, 17, 18.

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SCIEX (Division of MDS Health Group Ltd (MDS))

Code: SCI

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History: Sciex was incorporated in 1970 under provincial charter (Ontario). In late 1981, Sciex amalgamated with MDS Health Group Ltd, a Canadian controlled public corporation. In early 1982, an associate company to MDS Ltd, Sciex Inc, was established in Amherst, New York, and will be conducting marketing operations in the US.

Capability: Sciex is engaged in the design, R&D, manufacture, servicing, and marketing of trace chemical analysis

systems, sample inlet systems, ionization modules, and custom designed application software for the industrial, environmental, health, medical, and military markets. The company currently has the world's leading Atmospheric Pressure Chemical Ionization (APCI) research capability. The Trace Chemical Analysis systems, TAGA® 3000 and TAGA® 6000 MS/MS, and the Elemental Analyzer, ELAN® ICP/MS, are the main products of the company. Both TAGA® systems can be fully mobile and are up to 1000 times more sensitive and 1000 times faster than other available systems. The TAGA® 3000 is primarily used for targeted compound analysis, while the TAGA® 6000 MS/MS is used for rapid mixture analysis and structure elucidation, and in many cases avoiding the preparative steps and time delays of chromatographic separation. The ELAN® system is an exceptionally sensitive instrument used for elemental analysis and the determination of isotopic ratios of elements.

Average Work Force: Engineers – 7
PhDs – 12
Systems Analysts – 7
Others – 54

Gross Sales: Confidential

Plant Size: 22,000 sq ft

Equipment: Facilities are geared to specific applications requiring rapid measurement, monitoring or investigation of specific trace components in complex mixtures. Sciex equipment includes:

- Three fully computerized atmospheric pressure ionization mass spectrometers – laboratory based and mobile. The TAGA® 3000 is a single quadrupole MS system. The TAGA® 6000 MS/MS is a triple quadrupole mass spectrometer. Unique features include – detection of compounds at sub-picogram or low parts per trillion level, minimal memory effects which facilitate high sample throughput, high ion transmission, cryogenic pumping, and gas dynamically confined CID target with collision energies to 150 eV. Total system control, data display and manipulation are achieved via the PDP-11/03 or PDP-11/23 DEC computers, with RT-11 (single user) or RSX-11M (multi-user) operating systems. The appropriate peripheral terminal, graphic and hardcopy capabilities are integrated with the system.
- With the mobile unit, trace compounds at any accessible site can be detected, identified and their concentrations measured. The extent of environmental air contamination can be plotted throughout an area rapidly to pinpoint sources of contamination.
- Elemental Analysis Laboratory, equipped with the computerized ELAN® instrument and preparative wet chemistry laboratory. The ELAN® is a hybrid instrument incorporating an Inductively Coupled Plasma ion source interfaced to a computer-controlled mass spectrometer. The ELAN® permits the determination of elemental composition at the part-per-billion level in complex sample matrices as well as the measurement of isotopic ratios.
- Good design capability and reliability backed up by a team of skilled professionals able to provide application-oriented hardware, software and methodology development.
- In-depth customer training and comprehensive documentation.
- Toxic Chemical Laboratory capable of handling hazardous and carcinogenic compounds.
- Analytical facilities – expertise in the field of gas chromatographic column technology enables preparation of both packed and open tubular capillary columns.