CORRIGAN INSTRUMENTATION SERVICES

EFFECTIVE METAL DETECTION

X-ray scanning technique expedites food inspection

Locates bone fragments, fish bones, grit, stones, and metal pieces

X-ray scanners used for inspecting luggage at airport security points are being employed to locate chicken bone fragments for removal from boned meat, for separating stones from almonds, and for inspection of food lots suspected of containing broken glass, machinery parts, conveyor belt fragments and similar metal and non-metal objects.

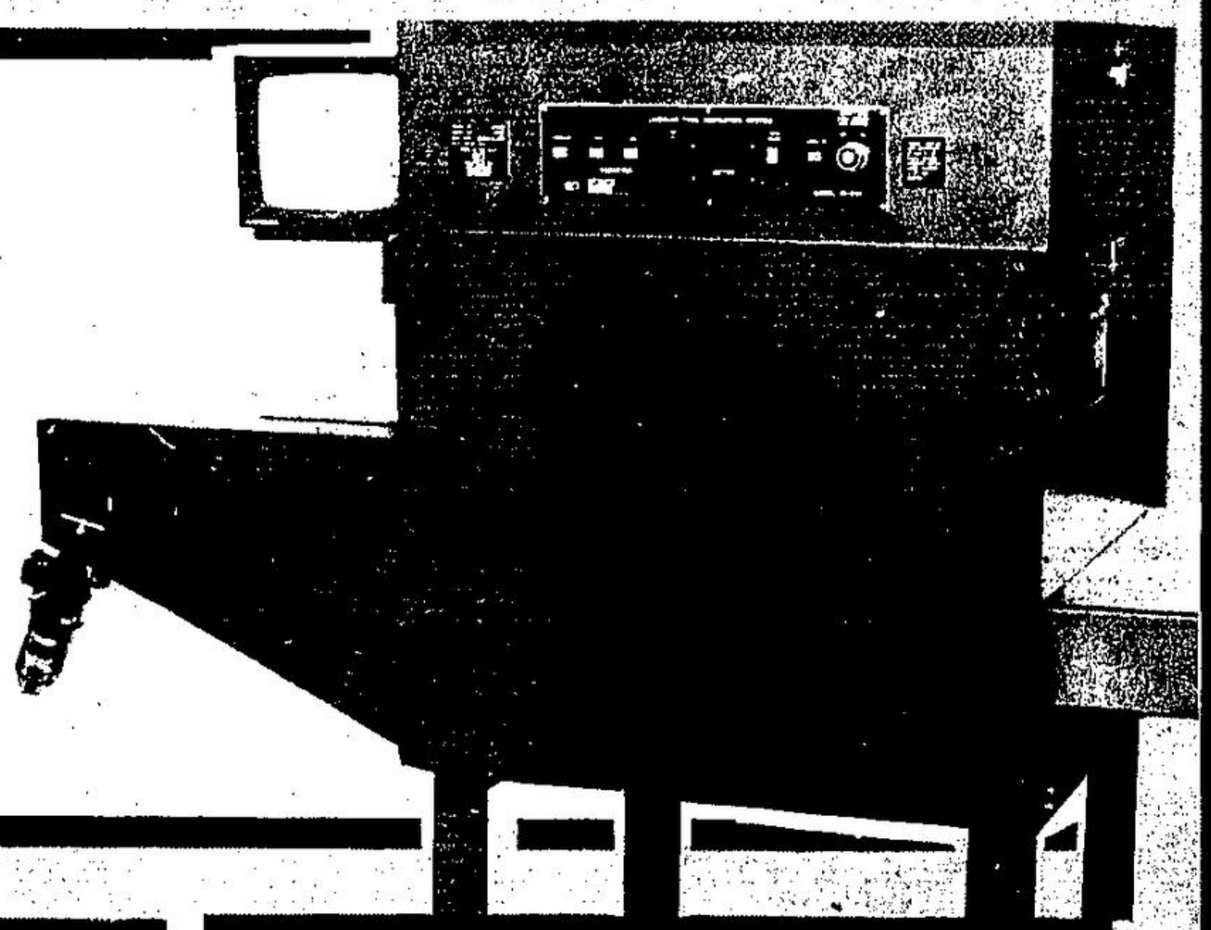
The patented scanner allows use of very low X-ray dosages. It uses a narrow slit beam rather than a projected broad beam with image enhancement.

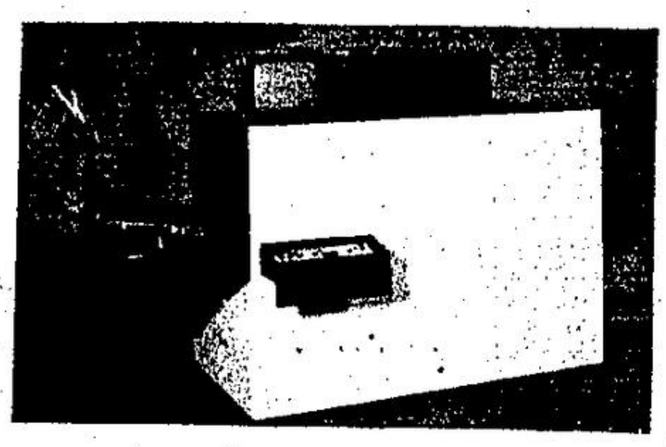
By changing plug-in modules, the scanner can discriminate between the density of the product and the objects to be sorted out. Objects of greater (or lesser) density cause the corresponding image on the TV screen to flash, give an audible signal, and, in the new automatic eject models announced in April, to trigger an air blast ejector at the moment the foreign object passes the eject mechanism.

Suspected shipments can be sent to the X-ray scanner manufacturer for inspection, or a rental machine can be sent to the processor. Examples of items that have been inspected include: ball bearings lost in a batch of single serve jelly packages; pieces of wire in chewing gum, resulting from a broken screen that was discovered after the lot was completed and wrapped; and bone chips in frozen blocks of imported meat. (Without inspection, the lot would have been consigned to dog food at considerable loss.)

Small (1/32") particles of grit have been detected and removed from soup mixes. The techniques also is suitable for locating unwanted bones and bone particles in meat, poultry, and fish. Interest is high in new models for removing shell fragments from walnut meats, filberts, and others. Removal of pit fragments from pie fruits, fruits for yogurt, and similar products is yet to be tested.

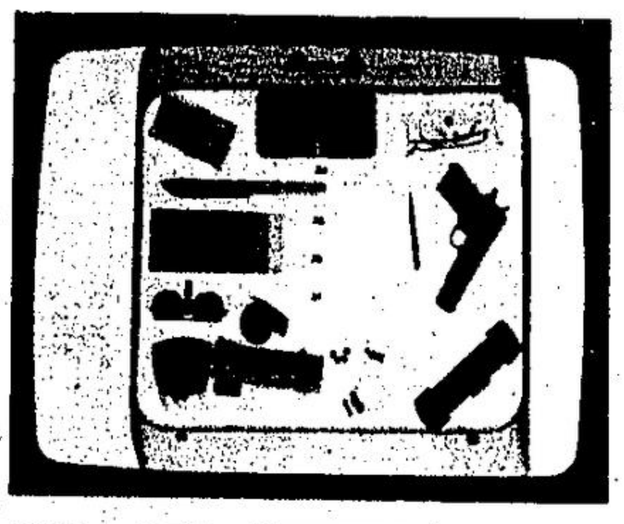
The testing machine will detect fresh fruit and vegetables (also meats) in unopened luggage. The U.S. Department of Agriculture is testing two scanners for airport inspection at Hawaii and Puerto Rico. Only those bags having agricultural contraband would be opened. Prospects for development of a workable system are good, according to USDA personnel working on the project. X-ray scanning would speed the inspection process for tourists, and increase the efficacy of control procedures for the oriental fruit fly, medfly, and other endangering species.





LINESCAN

OFFERS UNSURPASSED IMAGE QUALITY



The Linescan System One X-Ray security screening system is designed to satisfy the critical requirements of airport concourse security as well as the security requirements of large corporate mailrooms, correctional facilities, nuclear power plants and government agencies. The System One may be used to screen handbags, briefcases, lunch pails and similar items. Yet the large 28" (71.12 cm) wide by 19¼" (49.53 cm) high tunnel opening is adequate for checking items as large as a standard three suiter suitcase. This unit is equipped with an efficient 90 KVCP X-Ray generator operating at 140 KVCP, a 2:1 electronic zoom, and a high penetration mode. Because Linescan System One utilitizes the well known patented silicon diode array sensor developed and pioneered by Scanray, the system is safe for photographic film, even the new high speed films with speed ratings of I.S.O. 1000.

LINESCAN SYSTEM ONE X-RAYS LOCATIONS

1. House of Commons, Ottawa, Ontario.
2. Ministry of Attorney General Toronto, Ontario
3. Atomic Energy of Canada Korea
4. Technical Training Institute Cornwall, Ont.
5. Beaudrill Ltd., Tuktoyaktuk
6. AIRPORTS — St. Johns, Nfld., Toronto, Ont., Dorval, Quebec; Ottawa, Ont.; Gander, Nfld.; Quebec City, Quebec; Saint John, N.B.; Calgary, Alberta; Vancouver, B.C.; Victoria, B.C.; Edmonton, Alberta; Regina, Sask.; Thunderbay, Ont.; Sept Iles, Quebec; Ancienne Lorette, Quebec.
7. Polysar Ltd., Sarnia, Ont.
8. Vachon Inc. Quebec

FS-3 METAL DETECTORS LOCATIONS

(ALL AIRPORTS UNLESS OTHERWISE STATED)

Drummond Inst. Quebec
Ancienne Lorette, Quebec
Ottawa, Ontario
Sept Iles
Baggotville
Sault Ste. Marie
Mount Hope
Timmins
London
Cassidy
Penticton
Terrace
Castlegar
Abbotsford
Mont-Joli
Hauterive
Rouyn
Schefferville
Charlottetown, P.E.I.
Frobisher Bay, N.W.T.
Kauljuag, Quebec
Calgary, Alberta
Charlo, N.B.
Gagnon
Edmonton
Regina
Thunderbay
Saskatoon
Winnipeg
Dorchester Penitentiary, Dorchester N.B.
Val D"OR, Quebec
Hull, Quebec
Vancouver, B.C.
North Bay, Ont.
Victoria, B.C. Parliament Bldgs.

HIGH SENSITIVITY METAL DETECTOR

HEAVY DUTY SYSTEM FOR DEMANDING INDUSTRIAL AND CORRECTIONAL FACILITIES APPLICATIONS

In many industrial and correctional facilities, the high-sensitivity capabilities of general purpose metal detectors cannot be utilized due to difficult environmental conditions (e.g. proximity of moving metal masses and heavy electrical equipment). The HS-3 is a high-sensitivity metal detector designed to achieve maximum efficiency in real-world environments. The system is completely shielded in a heavy gauge aluminum structure ruggedly constructed to withstand physical abuse.

The only operating controls are the sensitivity selector, preset by the user inside the lockable control console and audible alarm volume control. Minimal operating controls and positive indications of metal content yield a high confidence system easily useable by non-technical personnel. Modular vertical and horizontal panels facilitate assembly with minimal effort.

The HS-3 is designed to detect and indicate the presence of small metallic items. It comes complete with a 10 position LED indicator to show quantities below the normal alarm level. The HS-3 features the Intex pulsed field technology which eliminates the need for field balancing and provides insensitivity to large amounts of stationary metal close to the detector.

The system consists of a walk-through archway, electronic console with integral LED indicator, all interconnecting cables and ramp walkway.

CORRIGAN

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