ENVIRONMENTAL CLEAN UP AND GEOMAGNETIC SURVEY

Your partner for
reliable detection technology

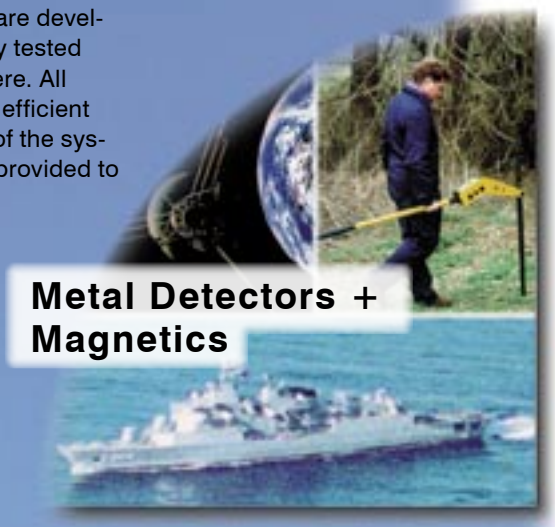
FOERSTER

DIVISION S

... a division of the FOERSTER Group

Competence through innovation and world-wide presence

The home of the Division S is at Reutlingen. Detectors, magnetic measuring technology, naval- and satellite magnetometers are developed, extensively tested and produced here. All know how for an efficient implementation of the systems and use is provided to the customers at Foerster's own training centre. The central sales department is also based at Reutlingen, together with subsidiaries and branches it provides services to customers in more than 50 countries. FOERSTER magnetic field measuring systems offers solutions for research, production and special applications.

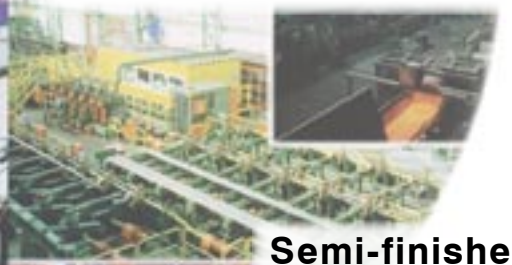


Metal Detectors + Magnetics

Component Testing

www.foerstergroup.de

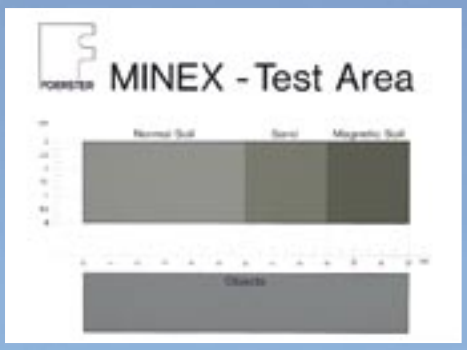
Maintenance Testing

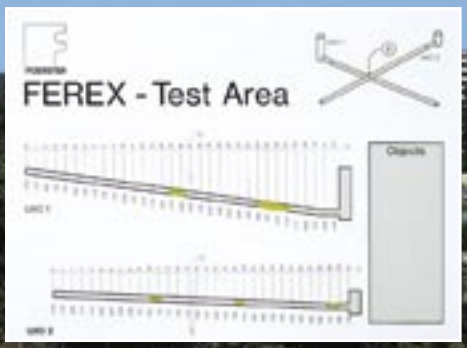


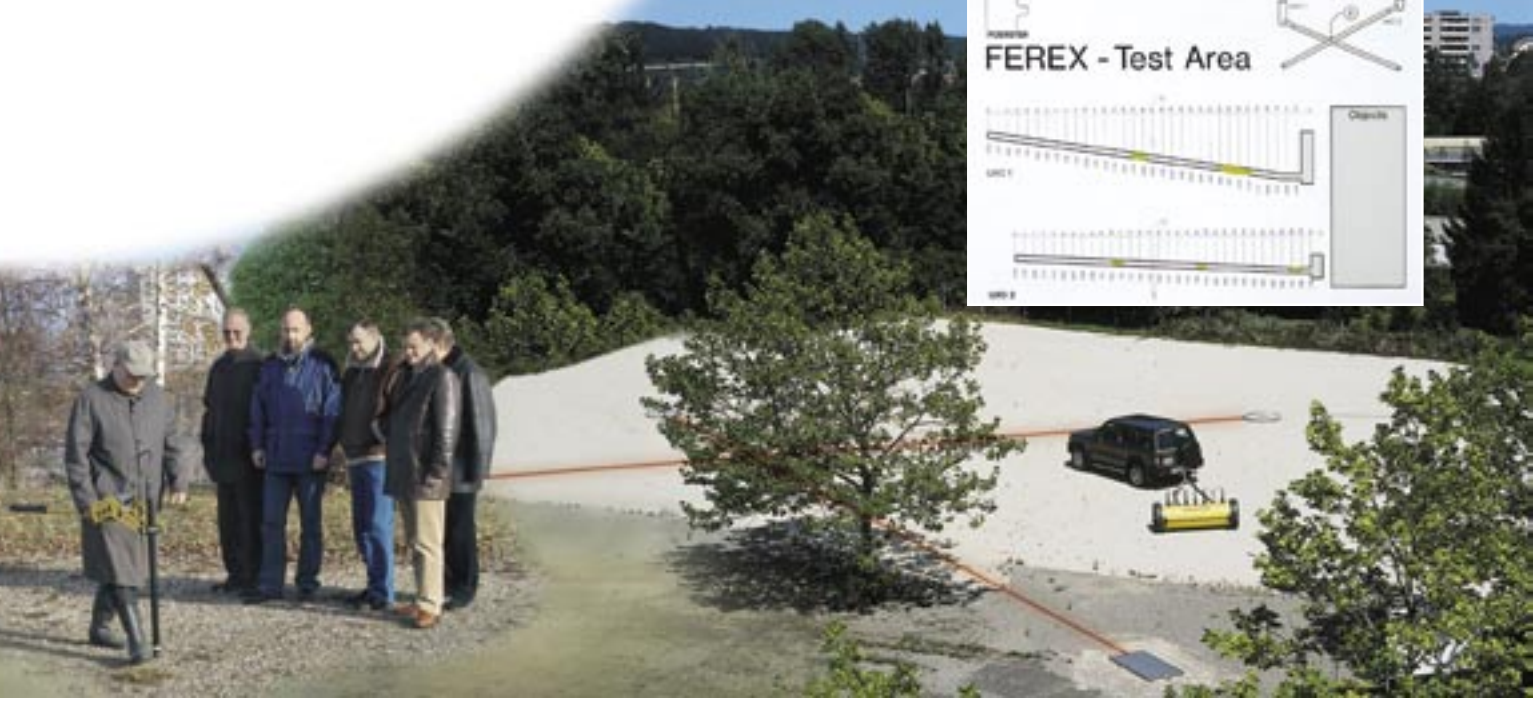
Semi-finished Product Testing

The parent branch of the FOERSTER group in Reutlingen

DETECTORS, SOFTWARE, TRAINING, SERVICE







MINEX® 2FD 4.530

Characteristics

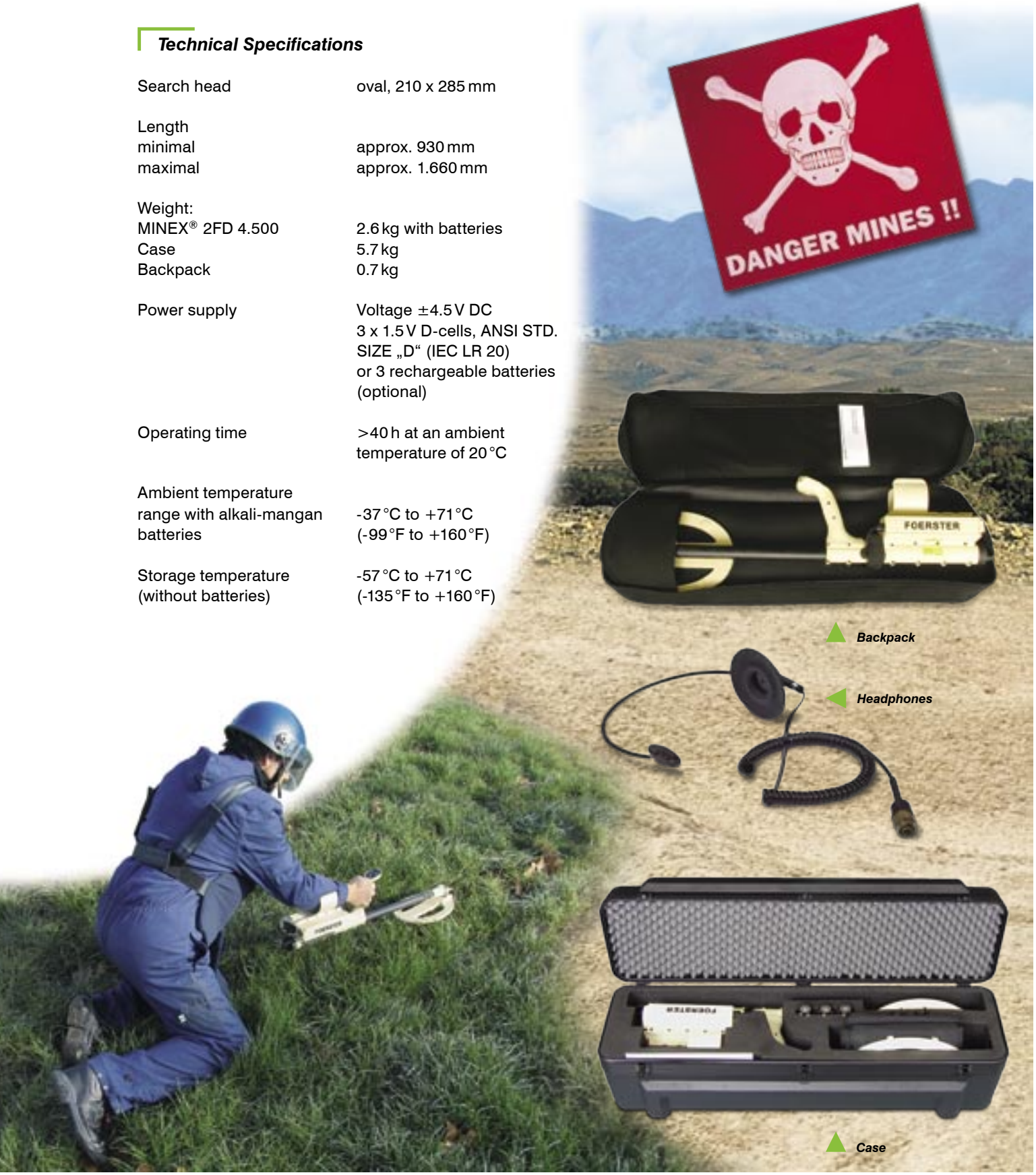
- Re-engineered and improved Minex 4.500
- Activ metal detector
- High sensitivity for all metals
- Smallest metal content detection, e.g. land mines
- Double tone detection signal for precise pinpointing
- Built-in self test and alarm tone system
- Ground learning system
- Improved ground learning capability
- New digital interface socket for:
  - Software update
  - Export of ground com pensation parameters
  - Failure diagnostics
- Headphone socket
- 5 sensitivity ranges
- Constant sensitivity during battery lifetime
- Built-in loudspeaker
- Compact Design
- Improved telescope locking
- Ergonomic, lightweight

MINEX® 2FD 4.530

- MINEX® metal detector
- Wear protection cover
- Case
- Batteries
- User manual

Technical Specifications

Search head	oval, 210 x 285 mm
Length	
minimal	approx. 930 mm
maximal	approx. 1.660 mm
Weight:	
MINEX® 2FD 4.500	2.6 kg with batteries
Case	5.7 kg
Backpack	0.7 kg
Power supply	Voltage ±4.5 V DC 3 x 1.5 V D-cells, ANSI STD. SIZE „D“ (IEC LR 20) or 3 rechargeable batteries (optional)
Operating time	>40 h at an ambient temperature of 20 °C
Ambient temperature range with alkali-mangan batteries	-37 °C to +71 °C (-99 °F to +160 °F)
Storage temperature (without batteries)	-57 °C to +71 °C (-135 °F to +160 °F)



Backpack

Headphones

Case

FEREX® 4.032 KITS

Headphones

Extension cable waterproof

FEREX® 4.032 API

- Control unit
- FEREX® probe CON 650
- Carrying rod
- Battery pack
- Carrying belt
- Case
- Batteries
- User manual

Case

GPS aided navigation

FEREX 4.032 DLG STD

- Control unit STD
- FEREX® probe CON 650
- 0.6 m cable
- Carrying rod
- Battery pack
- Carrying belt
- Case
- Batteries
- Start/Stop-handgrip
- Data transfer cable
- User manual

FEREX® 4.032 DLG GPS Cartograph

- Control unit GPS
- FEREX® probe CON 650
- 0.6 m Cable
- Carrying rod
- Battery pack
- Carrying belt
- Case
- Batteries
- Start/Stop-handgrip
- Data transfer cable
- User manual

FEREX® EQUIPMENT AND ADD-ONS

Basic unit	Evaluation Software	Detection on land
		Multi channel systems for large area detection
		hand-held

FEREX® 4.032 API

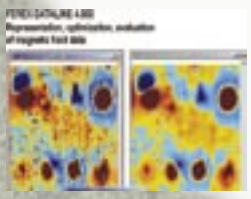
FEREX® 4.032 DLG Data logger

FEREX® 4.032 DLG GPS Cartograph

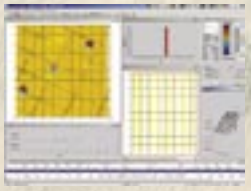
FEREX DATALINE® 4.800 STD

FEREX DATALINE® 4.800 STD FILTER Upgrade

FEREX DATALINE® 4.800 STD FILTER

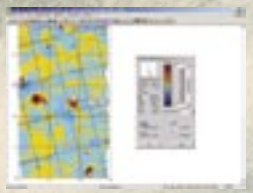


FEREX DATALINE® 4.800 GPS



FEREX DATALINE® 4.800 GPS FILTER Upgrade

FEREX DATALINE® 4.800 GPS FILTER



FOERSTER-Multi-probe-holder

FOERSTER-3-probe-holder
Needed in addition:
2 FEREX® probes

FOERSTER-4-probe-holder
Needed in addition:
3 FEREX® probes

	vehicle-based	**Positioning**	**Navigation** Software for support of vehicle based large-area detection	**Bohrehole detection**	**Underwater detection**
	FOERSTER MULTICAT® 4.850  Option: Foam marking additional 4 FEREX® probes and cable-set for 8 channel use (2. DLG GPS needed) GPS cables and antenna adaption	**GPS-system on request**   **Tachymeter total station on request**   	**FOERSTER DATAMONITOR software** Only together with DGPS and FEREX® 4.032 DLG GPS Display inside detection-vehicle 	  Hardware: Extention-cable with sealing-plug up to 100 m length for use down to 100 m water-depth, pulling rope, ballast-weigth Software DLG: STD, borehole module	Extention-cable with sealing-plug, up to 100 m length for use down to 100 m water-depth, pulling rope, ballast-weigth 

ACCESSORIES

3-probe holder

- Carrying frame
- Probe cable, 3-fold,
- Battery cable

Applications and benefits

- Large-area detection
- Adjustable probe-spacing
- Ergonomic design

4-probe holder

- Carrying frame
- Probe cable, 4-fold
- Battery cable

Bore hole detection

- FEREX® probe CON 400
- Battery cable
- Extension cable, waterproof
- Ballast weight

Options:

- Adapter for laser prism
- Adapter for GPS-antenna

TECHNICAL SPECIFICATIONS

FEREX® probe CON 1600

FEREX® probe CON 650

FEREX® probe CON 400

Probe Specification

Design	tension band probe, alignment for lifetime
Measuring uncertainty	<2 % rel. to ±10,000 nT
Resolution	<0.2 nT
Stability	<1 nT
Temperature drift	<1 nT/K
Band width	240 Hz
Sampling rate	20 Hz
Measuring range	±10,000 nT
Linearity	<1 nT relating to max. measuring range
Sensors	adjusted for lifetime, maintenance free

Spezifikation Data Logger

Memory	16 MB
per value	3 Byte
Channels max.	4
File export formats	.csv, .xyz, .txt, .fdl, .bmp

	FEREX® API	FEREX® DLG		
Operating time with one set of alkaline batteries: intermitted operation continuos operation	1 probe >80 h >70 h	1 probe >36 h >35 h	3 probes >18 h >15 h	4 probes >14 h >10 h
Power supply	Voltage ±6 V DC 4 x 1.5 V D-cells, ANSI STD SIZE „D“ (IEC LR 20) or 4 rechargeable batteries (optional)			
Measuring ranges	8 linear ranges from 0 to 3 nT up to 0 to 10,000 nT or logarithmic range			
Temperature ranges	Storage temperature -57 °C to +70 °C Operation ambient temperature -35 °C to +70 °C			
Weight (masses)	4 .6 kg with batteries in case 10.3 kg	4.9 kg with batteries in case 10.2 kg		
Approx. dimensions FEREX® Case	L 1,400 mm L x W x H 995 x 265 x 335 mm			
FEREX® probe	∅-tube mm	Length mm	Probe basis space mm	Weight kg
FEREX® probe CON 650	35	853	650	0.55
FEREX® probe CON 400	35	603	400	0.50
FEREX® probe CON 1600	35	1,800	1,600	1.00

FOERSTER MULTICAT® 4.850

Probe vehicle kit

- Probe carrier with tow bar
- Cable kit
- Cable adapter
- 3 FEREX® probes
- FEREX® 4.032 DLG GPS

DATAMONITOR
Navigation software

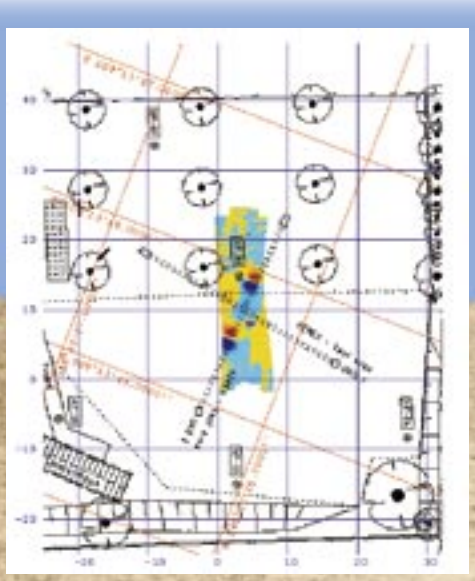
Options

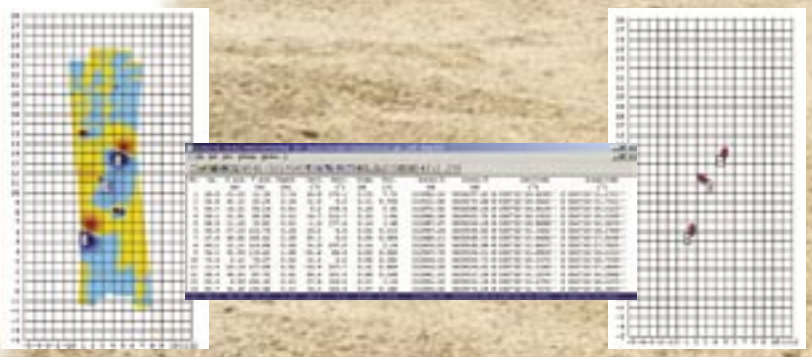
- Foam marking system
- Adapter for laser prism
- Adapter for GPS antenna
- DATAMONITOR navigation software

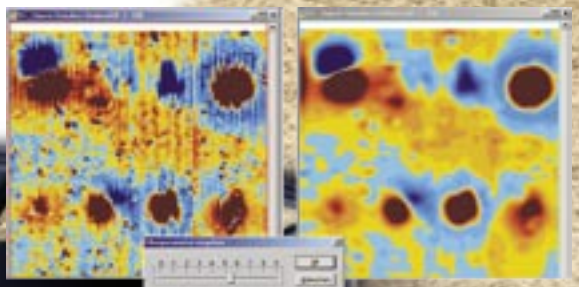
FEREX DATALINE® 4.800 STD/GPS

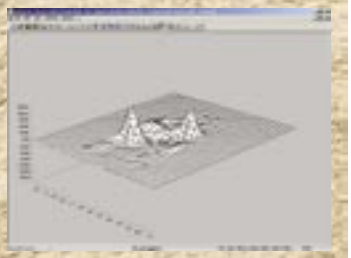
Characteristics

- Evaluation of FEREX® DLG data records
- Colour coded field display
- 3D display, track description
- Dipole and object calculation Object listing
- Object filter
- Mapping supported by-different co-ordinates systems
- User defined co-ordinate systems
- Data export/import Formats .csv, .xyz, .txt, .fdl, .bmp
- Grafics import (.bmp, .jpg, .jpeg, .emf, .wmf)
- GIS mapping support
- User administration









Scope of supply

- Software CD/ROM
- User manual CD/ROM
- Hardlock drive (USB, PCMCIA)

ARCHEOLOGY

Aerial view: Dr. Otto Braasch

FEREX® system-characteristics

- Differential magneto-meter – vertical com-ponent
- High resolution
- Best resolution of structures close to the surface
- Suitable under rough conditions, robust, maintenance free
- Adjusted for lifetime, maintenance free
- Simple handling
- Multi channel use
- Track width free selectable
- 16 MB memory / data capacity for more than 10 ha
- Ergonomic design

Data logging

- Continuous logging with high sampling rate
- Selective single point logging
- Free choice of interpolation parametres

Data management

- Dataload – Download- and Viewer-Software inclusive
- Export to .csv, .txt, .bmp, .xyz

by courtesy of Landesdenkmalamt Baden-Württemberg

FOERSTER

Institut Dr. Foerster GmbH & Co. KG
Division S Metal Detectors + Magnetics
In Laisen 70
72766 REUTLINGEN
GERMANY
Phone +49 7121 140-312
Fax +49 7121 140-280
s-all@foerstergroup.de
www.foerstergroup.de

Order No. EN 1832247 / 02/2005
Printed in Germany