Laser-Scan Ltd.

Software Product Specification

FLOWLINE

(Flowline Control and Management Package)

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Science Park, Milton Road, Cambridge, England CB4 4FY tel: (0223) 420414

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1 *DESCRIPTION*

The Laser-Scan flowline control and management (FLOWLINE) package operates on Digital Equipment VAX and MicroVAX series computers running the VMS operating system. See later sections for details of hardware and software prerequisites. It is recommended that the reader becomes familiar with the "LAMPS Environment Guide" which outlines in some detail the hardware and software environment required by the LAMPS package. LAMPS is the **L**aser-Scan **A**utomated **M**ap **P**roduction **S**ystem.

FLOWLINE is the Laser-Scan flowline database and control package and provides a flexible system for the management of a computer based flowline. Flowline operations are carried out by means of DCL (DIGITAL command language) command procedures which are invoked automatically under FLOWLINE control. These command procedures are created independently from flowline database definition. Thus the system is not restricted to a specific application, and indeed may be used to manage more than one flowline simultaneously.

The system may be used for the implementation of flowlines using Laser-Scan LAMPS mapping software for applications such as map digitising and editing or digital terrain modelling. It is, also, sufficiently general to control any other production flowline driven DCL command procedures.

The FLOWLINE package is comprehensively documented in the "FLOWLINE Package Manual", where details of its set-up, operation and system responses are provided.

2 *FACILITIES*

The FLOWLINE package comprises a relational database and a controlling program module called LAMPSCONTROL. All management and operator interaction with the database may be achieved using LAMPSCONTROL. The following features are offered:

- facilities for the definition of a production flowline in terms of concepts depicted on a flow diagram
- automatic recording of the start and completion of flowline tasks
- task sequencing according to the pre-determined flowline definition
- operator selection of currently required flowline tasks known to the system
- A DCL command file structure which minimises the need for operator's in-depth knowledge or initiative. Such details as filenames, system parameters and so on can be provided automatically by the system.
- extensive flowline management facilities
- full reporting facilities of flowline status and performance

- o screen menu, screen form and command qualifier input
- o VMS format messages referenced using 32 bit condition code symbols
- o assured database integrity, in the event of a system crash
- o error recovery procedures
- o flexible operator and workstation authorisation facilities to control the security of access to specified system components

3 *PREREQUISITES*

3.1 *HARDWARE PREREQUISITES*

- * Any DEC VAX, MicroVAX or VAXstation computer.
- * At least 10MB available disc space for software and the database plus sufficient for DCL command files and related data files.
- * Any DEC VT100 compatible alphanumeric terminal.

3.2 *SOFTWARE PREREQUISITES*

The FLOWLINE package runs under VAX/VMS Version 5.4-3 (or later versions) and assumes upwards compatibility by DEC. The LAMPSCONTROL module may be run concurrently with other interactive and batch processes.

The following two DEC software products also required to be installed on the system.

- * The DEC relational database system VAX Rdb/VMS Version 4.0 (or higher).
- * The DEC Form Management System VAX FMS Version 2.3 (or higher).

It is recommended that the reader becomes familiar with the LAMPS Environment Guide which outlines in greater detail the hardware and software environment required by the LAMPS package.

3.3 *GROWTH CONSIDERATIONS*

The minimum hardware and software requirements for any future version of this product may be different from the minimum hardware requirements for the current version.

4 *SUPPORT LEVEL*

FLOWLINE is a fully supported Laser-Scan standard software product.

5 *SYSTEM DEFINITION*

An understanding of the creation and use of DCL command procedures is necessary to obtain best and most flexible use of the facilities provided in FLOWLINE.

Laser-Scan offers consultancy services, which may be utilised to develop turnkey flowline systems for specific customer applications. Additionally, specialist training courses in the operation of Laser-Scan systems and DCL programming techniques can be arranged upon resquest.