

NAME

dxferber -- Extract LINE and ARC entities from a DXF file and arranges them in a way suitable for optimized cutting.

SYNOPSIS

dxferber [*file ...*]

DESCRIPTION

This manual page documents '\$Revision: 1.1 \$' of the **dxferber** program.

The cutworks software that comes with a gerber cutter doesn't automatically optimize the cutting paths it reads from DXF files. It essentially cuts lines in the order it finds them in the DXF file.

This program reads a DXF file. The name of the file must end in '.dxf' or '.DXF', otherwise the program will report an error and quit. It extracts all the 'LINE' and 'ARC' entities from it. It then searches through all these entities and assembles connected entities into lists called contours. If necessary, the direction of entities in a contour is changed so that all entities can be cut in one continuous movement.

These contours and any remaining lines and arcs are then sorted in ascending order of the left-bottom corner of their bounding box.

It also converts arcs into line segments. By default these line segments are no more than 5 units in length. It ignores the \$MEASUREMENT variable in the dxf file, because that is often not set correctly.

The output is written to a new file. The name of the new file is based on the name of the old file, with a trailing number added or increased. So 'foo.dxf' becomes 'foo1.dxf' and 'test 17.dxf' becomes 'test 18.dxf'.

EXIT STATUS

The **dxferber** utility exits 0 on success, and >0 if an error occurs.

COMPATIBILITY

The **dxferber** program requires the Python interpreter. It was written for version 2.7, but should be able to work with 3.x after fixing with 2to3.

SEE ALSO

python(1), 2to3.

Python Programming Language - Official Website, <http://www.python.org/>.

HISTORY

This program was written to stop having to fix up DXF files manually before loading them into cutworks.

AUTHOR

This manual and the **dxfgerber** software were written by Roland Smith <rsmith@xs4all.nl>.

The latest version of this program is available at: <http://rsmith.home.xs4all.nl/software/>

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