High Steel Structures LLC DXF File Specification

Preamble

The following specification outlines the format for which High Steel Structures LLC will expect to receive .dxf part files in.

Layers

Entities are to be grouped into the following layers:

Layer Name	Description	Examples
CUT	Profile Entities	part perimeter, holes, cut-outs
MARK	Marked entities	work points, set lines
DETAIL	Reference entities	direction-of-roll constraints
PARDATA	Part attributes	grade, thickness, drawing

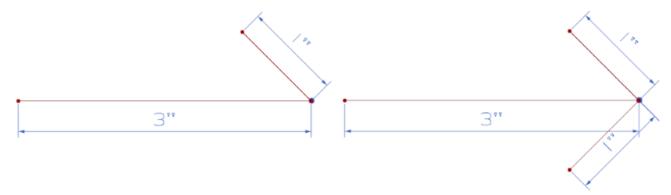
Key: Value pairs

Text attributes on the PARTDATA layer are to be organized into KEY: VALUE pairs. For example, material grade of A709-50 would result in the string MATERIAL: A709-50. Part attributes can be inside or outside the contour of the part, unless the part file has multiple parts in it.

KEY	Value Description	Format	Example(s)
PARTNAME	Part name	[job]_[mark]	1200018A_x1a
MATERIAL	Material grade	[spec]-[grade][test?]	A709-50T2 or A709-50
THICKNESS	Part Thickness (plate items)	integer or decimal	1.375
DRAWING	Drawing number	alphanumeric	1 or X1

Direction-of-rolling constraing

For parts where there is a requirement of direction of mill rolling, an arrow should be placed on the DETAIL layer in the center of the part. This can be a two line arrow or three line arrow. Only lines are needed. Dimensions and points are for reference.



Example

0											
0											
0	0	0	0	0	0	0	0	0	0	\circ	DRAWING: X201
0	0	0	0	0	0	0	0	0	0	0	THICKNESS: 1.5
0	0	0	0	0	0	0	0	0	0	0	PARTNAME: 1170143C_x20