

HDS G CODE FORMAT

- IJ arcs must use ABSOLUTE coordinates.
- Alternately, R arcs may be used.
- G and M commands must be 1 per line.
- Must have a delay after every 'spindle on' command (DLY,5).
- Must have a user offset defined (UAO,1), (UAO,2)...
- G27 after every tool change to ensure continuous motion.
- Header should look like this:
 - o G70 ← defines units as inches
 - o G90 ← absolute coordinates
 - o G40 ← disables cutter comp
 - o G80 ← disables fixed cycles
 - o G17 ← arcs in XY plane
 - o G27 ← cont. operation w/ speed reduction on corners
 - o M143 ← lowers pop-up pins
 - o M49 ← lowers dust shroud
 - o G600 ← calls up cut parameter settings
 - o (UAO,1) ← calls up user offset
- Footer should look like this:
 - o M5 ← spindle off
 - o M48 ← raises dust shroud
 - o G79 Z0 ← raises Z axis to home position (optional)
 - o M30 ← ends program

Sample file:

G70
G90
G40
G80
G17
G27
M143
M49
G600
(UAO,1)
T1 M6
S18000 M3
(DLY,5)
G27
G00 X2.5607 Y2.5607 Z0.1500
G01 Z-0.2500 F50.
G03 X1.5000 Y3.0000 I1.5000 J1.5000 F100.
X0.0000 Y1.5000 I1.5000 J1.5000
X1.5000 Y0.0000 I1.5000 J1.5000
X3.0000 Y1.5000 I1.5000 J1.5000
X2.5607 Y2.5607 I1.5000 J1.5000
G00 Z0.1500
T2 M6
S12000 M3
(DLY,5)
G27
X7.5000 Y3.0000 Z0.1500
G01 Z-0.5000
Y0.0000 F200.
X4.5000
Y3.0000
X7.5000
G00 Z0.1500
M05
M48
G79 Z0
M30