

## Programming LFB Mode 1

### Sample program

```

Edit 0 220115 Comment CURRENT-DEMO
0 1000 Comment LFB
$1 $2
;
(FACE-TURN) ;
M3 S1=4000 T400 ;
G0 X#814+1.0 Z-1.0 T4 ;
G99 X14.0 ;
G165 P1 Q1.5 D1.5 ;
G1 Z0,V0 F0.12 ;
X16.3 F0.035 ;
X17.9 A60.0 ;
Z7.8 ;
X#814 F0.12,V0 ;
G165 P0 ;
G0 X#814+1.0 T0 ;
;
(CHAMFER-BACK) ;
M3 S1=4000 T200 ;
G0 X#814+1.0 Z7.85+0.95 T2 ;
G165 P2 E2.0 R1.0 ;
G1 G9 X16.5 F0.06 ;

Result _____ INS
HDL 1 RDY 2 RDY OVR 30%
UNDO Set SW MC-Data Message CutCycle CalcIatrCoordCAL
List Edit Code LST FormtChk UP SRCH DWN SRCH Vib Wave$-Select Menu SEL
    
```

### Which Axes has LFB:

Machine	\$1	\$2
L220-VII	X1,Z1	X2,Z2
L220-X	X1,Z1	N/A
L220-XII	X1,Z1	N/A

Only 2 axes can be programmed at once  
i.e. X1, Z1 or Z1, Z2 etc...

### Adjust LFB if:

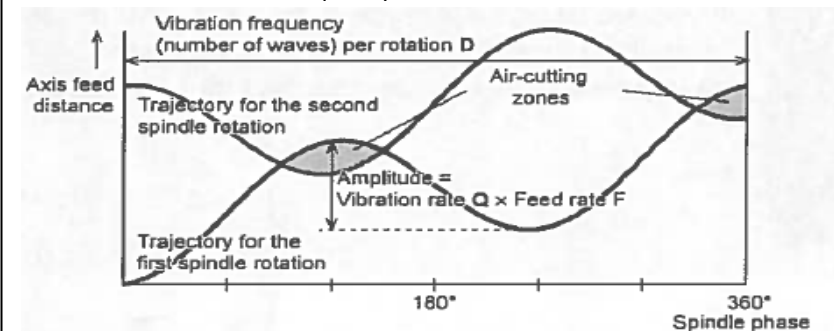
- Chips do **NOT BREAK**; increase Q-value by 0.1 at a time
- Chips are **TOO LONG**; increase D-value, recommend value for D are:  
0.25, 0.5, 0.75, 1.5, 2.5, 3.5

State spindle **speed and direction** before LFB. The LFB may change the RPM.

State **G99** before LFB

**G165 P1 Q1.5 D1.5** = LFB Mode 1 on

- P= Mode 1
- Q = Oscillation rate
- D = Oscillation Frequency



E setting range **0.01-2.5**

D setting range **0.1-6.0**

### Starting value

**Q=1.5**

**D=1.5**

**MAX feed for Mode 1 F0.04 per/rev**

,V0 = LFB halt, LFB is turned off for current line. If the feed rate has been changed when using ,V0 the feed rate for LFB will need stating again.

**G0** can be used at any time while LFB is active.

All **CAN CYCLES** can be used with LFB apart for **THREADING** cycles.

**G165 P0** = LFB off