

SPRING ANALYSIS OUTPUT  
26 Apr 1984

15:30:39

For:  
ROUND MUSIC WIRE WITH SQUARED AND GROUND ENDS

OUTSIDE DIAMETER..... .210+/- .008  
WIRE DIAMETER..... .034+/- .0004  
HOLE DIAMETER..... .220  
PIN DIAMETER..... .125  
TOTAL TURNS..... 8.0  
ACTIVE TURNS..... 6.0  
FREE LENGTH..... .480+/- .015  
SOLID HEIGHT..... .272+/- .003  
WAHL CORRECTGION FACTOR... 1.30  
SPRING RATE..... 58.73  
DIA. CHANGE FL to SH..... .0015  
MEAN DIAMETER..... .176  
SPRING INDEX..... 5.18

STRESS AND LOAD:  
LOAD AT .375in..... 6.166  
EXPECTED LOAD VARIATION... 5.55 TO 6.78  
STRESS AT .375in..... 91294.1  
LOAD AT .340in..... 8.222  
EXPECTED LOAD VARIATION... 7.40 TO 9.04  
STRESS AT .340in..... 121725.5  
FORCE TO SOLID..... 12.22  
STATIC STRESS AT SOLID.... 180849.3  
TOTAL STRESS AT SOLID..... 180849.3  
ENERGY..... .25  
TENSILE STRENGTH..... 319820.2  
DESIGN STRESS AS 65%..... 207883.1  
TOTAL STRESS AS  
PERCENT OF TENSILE STRESS. 56.5

SEAR SPRINGMAKE - Z -W.D. C. 5003 - 314 - yF. MARTIN

..125 16.5 T.P.I.