Part Name: Cap	**Drawing:** EX2–L1-DG1	**Revision:** A
Material: ∅3” X 2” STEEL 12L14		**Date:** 2025
Machine: Leadwell	**Control:** Fanuc Oi	**Prepared by:** TD

O	Program # Prefix: **O**
0032	Program #: **0032**

N2	Block #: **2**
G20	Positioning: **Inch**
G40	Tool nose radius compensation: **Cancel**
G99	Feedrate: **Distance/revolution**

N4	Block #: **4**
G50	Spindle: **Maximum RPM**
S2500	**2500 RPM**

N6	Block #: **6**
T1	**Tool select** #: **1**: 80° **R/H** turning tool
01	Compensation: **Tool offsets** # **01**

N8	Block #: **8**
G96	Spindle: **Constant surface speed**
S400	Spindle: **Speed 400 FPM**
M4	Spindle: **Counter-Clockwise**

N10	Block #: **10**
G0	Positioning: **Rapid**
G54	Part zero selection: **One**
X5.	Positioning on **X** axis: **X5.**
Z5.	Positioning on **Z** axis: **Z5.**
M8	Coolant: **On**

N12	Block #: **12**
X3.2	Positioning on **X** axis: **X3.2**
Z.1	Positioning on **Z** axis: **Z.1**

N14	Block #: **14**
G94	Cycle: **Facing**
X–.1	Positioning on **X** axis: **X–.1**
Z.005	Positioning on **Z** axis: **Z.005**
F.005	Feedrate: **.005 IPR**

N16	Block #: **16**
G0	Positioning: **Rapid**
X3.	Positioning on **X** axis: **X3.**

N18	Block #: **18**
G90	Cycle: **Turning**
X2.8	Positioning on **X** axis: **X2.8**
Z–1.245	Positioning on **Z** axis: **Z–1.245**
F.01	Feedrate: **.01 IPR**

N20	Block #: **20**
X2.6	Positioning on **X** axis: **X2.6**

N22	Block #: **20**
X2.4	Positioning on **X** axis: **X2.4**

N24	Block #: **24**
X2.2	Positioning on **X** axis: **X2.2**

N26	Block #: **26**
X2.02	Positioning on **X** axis: **X2.02**

N28	Block #: **28**
X1.895	Positioning on **X** axis: **X1.895**
Z–.745	Positioning on **Z** axis: **Z–.745**

N30	Block #: **30**
G0	Positioning: **Rapid**
X5.	Positioning on **X** axis: **X5.**
Z5.	Positioning on **Z** axis: **Z5.**
M9	Coolant: **Off**

N32	Block #: **32**
T1	**Tool select** #: **1**: 80° **R/H** turning tool
00	Compensation: **Cancel**
M5	Spindle: **Stop**

N34	Block #: **34**
M1	Program: **Optional stop**

N36	Block #: **36**
G50	Spindle: **Maximum RPM**
S507	**507 RPM**

N38	Block #: **38**
T10	**Tool select** #: **10**: ∅.75” drill
10	Compensation: **Tool offsets** # **10**

N40	Block #: **40**
G97	Spindle: **Revolutions per minute**
S507	Spindle: **Speed 507 RPM**
M3	Spindle: **Clockwise**

N42	Block #: **42**
G54	Part zero selection: **One**
Z.1	Positioning on **Z** axis: **Z.1**
M8	Coolant: **On**

N44	Block #: **44**
X0.	Positioning on **X** axis: **X0.**

N46	Block #: **46**
G74	Cycle: **Peck drilling**
R.05	Retract distance on **Z** axis: **.05**

N48	Block #: **48**
G74	Cycle: **Peck drilling**
Z–1.5	Positioning on **Z** axis: **Z–1.5**
Q1250	Peck distance: **.125**
F.0075	Feedrate: **.0075 IPR**

N50	Block #: **50**
X5.	Positioning on **X** axis: **X5.**

N52	Block #: **52**
Z5.	Positioning on **Z** axis: **Z5.**
M9	Coolant: **Off**

N54	Block #: **54**
T10	**Tool select** #: **10**: ∅.75” drill
00	Compensation: **Cancel**
M5	Spindle: **Stop**

N56	Block #: **56**
M1	Program: **Optional stop**

N58	Block #: **58**
G50	Spindle: **Maximum RPM**
S2500	**2500 RPM**

N60	Block #: **60**
T2	**Tool select** #: **2**: 80° **R/H** boring tool
02	Compensation: **Tool offsets** # **02**

N62	Block #: **62**
G96	Spindle: **Constant surface speed**
S95	Spindle: **Speed 400 FPM**
M4	Spindle: **Counter-Clockwise**

N64	Block #: **64**
G54	Part zero selection: **One**
X.75	Positioning on **X** axis: **X.75**
Z.1	Positioning on **Z** axis: **Z.1**
M8	Coolant: **On**

N66	Block #: **66**
G90	Cycle: **Turning**
X.85	Positioning on **X** axis: **X.85**
Z–1.245	Positioning on **Z** axis: **Z–1.245**
F.003	Feedrate: **.003 IPR**

N68	Block #: **68**
X.95	Positioning on **X** axis: **X.95**

N70	Block #: **70**
X1.05	Positioning on **X** axis: **X1.05**

N72	Block #: **72**
X1.15	Positioning on **X** axis: **X1.15**

N74	Block #: **74**
X1.23	Positioning on **X** axis: **X1.23**

N76	Block #: **76**
X1.33	Positioning on **X** axis: **X1.33**
Z–.87	Positioning on **Z** axis: **Z–.87**

N78	Block #: **78**
X1.43	Positioning on **X** axis: **X1.43**

N80	Block #: **80**
X1.53	Positioning on **X** axis: **X1.53**

N82	Block #: **82**
X1.605	Positioning on **X** axis: **X1.605**

N84	Block #: **84**
G0	Positioning: **Rapid**
X5.	Positioning on **X** axis: **X5.**
Z5.	Positioning on **Z** axis: **Z5.**
M9	Coolant: **Off**

N86	Block #: **86**
T2	**Tool select** #: **2**: 80° **R/H** boring tool
00	Compensation: **Cancel**
M5	Spindle: **Stop**

N88	Block #: **88**
M1	Program: **Optional stop**

N90	Block #: **90**
G50	Spindle: **Maximum RPM**
S3000	**3000 RPM**

N92	Block #: **92**
T3	**Tool select** #: **3**: 55° **R/H** turning tool
03	Compensation: **Tool offsets** # **03**

N94	Block #: **94**
G96	Spindle: **Constant surface speed**
S400	Spindle: **Speed 400 FPM**
M4	Spindle: **Counter-Clockwise**

N96	Block #: **96**
G54	Part zero selection: **One**
X1.995	Positioning on **X** axis: **X1.995**
Z.05	Positioning on **Z** axis: **Z.05**
M8	Coolant: **On**

N98	Block #: **98**
G94	Cycle: **Facing**
X1.505	Positioning on **X** axis: **X1.505**
Z0.	Positioning on **Z** axis: **Z0.**
F.003	Feedrate: **.003 IPR**

N100	Block #: **100**
G0	Positioning: **Rapid**
X1.725	Positioning on **X** axis: **X1.725**

N102	Block #: **102**
G1	Positioning: **Linear**
X1.875	Positioning on **X** axis: **X1.875**
Z–.025	Positioning on **Z** axis: **Z–.025**
F.005	Feedrate: **.005 IPR**

N104	Block #: **104**
Z–.75	Positioning on **Z** axis: **Z–.75**

N106	Block #: **106**
X1.95	Positioning on **X** axis: **X1.95**

N108	Block #: **108**
X2.	Positioning on **X** axis: **X2.**
Z–.775	Positioning on **Z** axis: **Z–.775**

N110	Block #: **110**
Z–1.25	Positioning on **Z** axis: **Z–1.25**

N112	Block #: **112**
X2.7	Positioning on **X** axis: **X2.7**

N114	Block #: **114**
X2.85	Positioning on **X** axis: **X2.85**
Z–1.325	Positioning on **Z** axis: **Z–1.325**

N116	Block #: **116**
G0	Positioning: **Rapid**
Z.05	Positioning on **Z** axis: **Z.05**

N118	Block #: **118**
X5.	Positioning on **X** axis: **X5.**
Z5.	Positioning on **Z** axis: **Z5.**
M9	Coolant: **Off**

N120	Block #: **120**
T3	**Tool select** #: **3**: 55° **R/H** turning tool
00	Compensation: **Cancel**
M5	Spindle: **Stop**

N122	Block #: **122**
M1	Program: **Optional stop**

N124	Block #: **124**
G50	Spindle: **Maximum RPM**
S3000	**3000 RPM**

N126	Block #: **126**
T4	**Tool select** #: **4**: 55° **R/H** boring tool
04	Compensation: **Tool offsets** # **04**

N128	Block #: **128**
G96	Spindle: **Constant surface speed**
S95	Spindle: **Speed 95 FPM**
M4	Spindle: **Counter-Clockwise**

N130	Block #: **130**
G54	Part zero selection: **One**
X1.775	Positioning on **X** axis: **X1.775**
Z.05	Positioning on **Z** axis: **Z.05**
M8	Coolant: **On**

N132	Block #: **132**
G1	Positioning: **Linear**
X1.625	Positioning on **X** axis: **X1.625**
Z–.025	Positioning on **Z** axis: **Z–.025**
F.001	Feedrate: **.001 IPR**

N134	Block #: **134**
Z–.875	Positioning on **Z** axis: **Z–.875**

N136	Block #: **136**
X1.3	Positioning on **X** axis: **X1.3**

N138	Block #: **138**
X1.25	Positioning on **X** axis: **X1.25**
Z–.9	Positioning on **Z** axis: **Z–.9**

N140	Block #: **140**
Z–1.25	Positioning on **Z** axis: **Z–1.25**

N142	Block #: **142**
X.65	Positioning on **X** axis: **X.65**

N144	Block #: **144**
G0	Positioning: **Rapid**
Z.05	Positioning on **Z** axis: **Z.05**

N146	Block #: **146**
X5.	Positioning on **X** axis: **X5.**
Z5.	Positioning on **Z** axis: **Z5.**
M9	Coolant: **Off**

N148	Block #: **148**
T4	**Tool select** #: **4**: 55° **R/H** boring tool
00	Compensation: **Cancel**
M5	Spindle: **Stop**

N150	Block #: **150**
G28	Reference position: **Return to**
U0.	Positioning on **X** axis from: **U0.**
W0.	Positioning on **Z** axis from: **W0.**

N152	Block #: **152**
M30	Program: **End**