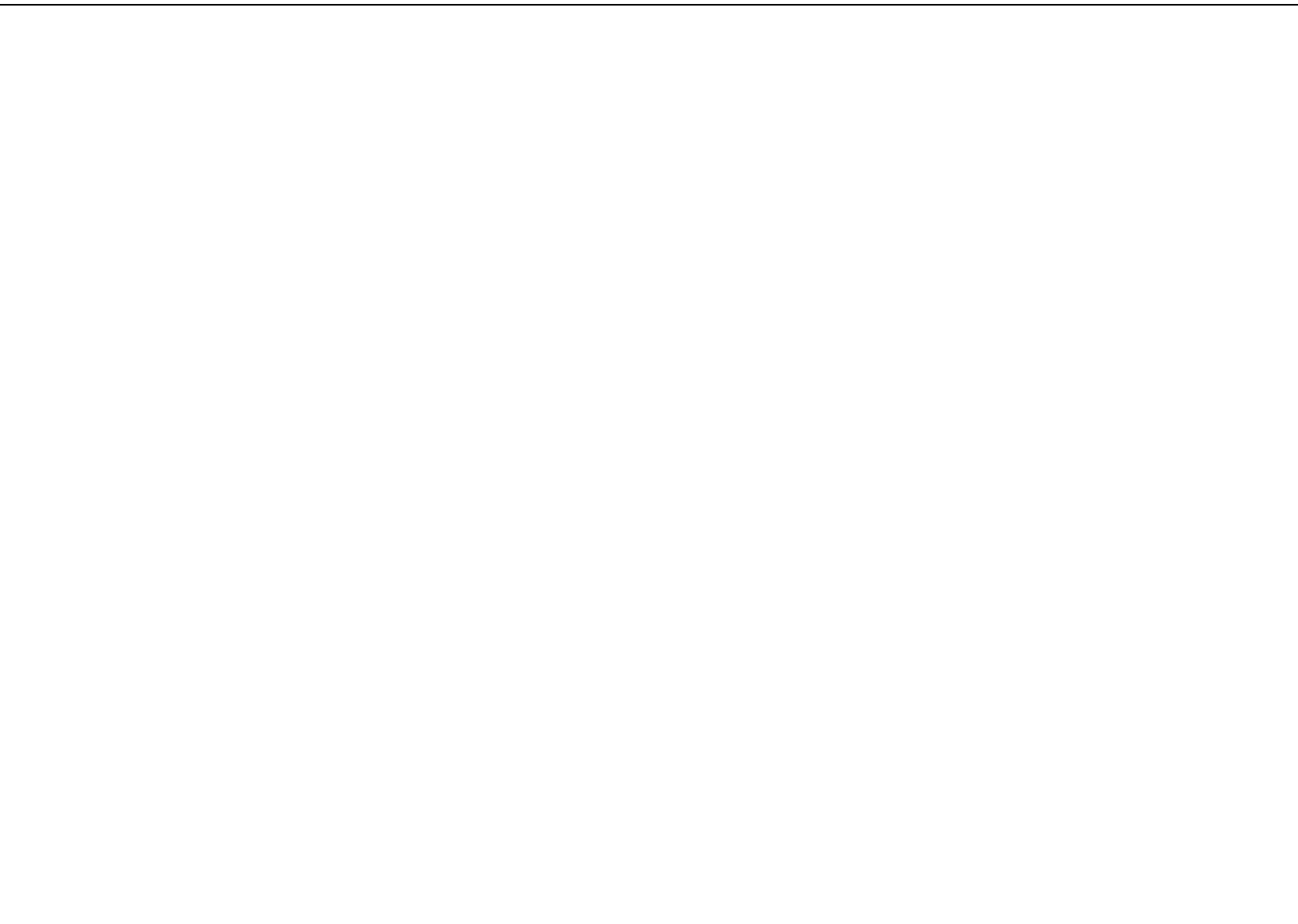


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# CNC Program

By: Kosta Grammatis



CNC program written in Mastercam and run on a HAAS VF4

```
%
O0000
(PROGRAM NAME - DOME PITCH)
( DATE=DD-MM-YY - 27-07-06 TIME=HH:MM - 16:32)
N100G20
N102G0G17G40G49G80G90
/N104G91G28Z0.
/N106G28X0.Y0.
/N108G92X0.Y0.Z0.
( 3/4 FLAT ENDMILL TOOL - 1 DIA. OFF. - 1 LEN. - 1 DIA. - .75)
((FIRST POSITION))
(( X0 Y0 IS THE CENTER OF THE PART))
((Z0 IS THE TOP, CLAMP ON X EDGES TO START))
((STOCK SIZE .75 X 12.00 X 6.5))
N110T1M6
N112G0G90X6.5387Y-3.5513A0.S3000M3
N114G43H1Z3.M8
N116Z.1
N118G1Z-.375F66.
N120G41D1X5.9387F40.
N122X4.9013
N124G2X4.5163Y-3.1663R.385
N126G1Y-2.3789
N128G3X.2574Y2.1303R4.5168
N130G1X.2015Y2.1376
N132X-.2019
N134G2X-.2579Y2.1303R.385
N136G3X-4.5168Y-2.379R4.5168
N138G1Y-3.1663
N140G2X-4.9018Y-3.5513R.385
N142G1X-5.9392
N144G40X-6.5392
N146Z-.275F66.
N148G0Z3.
N150X6.5387
N152Z-.275
N154G1Z-.75
N156G41D1X5.9387F40.
N158X4.9013
N160G2X4.5163Y-3.1663R.385
N162G1Y-2.3789
N164G3X.2574Y2.1303R4.5168
N166G1X.2015Y2.1376
N168X-.2019
N170G2X-.2579Y2.1303R.385
N172G3X-4.5168Y-2.379R4.5168
N174G1Y-3.1663
N176G2X-4.9018Y-3.5513R.385
N178G1X-5.9392
N180G40X-6.5392
N182Z-.65F66.
N184G0Z3.
N186X6.5387Y-3.5413
N188Z-.275
N190G1Z-.75
N192G41D1X5.9387F40.
N194X4.9013
N196G2X4.5263Y-3.1663R.375
N198G1Y-2.3789
N200G3X.258Y2.1403R4.5268
N202G1X.2025Y2.1476
N204X-.203
N206G2X-.2585Y2.1403R.375
N208G3X-4.5268Y-2.379R4.5268
N210G1Y-3.1663
N212G2X-4.9018Y-3.5413R.375
N214G1X-5.9392
N216G40X-6.5392
N218Z-.65F66.
N220G0Z3.
```

N222M5  
 N224G91G28Z0.M9  
 N226G28X0.Y0.A0.  
 /N228G28X0.Y0.  
 /N230G92X0.Y0.Z0.  
 N232M01  
 ( 1/4 FLAT ENDMILL TOOL - 9 DIA. OFF. - 9 LEN. - 9 DIA. - .25)  
 N234T9M6  
 N236G0G90X.4754Y2.2709A0.S3000M3  
 N238G43H9Z3.M8  
 N240Z.1  
 N242G1Z-.75F66.  
 N244G41D9X.2982Y2.3637F20.  
 N246X.2334Y2.3976  
 N248X-.2342  
 N250X-.316Y2.3558  
 N252G40X-.494Y2.2647  
 N254Z-.65F66.  
 N256G0Z3.  
 N258M5  
 N260G91G28Z0.M9  
 N262G28X0.Y0.A0.  
 /N264G28X0.Y0.  
 /N266G92X0.Y0.Z0.  
 N268M01  
 ( 1/4 SPOTDRILL TOOL - 2 DIA. OFF. - 2 LEN. - 2 DIA. - .25)  
 N270T2M6  
 N272G0G90X-5.4206Y-2.7727A0.S4000M3  
 N274G43H2Z2.M8  
 N276G98G81Z-.055R.1F15.  
 N278X-.0003Y2.9301  
 N280X5.4199Y-2.7727  
 N282G80  
 N284M5  
 N286G91G28Z0.M9  
 N288G28X0.Y0.A0.  
 /N290G28X0.Y0.  
 /N292G92X0.Y0.Z0.  
 N294M01  
 ( #31 DRILL TOOL - 11 DIA. OFF. - 11 LEN. - 11 DIA. - .12)  
 N296T11M6  
 N298G0G90X5.4199Y-2.7727A0.S4000M3  
 N300G43H11Z2.M8  
 N302G98G83Z-.82R.1Q.1F10.  
 N304X-.0003Y2.9301  
 N306X-5.4206Y-2.7727  
 N308G80  
 N310M5  
 N312G91G28Z0.M9  
 N314G28X0.Y0.A0.  
 /N316G28X0.Y0.  
 /N318G92X0.Y0.Z0.  
 N320M01  
 ( 3/4 FLAT ENDMILL TOOL - 1 DIA. OFF. - 1 LEN. - 1 DIA. - .75)  
 (M0(CLAMP INSIDE))  
 N322T1M6  
 N324G0G90X-6.3242Y-3.7663A0.S3000M3  
 N326G43H1Z3.M8  
 N328Z.1  
 N330G1Z-.374F66.  
 N332G41D1Y-3.1663F40.  
 N334Y-2.3789  
 N336G2X-5.9392Y-1.9939R.385  
 N338G1X-5.5234  
 N340G2X-.9758Y3.071R5.5368  
 N342G1Y3.1663  
 N344G2X-.5908Y3.5513R.385  
 N346G1X.5903  
 N348G2X.9753Y3.1663R.385  
 N350G1Y3.0711  
 N352G2X5.5234Y-1.9939R5.5368  
 N354G1X5.9387

N356G2X6.3237Y-2.3789R.385  
 N358G1Y-3.1663  
 N360G40Y-3.7663  
 N362Z-.274F66.  
 N364G0Z3.  
 N366X-6.3242  
 N368Z-.274  
 N370G1Z-.748  
 N372G41D1Y-3.1663F40.  
 N374Y-2.3789  
 N376G2X-5.9392Y-1.9939R.385  
 N378G1X-5.5234  
 N380G2X-.9758Y3.071R5.5368  
 N382G1Y3.1663  
 N384G2X-.5908Y3.5513R.385  
 N386G1X.5903  
 N388G2X.9753Y3.1663R.385  
 N390G1Y3.0711  
 N392G2X5.5234Y-1.9939R5.5368  
 N394G1X5.9387  
 N396G2X6.3237Y-2.3789R.385  
 N398G1Y-3.1663  
 N400G40Y-3.7663  
 N402Z-.648F66.  
 N404G0Z3.  
 N406X-6.3142  
 N408Z-.274  
 N410G1Z-.748  
 N412G41D1Y-3.1663F40.  
 N414Y-2.3789  
 N416G2X-5.9392Y-2.0039R.375  
 N418G1X-5.514  
 N420G2X-.9658Y3.0626R5.5268  
 N422G1Y3.1663  
 N424G2X-.5908Y3.5413R.375  
 N426G1X.5903  
 N428G2X.9653Y3.1663R.375  
 N430G1Y3.0627  
 N432G2X5.514Y-2.0039R5.5268  
 N434G1X5.9387  
 N436G2X6.3137Y-2.3789R.375  
 N438G1Y-3.1663  
 N440G40Y-3.7663  
 N442Z-.648F66.  
 N444G0Z3.  
 N446M5  
 N448G91G28Z0.M9  
 N450G28X0.Y0.A0.  
 /N452G28X0.Y0.  
 /N454G92X0.Y0.Z0.  
 N456M01  
 ( 1/4 SPOTDRILL TOOL - 2 DIA. OFF. - 2 LEN. - 2 DIA. - .25)  
 ((SECOND POSITION))  
 (( X0 IS THE CENTER OF THE PART))  
 ((Y0 IS THE FAR FACE OF PART))  
 ((Z0 IS THE TOP))  
 N458T2M6  
 N460G0G90X-5.6636Y-.375A90.S4000M3  
 N462G43H2Z2.M8  
 N464G98G81Z-.055R.1F15.  
 N466X5.6631  
 N468G80  
 N470M5  
 N472G91G28Z0.M9  
 N474G28X0.Y0.A0.  
 /N476G28X0.Y0.  
 /N478G92X0.Y0.Z0.  
 N480M01  
 ( #31 DRILL TOOL - 11 DIA. OFF. - 11 LEN. - 11 DIA. - .12)  
 N482T11M6  
 N484G0G90X-5.6636Y-.375A90.S4000M3  
 N486G43H11Z2.M8

N488G98G83Z-.8874R.1Q.1F10.  
N490X5.6631  
N492G80  
N494M5  
N496G91G28Z0.M9  
N498G28X0.Y0.A0.  
/N500G28X0.Y0.  
/N502G92X0.Y0.Z0.  
N504M01  
( 1/4 SPOTDRILL TOOL - 2 DIA. OFF. - 2 LEN. - 2 DIA. - .25)  
((THIRD POSITION))  
(( X0 Y0 IS THE CENTER OF THE HOLE TO BE DRILLED))  
((NOTE RUN ALL 3 SIDES WITH SAME PROGRAM))  
((Z0 IS THE TOP))  
N506T2M6  
N508G0G90X0.Y0.A-90.S4000M3  
N510G43H2Z2.M8  
N512G98G81Z-.125R.1F15.  
N514G80  
N516M5  
N518G91G28Z0.M9  
N520G28X0.Y0.A0.  
/N522G28X0.Y0.  
/N524G92X0.Y0.Z0.  
N526M01  
(.393 DRILL TOOL - 10 DIA. OFF. - 10 LEN. - 10 DIA. - .39063)  
N528T10M6  
N530G0G90X0.Y0.A-90.S2200M3  
N532G43H10Z2.M8  
N534G98G83Z-1.15R.1Q.12F10.  
N536G80  
N538M5  
N540G91G28Z0.M9  
N542G28X0.Y0.A0.  
N544M30  
%