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;
; EXEMPLO DE PARAMETRIZAÇÃO ITNC530
;
=====
;
;-----ZYX
MP 10 : %00000000000111;EIXOS ATIVOS --ZYX
MP 12 : 0
MP 20.0 : %00000000000000;SUPERVISAO REFERENCIA CODIFICADA ENCODERS
MP 20.1 : %00000000000111;SUPERVISAO AMPLITUDE ENCODERS
MP 20.2 : %00000000000111;SUPERVISAO FREQUENCIA ENCODERS
MP 21.0 : %00 ;IDEM FUSOS
MP 21.1 : %11 ;IDEM FUSOS
MP 21.2 : %11 ;IDEM FUSOS
MP 100.0 : -----ZYX ;ASSIGNMENT OF AXIS CHARACTERS TO THE AXES
MP 100.1 : -----ZYX
MP 100.2 : -----ZYX
;-----
;MP110 Assignment of the position encoder inputs to the axes
;Input: 0 = no position encoder input
; 1..5 = position encoder inputs X1..X5
; 35..38 = position encoder inputs X35..x38
; REGUA / ENCODER(2048 IMPULSOS)
MP 110.0 : 0 ;AXIS X 1 / 0
MP 110.1 : 0 ;AXIS Y 2 / 0
MP 110.2 : 0 ;AXIS Z 3 / 0
;-----
;MP111 Assignment of the position encoder inputs to the spindle
;1. spindle
;Input: 0 = no position encoder input
; 6 = position encoder input X6
MP 111.0 : 0 ;SPINDLE ENCODER EXTERNO=6
MP 111.1 : 0
;
;-----
;MP112 Assignment of the rpm measuring system inputs for the
;axes
;Input: 0 = no rpm measuring system input
; (analog axis)
; 15..20 = rpm measuring system input X15..X20
; 62..64 = rpm measuring system input X62..X64
;
MP 112.0 : 15 ;AXIS X
MP 112.1 : 16 ;AXIS Y
MP 112.2 : 17 ;AXIS Z
;-----
;MP113 Assignment of the rpm measuring system inputs for the
;1. spindle
;Input: 0 = no rpm measuring system input
; (analog spindle)
; 20 = rpm measuring system input X20
; (without DSP)
; 60 = rpm measuring system input X60
; (with DSP)
;
MP 113.0 : 19 ;SPINDLE ENCODER DO MOTOR/SEM ENCODER 0
MP 113.1 : 0
;-----
;MP115.0 Definition encoder input 1 Vpp or 11 uA
;Input: %X38..X35 X6..X1 bitcodet
; 0 = 1 Vpp
; 1 = 11 uA
MP 115.0 : %000000000000
;MP115.1 reserved
MP 115.1 : %000000000000

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;MP115.2 Low or high input frequency
; 1Vpp: 0 = 50 kHz
; 1 = 350 kHz
; 11 uA: 0 = 50 kHz
; 1 = 150 kHz
MP 115.2 : %000000000000
;-----
;MP120 Assignment of the nominal speed command outputs to
;the axes
;Caution: Assignment is fixed (.0 -> X1)
;Input: 0 = no controlled axis
; 1..6 = analogue outputs X8 1..6
; 7..13 = analogue outputs X9 7..13
; 51..59 = digital outputs X51..X59
;
;
MP 120.0 : 51 ;AXIS X
MP 120.1 : 54 ;AXIS Y
MP 120.2 : 55 ;AXIS Z
;-----
;MP121 Assignment of the nominal speed command outputs to the
;1. spindle
;Input: 0 = no output of nominal speed command signal
; 1..6 = analogue outputs X8 1..6
; 7..13 = analogue outputs X9 7..13
; 51..59 = digital output X51..X59
; (without DSP)
; 61 = digital output X61
; (with DSP)
;
MP 121.0 : 56 ;56 ;SPINDLE FLAT CABLE/ SEM MOTOR 0
MP 121.1 : 0
;-----
;MP210 Counting direction of the measuring signals of the
;position encoder
;Input: %987654321 bit-coded
; 0 = positive
; 1 = negative
;COUNTING DIRECTION OF MEASURING SYSTEM SIGNALS
;-----ZYX
MP 210 : %0000000000101;
;-----
;The signal period is automatically calculated by TNC:
;Signal period = MP331 / MP332
;MP331 = distance for counting pulses from MP332
;Input: 0 to 99 999.9999 [mm/degrees]
;DISTANCE TRAVELLED FOR NUMBER OF PULSES FROM MP332
; REGUA / ENCODER
MP 331.0 : 10.0000 ;AXIS X 0.02 / 12.7/2
MP 331.1 : 10.0000 ;AXIS Y 0.02 / 12.7/2
MP 331.2 : 10.0000 ;AXIS Z 0,02 / 4.233
MP 331.13 : 0.00000
;-----
; REGUA / ENCODER
MP 332.0 : 2048.00000 ;AXIS X 1 / 2048
MP 332.1 : 2048.00000 ;AXIS Y 1 / 2048
MP 332.2 : 2048.00000 ;AXIS Z 1 / 2048
;BACKLASH COMPENSATION
MP 710.0 : +0 ;AXIS X
MP 710.1 : +0 ;AXIS Y
MP 710.2 : +0 ;AXIS Z
;LINEAR AXIS ERROR COMPENSATION
MP 720.0 : +0 ;AXIS X
MP 720.1 : +0 ;AXIS Y
MP 720.2 : +0 ;AXIS Z
;
MP 730 : %00000000000000
MP 750.0 : +0

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MP 750.1 : +0
MP 750.2 : +0
MP 750.3 : +0
MP 750.4 : +0
MP 750.5 : +0
;DISPLAY MODE FOR ROTARY AXES AND PLC AXES
MP 810.0 : 0 ;AXIS X
MP 810.1 : 0 ;AXIS Y
MP 810.2 : 0 ;AXIS Z
MP 810.3 : 0
MP 810.4 : 0
;
MP 812 : 0
;SYNCHRONISED AXES
MP 850.0 : 0 ;AXIS X
MP 850.1 : 0 ;AXIS Y
MP 850.2 : 0 ;AXIS Z
MP 850.3 : 0
MP 850.4 : 0
;SYNCHRONIZATION MONITORIG
MP 855.0 : 0 ;AXIS X
MP 855.1 : 0 ;AXIS Y
MP 855.2 : 0 ;AXIS Z
MP 855.3 : 0
MP 855.4 : 0
MP 855.5 : 0
;REFERENCE FOR SNCHRONIZATION CONTROL
MP 860.0 : 0 ;AXIS X
MP 860.1 : 0 ;AXIS Y
MP 860.2 : 0 ;AXIS Z
MP 860.3 : 0
MP 860.4 : 0
;TRAVERSE RANGE 1;DEFAULT SETTING AFTER SWITCH ON;
;ACTIVATION VIA PLC M2817=0 M2816=0
;
MP 910.0 : +501 ;SOFTWARE LIMIT SWITCH X+
MP 910.1 : +501 ;SOFTWARE LIMIT SWITCH Y+
MP 910.2 : +1 ;SOFTWARE LIMIT SWITCH Z+
MP 910.3 : +0
MP 910.4 : +0
MP 910.5 : +0
MP 910.6 : +0
;TRAVERSE RANGE 2;ACTIVATION VIA PLC M2817=0 M2816=1
;
MP 911.0 : +501.1 ;SOFTWARE LIMIT SWITCH X+
MP 911.1 : +501.1 ;SOFTWARE LIMIT SWITCH Y+
MP 911.2 : -1.1 ;SOFTWARE LIMIT SWITCH Z+
MP 911.3 : +0
MP 911.4 : +0
MP 911.5 : +0
;TRAVERSE RANGE 3;ACTIVATION VIA PLC M2817=1 M2816=0
MP 912.0 : +99999 ;30000 ;SOFTWARE LIMIT SWITCH X+
MP 912.1 : +99999 ;30000 ;SOFTWARE LIMIT SWITCH Y+
MP 912.2 : +99999 ;30000 ;SOFTWARE LIMIT SWITCH Z+
MP 912.3 : +0
MP 912.4 : +0
;TRAVERSE RANGE 1;DEFAULT SETTING AFTER SWITCH ON;
;ACTIVATION VIA PLC M2817=0 M2816=0
MP 920.0 : -1 ;SOFTWARE LIMIT SWITCH X-
MP 920.1 : -1 ;SOFTWARE LIMIT SWITCH Y-
MP 920.2 : -501 ;SOFTWARE LIMIT SWITCH Z-
MP 920.3 : +0
MP 920.4 : +0
MP 920.5 : +0
MP 920.6 : +0
;TRAVERSE RANGE 2;ACTIVATION VIA PLC M2817=0 M2816=1
MP 921.0 : -1.1 ;SOFTWARE LIMIT SWITCH X-

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MP 921.1 : -1.1 ;SOFTWARE LIMIT SWITCH Y-
MP 921.2 : -501.1 ;SOFTWARE LIMIT SWITCH Z-
MP 921.3 : +0
MP 921.4 : +0
MP 921.5 : +0
MP 921.6 : +0
MP 921.7 : +0
;TRAVERSE RANGE 3;ACTIVATION VIA PLC M2817=1 M2816=0
MP 922.0 : -99999 ;SOFTWARE LIMIT SWITCH X-
MP 922.1 : -99999 ;SOFTWARE LIMIT SWITCH Y-
MP 922.2 : -99999 ;SOFTWARE LIMIT SWITCH Z-
MP 922.3 : +0
MP 922.4 : +0
MP 922.5 : +0
MP 922.6 : +0
MP 922.7 : +0
;DATUM POINT FOR POSITIONING BLOCKS WITH M92
MP 950.0 : +0 ;AXIS X
MP 950.1 : +0 ;AXIS Y
MP 950.2 : +0 ;AXIS Z
MP 950.3 : +0
MP 950.4 : +0
MP 950.5 : +0
;SIMULATED TOOL CHANGE POSITION FOR TOOL CALL WITH BLOCK SCAN
MP 951.0 : +0 ;AXIS X
MP 951.1 : +0 ;AXIS Y
MP 951.2 : +0 ;AXIS Z
MP 951.3 : +0
;MACHINE DATUM
MP 960.0 : +0.00000 ;AXIS X
MP 960.1 : +0.00000 ;AXIS Y
MP 960.2 : +0.00000 ;AXIS Z
MP 960.3 : +0.00000
MP 960.4 : +0.00000
.*****
;
;POSITIONING
.*****
;
MP 1010.0 : 20000 ;RAPID TRAVERSE AXIS X
MP 1010.1 : 20000 ;RAPID TRAVERSE AXIS Y
MP 1010.2 : 20000 ;RAPID TRAVERSE AXIS Z
MP 1010.3 : 10
MP 1010.4 : 10
MP 1010.5 : 10
MP 1010.6 : 10
;VELOCIDADE DE INTERPOLACAO
MP 1011 : 200000
;MANUAL FEED RATE
MP 1020.0 : 5000 ;AXIS X
MP 1020.1 : 5000 ;AXIS Y
MP 1020.2 : 5000 ;AXIS Z
MP 1020.3 : 10
MP 1020.4 : 10
MP 1020.13 : 10
;JANELA POSICIONAMENTO
MP 1030.0 : 0.01 ;AXIS X
MP 1030.1 : 0.01 ;AXIS Y
MP 1030.2 : 0.01 ;AXIS Z

;POLARITY OF NOMINAL VOLTAGE WITH POSITIVE TRAVERSE DIRECTION
;-----ZYX
MP 1040 : %00000000000101;ALL AXES
;ANALOG VOLTAGE FOR RAPID TRAVERSE
MP 1050.0 : 1 ;AXIS X
MP 1050.1 : 1 ;AXIS Y
MP 1050.2 : 1 ;AXIS Z

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MP 1050.3 : 1
MP 1050.4 : 1
      ;PASSO FUSO
MP 1054.0 : 10
MP 1054.1 : 10
MP 1054.2 : 10
MP 1054.3 : 0
MP 1054.4 : 0
MP 1054.5 : 0
MP 1054.6 : 0
MP 1054.7 : 0
      ;ACCELERATION
MP 1060.0 : 1      ;3      ;AXIS X
MP 1060.1 : 1      ;AXIS Y
MP 1060.2 : 1      ;AXIS Z
MP 1060.3 : 1
MP 1060.4 : 1
MP 1060.5 : 1
MP 1060.6 : 1
MP 1060.7 : 1
      ;RADIAL ACCELERATION
MP 1070 : 0.5      ;0.5      ;RADIAL ACCELERATION
      ;INTEGRAL FACTOR
MP 1080.0 : 0      ;AXIS X
MP 1080.1 : 0      ;AXIS Y
MP 1080.2 : 0      ;AXIS Z
MP 1080.3 : 0
MP 1080.4 : 0
MP 1080.5 : 0
      ;
MP 1087.0 : 10      ;1000      ;AXIS X
MP 1087.1 : 10      ;AXIS Y
MP 1087.2 : 10      ;AXIS Z
MP 1087.3 : 10
MP 1087.4 : 10
MP 1087.5 : 1
MP 1087.6 : 1
MP 1087.7 : 1
      ;
MP 1089.0 : 10      ;AXIS X
MP 1089.1 : 10      ;AXIS Y
MP 1089.2 : 10      ;AXIS Z
MP 1089.3 : 10
MP 1089.4 : 10
MP 1089.5 : 10
MP 1089.6 : 1
MP 1089.7 : 1
      ;JERK MAX
MP 1090.0 : 10
MP 1090.1 : 10
      ;
MP 1092 : 10000      ;1000      ;VORSCHUBSCHWELLE
      ;
      ;STANDSTILL MONITORING
MP 1110.0 : 0.2      ;4      ;AXIS X
MP 1110.1 : 0.2      ;AXIS Y
MP 1110.2 : 0.2      ;AXIS Z
MP 1110.3 : 0.2
MP 1110.4 : 0.2
MP 1110.5 : 1
      ;MOVEMENT MONITORING
MP 1140.0 : 1      ;AXIS X
MP 1140.1 : 1      ;AXIS Y
MP 1140.2 : 1      ;AXIS Z
MP 1140.3 : 1
MP 1140.4 : 1
MP 1140.5 : 1

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MP 1140.6 : 1
;MONITOR DE VEL. E POSICAO
MP 1144.0 : 0
MP 1144.1 : 0
MP 1144.2 : 0
MP 1144.3 : 0
;DELAY TIME FOR DISCONNECTION OF RESIDUAL VOLTAGE ON ERROR MESSAGE
MP 1150.0 : 0
MP 1150.1 : 0.5
MP 1150.2 : 0.5
MP 1160 : 0.5
MP 1200 : 0
MP 1201 : 0
MP 1202.0 : 0.02
MP 1202.1 : 0.08
MP 1210 : 0
MP 1211 : 0
MP 1230.0 : 10 ;0.1
MP 1230.1 : 10
;AUTOMATIC CYCLIC OFFSET COMPENSATION
;DIRECTION FOR TRAVERSING THE REFERENCE MARKS
;-----BZYX
MP 1320 : %00000000000011
;FEED RATE FOR TRAVERSING THE REFERENCE MARKS
MP 1330.0 : 1500 ;AXIS X
MP 1330.1 : 1500 ;AXIS Y
MP 1330.2 : 1500 ;AXIS Z
MP 1330.3 : 10
MP 1330.4 : 10
MP 1330.5 : 10
;FEED RATE FOR LEAVING THE REFERENCE END POSITION (ONLY FOR ROTARY)
MP 1331.0 : 200 ;AXIS X
MP 1331.1 : 200 ;AXIS Y
MP 1331.2 : 200 ;AXIS Z
MP 1331.3 : 10
MP 1331.4 : 10
MP 1331.5 : 10
MP 1331.6 : 10
;SEQUENCE FOR TRAVERSING THE REFERENCE MARKS
MP 1340.0 : 3 ;1ST AXIS--Z--3
MP 1340.1 : 2 ;2ND AXIS--Y--2
MP 1340.2 : 1 ;3RD AXIS--X--1
MP 1340.3 : 0
MP 1340.4 : 0
MP 1340.5 : 0
MP 1340.6 : 0
;TYPE OF REFERENCE MARK APPROACH(LINEAR=1,ENCOD=2)
;REGUA CODIFICADA = 3
MP 1350.0 : 2 ;AXIS X
MP 1350.1 : 2 ;AXIS Y
MP 1350.2 : 2 ;AXIS Z
MP 1350.3 : 2
MP 1350.4 : 2
MP 1350.5 : 2
;CONTROL WITH TRAILING ERROR OR SPEED PRE-CONTROL
;SPEED PRECONTROL IN ALL OPERATING MODES
;PRE CONTROLE=1
;ERRO ARRASTE=0
;-----ZYX
MP 1391.0 : %00000000000000
MP 1391.1 : 0
MP 1392 : %00000000000000
;FEEDBACK
MP 1396.0 : 0.01 ;0.001
MP 1396.1 : 0.01
MP 1396.2 : 0.01
MP 1396.3 : 1

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MP 1396.4 : 0.01
MP 1396.5 : 1
MP 1396.6 : 1
MP 1396.7 : 1
MP 1396.8 : 1
MP 1396.9 : 1
MP 1396.10 : 1
MP 1396.11 : 1
MP 1396.12 : 1
MP 1396.13 : 1
;*****
;OPERATION WITH SPEED PRE-CONTROL
;*****
;POSITION MONITORING IN OPERATION WITH PRE-CONTROL (ERESABLE)
MP 1410.0 : 1 ;AXIS X
MP 1410.1 : 1 ;AXIS Y
MP 1410.2 : 1 ;AXIS Z
MP 1410.3 : 1
MP 1410.4 : 1
MP 1410.5 : 1
;POSITION MONITORING IN OPERATION WITH PRE-CONTROL (EMERGENCY STOP)
MP 1420.0 : 5 ;AXIS X
MP 1420.1 : 5 ;AXIS Y
MP 1420.2 : 5 ;AXIS Z
MP 1420.3 : 1
MP 1420.4 : 1
MP 1420.5 : 1
MP 1420.6 : 1
;KV FACTOR FOR SPEED PRE-CONTROL
MP 1510.0 : 1 ;AXIS X
MP 1510.1 : 1 ;AXIS Y
MP 1510.2 : 1 ;AXIS Z
MP 1510.3 : 1
MP 1510.4 : 1
MP 1510.5 : 1
;FACTOR FOR STATIC FRICTION COMPENSATION
MP 1511.0 : 0 ;AXIS X
MP 1511.1 : 0 ;AXIS Y
MP 1511.2 : 0 ;AXIS Z
MP 1511.3 : 0
MP 1511.4 : 0
;LIMITATION OF AMOUNT OF STATIC FRICTION COMPENSATION
MP 1512.0 : 0 ;AXIS X
MP 1512.1 : 0 ;AXIS Y
MP 1512.2 : 0 ;AXIS Z
MP 1512.3 : 0
MP 1512.4 : 0
;FEED RATE LIMITATION FOR STATIC FRICTION COMPENSATION
MP 1513.0 : 0 ;AXIS X
MP 1513.1 : 0 ;AXIS Y
MP 1513.2 : 0 ;AXIS Z
MP 1513.3 : 0
MP 1513.4 : 0
;KV FACTOR FOR SPEED PRE-CONTROL AND M105
MP 1515.0 : 1 ;AXIS X
MP 1515.1 : 1 ;AXIS Y
MP 1515.2 : 1 ;AXIS Z
MP 1515.3 : 1
MP 1515.4 : 1
MP 1515.5 : 1
;
MP 1516.0 : 1 ;AXIS X
MP 1516.1 : 1 ;AXIS Y
MP 1516.2 : 1 ;AXIS Z
MP 1516.3 : 1
MP 1516.4 : 1
;

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MP 1521 : 0
MP 1522 : 0

;FEED RATE AT WHICH POSITIONING WINDOW IS CHECKED

;OPERATION WITH TRAILING ERROR

MP 1710.0 : 24 ;AXIS X = (1,2 * MAX.SPEED)

MP 1710.1 : 24 ;AXIS Y

MP 1710.2 : 24 ;AXIS Z

MP 1710.3 : 1

MP 1710.4 : 1

MP 1710.5 : 1

MP 1710.6 : 1

;POSITION MONITORING FOR OPERATION WITH TRAILING ERROR (EMERGENCY S

MP 1720.0 : 28 ;AXIS X = (1,4 * MAX. SPEED)

MP 1720.1 : 28 ;AXIS Y

MP 1720.2 : 28 ;AXIS Z

MP 1720.3 : 1

MP 1720.4 : 1

MP 1720.5 : 1

MP 1720.6 : 1

;KV FACTOR FOR OPERATION WITH TRAILING ERROR

MP 1810.0 : 1 ;AXIS X

MP 1810.1 : 1 ;AXIS Y

MP 1810.2 : 1 ;AXIS Z

MP 1810.3 : 1

MP 1810.4 : 1 ;SPINDLE

MP 1810.5 : 1

MP 1810.6 : 1

MP 1810.7 : 1

MP 1810.8 : 1

;KV FACTOR FOR OPERATION WITH TRAILING ERROR AND M105

MP 1815.0 : 1 ;AXIS X

MP 1815.1 : 1 ;AXIS Y

MP 1815.2 : 1 ;AXIS Z

MP 1815.3 : 1

MP 1815.4 : 0.5

MP 1815.5 : 1

MP 1815.6 : 1

;MULTIPLICATION FACTOR FOR KV FACTOR

MP 1820.0 : 1 ;AXIS X

MP 1820.1 : 1 ;AXIS Y

MP 1820.2 : 1 ;AXIS Z

MP 1820.3 : 1

MP 1820.4 : 1

MP 1820.5 : 1

;KINK POINT IN CHARACTERISTIC CURVE

MP 1830.0 : 100 ;AXIS X

MP 1830.1 : 100 ;AXIS Y

MP 1830.2 : 100 ;AXIS Z

MP 1830.3 : 1

MP 1830.4 : 1

MP 1830.5 : 1

=====

;X150

=====

MP 2040.0 : 0

MP 2040.1 : 0

MP 2040.2 : 0

MP 2040.3 : 0

MP 2040.4 : 0

MP 2040.5 : 0

MP 2040.6 : 0

MP 2040.7 : 0

MP 2050 : 0

;INTEGRAL SPEED AND CURRENT CONTROL


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*****
;
;=====
;MP 2020 .. 2999
;Current control with PWM interface
;Integral speed and current controller (TNC 430 Px only)
;with TNC430Cx these machine parameters are without function
;=====
;
;OUTPUT PWM PULSES
;MP 2020.0 : 12.7/2 ; DISTANCIA PERCORRIDA COM 1 VOLTA NO MOTO
;MP 2020.1 : 12.7/2 ; FORMULA = PASSO FUSO/RELACAO TRANSMISSAO
;MP 2020.2 : 12.7/3 ;
;MP 2020.3 : 360/72 ; AXIS B
;MP 2020.4 : 360/72 ;
;
;-----
;MP2100 Type of power stage for the axes
;Input: Name from file <Motor.amp>
;
;NOME DO MODULO DE POTENCIA
MP 2100.0 : HEIDENHAIN-UE21xB-X110,X114
MP 2100.1 : HEIDENHAIN-UE21xB-X110,X114
MP 2100.2 : HEIDENHAIN-UE21xB-X110,X114
MP 2100.3 : 0
MP 2100.4 : HEIDENHAIN-UE21xB-X110,X114
MP 2100.5 : 0
MP 2100.6 : 0
;
MP 2150 : 3
MP 2160.0 : 0
MP 2160.1 : 0
MP 2160.2 : 0
;-----
;MP2101 Type of power stage for the spindle
;Input: Name from file <Motor.amp>
;
;MP 2101 : HEIDENHAIN-UU210B-20A-QAN
;
;MP2170 Waiting period between switching the drive on and the
;ready signal of the drive
;Input: 0 to 4.999 [s]
MP 2170 : 0
MP 2172 : 0
;-----
;MP2180 PWM frequency (axes groups can be chosen)
;Input: 0, 3000 to 7000 [Hz]
; 0 = 5000 Hz
; 4000 = 4000 Hz SIEMENS (Simodrive)
; 4000 = 4000 Hz INDRAMAT (Powerdrive)
MP 2180.0 : 0
MP 2180.1 : 0
;-----
;MP2181 PWM frequency spindle
;Input: 0, 3000 to 7000 [Hz]
; 0 = 5000 Hz
; 4000 = 4000 Hz SIEMENS (Simodrive)
; 4000 = 4000 Hz INDRAMAT (Powerdrive)
;MP 2181 : 0
;-----
;MP2190 DC-link voltage
;Input: 0 to 10000 [V]
MP 2190 : 565
MP 2195 : 0
;-----
;MP2191 Decelerating the spindle after an emergency stop
;Input: %1
;Bit 0 = 0 Braking with monitoring of the maximum braking

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; current (primarily for inverters with braking resistor)
; = 1 Braking without monitoring of the maximum braking
; current (primarily for inverters with regenerative
; braking)
;MP 2191 : 0
;-----
;MP2200 Type of axis motors
;Input: Name from file <Motor.sn or Motor.asn >
;;NOME DA MOTORIZACAO
MP 2200.0 : QSY155B-EcoDyn
MP 2200.1 : QSY155B-EcoDyn
MP 2200.2 : QSY155B-EcoDyn
MP 2200.3 : 0
MP 2200.4 : QAN-200L-9000
MP 2200.5 : 0
MP 2200.6 : 0
MP 2200.7 : 0
;-----
;MP2201 Type of spindle motor
;Input: Name from file <Motor.sn or Motor.asn >
;MP 2201 : QAN-200L ;SPINDLE
;-----
;MP2221 Monitoring reference pulse spindle rpm encoder
;Input: %xx
;Bit 0: Monitoring of the reference marks
; 0 = active
; 1 = inactive
;Bit 1: Monitoring of turning direction (only with spindle DSP)
; 0 = active
; 1 = inactive
MP 2221.0 : 0
MP 2221.1 : 0
MP 2221.2 : 0
;-----
;MP2303 Reference value for I2t monitoring of the
;spindle motor
;Input: 0 to 1000.000 [factor]
; 0 = no monitoring (I2t power stage active)
; > 0 = factor to motor rated current is reference value
;MP 2303 : 1.5
;-----
;MP2312 Reference value for utilization display of the feed-
;rate drives
;Input: 0 to 1000.000 [As]
; 0 or 1 = motor rated current is reference value
MP 2312.0 : 1
MP 2312.1 : 1
MP 2312.2 : 1
MP 2312.3 : 1
MP 2312.4 : 1
MP 2312.5 : 0
;MAX TORQUE
MP 2396.0 : 0
MP 2396.1 : 0
MP 2396.2 : 0
MP 2396.3 : 0
MP 2396.4 : 0
MP 2396.5 : 0
MP 2396.6 : 0
MP 2396.7 : 0
;PROPORCIONAL CORRENTE
MP 2420.0 : 15 ;EIXO X
MP 2420.1 : 8 ;15 ;EIXO Y
MP 2420.2 : 15 ;EIXO Z
MP 2420.3 : 0
MP 2420.4 : 6 ;SPINDLE
MP 2420.5 : 0

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MP 2420.6 : 0
MP 2420.7 : 0
      ;INTEGRAL CORRENTE
MP 2430.0 : 15000 ;EIXO X
MP 2430.1 : 12000 ;EIXO Y
MP 2430.2 : 15000 ;EIXO Z
MP 2430.3 : 0
MP 2430.4 : 7000 ;SPINDLE
MP 2430.5 : 0
MP 2430.6 : 0
MP 2430.7 : 0
MP 2430.8 : 0
      ;PROPORCIONAL DE VELOCIDADE
MP 2500.0 : 7.2 ;8 ;AXIS PROPORTIONAL SPEED CONTROLLER
MP 2500.1 : 9
MP 2500.2 : 9
MP 2500.3 : 0
MP 2500.4 : 18 ;SPINDLE
MP 2500.5 : 0
MP 2500.6 : 0
MP 2500.7 : 0
MP 2500.8 : 0
      ;-----
      ;MP2510 Integral factor of the speed controller of the axes
      ;Input: 0 to 30 000 [A]
MP 2510.0 : 1000 ;AXIS X I-N-REGLER
MP 2510.1 : 2000 ;AXIS Y
MP 2510.2 : 1500 ;AXIS Z
MP 2510.3 : 0 ;AXIS B
MP 2510.4 : 1000 ;500 ;SPINDLE
MP 2510.5 : 0
MP 2510.6 : 0
MP 2510.7 : 0
      ;
      ;
      ;ACCELERATION
MP 2600.0 : 0 ;
MP 2600.1 : 0 ;
MP 2600.2 : 0 ;
MP 2600.3 : 0 ;
MP 2600.4 : 0 ;
MP 2600.5 : 0
MP 2600.6 : 0
      ;
      ;FRICTION COMPENSATION AT LOW MOTOR SPEED
MP 2610.0 : 0 ;
MP 2610.1 : 0 ;
MP 2610.2 : 0 ;
MP 2610.3 : 0 ;
MP 2610.4 : 0 ;
MP 2610.5 : 0 ;
MP 2610.6 : 0
      ;
      ;DELAY OF FRICTION COMPENSATION
MP 2612.0 : 0 ;
MP 2612.1 : 0 ;
MP 2612.2 : 0 ;
MP 2612.3 : 0 ;
MP 2612.4 : 0
MP 2612.5 : 0
      ;
      ;FRICTION COMPENSATION AT RATED SPEED
MP 2620.0 : 0 ;
MP 2620.1 : 0 ;
MP 2620.2 : 0 ;
MP 2620.3 : 0 ;
MP 2620.4 : 0 ;
MP 2620.5 : 0
MP 2620.6 : 0
MP 2620.7 : 0

```

```

MP 2630.15 : +0
;MP 2700 : 0
;
;
;MP 2800.0 : 0 ;MONITORING FOR POSITION AND SPEED
;MP 2800.1 : 0
;MP 2800.2 : 0
;MP 2800.3 : 0
;MP 2800.4 : 0
;
;
;*****
;SPINDLE
;*****
;=====
;MP 3000 .. 3999
;Spindle control
;=====
;MP3010 Output of spindle speed, oriented spindle stop
;Input:
;0 = no output of spindle speed
;1 = speed code only if the spindle speed changes
;2 = speed code for every tool call
;3 = analogue output of the spindle speed, gear code
;only if the gear stage changes
;4 = analogue output of the spindle speed, gear code
;for every tool call
;5 = analogue output of the spindle speed, no gear code
;6 = same as input value 3 but with controlled spindle for
;orientation
;7 = same as input value 4 but with controlled spindle for
;orientation
;8 = same as input value 5 but with controlled spindle for
;orientation
;
;MP 3010 : 8 ;8 PARADA ORIENTADA
;FUNCTION OF ANALOG OUTPUT S IF MP3010<3
MP 3011 : 0 ;
;FEED RATE FOR OUTPUT OF AN ANALOG VOLTAGE OF 10V
MP 3012 : 0 ;
;CHARACTERISTIC CURVE KINK POINT FOR OUTPUT OF ANALOG VOLTAGE WHIT
MP 3013.0 : 0 ;
;CHARACTERISTIC CURVE KINK POINT FOR OUTPUT OF ANALOG VOLTAGE WHIT
MP 3014.0 : 0 ;
MP 3014.1 : 0 ;
;DEFINE SPINDLE SPEED RANGE
;MP 3020 : 991 ;911
;AXIS HALT ON A TOOL CALL FOR WHICH ONLY SPINDLE SPEED IS OUTPUT
MP 3030 : 0 ;
;SPINDLE SPEED 0 PERMITTED
MP 3120 : 0 ;
;POLARITY OF S-ANALOG VOLTAGE
MP 3130 : 1 ;
;COUNT DIRECTION OF MEASURING SYSTEM SIGNALS FOR SPINDLE
MP 3140 : 1 ;
;LINE COUNT OF POSITION MEASURING SYSTEM ON SPINDLE
MP 3142 : 1024 ;
;MOUNTING MODE OF THE POSITION MEASURING SYSTEM ON THE SPINDLE
MP 3143 : 2 ;
;S-ANALOG VOLTAGE AT NOMINAL SPEED
MP 3210.0 : 9 ;2 ;GEAR RANGE 1
MP 3210.1 : 0 ;3 ;GEAR RANGE 2
MP 3210.2 : 0 ;4 ;GEAR RANGE 3
MP 3210.3 : 0 ;GEAR RANGE 4
MP 3210.4 : 0 ;GEAR RANGE 5
;MINIMUN S ANALOG VOLTAGE OUTPUT
MP 3240.1 : 0 ;
;JOG VOLTAGE FOR GEAR CHANGE

```

MP 3240.2 : 0.03 ;
;MAXIMUM WITH S OVERRIDE
MP 3310.0 : 150 ;
;MINIMUM WITH S OVERRIDE
MP 3310.1 : 25 ;
;RAMP GRADIENT
MP 3411.0 : 0.1 ;0.05 ;BLOCO 0
MP 3411.1 : 0.05 ;BLOCO 1
MP 3411.2 : 0.05 ;BLOCO 2
MP 3411.3 : 0.05 ;BLOCO 3
MP 3411.4 : 0.05
MP 3411.5 : 0
;MULTIPLICADOR PARA 3411 (DESACELERACAO)
MP 3412.0 : 1 ;M3,M4,M5
MP 3412.1 : 0.05 ;M19
MP 3412.2 : 1 ;ROSCA
MP 3412.3 : 1 ;ROSCA RIGIDA
;TRANSIENT RESPONSE OF SPINDLE(ACTS AS MP1520)
MP 3415.0 : 0 ;50 ;FOR M03,M04 AND M05
MP 3415.1 : 0 ;650 ;FOR SPINDLE ORIENTATION
MP 3415.2 : 0 ;50 ;FOR TAPPING
MP 3415.3 : 0 ;50 ;FOR RIGID TAPPING
;POSITIONING WINDOW FOR SPINDLE
MP 3420 : 1 ;2 ;JANELA DE POSICIONAMENTO
;DERIVATION OF REFERENCE MARKS FROM REQUIRED POSITION
MP 3430 : 185.9 ;POSICIONAMENTO M19
;DEVIATION OF REFERENCE MARKS FROM REQUIRED POSITION
;KV FACTOR FOR SPINDLE ORIENTATION
MP 3440.0 : 1 ;KV FACTOR FOR GEAR RANGE 0
MP 3440.1 : 1 ;KV FACTOR FOR GEAR RANGE 1
MP 3440.2 : 0.5 ;KV FACTOR FOR GEAR RANGE 2
MP 3440.3 : 0.5 ;KV FACTOR FOR GEAR RANGE 3
MP 3440.4 : 0.5 ;KV FACTOR FOR GEAR RANGE 4
MP 3440.5 : 0.5 ;KV FACTOR FOR GEAR RANGE 5
MP 3440.6 : 0.5 ;KV FACTOR FOR GEAR RANGE 6
MP 3440.7 : 0.5 ;KV FACTOR FOR GEAR RANGE 7
;NUMBER OF SPINDLE REVOLUTIONS
MP 3450.0 : 9000 ;GEAR RANGE 1
MP 3450.1 : 0 ;GEAR RANGE 2
MP 3450.2 : 0 ;GEAR RANGE 3
MP 3450.3 : 0 ;GEAR RANGE 4
MP 3450.4 : 0 ;GEAR RANGE 5
MP 3450.5 : 0 ;GEAR RANGE 6
MP 3450.6 : 0 ;GEAR RANGE 7
MP 3450.7 : 0 ;GEAR RANGE 8
;NUMBER OF SPINDLE REVOLUTIONS
MP 3451.0 : 4500 ;GEAR RANGE 1
MP 3451.1 : 0 ;GEAR RANGE 2
;NOMINAL SPEED FOR GEAR RANGES
MP 3510.0 : 4500 ;SPEED FOR GEAR RANGE 1
MP 3510.1 : 0 ;SPEED FOR GEAR RANGE 2
MP 3510.2 : 0 ;SPEED FOR GEAR RANGE 3
MP 3510.3 : 0 ;SPEED FOR GEAR RANGE 4
MP 3510.4 : 0 ;SPEED FOR GEAR RANGE 5
;MAXIMUM SPINDLE SPEED
MP 3515.0 : 4500 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 1
MP 3515.1 : 0 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 2
MP 3515.2 : 0 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 3
MP 3515.3 : 0 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 4
MP 3515.4 : 0 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 5
MP 3515.5 : 0 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 6
MP 3515.6 : 0 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 7
MP 3515.7 : 0 ;MAXIMUM SPINDLE SPEED FOR GEAR RANGE 8
;SPINDLE SPEED ACTIVATED BY MARKER M2501
MP 3520.0 : 2 ;
;SPINDLE SPEED FOR SPINDLE ORIENTATION
MP 3520.1 : 20 ;

;
;COMPENSATION VALUE PER PLC CYCLE FOR TRAILING AXIS ERROR COMPENSAT
MP 4070 : 0.0001 ;

;TIME FOR T0 TO T47
MP 4110.0 : 2 ;TEMPO COMANDO LIGADO
MP 4110.1 : 5 ;TOF COMANDO LIGADO
MP 4110.2 : 2 ;TEMPO IMPULSO COMANDO LIGADO
MP 4110.3 : 2 ;PISCA PISCA
MP 4110.4 : 2 ;PISCA PISCA
MP 4110.5 : 2 ;RETARDO LIB FREIOS Z
MP 4110.6 : 0 ;LIVRE
MP 4110.7 : 2 ;LIVRE
MP 4110.8 : 5 ;TEMPO DE LUBRIFICACAO T8-T56 OK
MP 4110.9 : 65 ;TEMPO DE INTERVALO DE LUBRIFICACAO T9-T57 OK
MP 4110.10 : 200 ;TEMPO APOS REFERENCIA (MANUAL E REGISTRO)
MP 4110.11 : 2000 ;TEMPO RETORNO DE OLEO EIXO ARVORE (09)
MP 4110.12 : 30 ;TEMPO P/GERACAO ALARM TROC TOOL CALL T-STROBE
MP 4110.13 : 500 ;TEMPO P/GERACAO ALARMES TROCA TOOL DEF
MP 4110.14 : 10 ;TEMPO QDO LIGA A MAQ. M3 - 2 SEG
MP 4110.15 : 500 ;TEMPO P/GERACAO DE ALARME TROCADOR C/ BOTAO
MP 4110.16 : 0 ;LIVRE
MP 4110.17 : 25 ;TEMPO PARA DESTRAVAR EIXO B
MP 4110.18 : 5 ;TEMPO PARA FIXAR FERRAMENTA
MP 4110.19 : 0 ;LIVRE
MP 4110.20 : 0 ;LIVRE
MP 4110.21 : 550 ;TEMPO EIXOS OK
MP 4110.22 : 3 ;TEMPO LIGA/DESL FUSO
MP 4110.23 : 0 ;LIVRE
MP 4110.24 : 101 ;TEMPO PARA INDEXAR MESA
MP 4110.25 : 100 ;BOMBA HID CONT.73
MP 4110.26 : 101 ;TEMPO PARA DESTRAVAR MESA
MP 4110.27 : 0 ;LIVRE
MP 4110.28 : 50 ;TEMPO RESET O1
MP 4110.29 : 8 ;50 ;TEMPO PARA CONVERSOR DO FUSO
MP 4110.30 : 50 ;TEMPO RESET O15
MP 4110.31 : 7 ;75 ;TEMPO PARA ABRIR MALHA
MP 4110.32 : 60 ;TEMPO DE VOLTAR PISTAO DA TROCA
MP 4110.33 : 7 ;75 ;TEMPO PARA ABRIR MALHA
MP 4110.34 : 0 ;LIVRE
MP 4110.35 : 0 ;LIVRE
MP 4110.36 : 0 ;LIVRE
MP 4110.37 : 0 ;LIVRE
MP 4110.38 : 0 ;LIVRE
MP 4110.39 : 10 ;TEMPO CONVERSOR OK
MP 4110.40 : 0 ;LIVRE
MP 4110.41 : 500 ;TEMPO P/ ATIVAR M1050 P/ REFERENCIA EIXO B
MP 4110.42 : 100 ;TEMPO TRAVA MESA EIXO B
MP 4110.43 : 10 ;TEMPO COMANDO LIGADO
MP 4110.44 : 50 ;TEMPO BALANCO TROCA DE CAMBIO
MP 4110.45 : 50 ;TEMPO SUPERVISAO TROCA DE CAMBIO
MP 4110.46 : 25 ;TEMPO BALANCO TROCA DE CAMBIO
MP 4110.47 : 100 ;ATRASO INICIO PROGRAMA CLP

; PRE-SET VALUE FOR COUNTER C0 TO C31
MP 4120.0 : 0 ;LIVRE
MP 4120.1 : 0 ;LIVRE
MP 4120.2 : 0 ;RESERVE
MP 4120.3 : 0 ;RESERVE

;SET A NUMBER IN THE PLC (D768 TO D956)
MP 4210.0 : +0 ;+50 ;LIVRE
MP 4210.1 : +0 ;
MP 4210.2 : +0 ;LIVRE
MP 4210.3 : +0 ;LIVRE
MP 4210.4 : +0 ;LIVRE

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MP 4210.5 : +0      ;LIVRE
MP 4210.6 : +0      ;
MP 4210.7 : +0      ;
MP 4210.8 : +0      ;
MP 4210.9 : +0      ;
MP 4210.10 : +0     ;
MP 4210.11 : +0     ;
MP 4210.12 : -120   ;POSICIONAMENTO EIXO Z P/ BAIXO
MP 4210.13 : +0     ;POSICIONAMENTO EIXO Z P/ CIMA
MP 4210.14 : +0     ;
MP 4210.15 : +0     ;
MP 4210.16 : +0     ;
MP 4210.17 : +0     ;
MP 4210.18 : +0     ;
MP 4210.19 : +0     ;
MP 4210.37 : +0     ;
MP 4210.38 : +0     ;POSICIONAMENTO ZERO MESA EIXO B APOS REFERENCIA
MP 4210.39 : +0     ;
MP 4210.40 : +0     ;
      ;SET A NUMBER IN THE PLC (WORD RANGE W960 TO W968)

      ;SET A NUMBER IN THE PLC (MODULE 9032)
MP 4230.0 : +0      ;RESERVE
MP 4230.1 : +0      ;RESERVE
MP 4230.2 : +0      ;RESERVE
      ;
MP 4310.0 : 1       ;COM=1 OU SEM MAGAZINE=0
MP 4310.1 : 4       ;POSICAO DE FERRAMENTA MAGAZINE
MP 4310.2 : 0       ;
MP 4310.3 : 15      ;HABILITA BARGRAF EIXOS
MP 4310.4 : 21      ;NUMERO FERRAMENTA MAGAZINE
MP 4310.5 : 0       ;
MP 4310.6 : 0       ;
      ;
      ;*****
      ;CONFIGURATION OF DATA INTERFACAES
      ;*****
MP 5000 : 0         ;BLOCK DATA INTERFACE
MP 5020.0 : 168     ;164 OPERATING MODE EXT1
MP 5020.1 : 168     ;OPERATING MODE EXT2
MP 5020.2 : 168     ;OPERATING MODE EXT3 (PLC)
MP 5020.3 : %00000000
MP 5030.0 : 0       ;OPERATING MODE EXT1
MP 5030.1 : 0       ;OPERATING MODE EXT2
MP 5030.2 : 0       ;OPERATING MODE EXT3 (PLC)
MP 5030.3 : 0       ;
MP 5040.0 : 7       ;DATA TRANSFER RATE IN OPERATING MODE EXT3 (DATA TRANSFE
MP 5040.1 : 0       ;
      ;*****
      ;3D TOUCH PROBE
      ;*****
MP 6010 : 0         ;SELECTION OF TOUCH PROBE TS220
MP 6120 : 200       ;PROBING FEED RATE
MP 6130 : 30        ;MAXIMUM MEASURING RANGE
MP 6140 : 2         ;SAFETY CLEARANCE ABOVE MEASUREMENT POINT
MP 6150 : 2000      ;RAPID TRAVERSE IN PROBE CYCLE
MP 6151 : 0         ;
MP 6160 : +0        ;M-FUNCTION FOR 180 GRAUS SPINDLE ORIENTATION
MP 6161 : +0        ;
MP 6162 : 0         ;
MP 6163 : 0         ;
MP 6165 : 0         ;
MP 6166 : 0         ;
MP 6170 : 1         ;
MP 6171 : 0.1       ;
MP 6180.0 : +0      ;
MP 6180.1 : +0      ;

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MP 6180.2 : +0
 MP 6181.0 : +0
 MP 6181.1 : +0
 MP 6181.2 : +0
 MP 6182.0 : +0
 MP 6182.1 : +0
 MP 6182.2 : +0
 MP 6185.0 : 1
 MP 6185.1 : 1
 MP 6185.2 : 1
 MP 6500 : %000000000000101;TOOL MEASUREMENT WITH TT130
 MP 6505.0 : 2 ;PROBE DIRECTION FOR TOOL MEASUREMENT
 MP 6505.1 : 1
 MP 6505.2 : 0
 MP 6507 : 0 ;CALCULATION OF PROBING FEED RATE
 MP 6510.0 : 0.1 ;MAX.PERMITTED MEASUREMENT ERROR FOR TOOL MEASUREMENT WI
 MP 6510.1 : 0.1
 MP 6520 : 200 ;PROBING FEED RATE FOR TOOL MEASUREMENT WITH NON-ROTATIN
 MP 6530.0 : 10 ;DISTANCE FROM TOOL LOWER EDGE TO STYLUS UPPER EDGE FOR
 MP 6530.1 : 1
 MP 6530.2 : 1

 MP 6531.0 : 40 ;STYLUS DIAMETER OR EDGE LENGHT ON TT110
 MP 6531.1 : 1
 MP 6531.2 : 1
 MP 6540.0 : 10 ;SAFETY ZONE AROUND STYLUS OF TT110 FOR PRE-POSITIONING
 MP 6540.1 : 1
 MP 6550 : 3000 ;RAPID TRAVERSE IN PROBING CYCLE FOR TT110
 MP 6560 : +18 ;M FUNCTION FOR SPINDLE ORIENTATION FOR MEASUREMENT OF I
 MP 6570 : 30 ;MAX. PERMITTED PERIPHERAL SPEED AT TOOL TIP
 MP 6572 : 0
 ;COORDINATES OF TT130 STYLUS CENTRE IN RELATION TO MACHINE DATUM
 MP 6580.0 : +0 ;AXIS X
 MP 6580.1 : +0 ;AXIS Y
 MP 6580.2 : +0 ;AXIS Z
 MP 6581.0 : +0
 MP 6581.1 : +0

MP 7110.0 : 95 ;COMPENSACAO DE AVANCO EM ROSCA
MP 7110.1 : 105
MP 7120.0 : 0 ;TEMPO INVERSAO M3 M4 CICLO DE ROSCA
MP 7120.1 : 0 ;TEMPO INVERSAO DA ROTACAO COM CODIGO S
MP 7120.2 : 0 ;TEMPO PARA DESLIGAMENTO APOS PROFUNDIDADE FINAL
MP 7130 : 0.1
MP 7150 : 0.1 ;JANELA DE POSICIONAMENTO DO EIXO DURANTE ROSCA RIGIDA
MP 7160 : 0
;DISPLAY E OPERACAO
MP 7210 : 0 ;NC E PLC ATIVOS=0 1=SO PLC ATIVO 2=estacao
MP 7212 : 0 ;MENSAGEM ENERGIA INTERROMPIDA QUITACAO
MP 7220 : 10
MP 7224.0 : %00000000 ;HABILITA DESABILITA TIPO DE ARQUIVOS
MP 7224.1 : %00000000 ;PROTECAO DE ARQUIVOS
MP 7224.2 : 0
MP 7226.0 : 0 ;TAMANHO ARQUIVOS PALLET
MP 7226.1 : 0 ;TAMANHO ARQUIVOS PONTO 0
MP 7229.0 : 100 ;QUANTAS LINHAS O NC VERIFICA CONSISTENCIA DE PROGRAMA
MP 7229.1 : 100 ;INSTRUcoes FK TAMANHO DOS ARQUIVOS
MP 7230.0 : 6 ;IDIOMA DIALOGOS NC
MP 7230.1 : 6 ;PLC
MP 7230.2 : 6 ;MENSAGENS PLC
MP 7230.3 : 6 ;HELP
 MP 7235 : -1
 MP 7237.0 : %00000000000000;CONTADORES DE PLC DISPLAY
 MP 7237.1 : %00000000000000;CONTADORES DE PLC RESET
 MP 7237.2 : %00000000000000;HORIMETROS INTERNOS RESET

MP 7238.0 : 0 ;MENSAGENS DOS CONTADORES DE PLC
 MP 7238.1 : 0
 MP 7238.2 : 0
 MP 7246 : 1
 MP 7251 : 0
MP 7260 : 100 ;NUMERO DE FERRAMENTAS NA TOOL TABLE
 MP 7261.0 : 0
 MP 7261.1 : 0
 MP 7261.2 : 0
 MP 7266.0 : 1 ;
 MP 7266.1 : 1
 MP 7266.2 : 2
 MP 7266.3 : 3
 MP 7266.4 : 4
 MP 7266.5 : 5
 MP 7266.6 : 6
 MP 7266.7 : 7
 MP 7266.8 : 8
 MP 7266.9 : 9
 MP 7266.10 : 10
 MP 7266.11 : 11
 MP 7266.12 : 12
 MP 7266.13 : 13
 MP 7266.14 : 14
 MP 7266.15 : 15
 MP 7266.16 : 16
 MP 7266.17 : 17
 MP 7266.18 : 18
 MP 7266.19 : 19
 MP 7266.20 : 20
 MP 7266.21 : 21
 MP 7266.22 : 22
 MP 7266.23 : 23
 MP 7266.24 : 24
 MP 7266.25 : 26
 MP 7266.26 : 27
 MP 7266.27 : 28
 MP 7266.28 : 29
 MP 7266.29 : 30
 MP 7266.30 : 31
 MP 7266.31 : 0
 MP 7266.32 : 33
 MP 7266.33 : 0
 MP 7266.34 : 0
 MP 7266.35 : 0
 MP 7266.36 : 0
 MP 7266.37 : 0
 MP 7266.38 : 0
 MP 7266.39 : 0
 ;ELEMENTS OF THE POCKET TABLE
 MP 7267.0 : 0 ;TOOL NUMBER (T)
 MP 7267.1 : 0 ;SPECIAL TOOL (ST)
 MP 7267.2 : 0 ;FIXED POCKET (F)
 MP 7267.3 : 0 ;LOCKED POCKET (L)
 MP 7267.4 : 0 ;PLC STATUS (PLC)
MP 7267.5 : 6
 MP 7267.6 : 0
 MP 7267.7 : 0
 MP 7267.8 : 0
 MP 7267.9 : 0
 MP 7270 : 0 ;DISPLAY FEED RATE IN MANUAL OPERATING MODE
 MP 7280 : 1 ;DECIMAL CHARACTER
 MP 7281.0 : 1
 MP 7281.1 : 1
 MP 7285 : 1 ;CALCULATE TOOL LENGHT IN POSITION DISPLAY OF TOOL AXIS
 MP 7289 : 0

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;POSITION DISPLAY STEP
MP 7290.0 : 4 ;AXIS X
MP 7290.1 : 4 ;AXIS Y
MP 7290.2 : 4 ;AXIS Z
MP 7290.3 : 0
MP 7290.4 : 4 ;SPINDLE
MP 7290.5 : 0
MP 7290.6 : 0
;
MP 7291.0 : S-UBVWZYX
MP 7291.1 : S-UBVWZYX
MP 7291.2 : S-UBVWZYX
MP 7294 : 0
MP 7295 : %0000000000000000;INHIBIT DATUM SETTING
MP 7296 : 1 ;SET DATUM VIA AXIS KEYS
MP 7300 : %101 ;CANCEL STATUS DISPLAY AND Q-PARAMETERS
MP 7310 : %00001100 ;GRAPHICS DISPLAY
MP 7312 : 5.00000
MP 7315 : 0 ;TOOL RADIUS FOR GRAPHIC DISPLAY WITHOUT TOOL CALL
MP 7316 : 0 ;TOOL PENETRATION DEPTH
MP 7317.0 : 0 ;M-FUNCTION FOR START OF GRAPHIC DISPLAY
MP 7317.1 : 0 ;M-FUNCTION TO STOP GRAPHIC DISPLAY

```

;DEFINICAO PARAMETROS DE USUARIO

```

MP 7330.0 : 4310 ;MAQ C/MAGAZINE OU S/MAGAZINE
MP 7330.1 : 4310.01 ;PARAMETRO USUARIO PARA POSICAO MAGAZINE
MP 7330.2 : 0 ;LIVRE
MP 7330.3 : 4310.03 ;PARAMETRO USUARIO PARA HABILITAR BARGRAF EIXOS
MP 7330.4 : 0 ;LIVRE
MP 7330.5 : 0 ;7480 ;MAGAZINE HABILITA=2 DESABILITA=0 TOOL CALL
MP 7330.6 : 0 ;7480.01 ;MAGAZINE HABILITA=2 DESABILITA=0 TOOL DEF
MP 7330.7 : 0 ;LIVRE
MP 7330.8 : 0 ;LIVRE
MP 7330.9 : 0 ;LIVRE
MP 7330.10 : 0 ;LIVRE
MP 7330.11 : 0 ;LIVRE
MP 7330.12 : 0 ;LIVRE
MP 7330.13 : 0 ;LIVRE
MP 7330.14 : 0 ;LIVRE
MP 7330.15 : 0 ;LIVRE
;
MP 7340.0 : 0 ;MENSAGEM CORRESPONDENTE AO PARAMETRO DE USUARIO
MP 7340.1 : 1
MP 7340.2 : 2
MP 7340.3 : 3
MP 7340.4 : 4
MP 7340.5 : 5
MP 7340.6 : 6
MP 7340.7 : 7
MP 7340.8 : 8
MP 7340.9 : 9
MP 7340.10 : 10
MP 7340.11 : 11
MP 7340.12 : 12
MP 7340.13 : 13
MP 7340.14 : 14
MP 7340.15 : 15

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;CORES DO VIDEO
*****

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;-----
;MP735X PARAMETERS FOR CALCULATING THE COLOR DEFINITIONS
; RED - GREEN - BLUE
; 0..F-0..F - 0..F-0..F - 0..F-0..F
;ROUGH-FINE - ROUGH-FINE - ROUGH-FINE
;E.G. $03F3F3F -> WHITE COLOR
;-----
MP 7350 : $0FFFF00 ;WINDOW FRAME
;-----
MP 7351.0 : $0FF0000 ;ERROR MESSAGES
MP 7351.1 : $000FF00
MP 7351.2 : $00000FF
;-----
;"MACHINE" OPERATING MODE DISPLAY
MP 7352.0 : $00F0F0F ;BACKGROUND
MP 7352.1 : $000FF00 ;TEXT FOR OPERATING MODE
MP 7352.2 : $000FF00 ;DIALOG
;-----
;"PROGRAMMING" OPERATING MODE DISPLAY
MP 7353.0 : $00F0F2D ;BACKGROUND
MP 7353.1 : $000FF00 ;TEXT FOR OPERATING MODE
MP 7353.2 : $000FFFF ;DIALOG
;-----
;"MACHINE" PROGRAM TEXT DISPLAY
MP 7354.0 : $00F0F2D ;BACKGROUND
MP 7354.1 : $0FAFAFA ;GENERAL PROGRAM TEXT
MP 7354.2 : $00AFF00 ;ACTIVE BLOCK
MP 7354.3 : $00C0800 ;BACKGROUND OF INACTIVE WINDOW
;-----
;"PROGRAMMING" PROGRAM TEXT DISPLAY
MP 7355.0 : $0000020 ;BACKGROUND
MP 7355.1 : $0E2E2E2 ;GENERAL PROGRAM TEXT
MP 7355.2 : $000F0FF ;ACTIVE BLOCK
MP 7355.3 : $0AFF00 ;BACKGROUND OF INACTIVE WINDOW
;-----
;STATUS WINDOW AND PLC WINDOW
;MP 7356.0 : $0000000 ;BACKGROUND
;MP 7356.1 : $0FAFAFA ;AXIS POSITIONS IN THE STATUS DISPLAY
;MP 7356.2 : $0FFFF7C ;STATUS DISPLAY OTHER THAN AXIS POSITIONS
;-----
;"MACHINE" SOFT-KEY DISPLAY
MP 7357.0 : $0000000 ;BACKGROUND
MP 7357.1 : $0000000 ;SYMBOLS
MP 7357.2 : $0B0B0B0 ;INACTIVE SOFT-KEY ROW
MP 7357.3 : $0F0F0F0 ;ACTIVE SOFT-KEY ROW
;-----
;"PROGRAMMING" SOFT-KEY DISPLAY
MP 7358.0 : $00001C5 ;BACKGROUND
MP 7358.1 : $0000000 ;SYMBOLS
MP 7358.2 : $0B0B0B0 ;INACTIVE SOFT-KEY ROW
MP 7358.3 : $0F0F0F0 ;ACTIVE SOFT-KEY ROW
;-----
;GRAPHICS: 3-D VIEW AND PLAN VIEW
MP 7360.0 : $0000000 ;BACKGROUND
MP 7360.1 : $080C0E0 ;TOP SURFACE
MP 7360.2 : $0306080 ;3-D: FRONT FACE
MP 7360.3 : $0FFFFFF ;TEXT DISPLAY IN THE GRAPHICS WINDOW
MP 7360.4 : $04080A0 ;3-D: LATERAL FACE
MP 7360.5 : $0000014 ;LOWEST POINT OF THE BLANK FORM
MP 7360.6 : $0F0F0FF ;HIGHEST POINT OF BLANK FORM (BELOW SURFACE)
MP 7360.7 : $0CC1919
MP 7360.8 : $06666CC
MP 7360.9 : $066CC66
MP 7360.10 : $06666CC
MP 7360.11 : $066CC66
MP 7360.12 : $0CC6666

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MP 7360.13 : \$0CC66CC

MP 7360.14 : \$066CCCC

MP 7360.15 : \$066CC19

;GRAPHICS: PROJECTION IN THREE PLANES

MP 7361.0 : \$0000000 ;BACKGROUND

MP 7361.1 : \$0606060 ;TOP VIEW

MP 7361.2 : \$024FFE8 ;FRONT AND SIDE VIEW

MP 7361.3 : \$0FF0000 ;AXIS CROSS AND TEXT IN THE GRAPHIC DISPLAY

MP 7361.4 : \$0FFFF00 ;CURSOR

;ADDITIONAL STATUS DISPLAY IN THE GRAPHICS WINDOW

MP 7362.0 : \$0A0A0A0 ;BACKGROUND OF GRAPHIC WINDOW

MP 7362.1 : \$0B0B0B0 ;BACKGROUND OF STATUS DISPLAY

MP 7362.2 : \$00000FF ;STATUS SYMBOLS

MP 7362.3 : \$000055F ;STATUS VALUES

;PROGRAMMING GRAPHICS

MP 7363.0 : \$0000000 ;BACKGROUND

MP 7363.1 : \$0FFFFFF ;RESOLVED CONTOUR

MP 7363.2 : \$0003CC0 ;SUBPROGRAMS AND FRAMES FOR ZOOMING

MP 7363.3 : \$000FF9C ;ALTERNATE SOLUTIONS

MP 7363.4 : \$0FF0000 ;UNRESOLVED CONTOUR

MP 7363.5 : \$00080FF

MP 7363.6 : \$0000000

;COLOR OF THE HELP ILLUSTRATIONS FOR CYCLES

MP 7364.0 : \$0FF0000 ;RED

MP 7364.1 : \$0FFFF7C ;YELLOW

MP 7364.2 : \$000FF00 ;GREEN

MP 7364.3 : \$000FFFF ;TURQUOISE

MP 7364.4 : \$00000FF ;BLUE

MP 7364.5 : \$0FF00FF ;VIOLET

MP 7364.6 : \$0000000 ;BLACK

MP 7364.7 : \$0808080 ;GRAY LINE COLOR (COLOR 8)

MP 7364.8 : \$0000000 ;COLOR FOR HIGHLIGHTED GRAPHIC ELEMENTS

MP 7364.9 : \$0FFFFFF ;BACKGROUND

;OSCILLOSCOPE

MP 7365.0 : \$0000000 ;BACKGROUND

MP 7365.1 : \$0C08030 ;GRID

MP 7365.2 : \$0FFFFFF ;CURSOR AND TEXT

MP 7365.3 : \$0FF0000 ;SELECTED CHANNEL

MP 7365.4 : \$080C0E0 ;CHANNEL 1

MP 7365.5 : \$000FF00 ;CHANNEL 2

MP 7365.6 : \$0FFFF00 ;CHANNEL 3

MP 7365.7 : \$0FF00FF ;CHANNEL 4

MP 7365.8 : \$0FFCF00 ;CHANNEL 5

MP 7365.9 : \$000CFFF ;CHANNEL 6

;POP-UP WINDOW (HELP KEY, POP-UP MENUS)

MP 7366.0 : \$0FFFFFF ;BACKGROUND

MP 7366.1 : \$0000000 ;TEXT OR FOREGROUND

MP 7366.2 : \$07C7C7C ;ACTIVE LINE

MP 7366.3 : \$0FF0000 ;TITLE LINE

MP 7366.4 : \$000FF00 ;SCROLL-BAR FIELD

MP 7366.5 : \$00000FF ;SCROLL BAR

MP 7366.6 : \$0000000 ;RESERVED

MP 7366.7 : \$0000000 ;RESERVED

MP 7366.8 : \$0000000 ;RESERVED

MP 7366.9 : \$0000000 ;RESERVED

MP 7366.10 : \$0000000 ;RESERVED

MP 7366.11 : \$0000000 ;RESERVED

MP 7366.12 : \$0000000 ;RESERVED

MP 7366.13 : \$0000000 ;RESERVED

MP 7366.14 : \$0000000 ;RESERVED

```

;LARGE PLC WINDOW
MP 7367.0 : $0000000 ;COLOR 0 BLACK BACKGROUND
MP 7367.1 : $0FFFFFFF ;COLOR 1 WHITE
MP 7367.2 : $0D0D0D0 ;COLOR 2 GRAY 10%
MP 7367.3 : $0A0A0A0 ;COLOR 3 GRAY 20%
MP 7367.4 : $0808080 ;COLOR 4 GRAY 40%
MP 7367.5 : $0404040 ;COLOR 5 GRAY 60%
MP 7367.6 : $0202020 ;COLOR 6 GRAY 80%
MP 7367.7 : $000FF9C ;COLOR 7 BILIOUS GREEN
MP 7367.8 : $0001C5C ;COLOR 8 DARK BLUE
MP 7367.9 : $0FF0000 ;COLOR 9 RED
MP 7367.10 : $000FF00 ;COLOR 10 GREEN
MP 7367.11 : $0FFFF7C ;COLOR 11 YELLOW
MP 7367.12 : $000FFFF ;COLOR 12 TURQUOISE
MP 7367.13 : $00000FF ;COLOR 13 BLUE
MP 7367.14 : $0FF00FF ;COLOR 14 VIOLET
;-----
;POCKET CALCULATOR
MP 7368.0 : $0ACACAC ;BACKGROUND
MP 7368.1 : $0FFFFFFF ;BACKGROUND FOR KEYS AND DISPLAYS
MP 7368.2 : $00000FF ;KEY TEXTS ("OS" IN "COS")
MP 7368.3 : $0FF0000 ;KEY SYMBOLS
;-----
;DIRECTORY TREE IN PGM MGT
MP 7369.0 : $0ECECEC ;TEXT BACKGROUND
MP 7369.1 : $0000000 ;TEXT
MP 7369.2 : $00000FF ;TEXT BACKGROUND OF THE ACTIVE FOLDER
MP 7369.3 : $0000000 ;LINE COLOR OF THE TREE STRUCTURE
MP 7369.4 : $0FF6000 ;FOLDERS
MP 7369.5 : $0FF0040 ;DRIVES
MP 7369.6 : $0FF0000 ;TEXT BACKGROUND IN TITLE OF THE BROWSER WINDOW
;-----
;SMALL PLC WINDOW
MP 7370.0 : $0000000 ;COLOR 0 BLACK BACKGROUND
MP 7370.1 : $0FFFFFFF ;COLOR 1 WHITE
MP 7370.2 : $0D0D0D0 ;COLOR 2 GRAY 10%
MP 7370.3 : $0A0A0A0 ;COLOR 3 GRAY 20%
MP 7370.4 : $0808080 ;COLOR 4 GRAY 40%
MP 7370.5 : $0404040 ;COLOR 5 GRAY 60%
MP 7370.6 : $0202020 ;COLOR 6 GRAY 80%
MP 7370.7 : $000FF9C ;COLOR 7 BILIOUS GREEN
MP 7370.8 : $0001C5C ;COLOR 8 DARK BLUE
MP 7370.9 : $0FF0000 ;COLOR 9 RED
MP 7370.10 : $000FF00 ;COLOR 10 GREEN
MP 7370.11 : $0FFFF7C ;COLOR 11 YELLOW
MP 7370.12 : $000FFFF ;COLOR 12 TURQUOISE
MP 7370.13 : $00000FF ;COLOR 13 BLUE
MP 7370.14 : $0FF00FF ;COLOR 14 VIOLET
MP 7370.15 : $0FF8000 ;FARBE 15 ORANGE
MP 7371.0 : $0ECECEC
MP 7371.1 : $0FFFFFFF
MP 7371.2 : $00000FF
MP 7371.3 : $00000FF
MP 7375.0 : $0E8E8E8
MP 7375.1 : $0C0C0C0
MP 7375.2 : $0FFFFFFF
MP 7375.3 : $0D0D0D0
MP 7375.4 : $0D2D2D2
MP 7375.5 : $00022FF
MP 7375.6 : $0A0E0FF
MP 7375.7 : $0000000
MP 7375.8 : $0FFFFFFF
MP 7375.9 : $00000FF
MP 7375.10 : $0A0A0A0
MP 7375.11 : $0FF0000
MP 7375.12 : $000FF00
MP 7375.13 : $0000000

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MP 7375.14 : \$0FF0000
MP 7375.15 : \$0000000
MP 7375.16 : \$0FFFFC0
MP 7375.17 : \$0000000
MP 7375.18 : \$0FF0000
MP 7375.19 : \$0000000
MP 7375.20 : \$000FA00
MP 7375.21 : \$00000C8
MP 7375.22 : \$0800000
MP 7375.23 : \$0FF6432
MP 7375.24 : \$07B342D

```
-----  
;MP7392 SCREEN SAVER  
;INPUT: 0 = OFF  
; 1 TO 99 [MIN]  
MP 7392 : 15  
=====
```

```
*****  
;MACHINING AND PROGRAM RUN  
*****  
  
;PARAMETROS DE USINAGEM E EXECUCAO AUTOMATICA
```

MP 7410 : 0
MP 7411 : 0
MP 7420 : %00011111
MP 7430 : 1 ;SOBREPASSO USINAGEM DE CAVIDADES
MP 7431 : 0.016 ;TOLERANCIA FINAL DE ARCO
MP 7440 : %0010011 ;SAIDAS DE FUNCOES M
MP 7441 : 0
MP 7442 : +19 ;19 ;ORIENTACAO CICLO 202
MP 7450 : %00000000000000
MP 7451.0 : 500 ;AVANCO QUANDO RETORNA AO CONTORNO
MP 7451.1 : 500
MP 7451.2 : 500
MP 7451.3 : 10
MP 7451.4 : 10

;COM MAGAZINE MP7480.0 = 2
;SEM MAGAZINE MP7480.0 = 0
MP 7480.0 : 1 ;2 ;TOOL CALL
MP 7480.1 : 0 ;2 ;TOOL DEF
MP 7481.0 : 0

MP 7481.1 : 0
MP 7481.2 : 0
MP 7481.3 : 0
MP 7482 : 0
MP 7490 : 0
MP 7492.0 : -1
MP 7492.1 : -1
MP 7493 : 0.005
MP 7494 : 0
MP 7502 : 0
MP 7503 : 0
MP 7600.0 : 5
MP 7600.1 : 7

;HARDWARE
MP 7620 : %00000111 ;MODO DE SELECAO OVERRIDE
MP 7621 : 0
MP 7640 : 0 ;6 ;TIPO DE MANIVELA 0=S/MANIV. 6=HR410
MP 7641 : %0000 ;FATOR DE INTERPOLACAO PELO TECLADO OU PLC INC MAN
MP 7645.0 : \$00
MP 7645.1 : \$00
MP 7645.2 : \$00
MP 7645.3 : \$00
MP 7645.4 : \$00
MP 7645.5 : \$00
MP 7645.6 : \$00

MP 7645.7 : \$00
MP 7650 : 0 ;SENTIDO DE CONTAGEM MANIVELA
MP 7660 : 300 ;SENSIBILIDADE DA MANIVELA
MP 7670.0 : 5 ;FATOR INTERPOLACAO BAIXA VELOC MANIVELA
MP 7670.1 : 2 ;IDEM MEDIA
MP 7670.2 : 1 ;IDEM ALTA
MP 7671.0 : 20 ;VELOCIDADE BAIXA EM MANUAL HR410 % MP1020
MP 7671.1 : 30 ;IDEM MEDIA
MP 7671.2 : 50 ;IDEM ALTA
MP 7672.0 : 0
MP 7672.1 : 0
MP 7672.2 : 0
MP 7680 : %00000000000000111
MP 7681 : %1111 ;TRANSFERENCIA DE FUNCOES AUX DURANTE BLOCK SCAN
MP 7682 : %00000100
MP 7683 : %0000000000
MP 7684 : 0
MP 7690 : %000
MP 7691.0 : 0
MP 7691.1 : 0
MP 7691.2 : 0
MP 7691.3 : 0
MP 13020 : 1991
MP 13030 : 0
MP 13140 : 0
MP 13142 : 111
MP 13143 : 0
MP 13210.0 : 0
MP 13415.3 : 0
MP 13420 : 0
MP 13430 : 0
MP 13440.0 : 1
MP 13440.1 : 1
MP 13440.2 : 1
MP 13440.3 : 1
MP 13440.4 : 1
MP 13440.5 : 1
MP 13440.6 : 1
MP 13440.7 : 1
MP 13450.0 : 0
MP 13450.1 : 0
MP 13510.2 : 0