

# RX RELEASE NOTES

## Version 3.2.0 (All machines)

### **New Products added:**

30200 and 780RX-5M meter lathes (id's 189 & 190)

### **New Features:**

- Part Probe - Basic Operation in DRO mode
- Optional Stop
- Tapered Helical Drill and Thread
- FACE cycle for Lathe
- MPF Converter for Lathe
- TC2 REF POSN change - turret goes to home
- TC2 Bar Puller event
- PROG In/Out - Display Volume names of drives
- Verify - ISO vs Perspective view
- Added option and default to allow user to program via radius or diameter
- Added Countdown timer in RUN mode
- Fixed issue that we believe caused the Windows blue screen.
- Improved the amount of time that most tool paths take to process

### **Bug Fixes:**

- Fixed issue where message prompts during LINE CENTER feature are intermittently disappearing
- Fixed Touch User Interface crash
- Warning message comes up due to new homing logic for TMC, 2OPS and TC2
- Fixed scenario where RLX would feed from tool change position to beginning of next event.
- Fixed scenario where activating TRAKing option required a reboot before it works.
- Fixed scenarios where drilling / tapping events would intermittently repeat themselves. Helical Drill would appear to go deeper than programmed.
- Fixed max TRAKing speed on some machine types.
- Updated DefaultConfigs per Mark Higon's request
- Fixed big lathes showing 8 tool turret instead of hydraulic turret in Tool Group
- Fixed scenario where homing does not back up if first attempt fails
- Fixed scenario where drilling on different fixtures resulted with bad toolpath
- Fixed scenario where tool group was not persisting correctly
- Fixed scenario where booting up with no config files caused connection to motion control to fail
- Fixed code 513 such that it cannot be used until machine has been homed.
- Fixed scenario where machine would intermittently stop mid run with no error. Seem to be buffer related.
- Fixed scenario where screen would blink while viewing the countdown timer.
- Modified DefaultConfig for Euro mills, per James Shore request.
- Added potential fix for intermittent issue of Touch-UserInterface crashing to desktop.
- Fixed timing of Euro TMC "drives not ready" warning message
- Screen flickers when using Countdown timer
- Removed check for EOF when reading binary input file
- Updated DefaultConfig.ini for IsEhwStatusOn to True for all RLX machines

Parasolid files would incorrectly use radius values for circles when diameter was chosen.  
Updated Spindle gains for all Euro TMC machines.  
Fixed Search Edit screen so that it scrolls smoothly now. Also adjusted Tool Table page so that it can be scrolled quicker.  
Removed the "Change Machine" feature on offline. The ability to emulate different machine types will be offered in a different way in the future.  
Fixed issue with running GCD program could display a part probe warning.  
Fixed scenario with Bolt Hole Helical Drills not using Diameter value correctly  
Updated DefaultConfig for all XYZ machines  
Fixed scenario where circle island was not using Diameter value correctly.  
Fixed issue where all 2 axis machines and 3 axis position events were giving "invalid feedrate" warnings.  
Made significant improvement to toolpath processing times  
Fixed issue with importing TMC calibration files with service code 141  
Added log messages for intermittent scenario where machine would stop with no error.  
Changed homing routine such that the first time after bootup will backup 10mm before attempting to home.

### **Version 3.1.2 (All machines)**

#### **Bug Fixes:**

Fixed issue on RLX when after opening a DXF file, the run panel led's would stop working properly and software could crash.  
Fixed green message prompts not appearing correctly when attempting to add a tool on TMC or VMC2 machines.  
Fixed issue where Tool Table screen would flicker when spindle is turned on and tool sorting is used.  
Fixed issue with MPF converter not showing up correctly

### **Version 3.1.1 (All machines)**

#### **Bug Fixes:**

Rotated Rect Profile was missing passes in Z plane  
Fixed scenario where flashing safety message remained on screen  
Added message log entry when tool table is scrolled  
Eliminated the SAFETY MSG ON button within TOOL TABLE. This is an interim solution to prevent Windows blue screen crashes that were identified.  
Fixed a scenario that would shutdown our software while opening a DXF file on lathe.  
Fixed scenario that would cause Z to rapid to unexpected position while running GCD program  
Fixed a couple of scenarios that would cause Touch-UserInterface to stop responding.  
Fixed issue with Verify getting stuck at G85 boring cycle  
Fixed scenarios where editing a program feedrate would cause an unexpected event to run at 0 RPM.  
Added service code 122 to Euro 2op  
Fixed scenario in Thread Repair that would cause Windows blue screen to occur  
Fixed issue with message log not displaying product id # correctly  
Fixed issue with Euro Lathes 185 & 186 and Spindle Fan Warning,  
Updated file that was getting flagged by some Antivirus software

Increased time to wait for servos to be ready. This should eliminate some intermittent fault 262 scenarios.

Fixed scenario where Z EHW limit would be ignored depending on option key installed.

Fixed EPA such that it is now context sensitive

GO TO - A HOME would result with unexpected Z movement

1845 RLX - Spindle calibration (code 510) would not reach 2500 rpm

RLX GCD programs are running at twice the diameter programmed

RLX - Fixed issue were going into PROG and then RETURN would cause the software to crash

RMX without spindle control will now not display IPT as an option

RMX 2 axis circle pockets would not default to the correct tool path type chosen

### **Version 3.1.0 (All machines)**

#### **New Products added:**

TC2 RLX, high speed and low speed (id's 177 & 178)

3 axis RMX Kneemill with programmable Spindle (id 184)

#### **New Features:**

Added actual runtime vs estimated runtime (EPA content added)

Turning the 4th axis ON / OFF no longer requires a reboot

\*\* front panel button now toggles between INCH / mm.

Added CutOff Release option to lathe Cutoff event (EPA content added)

Added software support for Z EHW option on bedmills (release of hardware TBD later)

Merged previous 3.0.3 software for Brush Motor machines

TRAKing and EHW options can now be purchased & activated separately

#### **Known Issue:**

Some machines may take longer than before during the "Connecting to Motion Control" prompt. We hope to address this in a future update.

#### **Bug Fixes:**

**Note – There was a large internal re-design, so some bugs may not have been present in previous release version.**

Fixed issue with Z EHW soft limit message getting logged every frame

Updated spindleCalLimitFactor to 5.0 for sake of auto spindle cal on all machines

Fixed several issues with Hardware Tester I/O's

Fixed issue found that could potentially crash Master software

Added service code 122 for Euro 2op

Fixed issue with Z bottom finish using Zig Zag instead of one One Way.

Fixed issue where Copy Drill to Tap would not convert CSS value properly

Fixed scenario where conrad that was too large for geometry would crash software

Fixed issue with Max Rapid being 200ipm instead of 400ipm on lathes

Fixed issue where Zig Zag toolpath would generate instead of One Way

Fixed scenario where starting a Finish pass would result with max RPM

Fixed issue where axis was unable to jog past abs 0.

Fixed issue with spindle override not working correctly on 2x Kneemills with spindle control

Fixed some missing service codes from menu screen

Fixed scenario where CTS in auto mode would not turn on correctly

Fixed jogstick feedrate only running half speed  
Code 318 added more info for converters  
Bug 25636 - 3x Knee - Z GO TO option not enabled correctly  
Bug 24776 - Euro TMC - TRAKing results with error 188  
Bug 25618 - 3x Knee - Z GO TO is not accurate in DRO  
Fixed Hardware Tester Turret I/O issues for 30120 / 780 machines.  
Fixed scenario found where Tool Path would cause software to close  
Fixed issue with Fault Log logging Warnings / Faults repeatedly  
Fixed issue with Z EHW option not enabling / disabling correctly  
Bug 25443 - GO TO intermittently not stopping at defined target  
Bug 25429 - TOOL PATH is incorrectly adding tool offsets in rapid moves  
Bug 25570 - Optional Z EHW was not enabled / disabled correctly  
Updated EPA with - Cut Off Release option, changed VMC to TMC and updated keywords  
Bug 25411 - Opening a CAM file with CENTER offset results with tool comp errors  
Bug 25369 - Remove unused input signals so that chattering inputs don't get logged.  
Bug 25370 - RMX code 123 - quill calibration factor is not displayed correctly  
Bug 25376 - While stepping through tool path the runtime and event labels are on top of each other  
Bug 25307 - RMX & RLX - SERV CODES will continuously display error 7205  
PT10 - fix issue with Facemill cutting Z finish using ZigZag when One Way was specified.  
Bug 24777 - Euro RLX - Spindle calibration does not finish  
Bug 25179 - Offline - MCE crashes on some PC's when launching  
Removed the SC523 control of the EHW smoothness parameters  
Bug 24776 – Fixed software error 188 while traking with A-axis  
Add SC523 parameters back to EHW tweaking, adjust for smoother motion.  
Bug 24985 - Euro 2op - Coolant does not shut off when door is open  
Fixed Hardware Tester, it would crash when trying to connect in previous versions.  
Bug 24956 - RLX - Program ran feedrate at max feed instead of programmed feedrate  
Bug 24726 - Z EHW is incorrectly enabled in STATUS  
Bug 24768 - DXF graphics window twitches when pressing ABS SET  
Bug 24973 - RLX - Opening the STATUS window causes the EHW option to disable  
Bug 24960 - RMX Euro - Moving quill while door is open results with motion safety errors  
Bug 9746 - Spare 1 and Spare 2 inputs are not detecting correctly in hardware tester  
Bug 9864 - Scenario where system will run motion with spindle off  
Bug 16013 - Program runs with Spindle off and code 311 set to NO  
PBI 18364 - Change PT10 Output of G Code on G0 Moves, Fix G00 to split Z from XY  
Bug 19524 - Cycle X Approach Enhancement - Tool Path does not update when change tool nose radius  
Bug 19663 - 780RLX - Intermittent spindle monitoring faults while running offline software  
Fixed safety logic for Z EHW on TMC machines, when TRAKing option is not purchased.  
Fixed issues in Lathe related to Groove event  
Fix issue where moving the quill in DRO caused a exceeded max velocity fault on Euro machines.  
Bug 24535 - Slave software crashes when attempting to launch as Euro TMC  
Bug 23736 - Euro TMC door unlock scenario not correct  
Bug 22255 - opening STATUS window changes to INCH units in Euro-TMC  
Bug 21632 - MPG does not work in Power Feed screen  
Bug 21158 - Euro TMC - Show Path is not drawing correctly  
20932 - Euro TMC and 2op - Disable 2 axis mode

Bug 24777 - Euro RLX - Spindle calibration does not finish  
Fix coolant issue on Euro TCs where coolant doesn't stop with door open.  
Fix thumping issue due to sprintf log message for over-frame statistics.  
Added Blocks-per-second DCT parameters and improve logging (removed logging for some G-code file processing)  
Fix bug where machine rapids slowly in Z sometimes when the a-axis in use.  
Bug 23102 - Fix issue with event remaining blank after getting into mode  
Fix Bug 23102 -Event prompts intermittently disappear  
Finish prompts are appearing before user input when defaults set to have fincut values.  
Bug 23102 - Event prompts intermittently disappear. Refactor cycle event updateedittable  
Bug 22831 - Cannot draw conrad and chamfer with different size options enabled  
Bug 22973 - When you edit clear off event to change feed rate, program will run at the older feed rate  
Fixed issue with wrong spindle calibration when running in CSS.  
Fix issue with Clear off finish cuts not using correct offset.  
Bug 21731 - Changing Tool 1 to Another Tool on a Single Tool Pocket or Island Adds Another Tool To the Tool table  
Bug 21664 - Another scenario where editing feedrate results with program running at older feed  
Fix issues with wrong sim spindle speeds and gear ratios.  
Bug 21711 MPF Turn off spindle and coolant before M00 and M06 and turn on spindle and coolant afterwards  
Bug 21710 - Aux event is incomplete when PT7 file is opened  
Bug 21687 -On Sub Repeat, Tool Number is Correct for 1st Move, but Chooses Wrong Tool for Next 5 Moves  
Bug 21543 - Remove duplicate M9 fix dialog rapid and extra rapid at end of program  
Bug 21543 - Fixed prev z rapid to use z safety and output MPF M codes  
Bug 21543 - XYZ Moves Traverses on Vector and Wipes Out Part - MPF Convertor  
Removed special characters from Service code 314 EPA text  
Bug 21417 - Using SFM and Feed Per Tooth not Handled in MPF Converter Export  
Bug 21416 - Sometimes Comments are Left Out of MPF Converted File  
Update LOOK for tapered thread mill  
Update LOOK drawing for tapered hole, add missing check for invalid diameter in drill event and event base  
Optional Z-EHW option not working on RMX models.  
MID 159 fix limit switches so Z is always on and always dual-switches. Add missing SC312.  
get EHW on Z working for 159.  
Add new tapered hole option for helical drill & bolt hole  
Bug 25158 - RLX - Scenario where software screen becomes unresponsive  
Take out redundant G291 - iso dialect when output mpf  
Remove soft limit decel SC523 control  
Bug 24973 - RLX - Opening the STATUS window causes the EHW option to disable (merge)  
z-axis limit switch bug fix.  
Bug 24926 - TMC - Z EHW logic is not working correctly when user buys EHW without TRAKing  
Bug 24446 - EHW smoothness fix. Added accel numbers to each EHW resolution.  
Bug 24932 - RLX displayed ODBC error after updating to latest Main software  
SimUI - fix issue with project settings and resources.  
Bug 24928 - TMC & 2op - GO TO does not appear without the EHW or TRAKing option enabled.

Bug 24789 - Code 1 would not save if using a Parasolid file - fix MLS strings related ONLY. Bug still open

Bug 24787 - Touch User Interface Error after using SHUT DOWN or PAUSE BREAK

Bug 24484- Some machines are now taking much longer to connect to motion control

Bug 24726 - Z EHW is incorrectly enabled in STATUS

Bug 24904 - RMX - GO TO is not available when EHW option is activated

Bug 24788 - Clear Off Moduleworks Error

Bug comma in wrong place when outputting tool info for MPF

Bug 24779 - EPA no longer works on pendants with the latest main build

Bug 24782 - Calculator and Keyboard do not work when launched

XYZ MID 92 spindle doesn't get up to speed.

Check default config version during service code 141

fix for MaxRpm on lathe - missed check in

Add support for REST feed and speed - not implemented yet

ScanKeys - Add infrastructure for '?' to get help

Main - Z-servo was enabled during CENTER function when it shouldn't have been.

Fix issue with tolerance for Profiles

Bug 24579 - 30120 - Hydraulic Turret not working properly

Bug 24610 - MTConnect - Agent not starting after improper shutdown

Bug 24542 - MTConnect use NCReady instead EStop SW

Bug 24542 - MTConnect - ESTOP data item always returns value as "ARMED" and Lathe X show Radius instead of Diameter

DCT - 20955 - DCT gives intermittent error when launching

DCT axis raw index counts not working.

A-axis slow bugs 23892 and 23282.

Fix DCT Too Many Parameters issue.

Bug 23987 - Service Code Screens - SC312 appears twice.

Bug 24317 - Parasolid file crashes our master software

Change threshold for Interval Time out of range to minimize unnecessary logging.

Bug 23801 - fix code 132 screen unresponsive issue

Bug 24103: If the clamp-in or clamp-out position is forced high or low in SIMUI , the user can still toggle between clamp-in and out using foot pedal

Bug 24104 - Spindle does not turn on once user turns off Hydraulic chuck using SC531

Bug 24044 - Verify not responding to softkeys from Front Panel

Change laser calibration initial move distance from 2 mm to 0.2 mm

BPS is low - Added diagnostics for DCT, fixed issue in slicer

Updates for service code 400 shutdown issue

change DisableEnableNIC to default to no shutdown. Fix issue with DataConnection.ping causing memory leak.

Fix issue with hydraulic pressure warning product 152

Fix issue where OpenTemp cause a small jump.

Bug 23913 - Z axis display in code 100 is not correct if glass scales are turned off

Fix issue where the simulated 8 tool turret moves constantly before the turret is homed.

Smooth TMC EHW motion. Set max EHW speed to slower speeds.

Change type from bool to int for AxisCalibrationType

Bug 23943 - DRO - CENTER feature not moving to correct position

Lowered the EHW jog Accel by 15% to make the motion smoother in the lower resolution settings.

Bug 23814 - Larger Pitch Value Causes Helical Drill to Fail  
Updated all TMC Sim HardLimits to be bigger  
Bug 23782 - code 316 does not update software  
Add ballscrew clutch to EHW group box.  
Bug 23777 - Surface Speed not being calculated correctly after being adjusted  
Bug 23675 - fixture offset not processed with Clear Off Irregular Profile  
Spikes in jerk. Fixed 2 more issues which caused spikes in the jerk. Now B488.  
Bug 22128 - G code editor causes memory leak  
Bug 23675 - Fixture Offsets Not Working Correctly With 2 Clearoffs.  
Bug 23751 - service code 122 not updating calibration values correctly  
FP EHW vibrates TMC in FAST mode. Changed logic to have accel limit instead of relying on max  
V4th locity to determine input rate  
Bug 23496 - A AXIS - running program with 4th axis enabled causes Z to rapid up to an  
unexpected height  
Bug 23638 - no FPEHW on tool setup screen  
Take care of incompatible offsets for Turn and Arc events including program io for RLX  
Run GCD and tool radius offset for back diameter programs  
Bug 23496 - A AXIS - running program with 4th axis enabled causes Z to rapid up to an  
unexpected height  
BM-Release - Bug 23424 - Z-servo not enabled at the right time. Fixed scenario at a Manual Tool  
Change.  
Bug 23498 - Some options & defaults should be disabled when ADV FEATURES is turned off  
Add parameter Lathe\_Pos\_X\_Axis to tell master if pos x axis on lathe is away from user  
Bug 23512 - After Arc Fix in 22513, Arcs are Bad in Conversational Program  
Bug 22513 - G-code Plots as Good in Toolpath, but Bad in Curviewer and any G-Code Text Editor  
Bug 23466 - Inserting a PAUSE event gets ignored during RUN mode  
Bug 23330 - RLX - Opening a metric CAM file results with wrong surface speed value  
Bug 23469 - Z EHW does not show up in STATUS when option is enabled in code 318  
Bug 23309 - Clear Off sequence with no profile does not display error when you run Tool Path  
Bug 21870 - Hardware Tester not showing correct inputs for hydraulic turret  
fixed bad check in for REST FEED/RPM  
Bug 23311 - INFO/MODE buttons do not respond in service code 510  
bug 23102 Event prompts intermittently disappear  
Bug 23371 - For large gcd files time estimate calc is too slow  
bug 23223 - Switch between 2-3 axis or lathe-mill does not clear time estimate in prog header.  
Fixed again.  
Bug 23315 - Irreg Profile runs at wrong feedrate after modified  
Changed slave to read glass scale all the time for monitoring purposes.  
Bug 22225 - Manual Spindle Cal now uses the number of calibration points specified in Default  
Config file  
Axis homing index and switch warning. Fixed logic for detecting index pulse rollover for A-axis.  
Lathe issue where customer says the inside corner of a small shallow face groove with sloped  
sides is rounding  
Spindle calibration - lowered upper calibration RPM from 4000 to 3800 to allow for some leeway  
in the maximum upper calibration  
Changed upper calibration RPM back to 4000 RPM to fix poor calibration results in mid and  
upper RPMs.  
Bug 23256 - INCH/MM selection in status menu is disabled

Add Diameter of Hole to Search Edit

Bug 23203 - Don't re-enable intergal term in power feed until motion starts (on an axis by axis basis.)

Bug 23231 - code 510 prompts with abort operation message when you try to leave the main screen

Bug 23134 - do not display CLEAR OFF text in Defaults for 2-axis machines

Update text for code 100 screen

Bug 23223 - Switch between 2-3 axis or lathe-mill does not clear time estimate in prog header

Bug 23198 - Event 0 in prog editor should show Input Z End for Verify

Bug 23116 - add remaining screens to process \*\* key press (Defaults, Tool Table)

Bug 23199 - Look and Tool Path not updating if just press INC or ABS

Bug 23140 - axis faults out in service code 100

Motion Stuck bug - fix all places where Slice can divide by zero. Version is now B446.

Change spindle calibration RPMs and gear ratio to improve spindle calibration accuracy

Bug 23197 - Run Show Path Screen Flickers On and OFF at Check Z

Fix error in debug code that would cause a NAN in the Slicer function

Bug 22249 - motion stuck. Added yet more diagnostics. Version is now B444.

Bug 23116 - Search Edit - screen does not update when switching between INCH and MM

Bug 23191 - fix general case for door logic not handled correctly

Bug 23142 - axis does not move in code 100 for MID 174

Bug 23147 - code 12 does not work for MID 174

Bug 23183 - RMX-BM - DRO not setting default RPM

Bug 23140 - code 100 faults out on MID 175

Bug 22184 - DRO number is wrong following SC123 calibration

Bug 22879 - DRO number is wrong following SC123 calibration, the values are Zeroing out at the 150mm position

Bug 23167 - Font in file dialog is not correct

Bug 21157 - When we save config files using SC 142, if folder exists delete it

Bug 21934 - DEFAULT Issue when Advanced Features Off

Memory leak in Proglo and Pictures

Bug 23116 - Search Edit screen does not update when using \*\* key to switch between INCH/MM units

Bug 23098 - add Z END to Search Edit options for 2-axis RMX-BM machines

Fix tiny oscillation of DRO X and Y (moving .0005).

Bug 23030 - Memory Leak Notes losing 2 obj each time

Bug 23116 - Search Edit screen does not update when you toggle INCH/MM units

Bug 22885 - on 2-axis machine, if the user changes INCH/MM units in the status flyout, it goes to the splash screen

Bug 23015 - 2 axis rectangle pocket event not counting time estimate in run

Bug 23103 - need to remove ORDER OF PASSES from Options & Defaults for 2-axis machines

Bug 23028 - Jog screen off of fixture table screen does not show "JOG ACTIVE" flashing message

Bug 23014 - Changing tool number will also change finish tool number

Bug 23012 - Prog IO has blank file typ

Bug 23031 - Screen zero on offline has softkeys that lead to screens that don't work

Bug 22831 - Groove option different conrads/chamfer not updating in Look if only hit INC or ABS set



Bug 22973 - When you edit clear off event to change feed rate, program will run at the older feed rate

Bug 22996 - service code 12 manual screen does not allow negative values to be entered

Fix issue with peck type programs for time estimate on VMC2

Fix DRO display in service code 12

Added new datasets for Ballbar. Fixed wrong scaling for simulation X and Y for belt ratio on MID 162.

Fix issue with peck type programs for time estimate on TMC

Fixed G76 lathe thread cycle time estimate way off

Bug 22832 - DRO X and Z values display draw tool path not correct on lathe

Bug 22831 - Look window does not update when editing events on lathe

Bug 22202 - Groove Tool Path Issues

Fix minor stale data display issue on service code 12 Manual screen

Update AUX event so it sends the correct AIR/MIST M-codes for machines 182 & 183

Bug 22869 - DRO Abs Set does not work after doing service code 12

Bug 22865 - service code 12 does not display the updated values after running in AUTO mode

Bug 22661 - Fine/Coarse button is slow to respond

Bug 22143 - Offline program stops at tapping

Updated options for PT10 files for Rough cut tolerance with and without finish

Bug 22775 - Mill - Cannot Move to Next Event Using Sub/Mirror and Fixture Offsets

Only output compile toolpath status on change.

Bug 7802 - View gcd file during run, G41 causes jump to end of program

Bug 21462 - OPEN TEMP does not restore DRO position correctly

Bug 22626 - service code 331 is storing wrong state

Bug 22468 - RLX Tap event does not Verify correctly

Bug 22634 - In Define Stock -> Auto it populates random numbers

Add message log statements for service code 12

Bug 22638 - Should not disable CNC Run and Traking for No EHW and in 2axis mode

Bug 22523 - 'Safety Msg ON' message comes up when there is no safety message

Change tapping to use fwd/rev relays inputs to drive "Is Flipped" signal. Add more signals to...

Bug 22566 - Thread Mill event is disabled when it should be available

Bug 22624 - Input Z End for Verify toggle switch is way off

Updates for service code 12

Bug 22615 - Time estimate calc not right for G02 on lathe using fpr

Bug 21335 - Rect Profile is omitting conrads and results in a tapered toolpath

Bug 22547 - Time estimate should not begin counting down if spindle not turned on

Bug 22548 - Add popup message when calculating time estimate

Fix link error in PLC20

Update temperature sensor warning

fix issue with spindle fault showing up all the time

Bug 22244 - service code 319 log list display covers soft key buttons

Fixed Bugs with Thumping and Scale/motor faults. Caused by overframes

Bug 22288 - Version B387 - fix issue where motion stops at end of program when spindle is turned off.

fixed issue where initial value of spindle speed override is 0 causing the spindle to only run at minimum speed

Add stop and go adjustment for G00 base on maxaccel parameter

Bug 22241 - do not allow IPT feedrate programs to open on machines that do not have spindle control

Fixed bug 22288 where machine can run a program with the spindle off. Slave now uses lack of fwd/rev relay feedback as SpindleOff for machines that use a hardware spindle switch (ie. not membrane critical keys) for spindle control.

Fix bug 22226 where soft limits are detected but don't stop the machine. The SoftlimitDec parameter was missing from the Axis nodes in Default Config.

If not overriding feedrate, do not adjust speed of count down time

Bug 22231 - Tool Path Problem on lathe with turn events

Bug 22217 - service code 311 missing from B list

Bug 22237 - service codes 300 - 302 not disabled

Bug 22231 - RLX - End of cycle event does not retract out of part correctly and crashes into part

Bug 22215 - add RPM fields back in Search Edit for RMX Brush Motor machines that have spindle control

Fix issue with thumping on a program that has many G2s or G3s end-to-end

Thumping when in CNC-RUN in a program with many g2's end to end. We now limit the number look-ahead read-blocks

Fix issue with Clear off finish cuts not using correct offset.

Bug 21504 - VMC2 Faults Right After Tool Change - G-Code File.

Bug 21733 - Z rapids up to soft limit

Bug 17785 - Toolpath Time and Actual Run Time Are Way Off.

Bug 22291 - Time estimate should not compute estimate for M01.

RMX w/bm - Service code 12 - Auto mode slave works. Add friction to Sim Axis Model.

Bug 22277 - Modifying depth per pass in Rect Pocket event results with problems

RMK: Add support for service code 12 on slave

Code 97 - modified instructions

DCT - Add Go Offline button to File menu.

fix issue with AddParameter missing. Missing types in NamedParameters

Bug 22064 - RMX - Rect Profile skipped tool change for finish tool

Add new string for service code 12

Add ReflashMasterSoftware project back in solution

Bug 20043 - Unexpected text visible in TOOL # box when MLS files is modified

Bug 21887 - Open Temp Then Cancel Not Working Right

Bug 21967 - TMC Tap Feed in Show Path Incorrect

Bug 22009 - TRAKING button is not visible when user has only bought EHW option

RMK - Fix issue with spindle speeding up. Reverse Tap Mode

Run Time Estimate enhancements

RMK - fix issue with temperature sensor

Bug 21841 - lathe cutoff release occurs at wrong x position

RMK - Update to fix issues with serial port.

Depth Per Pass options missing from Search Edit

Bug 21962 - FP EHW does not work in service code 510 spindle orient screen

Bug 21474 - Tool Path was not generated for rect pocket event

Bug 21632 - MPG does not work in Power Feed screen

Bug 22142 - pressing INCH/MM resets event field

Add missing references for MTDashboard

Initialize CPU temperature sensor to nominal value

Add SC97 to change motor directions.

Add flashing message to SC 326  
RMX-K - implement SC150 JogAccel on Slave.  
Fix issue where machine jumps.  
Fixed issue where A axis wouldn't jog with EHW.  
Utilities - Fixed issue where LogViewer would get an exception when un-pinning rows after some of the filter conditions  
Fix issue with axes jumping when doing Open Temp  
Fix issue with A axis not homing. Changed polarity of 4th axis home input to invert it  
Update for OPEN TEMP  
A-axis not homing or jogging.  
Bug 21949 - Sub or Copy Rotate Drops Z levels in Rotated Parts  
Bug 21902 - Toolchange Homing Error (Again) 115 Machine Boot Offline  
Bug 21931 - Unable to toggle EHW's in STATUS screen  
PT10 Lathe - change following error for turret axes. Missed checkin for DefaultConfig.  
PT10 Lathes - bug 21957 - turret following error - made the following error limit bigger.  
PT10 - fix issue with using any tool changer when running offline  
PT10 - Fix issue where the 8-tool turret was only available when running offline  
PT10 - Fixed issue with 8-tool turret backlash not being in correct units.  
Bug 21876 - Toolpath broken for Rect Profile  
bug 21734 - ATC sensor error offline when starting.  
Bug 21882 - Get this warning first time generate tool path  
TMC A-axis fails on homing even when disabled.  
Bug 21660 - Cryptlex license is not used every time when the option key is present  
added diagnostics log messages to show slaves understanding of A-Axis enable/disable  
Bug 21632 - MPG doesn't work when going to DRO subscreens  
Fix issue with speed check when handwheeling into the softlimit. We were overframing causing a bogus speed.  
bug 21472 - A-axis faults out homing even when not enabled. Fixed homing with 8-tool servo turret on lathe.  
Bug 21505 - Rectangular Pocket Destroys Finish Cut  
Bug 21420 - DEFAULTS values are still sometimes getting corrupted / populated with bogus values  
Spindle Cal new method - Removed logic to do bias at zero rpm. It didn't work. Updated calibration points at lower RPMs to include zero RPM.  
New spindle calibration logic. Seek the target calibration speed with a PID loop. Calibrate at zero RPM as well  
Bug 21420 - DEFAULTS values are still sometimes getting corrupted / populated with bogus values  
Bug 20896 - Engrave text removes space when text is long  
Bug 17062 - 4th Axis Goes Back to A0 After a Position or Mill Move to A90  
PB21241 - TRAK Connect - MVP - PC Programming - Use Cryptlex instead of USB dongle  
Bug 21294 - Changed Jog logic to guard against receiving a Stop before a Go and causing run-away motion  
Bug 21207 - Clear Off event is not drawn correctly in LOOK when multiple fixtures are used  
Bug 21335 - Rect Profile is omitting conrads and results in a tapered toolpath  
Bug 21163 - unable to page forward through Clear Off sequence  
TMC - Fix Master so we don't need to restarted the machine when turning the 4th axis on or off  
Bug 21158 - Euro TMC - Show Path is not drawing correctly

Time estimate for M22 and M30

Bug 20836 - issues inserting event between Clear Off sequences

Time estimate for canned cycles

fixed homing of the A-axis to correctly home (or skip homing) based on the A-Axis

Enable/Disable selection.

fix 20932 - Euro TMC and 2op - Disable 2 axis mode

Bug 20836: unable to insert an event between two Clear Off sequences

Bug 20847 - Code 521 - Hardware Tester sometimes has trouble launching / connecting properly

PB 21078 - Save to CAM avoid diagonal rapid moves

Bug 21137 - Calibration value not remembered on TMC12 and 14 machines

### **Version 3.0.3 (Brush Motor machines only)**

Fixed issue where Z servo was getting enabled when attempting to use CENTER feature.

Fixed issue where using EHW's in course mode on machines with smaller motors would attempt to run at 250ipm instead of 100ipm.

Fixed issue where product id 181 (DPMSM/SX2) would not connect to motion control.

Fixed intermittent overframes that were occurring in motion control logging.

### **Version 3.0.2 (Brush Motor machines only)**

Fixed issue where using EHW's in course mode on machines with smaller motors would attempt to run at 250ipm instead of 100ipm.

Fixed issue where product id 181 (DPMSM/SX2) would not connect to motion control.

Fixed intermittent overframes that were occurring in motion control logging.

### **Version 3.0.0 (Brush Motor machines only)**

#### **New Products:**

Added support for the following machine ID'S 156, 162, 163, 173, 174, 175, 176, 181, 182, 183 - that include the following machines.

TRAK Knee Mills upgraded to RMX2

TRAK Bed Mills upgrade to RMX2

#### **Retrofits**

PTRMX2

#### **Upgrades**

MX to RMX2 Upgrade

M2 to RMX2 Upgrade

AGE to RMX2 Upgrade

EDGE to RX2 Upgrade

EMX to RMX2 Upgrade

SM to RMX2 Upgrade

SMX to RMX2 Upgrade  
KMX to RMX2 Upgrade

**New Features:**

Implemented switching INCH/MM hard key using double asterisk button.

**Version 2.7.0**

**New Features:**

**RLX:**

Added Pipe Thread events (part of Advanced Features with Verify option)

Added Z Finish cut in Defaults section.

Groove event – all four corners can now be uniquely defined

Do One taper now remembers the last angle defined.

**RMX:**

Added MPF OUT converter option for Siemens Sinumerik One controls.

Improved Tool Path processing such that it does not re-process unless a change is made.

DXF feature **BREAK GEOM** can now break full circles

Added DXF feature **ADD RECT**. Useful for adding stock profile for Clear Off event.

**Bug Fixes:**

Bug 21214 - Run time estimator not working correctly on RLX products

Bug 20947 - Finish tool does not show in Tool Table when only Z bottom finish is defined without XY finish

Bug 21211 - GOTO fails stop intermittently on X axis while in Metric

Fixed issue with being able to Page Fwd through a Clear Off event defined with Fixture #'s

Bug 21137 - Spindle calibration value not remembered on TMC12 and 14 machines

Bug 20847 - Code 521 - Hardware Tester sometimes has trouble launching / connecting properly

Bug 20902 - Feedrate is intermittently running much slower than programmed

Bug 20925 - Z axis rapids up into soft limit when starting in middle of 4th axis program

Bug 20893 - Running irregular profile plunges the Z axis down to an unexpected depth

Bug 20802 - Starting at Circle Pocket Z Finish has unexpected results

Bug 20718 - Irregular islands give toolpath errors

Bug 20850 - Sub Repeat not running at the correct RPM

Bug 20663 - Added monitor for GDI objects and memory usage

Bug 20697 - Program error will only display once, need to display every time user tries Run or Toolpath

Bug 16013 - program continues running even after you turn the spindle off

Bug 16013 - program runs with spindle off during TRAKing

Bug 20511 - Some events run at the wrong feedrate or rpm after editing them

Bug 20692 - Master software crashes when attempting to launch on Pendant

Bug 20577 - Code 141 is updating MachineConfig.ini file

Bug 20579 - Clear Off Not Allowing Smaller Tool or Step Over Change

Bug 20041 - Irregular profile - unexpected toolpath

Bug 20504 - Code 316 sometimes fails to update slave

Bug 19524 - Cycle X Approach - Tool Path does not update when change tool nose radius  
Bug 20506 – Scenario where Copy Drill to Tap does not populate RPM properly  
Fixed issue where repeatedly going to Chip Clear caused incremental position shift  
Fixed issue with Master software crashing after going into code 311.  
Fixed issue where Link Length value of 0 was affecting pockets with offset tool path  
Fixed issue found where Fixture Offsets were not working correctly on TMC product  
Fixed issue found on TMC where Front Panel Electronic Handwheel would very intermittently jog the wrong axis  
Fixed issue where pressing the = symbol on the keyboard would trigger a 4th axis error  
Bug 19227 - disable asterisk button screenshot functionality while in service code 81  
Added logging corruption fixes  
Changed jog logic to eliminate the intermittent operation caused by immediate keep-alive failing briefly  
Bug 19952 - Clear Off Z Floor Parallel Finish Destroys Circle Boss  
Bug 19738 - tool type string is hard-coded  
Bug 19758 & 19839 - START AT intermittently fails to generate Finish tool path  
Bug 19756 - RLX - Running a SFM cycle event will intermittently run at wrong speed  
Bug 19732 - RMX 2D 0 Start at INC move not handled correctly  
Bug 19761 - Lathe - Screen Image Not Updating on OD/ID Groove Edit  
Bug 19762 - Lathe - On Arc Event, G99 Missing in Temp274.dat File  
Bug 19743 - RMX - START AT will plunge down in Z before moving over in XY  
Bug 17685 - RMX 2D - Start At Does Not Prompt for Set Z  
Bug 19717 - Feedrate change does not get reflected while running a program  
Fix missing service codes in service code list B for VMC2  
Bug 19689 - Mill - First Move is Z to Rapid and then to X, Y Positions  
Bug 19648 - Set Feed Override Changes if Open then Close Defaults  
Bug 19396 - AUX event is sometimes not handled correctly when opened  
Bug 19615 - Swipe right does not work for Aux and Pause events  
Bug 19618 - Lathe B209 Missing Option for Z Finish Cut  
Bug 19591 - Clear Off Event - tool does not go around profiles CCW when use tool right  
Bug 19525 - Cycle X Approach Enhancement - Tool Path incorrect on backside of part  
Bug 19592 - Clear Off Event - Tool path calculated wrong based on event you are on in Program mode  
Fix issue with crashing when opening cycle event program because of OD to ID option  
Add option to lathe cycle to rough od to id  
Bug 19483 - Roughing at a Z Pass Start Allows Tool to Crash Thru Part  
Bug 19469 – Increased amount of time service code 142 has before it fails.  
Bug 19415 -When using sub repeat with part change it rapids to last event in XY before moving in Z rapid to first event. Should just go to first event at part change z part change position  
Bug 18011 - RMX - Save Tap Program as CAM and Z Depth Defaults to Zero in CAM. Now z rapid is in inch rather than metric  
Bug 19407 - TMC and VMC2 - Z is plunging down before XY rapids  
Bug 19401 - TMC and VMC2 - current tool status is being lost  
Bug 19390 - Software crashes to desktop when using START AT  
Bug 18900 - RLX cycle programmed in IPR does not run at the correct feedrate  
Bug 19114 - In DXF or Solids, After Using Rectang Box, You Cannot Change Options - Master Crashes  
Bug 18779 - 4th Axis Makes Move to A0 When it Should Not

Bug 18713 - Changed Tool Numbers in Cycle Not Updating Tool Table - Sometimes Confirm shutdown msg hidden if error flyout window is out.

Bug 19096 - Cam-Out Inserts G0 Move AFTER the M22

Bug 19060 - 20 Fixture Offsets Listed but Only 6 are Usable in RMX

Bug 19076 - Trying to run toolpath for a drill event causes system error - Error introduced with CompileToolPath changes

Bug 18853 - Event comments cause master to crash

Fixed issue with 2 axis TRAKing, machine would not stop at desired location.

Bug 18777 - Setting xyz and z feedrate only outputs z feedrate

Bug 18761 - Changing # of Passes Does Not Change Toolpath

Bug 18757 - Z Helical Entry Feed Should Not be the Same as the XYZ Roughing Speed

Bug 18759 - G94 Gets Repeated 8 Times at the Start of a Program

ModuleWorks - Tool Path Recalculation - Only recalculate when necessary

Bug18751 - Doing TOOL PATH and then TOOL PATH again can cause error

Bug 18643 - Touch user interface crashes when Run Start at is used

Bug 18307 - Pocket Finish Cut on Outside of Pocket - Fix issue with cutting direction for open profile in Clear Off

Bug 18528 - Log Marker - pressing the asterisk button will abort a program run

Bug 18294 -Remove TAB softkey on screen shot feature

Bug 18307 - Pocket Finish Cut on Outside of Pocket

Updated tapping tuning for TMC12 & TMC14 id's

Bug 18321 - unable to close out Clear Off Irregular Stock

DCT - fix auto scale button toggle

DCT - Zoom now scales both left and right Y axes

DCT - more accurate zooming of right Y axis

DCT - Restore zoom after hitting play

DCT - Fix mouse drag outside of legend will zoom both axes.

DCT - fix issue with PlotOptions resetting scale and turning off right axis. Fix zoom issue to correctly scale right axis accordingly

DCT - Fix issue with HiLo/A2B indicators jumping. Add more zooming capabilities. Trap mouse clicks in indicator deltas

DCT - Fix duplicate Y Axis Scale objects

DCT - Change grid shading in Plot Options. Add formatting to XY1Y2 scale.

DCT - Remember Line Thickness in Plot Options

DCT - Fix issue with keep alive. Update connection indicators

DCT - fix issue with choosing colors after parameter 10. Fix not saving colors correctly. Fix update display after changing colors. Turn off High/Low, A2B and show point values if disconnected

DCT - Update Horizontal Slider. Remove color on Set Scale. Fix issue with TopMost and Plot Options

DCT - fix scaling issue

DCT - Update Plot Options - Add extra parameters, remember color choices, remove unused controls. Also, add BringToFront on all dialogs per John's complaint that they come up behind the main window

## **Version 2.6.1**

**Bug Fixes:**

Software does not work when using START AT on any event after an irregular pocket. This problem also happens when using an irregular pocket within our island and new clear off event.

**Version 2.6.0****New Features:****RMX:**

Tool Table sorting  
Ability to mode out from middle of toolpath calculation  
Clear Off

**RLX:**

Retain angle in Do One taper

**Other:**

VMC2 merged  
Code 1 - Added functionality by using the \* button  
Floating License for group training

**Bug Fixes:**

Fix issue where Lathe Cycle Event with IPR causes motion to stop unexpectedly.  
Fixed issue with Thread Repair, LH thread starting point and cross-threading.  
Bug 18771 - Fix issue with message log becoming disabled after reboot.  
In Status, the heading changes from status to different options for different machine ID's  
Updated tapping parameters for TMC12, TMC14, TMC12-12k, and TMC14-12k. Note: AC drive parameters must be updated along with software for these machine types!  
Fixed issue where treadmill event was incorrectly showing RPM instead of FIN RPM  
Bug 18576 - TMC - FP EHW intermittently moves 2 axis at once  
Bug 18643 - Touch user interface crashes when Run Start at is used with sub rotate event  
Bug 18528 - Log Marker - pressing the asterisk button will abort a program run  
Disable real time messages with double to ascii to improve real-time ISR spikes.  
Fix thumping by removing logging (once again) from the CmdBuf code. This logging should not be enabled for WinCe.  
Bug 18332 - TMC - Code 318 - E HANDWHEELS and 4TH AXIS are missing from list of options  
Bug 18334 - TMC - AUX event does not do anything when AUX FUNCTIONS is missing  
Bug 18304 - VMC2 - In 2 axis mode, cannot move the Z at all with the FP EHW  
Bug 18269 - When you leave out the finish cut for rect pocket, get 0 spindle speed  
Change ColdTurkey defaults to output all 100 parameters  
Bug 18120 - OPEN TEMP is not restoring DRO position properly on Lathe  
Bug 18104 - Sub Rotate of Irreg Pocket results with unnecessary tool changes  
Bug 18123 - TMC EHW Problem - Z EHW's does not work in 2 axis mode after running a program  
Bug 18130 - RMX - Choosing to start at circle pocket finish skips Z finish cut  
Bug 18019 - Sub Part Verify Not Working Correctly  
Bug 17375 - RLX - Tool Offset not applying correctly during Power Feed



Bug 18010 - TMC - WARM UP gives error "Not enough travel"

Bug 18019 - Sub Part Verify Not Working Correctly

Bug 17556 - GCD - Run Program and Then Stop. Now Run From an Event - Crash in Z

Bug 17711 - 0.090" Threadmill Crashes Offline and Gives Motion Control Error on TMC

Bug 17474 - EHW toggle switch missing from STATUS screen Move MessageLog.Init to earlier to get boot up messages.

Bug 17872 - Threadmill With No Fin Cut specified still asks for Fin Feed and Fin Speed

Bug 17720 - VMC2 - If not Aux, still allow cool, air, and part change. Just gray out pulse and aux output

Bug 17719 - VMC2 - AUX options not displayed correctly

Bug 17646 - Start at Fin Cut on Rectangle Pocket Causes Z Crash (TMC only)

Bug 17252 - Z Finish Cut Tool Drop down is sometimes empty in Defaults and Options

Bug 17259 - Z Finish Floor Cut Uses Roughing Feedrate and not Finish Feedrate

Bug 17407 - Stepmover Amount is Wrong for Circle Pocket Offset

Bug 17443 - Stepmover % for Adaptive Toolpath with Z Finish is incorrectly maxing out at 70 percent

PT10 - fix issue with message pump for WinCe

Retain values previously set in DRO DO ONE

Bug 17184 - do not reset motor encoder counts during Open Temp

Bug 17034 - For attached dxf when using manual chaining, cannot undo selected geometry and rechain.

PT10 Bug - Big lathe times out while tapping at slow speed.

Bug 12104 - XYZ Spindle Speed check Error 256 Fix Also Update to Version B131

ServiceCodes - Issue with SC523 not being able to edit F5 parameter.

PT10 - Copy Rotate Z Axis does not copy over Z Finish Cut and does not use the correct toolpath

Bug 17052 - 4th Axis shows up 2 times in status screen

Bug 16767 - TMC sim won't orient. Remove new Spindle "sanity check" when running offline because it doesn't like the jump in velocity when the spindle sim orients. The average spindle speed never goes to zero.

PT10 - fix issue where a random little blank window would show up on the desktop. This would happen when you change screen resolution. It only happened after starting master the first time

Bug 11902 - RLX not erroring out when more than one gear active

Bug 13015 - engrave event with radial option does not display properly on LOOK screen

Bug 16764 - TMC - unable to open program unless 4th axis is enabled

Bug 16700 - In Lathe, Cycle turn event does extra passes when using depth per pass

Bug 16004 - Sub Rotate Z Axis does not have Z Finish Cut

Bug 16005 - Copy Rotate Z Axis does not copy over Z Finish Cut and does not use the correct toolpath

Bug 13724 - ignore CTS button press if CTS system is not enabled on the machine

Bug 1386 - depth per pass is missing from Search Edit

Bug 16400 - Put up appropriate error message when unsupported geometry is selected

Bug 5520 - don't update index angle windows in service code 505 if any flyout windows are out

Bug 16009 - Look screen and toolpath don't match

Bug 16266 - RLX - Copying a thread event from the clipboard results with wrong geometry

Bug 16442 - Sub and Copy Rotate not copying depth per pass correctly

Bug 16265 - For Irregular Pocket event, Z Finish Cut - Step over percentage does not take value more than 70

Bug 11902 - RLX does not error out when more than one gear is active

Bug 16010 - First Position Event does an extra move in A  
Bug 15983 - RUN STRAT button does not work properly  
PT10 - Z Pocket Floor Speed Incorrect  
Bug 15545 - RMX - Using 0 inc on Irreg profile depths results with Z plunging to 0 ABS unexpectedly  
Bug 14962 - Zig Zag Entry Not Working with Pocket  
Bug 14105 - KMX - Added 100 ms to MotionAllowed and NoSpeedLimit time delay numbers for MID 109.  
Bug 14103 - No Quill soft key in SC 123 for Switzerland machine 109  
PBI 10787 - BBSF - VMC creeps to destination issue  
Z EHW On or Off Option - Config Slave Software  
Add Z EHW option for Switzerland mill  
PT10 - RLX - fix bug where you cannot power-feed with the spindle in reverse. Fixed error in detection logic.  
Bug 16701 - Tool Group choice is not defaulting correctly

#### **Version 2.5.4**

##### **Bug Fixes:**

Added ability to abort out of Tool Path processing.  
Added software licensing for offline product.  
Bug 17453 - RLX when running with 8 tool turret, some features did not work properly such as TRAKing, auto coolant, door guard and spindle safety logic.  
Bug 17691 - Zig Zag entry toolpath is not being defined at the correct angle.  
Fixed issue where toolpath was using plunge entry instead of zig zag.

#### **Version 2.5.3**

##### **Bug Fixes:**

Fixed Cut Tolerance Value in Default Config File

#### **Version 2.5.2**

##### **Bug Fixes:**

Fixed Lathe 8 position servo turret faults when changing positions. Changed lathe Y axis

#### **Version 2.5.1**

##### **Bug Fixes:**

Changed threading timeout from 10 to 30 seconds for sake of 30120 machines threading at low rpm's.  
Fixed Low Hydraulic Fluid Pressure safety message is always flashing on 30120  
Updated DEFAULTS for Euro product ID's 91, 92, 93, and 94  
Fixed issue in DEFAULTS page with Rough Cut Tolerances with and without finish were swapped.  
Spindle speed 0 RPM warning message that comes up for Rect Pocket

#### **Version 2.5.0**

**New Features:**

Added support for TMC12 and TMC14 machines, including 12K and CTS options  
Added support for Hydraulic Turret on 30120 RLX  
Add CANCEL button in OPEN TEMP for machining centers  
Motion control errors are now being logged in the Fault Log  
MTConnect - Added service code 602 to allow user to select version of MT Connect protocol.  
Currently we support 1.4 and 1.5

**Bug Fixes:**

Z axis not moving to correct Z SAFETY height when START AT is used  
Fixed issue where performing a POWER FEED with an ATC tool without a library # would result with the Z moving unexpectedly  
Switching between undefined tool to Library tool would result with tool offset not being applied correctly.  
Fixed issue where 30120 machines would automatically default to have hydraulic turret enabled the first time it was turned on  
RUN, START AT does not run part at the correct fixture location  
Fixed issue where a following error fault may occur when attempting to TRAK the A axis  
Added another decimal place for the Scale Feature  
Fixed scenarios where Tool by Tool was not running in the correct order  
Fixed scenario where DRO features such as Power Feed would cause unexpected rapid movement. This came about because it was trying to comp the previous tools offset, and so we changed the way that our system handles tools with no offsets defined for lathe  
2 axis irregular profile is not prompting for CHECK Z and crashing into part  
Running a circle pocket with no finish cut defined resulted with finish tool change  
When Multiple fixtures is turned ON, Run Start at does not goto the correct Z height  
Fixed issue with starting in the middle of a program that included SUB PART would result with starting at the beginning of the program  
Starting program at a SUB PART with Z SAFETY defined results with Z plunging down to an unexpected depth.  
Fixed issue where Verify software gives Tool # error when the first event is PAUSE  
Improved tapping depth accuracy on some machine models.  
Fixed scenario where system will run even though spindle is not running and code 311 is set to NO  
Fixed scenario where during Irregular Profile the Z will go to Z safety before finish cut instead of going to Z rapid  
Fixed issue with Run Time Estimate being way off when 4th axis event and FPT are both used  
Fixed issue where Face Mill Z finish cut would not have the correct chosen cutting method  
Fixed issue where a rotated pocket event using depth per pass would be missing passes  
Fixed pocket toolpath scenario where the finish tool was not using the correct stepover amount  
Fixed issue where Z finish cut was previously using the roughing RPM and feedrate  
Fixed issue where TMC fails to orient before a tool change.

**Version 2.4.0****New Features:**

Added support for CTS (Coolant through Spindle) and 12K options on TMC5, TMC7, TMC10

**Bug Fixes:**

User not seeing appropriate error message when attempting to Sub or Copy Repeat a 4th axis event

Verify Give Language Error Message Every Time You Run It Fixed service code screen so it now lists the 4th axis codes 502 and 506 when the 4th axis is enabled

In Pockets and Islands Finish RPM runs at roughing speed

Unable to run program due to corrupt TEMP274.DAT file residing on computer module

Fixed issue with Repeat Event not opening correct on Lathe

Fixed issue with home switch failures (stuck open or closed) not generating alerts

Fixed save and open temp for GCD and PTG (GCD now gets save as PTG in save temp)

During tapping in TMC Z axis would continue to creep beyond programmed depth and spindle never reversed.

Lathe Cycle Pause Then Chip Clear at Pause Terminates Program

Tool clamp sometimes unclamps briefly

Fixed issue where ATC came out when not expected

Corrupted Slave Log file with "Performance" messages

Z motion during tool change creeps slowly into position

On Lathe, machine comes to Oipm in middle of a Groove event

Z Fixture Offsets are not being opened properly

Fixed scenario where lathe toolpaths are completely wrong

Code 530 - Serial numbers sometimes disappearing

Toolpath Improperly Displays G2, G3 That Display & Run Correctly In Run Show Path

Lathe - Run, DRO not displaying X Movement - Show Path Displays it correctly

Lathe - PT4 File Loses Repeat Event Z Offset Value in PT10 Import

Lathe Stock Not Correct at Tailstock End in Verify

DCT - Does not work once computer name has been changed

Event not being drawn in look when it is created in program editor

Do One Changes DRO Display

Z Feed to Depth and stops on Circle Pocket

MTConnect option needs to be freely available for trial offline software

MT Connect Giving Incorrect Part Count on GCD File

Message log is constantly writing "GetCurrentUserProfileName()" to log

PK errors when Programming a Solid

Fault log appears to be logging fault messages multiple times

Intermittent timeout when starting a program. Changed "Start new program" data connection parameter to "send-always"

**Version 2.3.0****New Features:**

Added support for 4th axis option on all TMC machines

**Bug Fixes:**

Fixed save and open temp for GCD and PTG (GCD now gets save as PTG in save temp)

PK errors When Programming a Solid

Intermittent timeout when starting a program. Changed "Start new program" data connection parameter to "send-always"

Z Feed to Depth and stops on Circle Pocket

Serial number warning appears even though all serial numbers are entered  
code 510 - encoder check does not display correctly for 8K VMC machines  
code 510 – removed RESET button  
code 510 - show text for 4096 counts for 8K VMC machines  
Do One Changes DRO Display  
Event not being drawn in look when it is created in program editor  
DCT - Does not work once computer name has been changed  
Fault log appears to be logging fault messages multiple times  
Message log is constantly writing "GetCurrentUserProfileName()" to log

## **Version 2.2.0**

**Note – This update does not support the VMC2 machines or 4<sup>th</sup> axis hardware**

### **New Features:**

Added MT CONNECT as an option for all machines, and free for offline software.  
Tool by Tool tool path on all RMX controls. New REPEAT PART choice in SUB REPEAT event and RUN STRATEGY button in setup mode to choose TOOL BY TOOL or PART BY PART  
Option for Z finish cut tool path pattern on RMX  
New Default on RMX for Z SAFETY PLANE  
New Default on RLX for separate RPM vs SFM for drill and tap events  
PROG IN/OUT now allows user to view all files types

### **Bug Fixes:**

ZigZag Entry was not being saved with Circle Pockets and Spiral tool path.  
Z MOD value in Program Tools table did not change when assigned to ATC # 16.  
Z axis overshooting during entry moves on TMC machines  
Unexpected motion occurs when performing DO ONE and opening chuck guard (Euro)  
TRAKing slowly through a lathe groove event resulted with unexpected motion and errors  
Tool path issues when using a finish tool larger than the roughing tool  
Scenario where profile lead in/out arcs for finish cut were backwards  
Run – Start At – Z finish would error out when attempting to run.  
Facemill and Threadmill were not being drawn correctly in Verify screen  
Erroneous tool comp error when attempting 2 axis mill / arc combinations.  
Serial number warning appeared even though all serial numbers were entered. Added more logging in the event that this occurs again.  
Mill Indexer would index twice when performed within a Sub Repeat.

## **Version 2.0.1**

### **Bug Fixes:**

G81 and G82 Not working with Verify  
Fixed a rare case where Z axis would slowly creep into position on VMC7  
Offline software does not launch after recent Windows 10 update  
Delayed display of Error 263 by 1.5 seconds so that the user can identify if Spindle turned on properly  
Fixed scenario where machine would run an extra finish pass that was not defined  
Fixed issue where face mill makes too many passes

Made change so that Circle pocket does not skip tool change for finish cut  
Fixed scenario where Z axis plunges down in between multiple passes in Profile events  
Spindle fails to turn on after Tool Change and STOP or RSG are used  
Fixed some cases where Depth per pass not calculating correctly  
Fixed scenario where spindle did not turn back on after auto tool change when STOP was used

## **Version 2.0.0**

### **New Advanced Features:**

Added Pictures and Notes feature  
Added User Profiles to DEFAULTS page. Use code 600 to create & modify users, such that each user profile has its own set of defaults.

### **New Standard Features:**

First release to support VMC5, VMC7, and VMC10 machines  
Added Spiral Tool Path option for Circle Pocket event  
Added option to use finish / rest tool on Z finish cut for pockets and islands  
RPM and SFM are now both displayed simultaneously in DRO & RUN screens  
Added PTG file type - Save and open g code files along with tool offsets, as well as fixture offsets, pictures and notes.  
Added ENLARGE STOCK button within VERIFY – DEFINE STOCK page.  
For DPM mills, the BASE TOOL is no longer required to be set, so that the user can enter offsets using a tool measurement device  
CAPS LOCK button added to Keyboard  
Diagnostic Charting Tool available using service code 522  
Updated some EPA content for new features, as well as compressed the videos down to smaller file sizes.  
Added file validation tool for software updater.  
Added check for spindle run feedback, to ensure that the spindle is actually running when it's commanded to.

### **Bug Fixes:**

Fixed screen resolution on tool room mills so that it will display in .0005" resolution. Version 1.7.5 was displaying in .0001" resolution.  
Fixed scenario where if conrad was too big for programmed geometry, it would give an exception instead of a proper warning message.  
Fixed scenario where starting at an island pocket would result with the Z not retracting up to the rapid plane correctly.  
Fixed scenario where pocket with no rest passes would run the finish cut at the rough feedrate.  
Fixed issue with Verify not drawing repeat and tap events correctly.  
Fixed intermittent issue with software crashing to desktop while user is in PROG or RUN mode.  
Added SAVE TEMP files to code 1.  
Fixed scenario where using Run - Start At on GCD files would plunge the Z deeper than programmed.  
Added additional logging for intermittent issue where attempting to save a program results with an invalid filename error.  
Fixed issue on lathe turrets where OPEN TEMP would replace the current tool # status.  
Fixed issue where Verify would hang if a drill with zero diameter was used.

Fixed several issues regarding the run time estimator, including SFM / IPT and TAP times being way off. There are still some remaining bugs with this that will be addressed in a future version.

Fixed issue where ORDER OF PASSES was not being saved across programs.

Fixed issue where defining Depth Per Pass on Rectangular Profile would rapid instead of feed into part.

Fixed scenario on lathe where if programming a bore or cycle from backside of part, the axis would not retract back to rapid position correctly.

Fixed scenario where modifying a lathe's tool radius would incorrectly modify the current ABS position as well.

Fixed several cases where system would improperly detect an invalid feedrate within program, due to a finish cut, cutter comp, or other option being disabled.

Fixed scenario where starting in the middle of a program would result with a RUN OVER.

Fixed issue where after activating the AUX FUNCTION option, it would not be available until after reboot.

Fixed a very intermittent scenario where a POWER FEED, RETURN ABS ZERO, or CENTER would move the Z axis by the amount of the tool offset.

Fixed a very intermittent scenario where system would run the wrong program, such as perform a RETURN ABS ZERO instead of running the program in memory, or vice versa.

Fixed scenario where using Chip Clear and then jogging into the soft limit would result with a RUN OVER condition.

Fixed scenario where a profile with multiple passes was not rapiding up to the Z SAFETY plane correctly.

Fixed several other minor tool path related issues.

#### **Version 1.7.5**

##### **Bug Fixes:**

Bug 6139 - Fixed issue with Engrave Center tool path not centering itself correctly.

Add service code 601 to toggle splash screens. Splash screen will now default to TrakMT on all machine ID's.

Fixed issue with service code 326 not display error #'s greater than 250.

Fixed scenario where if pendant is disconnected from computer module while jogging, then motion will now stop immediately.

Fixed issue with Power Feed not running at correct feedrate when using certain SFM and IPT combinations.

Added more message logging for Power Feed.

Improved tapping accuracy on 30120RLX.

#### **Version 1.7.3**

##### **Bug Fixes:**

Bug 5526 - Max feedrate was being incorrectly capped at 250ipm on DPM2, DPM3, and DPM5 with EHW option.

Bug 5525 - Updated spindle timeout amount on 30120 to allow up to 25 seconds for spindle to get up to speed. This resolves the scenario of a fault 106 when attempting to run at high rpms.

#### **Version 1.7.2**

##### **Bug Fixes:**

Bug 4951 - In mill power feed, axis not running at correct feed with SFM and IPT defined.

Bug 4711 - EHW do not come on after SC316.

Bug 5483 - Powerfeed no longer works for more than one axis.

Bug 4293 - Software freezes during RUN with Math Help

### **Version 1.7.1**

#### **New Features added:**

1. Islands supported in DXF and Parasolid
2. Engraving - added orientation, center reference, angle, and mirror options
3. Helical Drill
4. INC SET and ABS SET for lathe conrad and chamfer
5. Keyboard and Calculator open and close with INFO buttons
6. Changed G-code editor search box

### **Version 1.6.20**

Fixed issue introduced in 1.6.19 with "What's New" button not playing the video correctly.

### **Version 1.6.19**

Fixed issue introduced in 1.6.17 where DEFAULTS would revert back to factory settings every time the control was restarted.

### **Version 1.6.17**

#### **New Features**

Consolidated mill and lathe software into one version

Added "What's New" button

Added support for 30120 RLX, machine ID 108.

Added DEPTH PER PASS as an OPTION and DEFAULT for all pocket, profile, and island events

Added support for more gcodes (see programming manual for more details):

Mill CAM – G06, G07

Mill GCD – G73, G84

Lathe CAM – G73, G76, G81, G82, G92

Lathe GCD - now available

Added service code 522 for Diagnostic Charting Tool

Added Z RAPID as a DEFAULT

Added ability on lathe to thread in the Z positive direction. Note that the Z RAPID value will be on the left side of the part, and precautions should be taken accordingly.

Added ability to collapse the Program Tools and Tool Library sections of the TOOL TABLE.

#### **Bug Fixes**

Fixed issue in lathe Power Feed where user was unable to select IPR when spindle speed is set to SFM.

Fixed issue where tool table is unable to open / close while running program in SFM or IPR.

Fixed scenario where using SHOW PATH during THREAD REPAIR would cause an OPENGL error.

Fixed issue with THREAD REPAIR not prompting user to run program again.

Fixed lathe issue with X HOME and Z HOME would sometimes revert back to default after software update.

Fixed issue found on lathe where if you were turning EHW at the same time that you set the taper amount in DO ONE, the Z would move back and forth a small amount instead of executing the specified taper amount.



Fixed issue found where if you opened the tool table on top of a flashing safety message, and then attempted to scroll the tool table, it would result with a Windows blue screen displaying APC\_INDEX\_MISMATCH.

Fixed issue on bedmills where GO TO would incorrectly display Z axis as a possible target.

Fixed issue where software would not update correctly when computer name was changed.

Fixed scenario where after exiting a program RUN, and then attempting either a POWER FEED, RETURN ABS 0, or CENTER, it was possible for the Z axis to move unexpectedly by the amount of the tool offset.

Fixed several intermittent issues in DRO where an axis may disappear, freeze, or not display correctly.

Increased calibration tolerance from 1% to 2%

Fixed issues with clicking or scrolling on Tool Table would cause it to not draw on screen properly.

Fixed issue with service codes 122 and 131 not working correctly on mills.

Fixed issue with DIA MOD not having any effect when running GCD programs on mill.

Fixed issue with starting at a pass # of a profile would result with pass depths not being correct.

Fixed issue with COPY DRILL TO TAP converting INC values to ABS.

Fixed multiple scenarios found where if you start at a Pass # of a pocket, the Z would not rapid to the correct height.

Fixed intermittent scenario where attempting to go into the Verify screen would result with the software minimizing itself out of view.

Fixed service code 326 to support newer flashing messages on mill and lathe.

Fixed scenario in lathe CYCLE event where finish tool would incorrectly use the radius of the roughing tool.

Fixed specific scenario found with lathe GROOVE event where toolpath was not correct.

#### **Euro specific bug fixes**

Added support for PMER F90 RMX and 780 RLX, machine ID's 118 and 119.

Fixed scenario where error 256 Max RPM exceeded while running burn-in program.

Fixed several issues with service code 400 not working correctly on machines and offline.

Fixed issue with OPEN TEMP causing an unintended motion fault.