

# Parameters Dictionary

Dictionary of parameters in Stuga machines


## Contents



Comments

Stuga Parameter Dictionary						
Parameter Name	Description	Software	Machine	Value Range	Default value	Notes
loadOffsetX	Distance the gripper has to move after measuring finished to clear the grip finger.		Autoflow			See Autoflow Loading Offset Parameters
stopCylindertozeroX	Distance from zero to the stop cylinder		Autoflow			See Autoflow Loading Offset Parameters
infeedToZeroX	Distance from Zero to the material side of the loading fence		Autoflow			See Autoflow Loading Offset Parameters
measureStartPosX	GX Position to start length measuring		Autoflow			See Autoflow Loading Offset Parameters
useGripRelease	Switch on sensor to detect if gripper is off	winMulti 3.63.0.0	Autoflow	0 or 1	0	
useSawInfeedTopToggle	set true to toggle off / on saw infeed top clamp on last cut	winMulti 3.64.0.0	Autoflow	0 or 1	0	Requested by GF at Thermaseal A2008
ejectStrokeLength	Distance that eject cylinder pulls profile out of machine	winMulti	Autoflow	0-600	600	<a href="https://stuga.dokit.app/wiki/TB0247_Safety_Gate_Distances_c">https://stuga.dokit.app/wiki/TB0247_Safety_Gate_Distances_c</a>
outfeedSize	Size of outfeed table from where a square-ended bar is ejected to to the safety gate	winMulti	Autoflow	1850-6000	2900	<a href="https://stuga.dokit.app/wiki/TB0247_Safety_Gate_Distances_c">https://stuga.dokit.app/wiki/TB0247_Safety_Gate_Distances_c</a>
parkpositionR	Park position in degrees for R axis on power down	winMulti 3.72.0.0	Autoflow	0-360	0	Requested by GF at Glazerite A2009
shortestPieceAvoidEnd	Avoid using pieces shorter than this at end of bar. Optimiser forces a mechanical prep at the end depending on sawFeedDir. Switch off with 0.	winMulti 3.75.0.0	All	0-1000	0	DISABLED form 4.13.0.0 because optimising adversely affected
useUnclampSawOnReverse	default True. Switch off side and top saw clamps on autoflow on x axis reversing	winMulti 3.73.0.0	Autoflow	0 or 1	1	Requested by GF at Thermaseal A2008
firstCutOverHeight	the extra height added for first cut on the bar. Stops the first trim cut from hanging around due to profile tape not cutting properly	winMulti 3.79.0.0	Autoflow	0 to 50	0	tested using fixed 50 at Thermaseal A2008, then added as param Framemaker visit A2006
sawBacklashMove	Use a backlash compensation	winMulti 3.91	Autoflow	0 or 1		Not implemented or used
useBlowerForEndPiece	Utilises a blower to remove the last tricky offcut on Autoflow	winMulti 3.95.0.0	Autoflow	0 or 1	0	Needs a blower upgrade fitted to ensure enough air flow (R001)
throwawayChunkSize	defines piece size that offcuts < throwaway are chopped into until smallest grip is left	winMulti 3.95.0.0	Autoflow	25-90	60	Should be defined by distance between saw blade and rear saw jam ups
houseKeepingStock	Days to retain bars used data	winMulti 3.96.0.0	All	7-720	365	<a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and_Sm">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and_Sm</a>
houseKeepingPieces	Days to retain pieces cut data	winMulti 3.96.0.0	All	7-180	62	
houseKeepingRunning	Days to retain efficiency data	winMulti 3.96.0.0	All	7-180	62	
disableOfConveyor	Disable Outfeed Conveyor on Autoflow Mk A machines	winMulti 3.97.0.0	Autoflow MkA	0 or 1	0	First done at Astraframe A2002. Machine works better without
houseKeepingEntryLog	Days to retain detailed io and axis data	winMulti 3.103.0.0	All	Jan-30		
dbTickInterval	Sample frequency for detailed diagnostic data	winMulti 3.103.0.0	All	100 to 2000	200	May need to tweak if PC is slow or USB connection slow
dbDumpInterval	sample frequency to dump data to database	winMulti 3.103.0.0	All	1000 to 50000	5000	May need to tweak if database / network connection is slow
useEntryLogging	Switch on logging of detailed io and axis data	winMulti 3.103.0.0	All	0 or 1	0	
useToolBreakDetect	Switch on tool break detect feature	winMulti 3.103.0.0	ZX	0 or 1	0	Tool break detect only works on ultrasonic sensor and v3.30 m
toolBreakRange	range +/- for detection window of tool	winMulti 3.103.0.0	ZX	1 to 10	5	
toolBreakSpeed	Speed of R axis on detection	winMulti 3.103.0.0	ZX	10 to 200	100	
skipThrowawayMitreCut	Skip the leading mitre cut on last offcut	winMulti 4.4.0.0	Autoflow	0 or 1	0	Needed on A2007 because gripper arm on top of profile under blockages
reverseOptimisationOrder	Reverse optimisation order	winMulti 4.7.0.0	All	0 or 1	0	reflects the piece preps and gaps as sent to optimiser, then rear order. Looking to try to place short pieces at the start of the bar. Microline machines, as short bits at end create a big problem in
debugStepMode	Debugging mode forcing a start to be pressed after each saw operation.	winMulti 4.10.0.0	Autoflow	0 or 1	0	Intention is to extend this with different modes in future, perhaps recipe commands, etc
throwaway	smallest waste piece that is able to be ejected onto the outfeed table	winMulti and winSaw	Autoflow and Saw	200 to 260mm	260	See <a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and</a>
chutewidth	The largest size waste lump that would be pushed down the chute	winMulti and winSaw	Autoflow and Saw	120mm to 150mm	130	See <a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and</a>
smallestgrip	the smallest waste piece at the very end of the bar that the clamping system (infeed side) is able to hold onto whilst a square cut takes place	winMulti and winSaw	Autoflow and Saw	80-120mm	100	See <a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and</a>
optimiserYieldLimit	This will retest optimiser with increasing thresholds to get best yield	winMulti 4.19.0.0	All	0-95	0	Leave at 0 to disable

use449ForStdLength	Use length given in 449 file as standard length	winMulti 4.23.0.0	All	0 or 1	0	Relies on 449 file having ONLY std lengths in, not offcuts
useMachineUpload	regular upload of machine status data for logging by front end	winMulti 4.24.0.0	All	0 or 1	0	Needs Mint v3.38
offcutShiftMin	lower limit to kick in offcut shift to start	winMulti 4.26.0.0	Microline only	0 to 1000	0	
offcutShiftMax	upper limit to kick in offcut shift to start	winMulti 4.26.0.0	Microline only	0 to 1000	0	
mlShortPieceSaveBarEnd	At bar end on Microline, position to move to to allow CLSOP to get under final piece	winMulti 4.29.0.0	Microline only	0 to 1200	0	0 means do not use. See CC-013479. Video available of issue
decelDivisorGlobal	Number to divide actual accel rate by at end of slots - helps stop the slot end from overshooting and giving poor finish	winMulti 4.30.0.0	All	1 to 10	10	Implemented as a permanent fixture on Z041 Polyframe, but tl be modified for performance reasons. Can also be modified loc speed command - decelDivisor=nn
phaseScaling	scaling the feedback from the phase monitor module	winMulti 4.38.0.0	Ring	0.1 to 1	1	
minYNotchResidual	Minimum residual amount allowed for Y notches on Autoflow	winMulti 4.63.0.0	Autoflow	5 to 50	20	Following issues on CC-014201 Astraframe where notch too d
psInfeedRollerLift	Delay between infeed roller lifting and infeed belt starting	winMulti 4.65.0.0	Mk3 Infeed only	0 to 2000	1000	As recommended by MV 04/12/15
autoloadLength	Lengths > autoloadingLength will allow standalone saw autoloading to work, else load manually to backfence	winMulti 4.65.0.0	Standalone Saw Mk5 Only	4500-6000	5500	
yNotchStartGap	Gap distance at start of bar for Y notching	winMulti 4.65.0.0	All	0-350	270	On Microline this beeds updated W_ESYF and W_ESYR mnd fil for this 'y'. Used instead of 's+s' or 's+s+s', which were a work See YNotchStartGap Parameter
gripPassPos	G axis position when ejecting profile to transfer table	winMulti 4.65.0.0	Mk3 Outfeed only	0-100	75	
secondSawHeight	Height of middle saw cut out sensor if fitted	winMulti 4.70.0.0	Saw Mk5	0-100	0	Used as the tipping point for the saw cut height when set on the feature is switched off
overLengthMax	amount that optimising system will allow an overlength before modifying stdLength for all following lengths	winMulti 4.79.0.0	Measuring infeeds	0-100	25	If set too low, optimiser is able to reoptimise all bar lengths to ( to needing fewer bars on infeed table. This can lead to confusio
optimiserVersion	External optimiser version	winMulti 4.79.0.0	All	1 to 2	1	1=std; 2=2016 version (requires optim2016.exe)
useOffcutsDiagnostics	log movement of offcuts in diagnostic file	winMulti 4.79.2.0	All	0 or 1	0	Only switch on if tracing problems, as it slows down the loading lots of offcuts
flowlineAllInOne	Switches oin second saw screen	winMulti 5.0.0.0	Flowline	0 or 1	0	Activates control of saw side from one TwinCAT3 PC. Separate because we could have Mk3, ZX3 or ZX4 with flowlineAllInOnr
psZTurret	Z turret pulse delay (ms)	winMulti 5.0.0.6	Flowline	500-4000	1000	
frontToBackVersion	Definition of interface between front end and back end controller	winMulti 5.0.0.7	All	1 to 3	1	Changes needed for flowlineAllInOne. This parameter keeps cc versions. Detail of changes is in following sheets. 3 - uses ph parameters for output change - requires tcMulti3.4 REMOVED IN V6 as the front end reads the back end version
useUnderRoller	useUnderRollerFlag - activates checking of underroller home sensors on X return	winMulti 5.0.0.7	ZX	0 or 1	1	Only used on ZX
useComponentEntry	activates component entry screen on manual input	winMulti 5.0.0.8	All	0 or 1	0	Specifically designed for BPS A2015
transferType	Transfert Table type	winMulti 5.2.7.0	Beckhoff control	0-2	0	0-LiftSlide; 1-LiftLoad; 2-Mk6
componentDirectory	Directory used to read componet information from	winMulti 5.3.0.0	All	text	c:\components\	
invert300Hz	Invert the 300Hz / 50Hz output	winMulti 5.4.4.0	All	0 or 1	0	Need to invert the output for Delta Inverters - set to 1
allWasteAtStart	Force all waste < minOffcut to be cut at start of bar	winMulti 5.5.0.0	Standalone saw only	0 or 1	0	cut into throwawayChunkSize pieces.
showCutPieceList	displays a windows form with the last n pieces on	winMulti 5.7.0.0	All	0-10	0	Useful at BPS as they have no printer and were using the Bar E
usePLCEstop	Switches on compatibility with PLC TwinSafe safety systems	winMulti 5.8.0.0	TwinCAT3 only	0 or 1	0	Configuration parameter - critical
globalYDepthAdjustment	Value to offset ALL Y notch depths by to overcome differences in 3rd Party software output and actual welder values	winMulti 5.9.1.0	All	"-5 to 5"	0	
liftingPusher	Switches on lifting pusher capability	winMulti 5.9.1.0	a	0 or 1	0	
useBarQueueIdentifier	Switches on Bar identifier holes	winMulti 5.13.0.0	Flowline	0 or 1	0	Uses IDENTIFY mnd file to create 1, 2 or 3 holes in each bar to
useOnlyStdLengths	Forces machine to measure and use only standard lengths. Measuring system just used to check	winMulti 5.14.5.0	All	0 or 1	0	Used at BPS where they never use offcuts
useReverseArrowHeads	Reverse order of arrow head cutting so that chute is at front of machine on final cut	winMulti 5.14.7.0	All	0 or 1	0	Changes direction of small offcut triangles, helps with offcut di
groupOpFootprint	max area that the grouping can take place	winMulti 5.14.9.0	All	0 to 6500	1000	Equivalent to max reversing move on grouping.
groupOpNeighbour	max distance to nearest similar op	winMulti 5.14.9.0	All	0 to 1000	0	if closer than this distance it will group the operations. Set to 0
useInfeedOnLargeOffcut	allows large offcut to be removed from infeed on standalone saw type machine	winMulti 5.14.15.0	Standalone Saw	0 or 1	0	Emulates old style saw feature "hugeOffcutReversePusher"
frameCountSource	Select the source of the data that feeds the frame count	winMulti 6.0.0.0	All	0-2	0	0=off; 1=SlotNumber; 2=trimmed id field
pieceBitmapIdentifier	Identifier lable on the piece picture in the bar queue	winMulti 6.0.0.0	All	0-3	0	0=off; 1=PieceNumber; 2=SlotNo; 3=Trimmed Id field
infeedScreenType	Resolution of infeed screen	winMulti 6.0.0.0	All	0-1	0	0=std; 1=WideHD
sawSYType	SY axis type	winMulti 6.0.0.0	All	0-2	0	0=No SY Axis; 1=Full range, as autoflow; 2=Y-Drive about centi
inverterOkHigh	State of inverter OK signal	winMulti 5.16.0.0	All	0 or 1	0	0=Low is ok, 1= high is OK

safetyCctActiveLow	Invert the TwinSAFE PLC safety input to make it active low	winMulti 5.18.0.0	TwinSAFE systems	0 or 1	0	0 = Default, reads high signal when safety is reset. 1 = Safety circuit reads high when circuit is broken This param TwinSAFE machines have an inverted safety input in the twins: easy way around the issue (S094, Z049) This is not an easy sol other reasons, the output needs to be active high, so ES circuit Parameter not used v6 above
ps_PopUp	Delay for popup cylinders in ms	winMulti 6.0.0.0	ZX5	0 to 1000	250	
ps_DDClampOn	Delay for datum drill clamp cylinder On in ms	winMulti 6.0.0.0	ZX5	0 to 1000	500	
ps_DDClampOff	Delay for datum drill clamp cylinder Off in ms	winMulti 6.0.0.0	ZX5	0 to 1000	250	
lengthMeasureScale	Scaling for the length measuring laser	winMulti 6.0.0.0	ZX5	-1 to 1	-0.176829174	Scaling factor for the analogue feedback from the laser in mm.
lengthMeasureOffset	Offset for the length measuring laser	winMulti 6.0.0.0	ZX5	5000 to 7000	6294.54	Offset for laser position in mm. Adjust to correct offcut length laser is +/- 10mm
stdLenSensor1Pos	Position of the std Length sensor 1 (shorter)	6.3.0.0	ZX5	4000 to 7000	5950	
stdLenSensor2Pos	Position of the std Length sensor 2 (longer)	6.3.0.0	ZX5	4000 to 7000	6450	
sawDepthOffsetY**	Depth offset for Y notches using saw head.	6.3.4.0	ZX5	-1 to 1	0	Allows tweaking of right and left Y notches if they are not the s offset affect both left and right. The fact that this has to be mox the blade centre line is not in line with the SR axis of rotation s needed.
ps_pushToBfDrill	Channel B push to backfence for drill	6.3.4.0	ZX5	0 to 6000	3000	
ps_pushToBfMod*	Push to backfence time	6.3.4.0	ZX5	0 to 6000	3000	
ps_crankOverrun*	Crank overrun after sensor seen	6.3.4.0	ZX5	0 to 5000	100	Allows overrun where sensor comes on before end of crank tra
ps_popUpFilter*	Time filter for dog slot sensors	6.3.4.0	ZX5	0 to 1000	100	Used to filter spurious signals, sensor must be constantly activ time before active
ps_drillPIDDown	Timeout for drill plunge to out sensor before error	6.3.4.0	ZX5	0 to 10000	5000	
ps_blowerPulse*	Pulse time for blower in this module	6.3.4.0	ZX5	0 to 10000	500	
ps_popUpOut*	Time for popup to activate	6.3.4.0	ZX5	0 to 1000	250	Special case for Datum Drill - has longer popups
ps_popUpDown*	Time for popup to deactivate	6.3.4.0	ZX5	0 to 1000	250	
ps_popUpEnd*	Time delay for "end" pop up to activate	6.3.4.0	ZX5	0 to 5000	0	Module D is 2000 by default to allow bar to clear first dog befo
ps_rollerDrop*	Time for rollers to drop	6.3.4.0	ZX5	0 to 2000	0	Module A is 500 by default
ps_gripOn*	Gripper teeth on timeout before teeth out error	6.3.4.0	ZX5	0 to 2000	1000	
ps_gripOff*	Delay allowed for gripper assembly off	6.3.4.0	ZX5	0 to 2000	1000	
ps_gripHeight*	Deley for gripper height to reach profile	6.3.4.0	ZX5	0 to 5000	2000	
ps_chanLockOn*	Delay to allow channel locking device to activate	6.3.4.0	ZX5	0 to 1000	250	
ps_chanLockOffOn*	Time between channel off and lock on	6.3.4.0	ZX5	0 to 1000	50	Increase to create a bigger gap for the saw infeed Module E che
ps_crankTimeout	Timeout for all cranks for home / out sensor made	6.3.4.0	ZX5	0 to 10000	5000	
qDrawBarId	Adds the bar ID to the bar picture instead of bar length	6.3.6.0	All	0 or 1	0	Helps track and diagnose bar queueing issues
widthMeasureScale	Scaling for the width measuring	6.3.10.0	ZX5	-1 to 1	-0.030534	Scaling factor for the analogue feedback from the width measu your peril!
widthMeasureOffset	Offset for the width measuring	6.3.10.0	ZX5	-500 to 500	128.7	Offset forward in mm. Adjust to correct width readings. Accur 0.1mm. Beware of profile crushing
useMitreOnStartWaste	Use a mitre cut, not square cut on waste at start of bar	6.3.10.0	All	0 or 1	1	Stops offcut waste jamming bar push at beginning
ps_InvAccelTime50Hz	Delay between motor accel start and plunge start for 50Hz spindle	6.3.11.0	All	0 to 2000	500	enable reduction in acceleration pause before plunging. On pr is immediate (effectively zero). It is possible to accelerate durin but care must be taken to ensure the tool is up to speed before
ps_InvAccelTime300Hz	Delay between motor accel start and plunge start for 300Hz spindle	6.3.11.0	All	0 to 2000	200	enable reduction in acceleration pause before plunging. On pr is immediate (effectively zero). It is possible to accelerate durin but care must be taken to ensure the tool is up to speed before
widthMeasureMode	Mode of operation for width measuring	6.3.14.0	ZX	0 to 6	0	Width measuring mode. 0=off; 1=profile recognition; 2=profile and tolerance
zTurretSawType	Turrect Type used	6.3.20.0	All	0 or 1	0	0=Stuga; 1=Somatec
productionRecipients	List of email addresses to send production data to	6.3.46.0	All	text	none	Sperated by semicolon
productionEmailTime	Time of day to send production email for previous shift	6.3.46.0	All	text	09:00:00	
emailServer	Email server used to send	6.3.47.0	All	text	smtp.office365.com	}
emailUser	Email username on server	6.3.47.0	All	text	[[1]]	}
emailPassword	Email user password on server	6.3.47.0	All	text	Wuzo4848	} These parameters are the standard using the Stuga Email Ser
emailPort	Email port number	6.3.47.0	All	0 to 999	587	}
emailConnectType	Email connection type on server	6.3.47.0	All	0 to 4	1	} 0=Direct SSL; 1=SSLAuto; 2=Normal; 3=StartTLS; 4=TryTLS
infeedLaserRemeasure	Length measured by laser below which the rear sensors are used.	6.3.57.0	ZX5	0 to 7500	2000	Helps mismeasures on smaller size offcuts
reverseGripHoles	Reverse the hole order on grip location holes	6.3.58.0	ZX5	0 or 1	0	Overcomes problem with Liniar profile with a curved edge nea 0= rear then front; 1= front then rear
maxOffsetFromCentreline	Maximum allowable offset for a Y notch from the centreline	6.3.61.0	ZX5	0 to 20	20	This is a limitation on Ydrive - it can only range +/-20mm from t
remakesPassword	Separate Password for remakes screen	6.3.61.0	All	text	none	none will disable feature
yGripHolePosition	Gripper hole position in Y axis on ZX5 gripper	6.3.69.0	ZX5	0 to 40	15	Needs to be 12 on Z066
useInverterAtZero	Spindle off routing waits for X308 Inverter at Zero before releasing spindle relay	6.4.1.0	All	0 or 1	0	Needs Yaskawa inverter fitted. Will cause longer delay if Zero i
useBarcodeReader	Switches on barcode reading function for Ecoline	6.4.1.1	Ecoline	0 or 1	0	Puts input window at bottom centre of screen
ecoGripperDepth	Required depth of gripper into profile	6.4.9.0	Ecoline	-30 to -10	-18	
ecoGripperToSpindle	Distange from gripping point to spindle centreline	6.4.9.0	Ecoline	10 to 30	25	
ecoInfeedOverrun	Distance that infeed loader pushes profile past zero	6.4.9.0	Ecoline	20 to 50	40	

ecoLaserAdjust	Adjustment for laser position	6.4.9.0	Ecoline	0 to 10	6.2	
maxLoadLength	Scales the bars on screen to maximum load length	6.4.10.0	All	2000 to 6600	6500	Originally, scaling fixed to a 6500mm bar, but changed to allow shorter pieces to give a better operator view
ecoSkipVPos	Illegal area at each end of piece where V notch cannot happen	6.4.10.0	Ecoline	100 to 400	300	
ecoGripperLength	Length of gripper - used to ensure a prep does not enter the gripper area	6.4.10.0	Ecoline	0 to 100	80	System automatically adds on depth created by mitre and G ax
bladeCenAdjust	tweak the difference between \f and f/ when there is a difference in bladeOffset/ and bladeOffset\	6.4.11.0	ZX	-3 to +3	0	See bladeCenAdjust Parameter
ecoMitreAdjust	Adjustment for difference of x position of operations on ecoline - mitre compared to square end cut	6.4.15.0	Ecoline	-5 to +5	0	
ecoArrowAdjust	Adjustment for difference of x position of operations on ecoline - arrowhead compared to square end cut	6.4.15.0	Ecoline	-5 to +5	0	
isAncilSaw	Disables and enables parameters specific to an ancillary or cill saw	6.4.20.0	Sawing Modules	0 or 1	0	
transferMHControl	switches control of transfer table to MH side	6.4.32.0	Flowline / ZX	0 or 1	0	take care with stoppableOutputs and alarms as any transfer or rerouted see <a href="https://stuga.dokit.app/wiki/Changing_Control_of_Transfer">https://stuga.dokit.app/wiki/Changing_Control_of_Transfer</a>
exhausterVNotch	switches on/off control of extractor when VMOT running	6.4.32.0	Flowline / ZX	0 or 1	1	
throwawayMinChunk	provide a "no-go" range for chunks cut to prevent lodging in backfence	6.4.32.0	Sawing	0-150	100	See <a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and</a>
throwawayMaxChunk	provide a "no-go" range for chunks cut to prevent lodging in backfence	6.4.32.0	Sawing	50-150	100	See <a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and</a>
throwawayEjectAtStart	ejects throwaway pieces at start of the bar	6.4.33.0	Sawing	0 or 1	0	See <a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and</a>
invertSlowdownInput	Invert the input for slowing down the main axis (pusher on saw) when a gate open or lightbeam broken	6.4.35.0	Sawing	0 or 1	0	Some machines are wired differently - this allows compatibility
chuteWidthAtStart	allows a longer waste cut at the start (possible on Autoflows)	6.4.37.0	Autoflows	0 or 1	0	See <a href="https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and">https://stuga.dokit.app/wiki/Throwaway_Chutewidth_and</a>
psToolRetract	timer used when tool is switched off if tool home input is non-existent or switched off	6.4.39.0	All			
screenMainX	Parameters for screen position and size	6.4.40.0	All		-1	
screenMainY						
screenMainH						
screenMainW						
screenSawX						
screenSawY						
screenSawH						
screenSawW						
minWheelieLength	Minimum saw pusher position for activation of a "wheelie trap" move	6.4.45.0	ZX5	500 to 6000	2000	See Wheelie Trap on ZX5
ps_WheelToClamp	Length of time (ms) that infeed wheel rotates for when pulling into machine	6.4.59.0	ZX5	0 to 4000	2000	Changes depending on the distance of the infeed table from the
useAngleNotCharacter	Use angle, not the prep character when deciding on angles	6.4.65.0 to 6.4.98.2	All	0 or 1	0	Use the actual angle sent, not the / character on variable angle BM bug of the wrong ^  ...Changed to a profile specific parameter in 6.4.98.4 A) <a href="https://stuga.dokit.app/wiki/Cutting_Incorrect_Profile">https://stuga.dokit.app/wiki/Cutting_Incorrect_Profile</a>
gripperType	Gripper Type	6.4.69.0	Flowline	0 or 1	0	0 - Standard 1 - Trueloc
overOptimise	Optimise error cushion	6.4.70.0	All	0 to 40	2	See overOptimising issue
useSXGripCheck	Use the grip check pullback on Saw side loading	6.4.84.0	ZX5 / Toothed Gripper	0 or 1	1	On ZX5s without a channel bar (up to Z064) the gripper is somewhat properly so this feature to test if the gripper is engaged can be
nosePushBack	Distance of Push back on ZX5 toothed grip loading	6.4.84.0	ZX5 / Toothed Gripper	0 to 10	5	This addition of a 5mm push back in 6.3065 should help stabilise positions, but on some machines, this has caused a problem. See the loading cycle work pre- 6.3065 method of pushing up to the
ringType	Ring type parameter to control tooling sequence	6.4.91.0	Machining Centres	-1 to 5	-1	rtDefault = -1 - sets by default, changed on first loading rtMk3 = 0 [one output per spindle motor and plunge together] rtMk3DP = 1 [one output per spindle motor and plunge together] rtZX = 2 [two outputs per spindle - motor first and plunge after] rtAutoflow = 3 [two outputs per spindle - motor first and plunge] rtTwoHeadNoPlunge = 4 [No plunge, motor stays on throughout] rtThreeHead90 = 5 [Not used]
infeedBeamMode	Control mode for an infeed light beam	6.4.91.0	ZX5	0 to 2	0	Fitted to Z084 for compliance see ZX5 Infeed Safety Additions 2021
outfeedBeamMode	Control mode for an outfeed light beam	6.4.91.0	ZX5	0 to 2	0	Fitted to Z084 for compliance see ZX5 Infeed Safety Additions 2021
gripHoleSlotMode	Toothed gripper hole slotting mode	6.4.93.0	Toothed Gripper	0 to 2	0	Allows elongation of the toothed gripper holes on all profiles, or This helps the gripper pins locate if a profile has rotated slightly Slotting modes 0 - off 1 - On profiles where the flip parameter = 'D' 2 - On all Profiles
gripHoleSlotSize	Toothed gripper hole slot size	6.4.93.0	Toothed Gripper	-5 to 5	0	Movement of Y axis to produce gripper slot in mm Can be + or - A negative value will elongate the hole towards the front of the most common as the profiles tend to roll back A positive value will elongate holes towards rear If elongation in both directions is needed, alter the yGripHoleP and elongate +/- from that position See Elongating Toothed Gripper Hole Size
canSkipInitialise	Flag software to skip the initialise function after estop and continue from where program was stopped	6.4.96.0	All Beckhoff TC3controls	0 or 1	0	Switch on to improve recovery speed after an estop. This parameter needed following machine compliance upgrade wired into estop circuit

ps_ejectpushMH	Pause for eject push on MH side.	6.5.6.0	Mk3 Flowline all-in-one	0 to 5000	3500	This followed discovery of a bug which means MH side and saw This delay is now used solely for MH side ejecting if there is no
outfeedType	Type of outfeed table	6.5.7.0	All	0 to 2	0	0-Standard 1 - Sturtz 2 - Soenen
opBlipOn	Time for On "Blip" to warn operator that machine is idle	6.5.8.0	All	0 to 1000	0	Set to zero to disable
opBlipOff	Time between "Blips" to warn operator that machine is idle	6.5.8.0	All	0 to 10000	0	Set to zero to disable
ejPosBladeClear	Servo eject position to clear blade	6.5.12.0	JX Axis	0 to 1000	125	Used when the eject is replaced with a servo drive for individual
ejPosLabel1	Servo eject position for 1st Label application	6.5.12.0	JX Axis	0 to 1000	600	Used when the eject is replaced with a servo drive for individual
ejPosLabel2	Servo eject position for 2nd Label application	6.5.12.0	JX Axis	0 to 1000	700	Used when the eject is replaced with a servo drive for individual
ejPosOut	Servo eject position to eject out	6.5.12.0	JX Axis	0 to 1000	750	Used when the eject is replaced with a servo drive for individual
ejSpeed	Servo Eject Speed	6.5.12.0	JX Axis	0 to 2000	750	Used when the eject is replaced with a servo drive for individual
measureSensorPos1	Autoflow gripper measure sensor 1 position	6.5.13.0	Autoflow Mk4	0 to 2000	1500	Distance from gripper zero (nose pressed in) to sensor. Used to
measureSensorPos2	Autoflow gripper measure sensor 2 position	6.5.13.0	Autoflow Mk4	0 to 2000	1500	more accurately
useFirstConveyorForReinforced	Determines which conveyor to output reinforced pieces	6.5.13.0	Autoflow Mk4 with dual conveyor system	0 or 1	1	
finalCutOffset	offset to apply to the final cut of a bar	6.5.13.0	All	-1 to 1	0	Applied on a cut less than 150mm from end, as this reflects cut go of the profile and leaves the clamping for cutting to the outf predictable error that can be offset with this value  ...Only use this parameter if the error is consistent across many profiles
usePopupBackfenceZX5	use the popup cylinders for a backfence on MH outfeed	6.5.15.0	ZX5	0 or 1	0	Original software used the popups on Crank C as the backfence they were sometimes damaged by a wayward profile, ripping or Following an update on Z083 Window Warehouse, some bars t indicating a slightly different setup or alignment. This parameter to the original process
vsOffsetLead	Offset value for a vs profile for the vs tilted lead cut of the mitre pair [ \ ]	6.5.22.0	Autoflow VS	-5 to 5	0	Allows a simple offset for inconsistencies with VS tilt cuts See <a href="https://stugaltd.monday.com/boards/292796285/pulses/4385">https://stugaltd.monday.com/boards/292796285/pulses/4385</a>
vsOffsetTail	Offset value for a vs profile for the vs tilted tail cut of the mitre pair [ / ]	6.5.22.0	Autoflow VS	-5 to 5	0	 ...Should always try to solve with blade spacers first
vsTiltTiltGap	Additional Gap added between two VS Square / square cuts with tilt	6.5.23.0	Autoflow VS	0 to 10	3	Needed if the above vsOffset parameters are used which could situation, putting the cuts in the wrong order on the bar length exceed the maximum vsOffset
ps_InfeedConvDecelTime	Timer for the Infeed Conveyor decel time	6.5.27.0	Autoflow Mk4	0 to 5000	5000	On Sturtz infeed, there is a electro-mechanical brake on the n time from switching off the inverter output to application of th issues when the inverter decel timer has not been set correctly because the decel of the conveyor is 0.5 seconds which is too l
reminderText	Text to display at reminderTime	6.5.28.1	All	text		
reminderTime1	1st reminder time	6.5.28.1	All	00:00:00-23:59:59	12:30:00	See Setting Cleaning Reminders on winMulti software
reminderTime2	2nd reminder time				16:30:00	
invertChannelLock	Invert the channel lock on saw loading	6.6.2.0	Flowlines / ZX	0 or 1	1	By default, the lock should be inverted but many machine are n the output sense to be inverted
holdOptimiserUntilLoaded	Hold optimiser from starting until the entire batch is loaded	6.7.0.0	All	0 or 1	1	Set to True to solve issue when crashing on loading with batch ' separate profiles (A&B Modus Batches)
datumHoleQty	Specifies the number of holes used to create the datum lock for a toothed gripper	6.7.3.0	ZX5	2 or 3	2	Used in conjunction with Veka Omnia upgrade to allow 3 pin sy