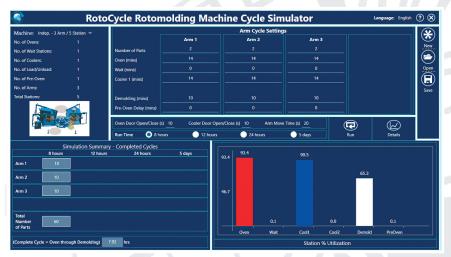


WHEN PERFORMANCE COUNTS...

ROTOCYCLE

DESKTOP SOFTWARE PROGRAM FOR ROTOMOLDING CYCLE SIMULATION.



Ferry is the
Exclusive Sales Channel
for RotoCycle.

Description		Arm 1	Arm 2	Arm 3	Arm 4	Time (mins)	% Utlization
Oven Time - Normal Cycle		154.0	154.0	140.0	0.0	448.0	93.3
Oven Time - Cycle Held-Up		0.0	0.0	0.0	0.0	0.0	0.0
Move from Oven to Wait		5.5	5.5	5.0	0.0	16.0	3.3
Wait Time - Normal Cycle	100	0.0	0.0	0.0	0.0	0.0	0.0
Wait time - Cycle Held-up		0.0	0.0	0.0	0.0	0.0	0.0
Move from Wait to Cool1	10	5.5	5.4	5.0	0.0	15.9	3.3
Cool time 1 - Normal Cycle		154.0	140.0	140.0	0.0	434.0	90.4
Cool time 1 - Cycle Held-up		0.0	0.0	0.0	0.0	0.0	0.0
Move from Cool1 to Demold		5.5	5.0	5.0	0.0	15.5	3.2
		0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0
Demold time - Normal Cycle		100.4	100.0	110.0	0.0	310.4	64.7
Demold time - Cycle Held-up		0.0	0.0	5.0	0.0	5.0	
Move from Demold to PreOv	en	3.3	3.3	3.7	0.0	10.3	2.2
PreOven time - Forced Delay		0.0	0.0	0.0	0.0	0.0	0.0
		46.8	61.3	61.0			
Move from PreOven to Oven		5.0	5.5	5.4	0.0	15.9	3.3
	Arm 1	Arm 2		Arm 3		Arm 4	
Parts per Arm	2	2		2		0	
Starting Location	Oven	Pre-Oven		Demold			
Ending Location	Demold	Wait		Pre-Oven			
Total Completed Cycles	10	10		10			8 hours

RotoCycle is a Windows® based software package production simulation calculator that aids the user to determine the production output of a machine based on the 9 machine styles (Independent-arm, Fixed-arm Turret, In-Line Shuttle) the configuration (number of arms, stations, indexing time, etc.) and the mix of molding

cycle times for each arm. The effect of unbalanced cycles and the bottlenecks created can easily be seen with the onscreen and printable reports.

RotoCycle is intended as an analysis and teaching tool. It can be used for:

- Estimating machine production output
- Illustrating the effect of long or short oven & cooler times on production output
- Estimating waiting times in cooling stations
- Estimating waiting times prior to entering the oven station (operator free time)
- Match cycle station times for maximum output use multiple station Independent-arm machine more efficiently

to reality Sillipation		machine Type	110ep 57		-					
	Arm 1	Arm 2			Arm 3					
Number of Parts	14	2			2 14					
Oven (mins) Wait (mins)	14	14			14					
Cooler 1 (mins)	14	1			14					
Demolding (mins)	10	1								
Pre-Oven Delay (mins)					10					
Oven Door Move(s) 10		Cooler Door Mo	re(s) 10			Arm Move(s) 20			
		Complete		,						
	Arm 1	Am			Arm 3					
8 hrs	10	,	0		10					
		Simulatio	n Dotaile	_						
		Arm 1	Arm 2	Am3	Time(I	Mins)	(%Utilization)			
Oven Time - Normal Cycle		154	154	140	44	8	93.3			
Oven Time - Cycle Held-Up										
Move from Oven to Wait		5.5	5.5	5	1	6	3.3			
Wait Time - Normal Cycle										
Wait time - Cycle Held-up										
Move from Wait to Cool1		5.5	5.4	5	15.9		3.3			
Cool time 1 - Normal Cycle		154	140	140	43	4	90.4			
Cool time 1 - Cycle Held-up										
Move from Cool1 to Demoid		5.5	5	5	15	.5	3.2			
Demold time - Normal Cycle		100.4	100	110	310	1.4	64.7			
Demold time - Cycle Held-up		100.4		5	5		1			
Move from Demoid to PreOven		3.3	3.3	3.7	10		22			
PreOven time - Forced Delay										
PreOven time - Oven Full		46.8	61.3	61	161	1.2	35.2			
Move from PreOven to Oven		5	5.5	5.4	15.9		3.3			
		Am 1	Arm 2		Arm 3					
Parts per Arm			2 2		2 Demoid					
Starting Location		Demoid	Oven PreOven Demoid Wait		PreOven					
Ending Locations Total Completed Cycles		10			10	8 hours				
Total Number of Parts		20 20			20	60				

- Illustrates the effect of demolding times on productivity
- Calculates total parts per arm to show estimates of total production output
- Includes 5 languages options: English, Spanish, German, Italian and French
- Helps to determine the best product mix on the most common styles of machine for maximum efficiencies

RotoCycle calculates time for each arm at each station to pinpoint delays and bottlenecks in your machine set-up. Compare station utilization with the bar graph and maximize station/oven use as this relates directly to your overall productivity, greatly enhancing efficiencies. Balance station times for maximum arms-per-day on machines with multiple ovens and coolers. See the effect on productivity on a complete machine when time changes on only one arm. Print out detailed simulation results for comparison.

Now you can determine the best product mix on each of your machines for maximum production efficiencies.

