

# Costimator<sup>®</sup> Manufacturing Processes

The Costimator, manufacturing cost estimating software, comes with a large variety of pre-built ready-to-use processes. Having a large array of processes to select from minimizes the time it takes to begin using the Costimator system.

If you don't find the process you are looking for, on this list, contact MTI Systems at 800-644-4318. Costimator can be easily customized to add new processes and customize existing processes to suit your needs.

Abrasive Belt Grind	Brazing, Dip
Abrasive Cutoff	Brazing, Furnace/Oven
Abrasive Rotary Sanding	Brazing, Induction
Abrasive Waterjet	Brazing, Resistance
Acid Emulsion Cleaning	Brazing, Torch
Acid Neutralize	Broach
Acid Pickle	Broach, Blind-Spline
Adhesive, Spray	Broach, Continuous Chain
Adhesive, Surface Activated	Broach, External "Pot" Broach
Alodine Solution	Broach, External Forms
Anodize	Broach, Horizontal
Anodize on Magnesium	Broach, Vertical
AQL test for passivation	Buff
Assembly	Burn, Flamecut
Assembly of Hard Disk Drives	Burnish
Assembly, Auto Pem Inserter	Burnish, Gear
Assembly, Brazing	Burnish, Production Parts
Assembly, Electrical	Burnish, Roller
Assembly, Mechanical	Burr
Assembly, Piping	Cadmium Plate
Assembly, Point to Point Wiring & Mechanical	Cam Grind
Assembly, Sheet Metal	Cam Mill
Assembly, Weldments	Case Harden
Assembly, Wind (Motors, etc)	Casting
Automotive Airbag Assy	Caustic Etch
Automotive Processes	Chemical Machining
Bag & Seal	Chemical Machining (CM)
Bake Parts	Chemical Machining, Electro (ECM)
Balance Parts	Chemical Machining, Electro Pulse (PECM)
Band Saw, CNC	Chemical Machining, PCM
Benchwork	Chemical Milling (CM)
Bevel Machine	Chromate
Black Oxide	Chromate Post Treat
Boring Mill	Chrome Plate
Brake	Circuit Board Processes
Brake, Folding, Manual	Cleaning Processes
Brake, Hydraulic	CNC Bend, Extrusion
Brazing	CNC Bend/Slide Form, Weld

---

Copyright © 2011 by MTI Systems, Inc. All rights reserved. Costimator is a registered trademark of MTI Systems, Inc. (Rev A)

# Costimator<sup>®</sup> Manufacturing Processes

CNC Boring Mill, Horz	Electronic, Assembly & Processes
CNC Boring Mill, Vert	Electronic, Axial Insertion
CNC Brake, Folding	Electronic, Circuit Board, Wave, Wash, Trim
CNC EDM, Drill	Electronic, Cut (Wire)
CNC EDM, Sinker	Electronic, In Circuit Test
CNC EDM, Wire	Electronic, Manual Insertion
CNC Fiber Placement	Electronic, Radial Insertion
CNC Flamecutting/Plasma	Electronic, Touch Up
CNC Laser/Punch	Electronic, Wave Solder
CNC Lathe	Electronic, Wire Harness
CNC Lathe, Chucker w/Mill	Engineering
CNC Lathe, Engine	Engrave
CNC Lathe, Multi-Spindle	Engrave, Laser
CNC Lathe, Univ	Extrusion
CNC Lathe, VTL	Face Gears, Gear Grinding
CNC Mach Ctr, VTL (5) axis	Face Gears, Gear Shape Method
CNC Mach Ctr, Horz (5) axis	Face Gears, Hob Method
CNC Mach Ctr, Univ	Fiberglass Manufacturing
CNC Mill Turn Center	Filament Winding (Composites)
CNC Press Brake	Finishing, Organic
CNC Router	Flamecut
CNC Saw, Circular	Forced Air Drying
CNC Turret Punch	Forging Process - Rolled Ring
CNC Turret Punch/Laser	Form Cylinders
CNC Turret Punch/Plasma	Form, Draw
Coating	Four Slide
Coil Slitting	Gear Grinding
Coining (Forging)	Gear Shaping
Composite Mfg	Gear, Lap Teeth
Copper Plate	Gearcut, Bevel, Mill
DeBurr	Gearcut, Bevel, Spiral Generator
Deburr, Vibratory	Gearcut, Bevel, Straight Generator
Decorative Chrome	Gearcut, Hob
Degrease	Gearcut, Rack
Deoxidize	Gearshaving
De-Slag	Glue
Desmutter	Gold Plate
Dial Machine	Gravity Casting
Die Casting	Grind, Cam
Die Maintenance & Repair	Grind, Centerless
Drill Press	Grind, Creepfeed
EBM (Electron Beam Machine)	Grind, Cutter
ECM (Electro Chemical Machining)	Grind, ID
EDM, Sinker	Grind, Jig
EDM, Sinker Drill	Grind, OD
Electroless Nickel Plate	Grind, Surface

---

Copyright © 2011 by MTI Systems, Inc. All rights reserved. Costimator is a registered trademark of MTI Systems, Inc. (Rev A)

# Costimator<sup>®</sup> Manufacturing Processes

Grind, Surface, Rotary, Vert	Lathe, VTL
Grind, Thread	Lead Plate
Grind, Universal	Leak Test
Grit Blast	Mark & Identify
Gun Drilling	Marking, Laser
Hardcoat	Masking-Unmasking
Heat Treat	Mill, Manual
Heat Treat, Carburize	Mill, Manual, Boring, Horz
Heat Treat, Induction Harden	Mill, Manual, Horizontal
Heat Treat, in-house	Mill, Manual, Knee Mill
Heat Treat, Quench and Draw	Mill, Manual, Planer
Heat Treat, Redraw	Mill, Manual, Universal
Heat Treat, Sub Contract	Mill, Manual, Vert Bridge
Hone	Mill, Manual, Vertical
Hot Stamp	Mill, Profiler
Hot Water Rinse	Mill, Thread
Impregnate	Mill, Vertical Slotter Keyseater
In Process Rinsing	Mold, Injection
Incoming Raw Material	Molding
Induction Hardening	Molding, Compression
Ink Stamp	Molding, Injection
Inline Thermoforming	Nickel Plate
Inspection	Nickel Undercoat
Inspection, CMM	Nital Surface Temp Acid Etch
Inspection, Comparator	Nitride
Inspection, Final	Notcher
Inspection, Magnetic Particle	Outside Services
Inspection, Receiving	Oven
Inspection, Ultrasonic	Pack & Ship
Inspection, Visual	Pad Print
Inspection, X-Ray	Paint
Iron Worker	Paint (Sub-contract)
Jig Bore	Paint (Using in-line conveyor)
Jig Grind	Paint @ Spray Booth
Kitting	Palladium Plate
Lap	Parkerize on Steel
Laser cutting	Parts Washer
Laser Drilling	Passivate
Laser Sintering (Cad to Shape)	Periodic Deoxidizer
Lathe, Centering	Phosphate on Steel
Lathe, Manual, Engine	Planer
Lathe, Manual, Tool Room	Plasma Arc Cutting
Lathe, Manual, Tracer	Plate rolling
Lathe, Manual, Turret	Plating
Lathe, Spinning	Plating Processes-Costs
Lathe, Univ	Plating Processes-Step by Step

---

Copyright © 2011 by MTI Systems, Inc. All rights reserved. Costimator is a registered trademark of MTI Systems, Inc. (Rev A)

# Costimator<sup>®</sup> Manufacturing Processes

Stamping	Rotary Die Cutting
Plating, Sub-Contract	Rotary Machining
Platinum Plate	Rotary Transfer Machine
Polish	Rotational Molding
Powder Coating	Router
Press	Router, Hand
Press, Arbor	Sand Blast
Press, Blanking	Sand Casting Process - Green Sand
Press, Brake	Saw
Press, CNC Punch/Plasma	Saw, Band
Press, Compacting	Saw, Cold
Press, Deep Draw	Saw, Dicing
Press, Flange	Saw, Panel
Press, Forming	Screw Mach, CNC Swiss Type
Press, Hammer (Forging)	Screw Mach, Multi-Spindle
Press, Hem	Screw Mach, Single Spindle
Press, Hot Form	Sewing & Stitching
Press, Hydroform	Shaper, Horiz
Press, Panel Bender	Shaving
Press, Pierce	Shear
Press, Precision	Shear, Circle
Press, Punch	Shipping
Press, Roll Form	Shot Blast
Press, Rubber	Shot Peen
Press, Sintering	Silk Screen
Press, Stamping	Silver Plate
Press, Straightening	Sinter
Press, Stretch Form Extrusion	Skiving of Plate Stock
Press, Stretch Form Sheet	Slitter
Press, Transfer	Slitter, Sheet Stock
Press, Trim	Slitter, Sheet/Plate
Pressure Test	Slitting (Laminated Material)
Prime	Slotting (of tubing ends)
Printing on Plastic	Soak Cleaner
Pultrusion	Solder
Punch	Solder, Flushing
Quality Control	Spline Rolling
Radial Drill Press	Spot Welding, Robotic
Receiving	Spring, Burr
Regrind Material	Spring, Coiler
Rework	Spring, Cutoff
Rhodium Plate	Spring, Former
Riveting	Springmaker
Roll Forming	Stain (Using in-line conveyor)
Roll Threads	Stamping
Rotary Air Bender	Straightening

---

Copyright © 2011 by MTI Systems, Inc. All rights reserved. Costimator is a registered trademark of MTI Systems, Inc. (Rev A)

# Costimator<sup>®</sup> Manufacturing Processes

Stress Relieve	Weld, Cost of Consumables
Stretch Form	Weld, Manual
Sub Contract	Weld, Orbital
Superplastic Form	Weld, Robot
Supersonic Gas-Liquid Clean	Weld, Setup & Tack
Surface Finish Calculation	Welding
Swage	Welding, Arc
Test	Welding, Butt
Thermoforming, Plastic Sheet - Rotary	Welding, Butt (Wire)
Thermoforming, Plastic Sheet - Shuttle	Welding, Clean
Thread Milling	Welding, Cost of Electrode
Thread Rolling	Welding, EB (Electron Beam)
Thread Whirling	Welding, Fitup
Thread, Worm	Welding, Fitup & Adjust
Tin Plate	Welding, Flame
Tin-Lead Plate	Welding, Flux Core
Tool Life Calculation	Welding, Friction Stir
Tool Maintenance & Repair	Welding, Grind Welded Edges
Tool Room	Welding, Laser
Trim	Welding, Mig
Tube & Pipe Manufacturing	Welding, Plasma
Tube Bead	Welding, Projection
Tube Bend	Welding, Ransome Manipulator
Tube End Forming	Welding, Resistance
Tube, Automatic Cutoff	Welding, Robot
Tube, Laser	Welding, Seam
Tube, Slotting (of tubing ends)	Welding, Skip
Tube, Weld, Orbital	Welding, Spot
Tumble Deburr	Welding, Stick
Ultrasonic Inspection	Welding, Stud
Ultrasonic Weld Plastic Parts	Welding, Sub-Merged Arc
Upsetter (Forging)	Welding, Tig
Vacuum Form	Wire Harness Assembly
Vapor Degrease	Wire Processing
Wash	Wire, Straighten & Cut
Waterjet	Zinc Phosphate on Steel
Wave Solder	Zinc Plate
Weld, Clean & Grind	Zyglo