

Work Stations
Metal Work Station
Paint Station
Assembly Station

Worker
Metal Worker
Paint Worker
Assembler
Transporter

Worker Tasks	Inputs	Outputs
Metal Worker		
Create Frame Parts (A,B,C,D,E,F,G) <ol style="list-style-type: none"> 1. Cut Tube - 60 seconds (1% Fail rate) 2. Mill Tube - 30 seconds(1% Fail rate) 3. Bend Tube - 30 seconds (0.5% Fail rate) 	Steel Tube	Frame Part
Create Handle Bar Parts (A, B) <ol style="list-style-type: none"> 1. Cut Tube - 60 seconds (1% Fail rate) 2. Mill Tube - 30 seconds(1% Fail rate) 3. Bend Tube - 30 seconds (0.5% Fail rate) 	Steel Tube	Handlebar Part

Create Fender 1. Bend Sheet steel - 45 seconds (2% Fail rate)	Sheet Steel	Unpainted Fender
Paint Worker		
Paint Frame 1. Paint Frame - 30 seconds (0.25% Fail rate) 2. Bake Paint - 200 seconds (0.5% Fail rate)	Unpainted Frame Paint (2)	Painted Frame
Paint Handlebars 1. Paint Handlebars - 30 seconds (0.25% Fail rate) 2. Bake Paint - 170 seconds (0.5% Fail rate)	Unpainted Handlebars Paint (1)	Painted Handlebars
Paint Fender 1. Paint Fender - 30 seconds 2. Bake Paint - 170 seconds (0.5% Fail rate)	Unpainted Fender	Fender
Assembly Worker		
Assemble Frame 1. Weld Frame together -200 seconds (3% Fail rate)	Frame Part A Frame Part B Frame Part C Frame Part D Frame Part E Frame Part F Frame Part G	Unpainted Frame
Assemble Handlebars 1. Weld Handlebars together (2% Fail rate)	Handlebar Part A Handlebar Part B	Unpainted Handlebar
Final Assembly	Painted Frame	Bicycle

<ol style="list-style-type: none">1. Install 2 brackets for drivetrain - 30 seconds (0.25% Fail rate)2. Install 1 bracket for handlebar - 20 seconds (0.12% percent Fail rate)3. Install drivetrain - 40 seconds (0.25% Fail rate)4. Install wheels - 60 seconds (0.12% Fail rate)5. Install Handlebars - 30 seconds (0.12% Fail rate)6. Install Fenders - 45 seconds7. Install Seat - 20 seconds8. Install Chain - 20 seconds	<p>Brackets (3) Drivetrain Wheels (2) Painted Handlebars Fenders (2) Seat Chain</p>	
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