M710 - Barrel

OP #	PROCESS DESCRIPTION	MACHINE DESCRIPTION	Capital $	Ops. $	Depart. Number	Depart. Labor $	Total % Overhead	Std Run Hours	Material $	Labor $	Over Head $	Oper Cost
1	Issue from crib (105550)				9132			0.000001				
5	Drill bore - upset barrels		$ 3,500		8158	$ 15.76	359.44%	0.021468		$ 0.34	$ 1.22	$ 1.55
15	Form Turn NFT form		$ 6,000	$ 2,000	8158	$ 15.76	359.44%	0.034860		$ 0.55	$ 1.97	$ 2.52
20	Bore ream to remove drill rings		$ 3,000		8158	$ 15.76	359.44%	0.010416		$ 0.16	$ 0.59	$ 0.75
30	GFM form and finish		$ 10,000	$ 500	8158	$ 15.76	359.44%	0.025976		$ 0.41	$ 1.47	$ 1.88
56	Load furnace baskets				8105	$ 15.38	333.86%	0.001680		$ 0.03	$ 0.09	$ 0.11
57	De-grease				8105	$ 15.38	333.86%	0.001720		$ 0.03	$ 0.09	$ 0.11
58	Load work on furnace base				8105	$ 15.38	333.86%	0.002510		$ 0.04	$ 0.13	$ 0.17
59	Stress relieve				8105	$ 15.38	333.86%	0.000001		$ 0.00	$ 0.00	$ 0.00
60	Cool work				8105	$ 15.38	333.86%	0.000001		$ 0.00	$ 0.00	$ 0.00
61	Unload work from furnace base				8105	$ 15.38	333.86%	0.007590		$ 0.12	$ 0.39	$ 0.51
63	Unload furnace baskets				8105	$ 15.38	333.86%	0.001890		$ 0.03	$ 0.10	$ 0.13
65	Cut-off muzzle end and crown				8158	$ 15.76	359.44%	0.025000		$ 0.39	$ 1.42	$ 1.81
71	Finish Turn											
85	Turn and face breech chamber and polish chamber	Horizontal CNC	$ 300,000		8158	$ 15.76	359.44%	0.091660		$ 1.44	$ 5.19	$ 6.64
		Tooling		$ 50,000								
		Gaging	$ 12,000									

Confidential - Subject to Protective Order
Williams v. Remington

BARBER - 5.22.06r0009030

M710 - Barrel

OP #	PROCESS DESCRIPTION	MACHINE DESCRIPTION	Capital $	Ops. $	Depart. Number	Depart. Labor $	Total % Overhead	Std. Run Hours	Material $	Labor $	Over Head $	Oper. Cost
120	Magnaflux				8158	$ 15.76	359.44%	0.015500		$ 0.24	$ 0.88	$ 1.12
125	Straighten and inspect				8157	$ 15.43	325.91%	0.012000		$ 0.19	$ 0.60	$ 0.79
130	Rough and finish centerless polish				8157	$ 15.43	325.91%	0.014400		$ 0.22	$ 0.72	$ 0.95
135	Grind Breech O.D.	Cylindrical Grinder	$ 50,000		8158	$ 15.76	359.44%	0.006362		$ 0.10	$ 0.36	$ 0.46
		Tooling		$ 15,000								
		Gaging		$ 500								
145	Drill & Tap, Mill Slot	Vertical CNC	$ 70,000		8158	$ 15.76	359.44%	0.013207		$ 0.21	$ 0.75	$ 0.96
		Tooling		$ 15,000								
		Gaging	$ 1,500									
150	Alkaline Clean				8157	$ 15.43	325.91%	0.000001		$ -	$ -	$ -
160	Induction Harden Barrel Locking Lugs		$ 4,000		8157	$ 15.43	325.91%	0.006000		$ 0.09	$ 0.30	$ 0.39
170	Angularity Straighten				8157	$ 15.43	325.91%	0.005744		$ 0.09	$ 0.29	$ 0.38
	Totals		**$ 460,000**	**$ 83,000**				**0.297987**	**$ -**	**$ 4.68**	**$ 16.56**	**$ 21.24**

REV4-EST XLS

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BARBER - 5.22.06r0009031