

Supplementary file S1

Table S1. Time consumption estimates (s m^{-3} , at stem volume $^{-1} = 4.877$), standard errors, and p-values obtained from the analysis of covariance (ANCOVA) for field trial 1. The covariate stem volume $^{-1}$ is expressed as solid m^3 under bark, and the categorical factor boom-control system has two levels, i.e. IBC either Off or On. The unit of observation is a tree (i.e. stem), and n is the number of trees. The total number of trees in field trial 1 was 928.

Dependent variable	Effect	Estimate	Standard error	P-value	n
Total time	Intercept	23.29	3.62	<0.0001	
	Stem volume $^{-1}$	13.53	0.29	<0.0001	928
	IBC: Off	9.99	5.04	0.0476	440
	On	0			488
Boom-out	Intercept	3.04	1.52	0.0458	
	Stem volume $^{-1}$	4.87	0.12	<0.0001	928
	IBC: Off	1.08	2.12	0.6083	440
	On	0			488
Felling-processing	Intercept	20.25	3.23	<0.0001	
	Stem volume $^{-1}$	8.66	0.26	<0.0001	928
	IBC: Off	8.91	4.49	0.0478	440
	On	0			488

Table S2. Time consumption estimates (s m^{-3} , at $\text{stem volume}^{-1} = 6.864$), standard errors, and p-values obtained from the ANCOVA for field trial 2. The covariate stem volume^{-1} is expressed as solid m^3 under bark, and the categorical factor boom-control system has two levels, i.e. IBC either Off or On. The unit of observation is a tree (i.e. stem), and n is the number of trees. The total number of trees in field trial 2 was 1024.

Dependent variable	Effect	Estimate	Standard error	P-value	n
Total time	Intercept	18.96	2.42	<0.0001	
	Stem volume ⁻¹	14.64	0.19	<0.0001	1024
	IBC: Off	-0.70	3.26	0.8294	418
	On	0			606
Boom-out	Intercept	-2.31	2.05	0.2587	
	Stem volume ⁻¹	6.59	0.16	<0.0001	1024
	IBC: Off	-0.66	2.76	0.8109	418
	On	0			606
Felling-processing	Intercept	21.27	1.38	<0.0001	
	Stem volume ⁻¹	8.05	0.11	<0.0001	1024
	IBC: Off	-0.04	1.86	0.9820	418
	On	0			606