

Its your choice, your money, your environment

Crane Productivity for Environment and Profit

Issue 26 Aug 2021

Shipping Line and Environmental Savings to be made using BLOK Pinning Machines and Spreaders	If used in Straddle Carrier terminals only using BLOK Rig pinning machines		All terminals with AGV, SC, or Trailers using BLOK Spreader for HTL or BLOK Cert for VTL	All terminals with AGV, SC, Trailers using BLOK Spreader and Cert for Quad Lifting	Your Choice now or later 2024?
		Order Now			
Number of container moves through container terminals per year UNCTAD 811m teu	811,000,000		811,000,000	811,000,000	
Convert teu to containers divide by	1.7		1.7	1.7	
Number of actual containers 20ft+40ft etc.	477,058,824	moves per year	477,058,824	477,058,824	
Rate of handling per hour by crane	30	moves/hr	30	30	
Average number of cranes used per vessel	2.0	cranes	2.0	2.0	
Total handling time in terminals per year	7,950,980	hours	7,950,980	7,950,980	
Percentage of containers needing conlocks	25%		25%	25%	
Percentage of those containers moved by straddle carriers	50%		100%	100%	SC or trailers or AGV
Percentage crane time saved using BLOK Products	30%	BLOK Rig Pinning Machine	40%	80%	Handling empties in Quad configuration
Total vessel time to be saved worldwide	298,162	hours	795,098	1,590,196	
Average time spent in port per call	19	hours	19	19	
Total number of sailing hours all ships	60,000,000	hours	60,000,000	60,000,000	
Percentage of sailing time world wide to be saved	0.5%		1.3%	2.7%	
Total fuel all ships	80,000,000	tonnes	80,000,000	80,000,000	
Cost of fuel of any sort per tonne	\$650	\$/tonne	\$650	\$650	
Total cost	\$52,000,000,000		\$52,000,000,000	\$52,000,000,000	
Slow sailing factor	2.5	Ref mdpi	2.5	2.5	
Cost of fuel saved by slow sailing without loss of schedule	\$646,017,157	USD	\$1,722,712,418	\$3,445,424,837	USD
CO2 multiplying factor by burning 1 unit oil	2.6		2.6	2.6	
CO2 saved	2,584,069	tonnes of CO2 / year	6,890,850	13,781,699	tonnes of CO2 / year

References

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