

Responsible

MILL P U series

Energy Efficiency Certificate



All measurements were made in accordance with measurement standards as defined in ISO 14955

1 // New control generation

Consumption

The change to a new CNC, Heidenhain TNC 640, improves the control efficiency.

2 // Highly efficient exhauster system

The implementation of a Venturi nozzle in the exhauster system helps to significantly reduce the compressed air usage.

3 // Design

Several design changes, like switching to LED lights, also help improve the energy

4 // ITC - Intelligent Temperature Control The continuous improvements made on this software help compensate the temperature fluctuations and also significantly increase the already improved precision of the new generation of Milling machines.

Equivalent to, over 1 year greenhouse gas and ${\rm CO_2}$ emissions from



562,494



carbon sequestrated by

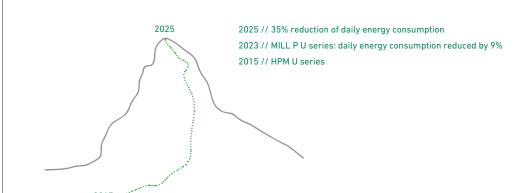
76

tree seedlings grown for 10 years

kilometers driven

by an average

passenger car





MILL S series

Energy Efficiency Certificate





Daily Energy	199 kWh	169 kWh	-17%	
Machining (16h)	9.9 kW	8.5 kW	-16%	1,2,3,4
Ready (4h)	5.1 kW	4.3 kW	-18%	1,2,3
Standby (4h)	4.9 kW	4.0 kW	-22%	1,2,3
Operating mode (24h cycle time)	HSM (2015)	MILL S (2023)	Energy saving %	Thanks to GF

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674,993 smartphones

smartphon charged

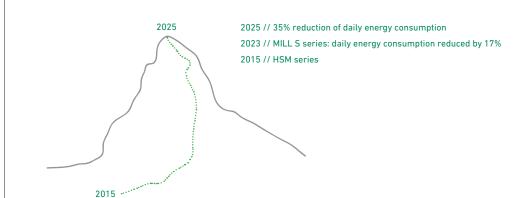


carbon sequestrated by

92

tree seedlings grown for 10 years

kilometers driven by an average passenger car





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Operating mode (24h cycle time)	HSM U LP (2015)	MILL S U (2023)	Energy saving %	Thanks to GF
Standby (4h) Ready (4h) Machining (16h)	6.1 kW 6.7 kW 11.6 kW	5.2 kW 5.9 kW 10.2 kW	-17% -14% -14%	1,2,3 1,2,3 1,2,3,4
Daily Energy Consumption	237 kWh	207 kWh	-13%	

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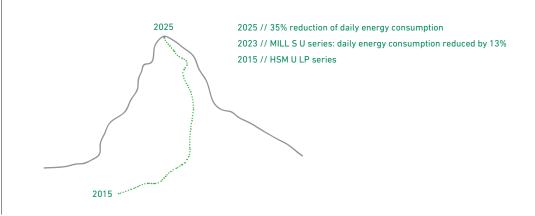
carbon sequestrated by

92

tree seedlings grown for 10 years



kilometers driver by an average passenger car





MILL X

Energy Efficiency Certificate



Daily Energy Consumption	226 kWh	197 kWh	-15%	
Machining (16h)	11.1 kW	9.7 kW	-14%	1,2,3,4
Standby (4h) Ready (4h)	5.7 kW 6.6 kW	4.8 kW 5.8 kW	-19% -14%	1,2,3
Operating mode (24h cycle time)	XSM LP (2015)	MILL X (2023)	Energy saving %	Thanks to GF

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Equivalent to, over 1 year greenhouse gas and ${\rm CO_2}$ emissions from



652,493

smartphone charged



carbon sequestrated by

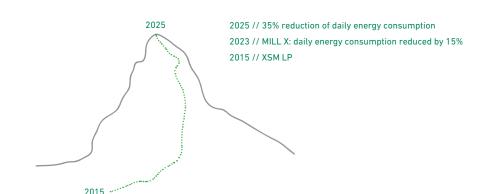
89

tree seedlings grown for 10 years

Source: www.epa.gov



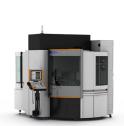
22,130 kilometers driven by an average passenger car





MILL X U series

Energy Efficiency Certificate





Daily Energy Consumption	282 kWh	265 kWh	-6%	
Standby (4h) Ready (4h) Machining (16h)	7.9 kW 8.5 kW 13.6 kW	7.0 kW 7.1 kW 13.1 kW	-13% -20% -4%	1,2,3 1,2,3 1,2,3,4
Operating mode (24h cycle time)	XSM U LP (2015)	MILL X U (2023)	Energy saving %	Thanks to GF

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Equivalent to, over 1 year greenhouse gas and ${\rm CO_2}$ emissions from



382,496

smartphor charged



carbon sequestrated by

52

tree seedlings grown for 10 years

kilometers driven by an average passenger car

