TORNOS

Your partner for smart production

Energy efficiency

Energy saving

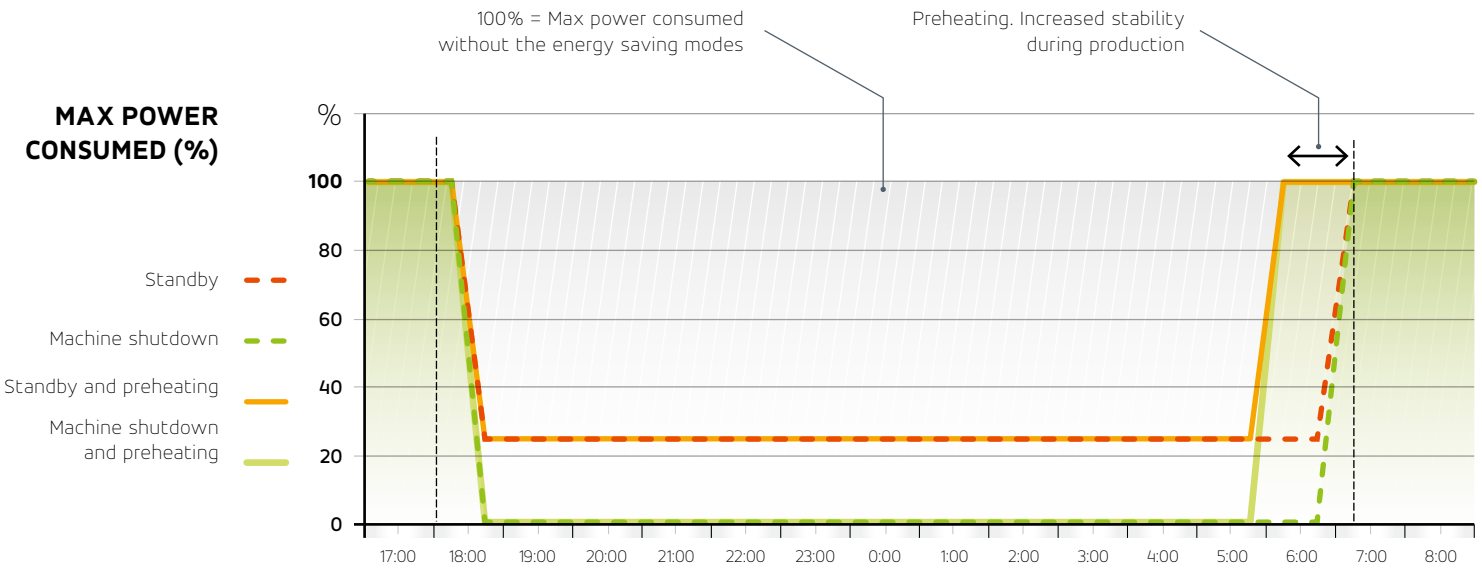
Targeted measures can often be used to reduce the energy consumption of your fleet of Tornos machines. These can also increase energy efficiency, and allow you to benefit from lower energy and operating costs. They also allow you to help reduce production of CO_2.

To find out more, simply contact our team of specialists.

Standby
Tornos offers a machine standby function, which allows its consumption to be reduced by 75% — the best way to cut energy use when the machine has finished its production run. It works by automatically switching some of the machine's consumers, such as pumps, the oil mist extractor and even the door locks, to standby.

Standby and machine preheating
The user benefits from options which provide two further possibilities, for even greater savings. The first is the option to automatically programme machine preheating. This means the operator can start production more quickly without having to wait for the machine to warm up.

Machine shutdown
The second is the option to programme a total shutdown of the machine at the end of production. The electricity consumption is therefore zero whilst the machine is in standby.



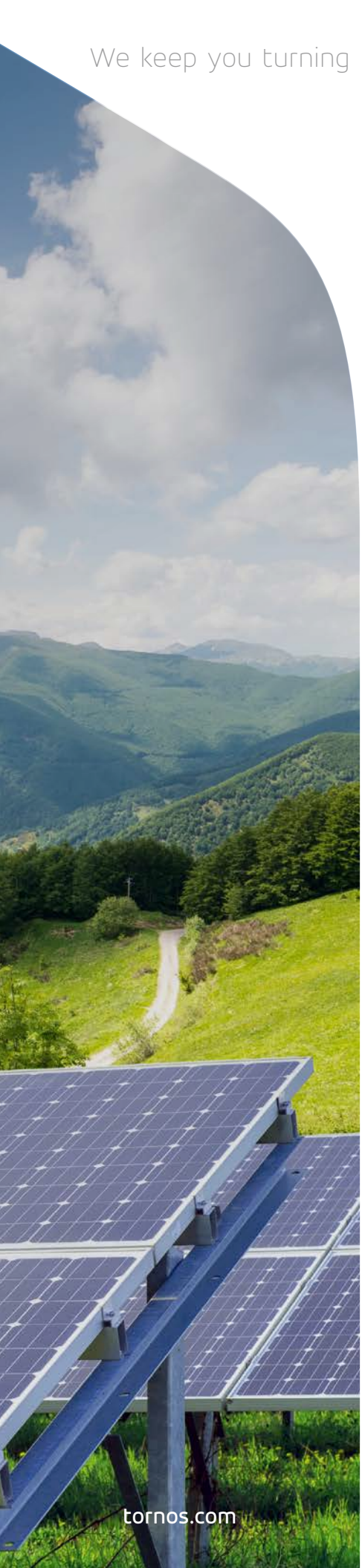
These options should appeal to users with a focus on environmental issues and those looking to manage their energy consumption.

Pump actuation using a frequency converter
The use of frequency converters on the high pressure pumps optimises the supply of coolant. Permanent optimisation of the rotation speed of the pump motor makes it possible to supply only the amount of lubricant that is strictly necessary. This results in a huge reduction in the use of electrical power from the network, leading to significant savings.

Reduction in moving masses
For many years, Tornos has been digitally calculating and optimising the behaviour of the key components of its machines. This has enabled us to reduce the moving masses and therefore reduce energy consumption whilst improving acceleration. These analysis methods allow us to reduce masses by up to 40% whilst improving machining performance.

Drive technique
Tornos uses more efficient synchronous motors which boost the machining performance of the spindles and axes. Thanks to recovery modules, we are able to recover and reinject up to 70% of the energy returned by the braking system in all the drives. Our spindles and guide bushes with integrated motors operate without a hydraulic unit, thereby eliminating a very high-consumption component whilst maintaining cutting-edge performance.

We keep you turning



TORNOS SA

Rue Industrielle 111
CH-2740 Moutier
Tel. +41 (0)32 494 44 44
Fax +41 (0)32 494 44 03
contact@tornos.com

Tornos
throughout
the world

Complies with current European CE/EMC Safety Directives.

April 2017 edition – © Tornos 2017, All rights reserved

cm