

True Modular System

by  **epm**[®]

CIG highspeed (N₂)

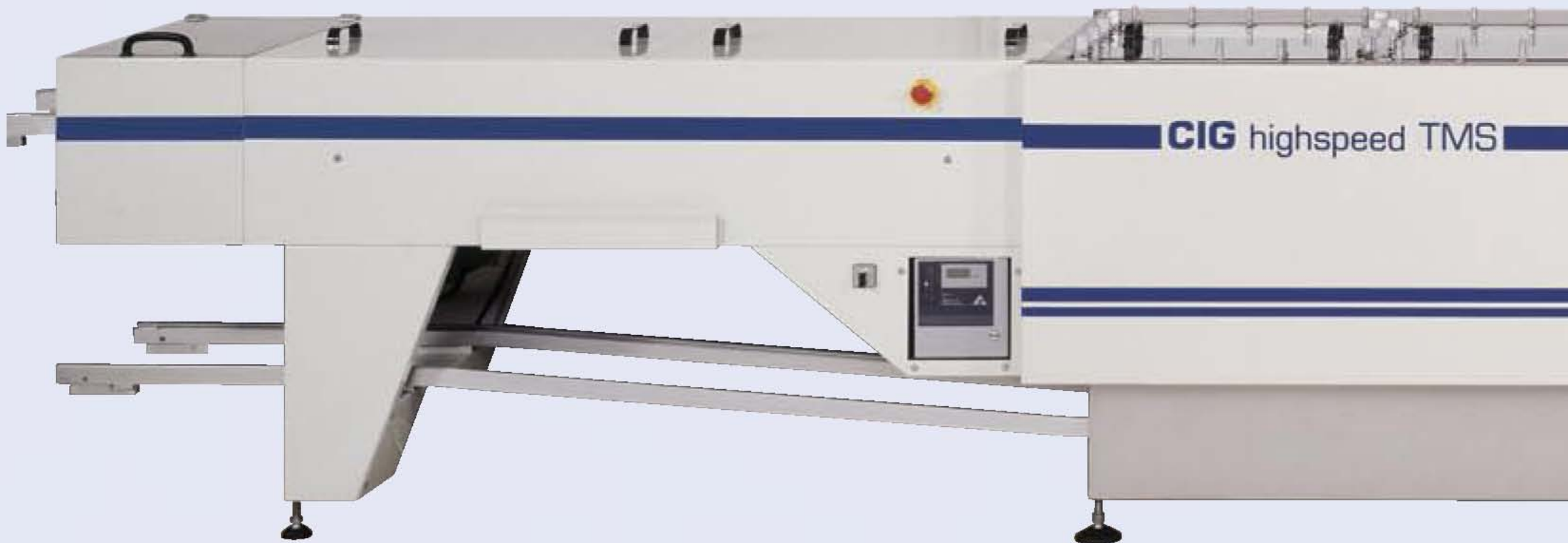


The only system that grows with your needs.

Fluxer with 1 or 2 nozzles
Easy Load pump head

Permanente PPM measuring of
the N₂ content
Granulate filter

Carrier- and finger transport
Finger transport with V- or L fingers
for direct or applied PCB
Carrier transport 300 / 400 / 500
Angle adjustment
(Carrier-machine)



Solder pot (Bodycoated)
5 years guarantee for corrosion

AC motors

Quick-change nozzle
no need for screws

Alcohol and water based flux

Pyrometer

Preheater:
infrared / carbon / convection

PC control

Machine Information System (MIS)





Soldering angle/Dual wave

When using the carrier conveyor system the soldering angle above the Dual wave is programmable from 6–9°. With the finger conveyor system the soldering angle is fixed at 9°. Each of the two solder waves has its own pump system. The height of the turbulent solder wave and of the smooth full solder wave can be programmed independently.



Condensation Trap

The condensation trap filters the loose particles through the Venturi nozzle out of the process atmosphere. Subsequently the pollution in the machine is substantially reduced.



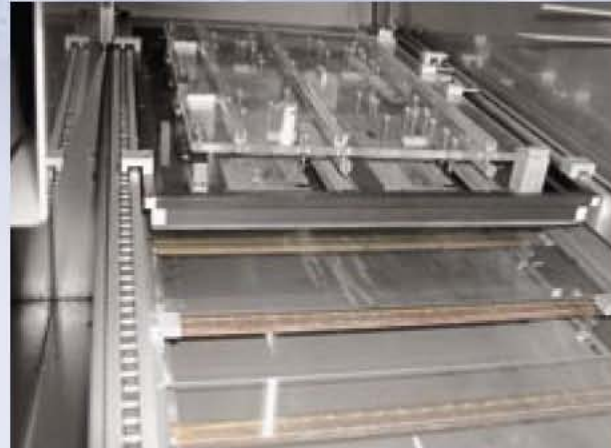
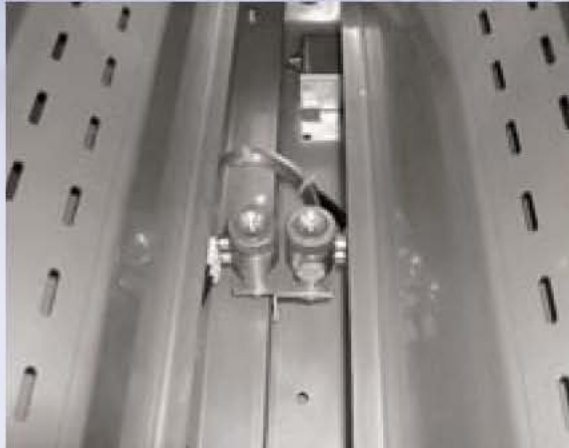
Preheater

The proven preheating system is equipped with carbon infrared beam emitters, enabling water based fluxes to be processed safely. A preheating temperature management system (pyrometer) measures the actual temperature and adjusts the temperature according to the required values.



Inert Gas Atmosphere

The automatic gas infeed in the process chamber prevents oxidation during the solder process and guarantees an optimal solder quality. The residual oxygen is permanently monitored and regulated.



Carrier or finger transport

The carrier conveyor system can be used for both fixed and adjustable frames. The finger conveyor system can be equipped with V-fingers (direct gripping of the pcb's) or with L-fingers (holder for epoxy mask with pcb's).



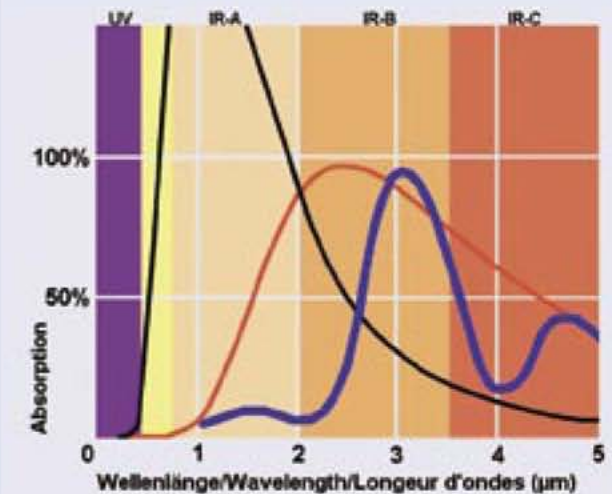
(Double-) atomizer fluxer

The atomizer fluxer processes all fluxes with low solid parts. This system was developed for the very finest reproducible flux application. The flux is pumped directly from the original flux container to the atomising nozzle. The double fluxer was specifically developed for the application of two different fluxes.



Preheater / Convection preheater

The preheating system is equipped with 12 IR-beams (option hybrid or carbon beams). Convection for efficient heat transfer on both sides of the PCB.



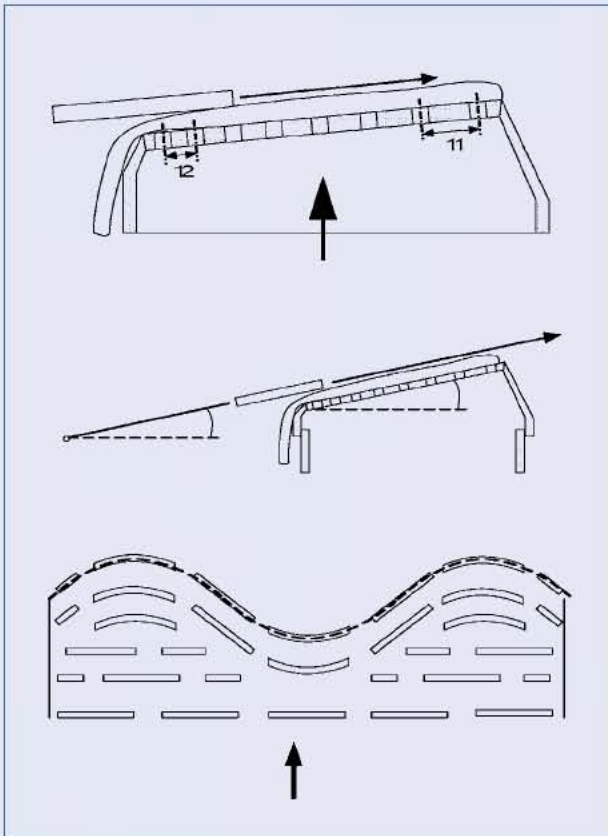
The emission spectrum of the Carbon-beams is practically identical with the absorption spectrum of water.

NEW!*

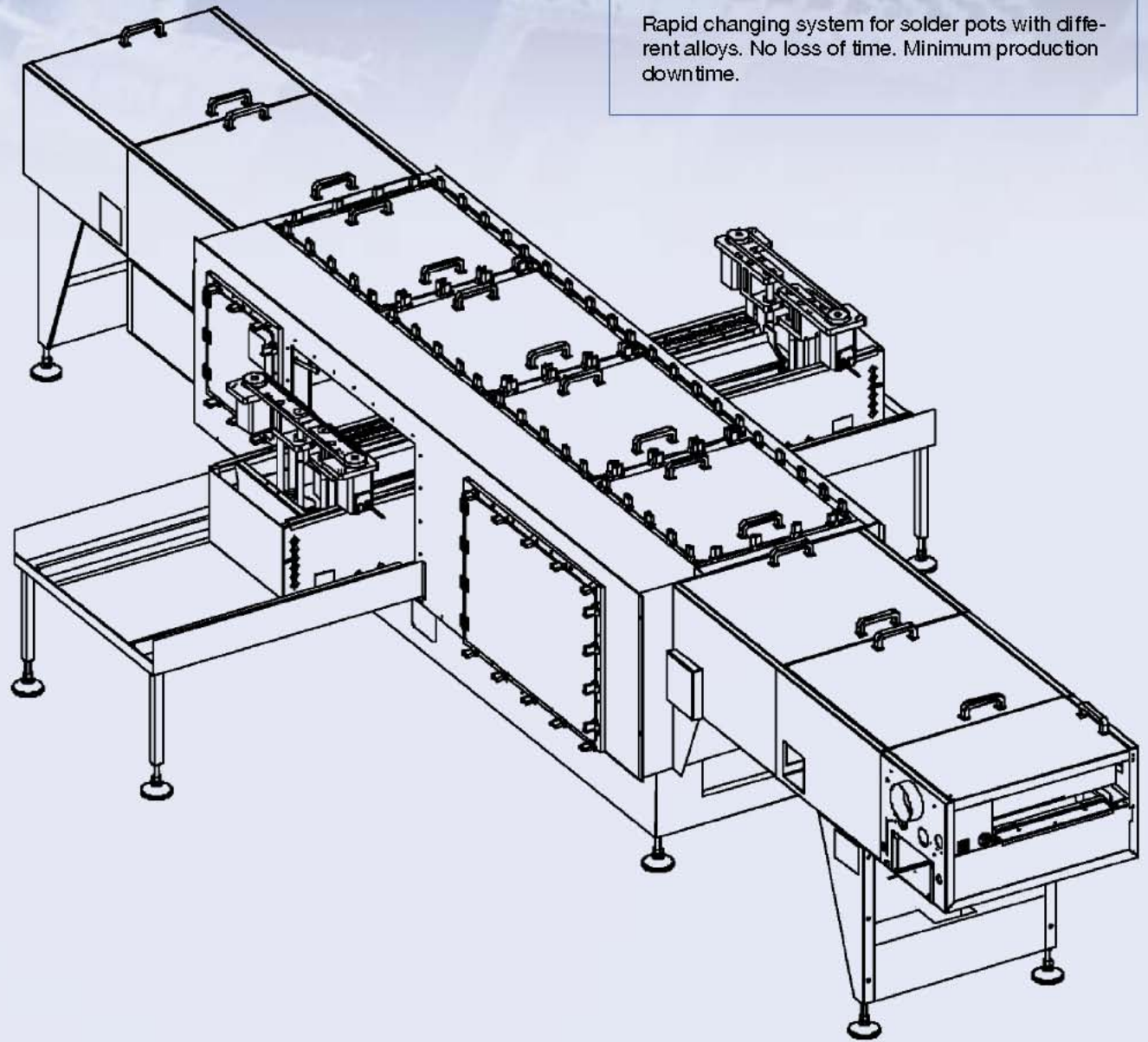
* Patent pending

The N.B-solder wave:

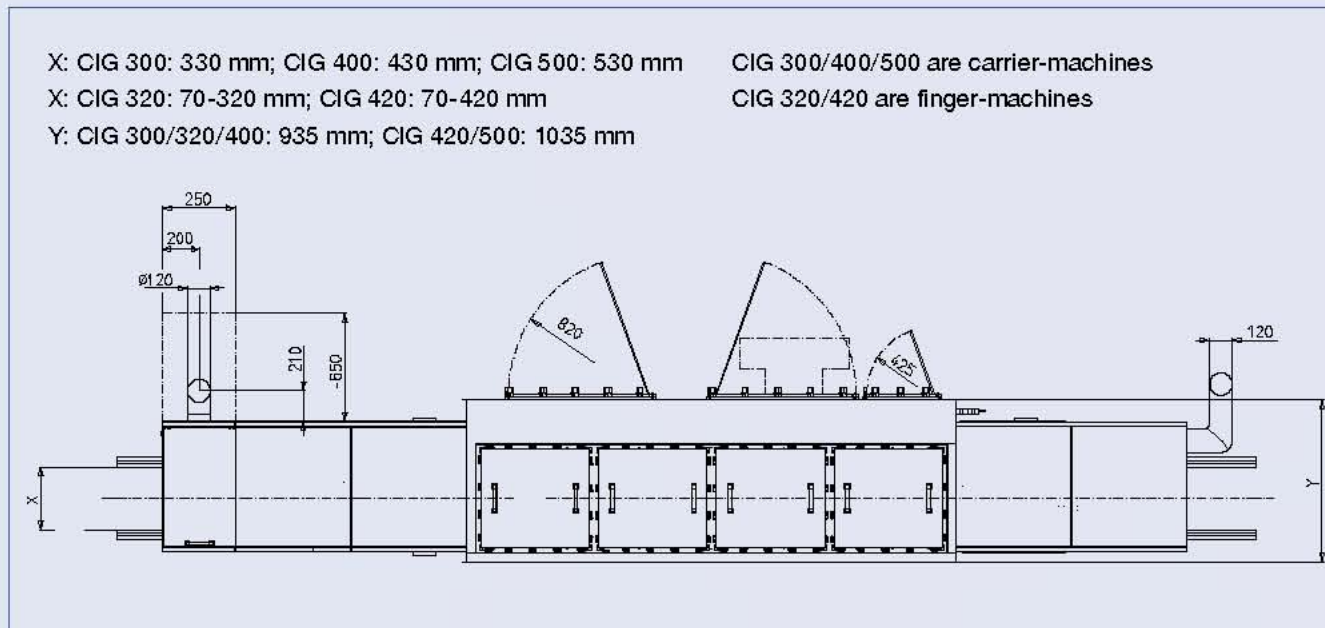
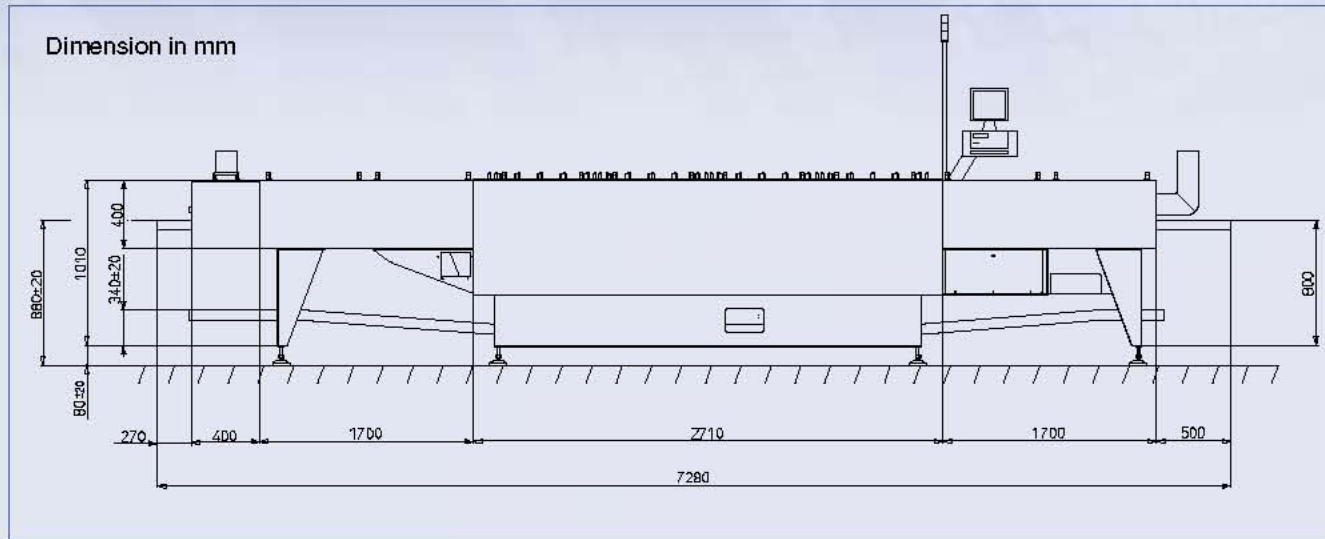
- even PCB layout errors can be handled hassle-free
- allows high-speed production
- offers excellent characteristic for partial-soldering
- optimized maintenance by screw-less (nozzle) fixing



Rapid changing system for solder pots with different alloys. No loss of time. Minimum production downtime.

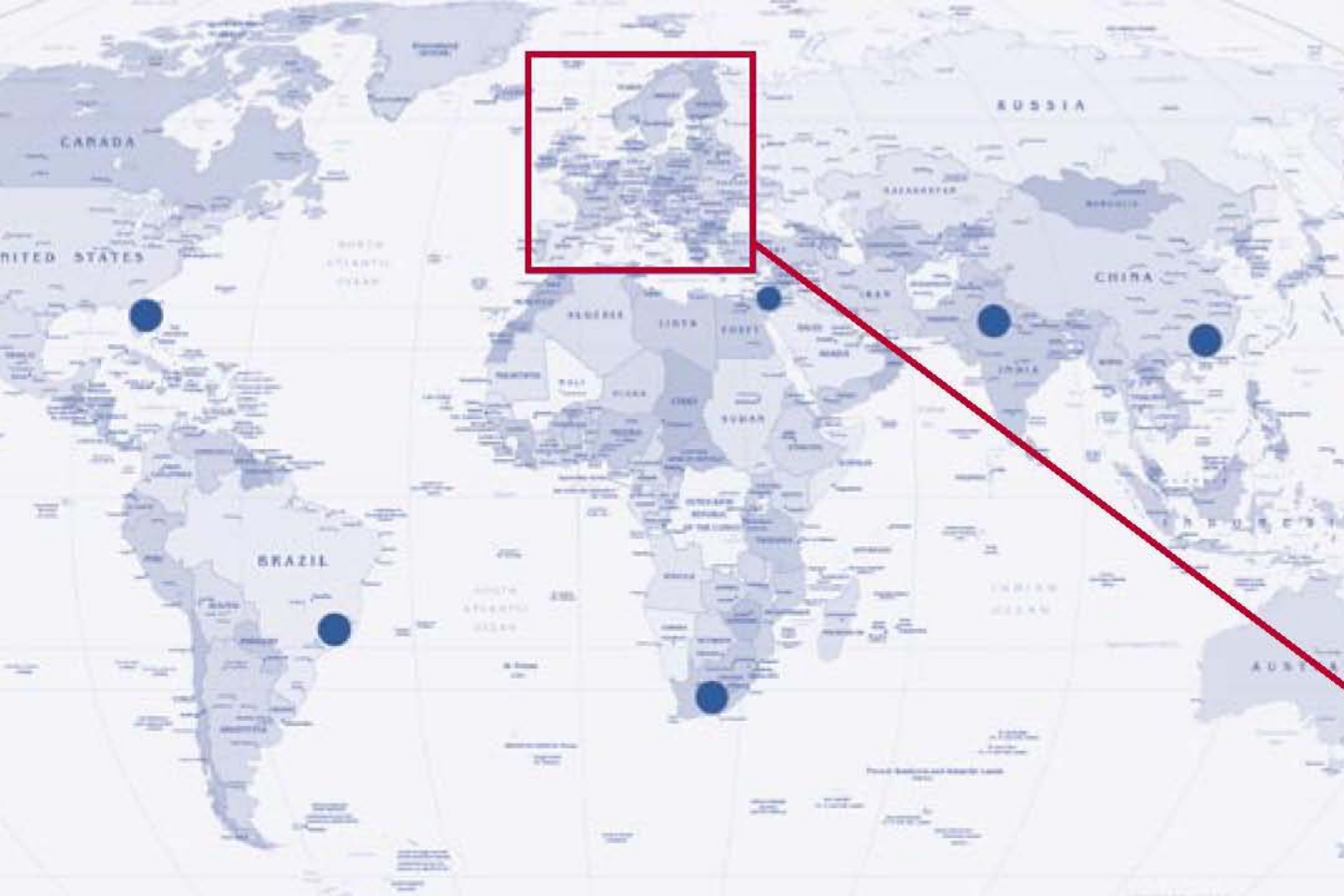


Data and dimensions of the CIG Highspeed TMS



Power requirements

Connection value	Electrical connection	230/400V +10%–15%, 50/60 Hz, 3PNE
	Total connection load	≥ 24.7 kW
	Back up fuse (provided by customer)	3 x 35 A delay fuse
	Pneumatic connection	Connection: 1/4" Power: 5–8 bar constantly Consumption: about 0.16 m³/h, depending on production
	N ₂ connection (N ₂ cover)	Connection: 1/2" Innengewinde Power: 7 bar constantly Consumption: 15–20 m³/h, depending on production
	Sound level	< 65 dB(A)
Weights and loading	Machine	ca. 900 kg, without solder filling
	Solder filling	390–450 kg depending on the alloy (CIG 300/320/400) 550–650 kg depending on the alloy (CIG 420/500)



Where to find epm – all around the world



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