

TCP 150 HPE, High Performance Electric

High efficient production of up to 15" Light Guide Plate or similar size. With a possible cycle time below 25 sec*) and a footprint of 1 m², this system provides a high efficient solution, ready to be placed in a clean room direct in productionline. The technology is based on the Flux Gear™ system as every TC TECH system. Together with the Cold Frame Feature™ and D-HYPE™ it is possible to have full control over the cycle and get perfect parts continuously. Startup time is almost zero, first cycle gives the same result as after hours of production and a change of product size only takes a few minutes.

Product Data:

Process time down to 15 s*)

Quality grade Super

Thickness 0,25 - 30 mm

Double sided pattern

Max heating area 350x210 mm

Footprint: 1000 x 1000 mm

Roll to roll option

*)Heating and cooling time, handling excluded, depending on pattern deep, material in substrate and stamper quality.

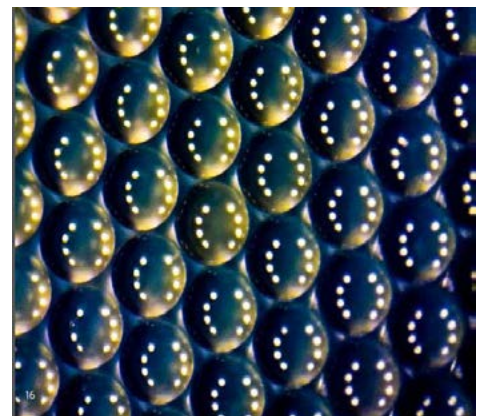
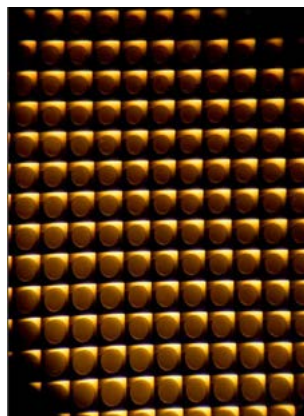
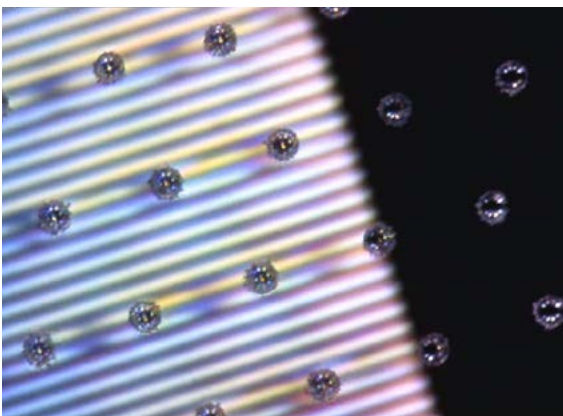
High Performance system

- Doublesided pattern
- Thickness down to 0,25 mm
- Single cavity or multicavity
- Cold frame feature 1,0 mm

Add-on

Robot

Roll to Roll



TECHNICAL DESCRIPTION TCP 150 HPE

Servo Electric press and control unit 600 kN

Footprint: 1000 x 1000 mm

Height: 2500 mm

Weight: 1 400 kg

Advanced speed: 70 mm/s

Working speed: 18 mm/s

High Speed: 90 mm/s

Stamper size: Estimated 385x250 mm

To be defined after receiving drawings.

Estimated cycle time for LGP 15" ~20 sec.

Heating and cooling time, handling 5 sec, depending on pattern deep, material in substrate and stamper quality.

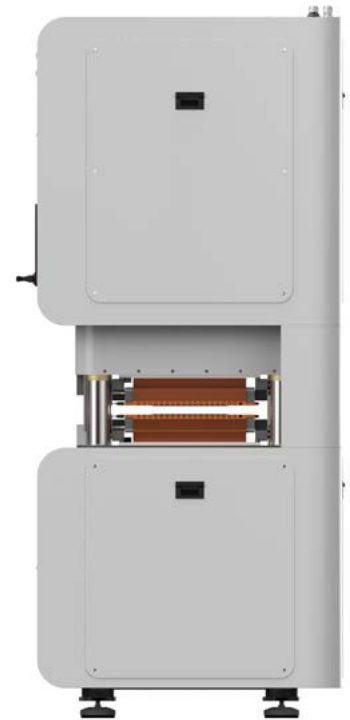
Power unit 60 kW

Footprint: 600 x 400 mm

Height: 2000 mm

Weight: 60 kg

Clean-room, robots, air supply, vacuum etc. is not included in this footprint estimate



Production room requirement

Production room: Optical parts cleanroom Class 1000 or better.

Temperature: 20 – 27°C ± 2°C (at chosen temperature)

Relative humidity: 30–60%, ± 5% (at chosen humidity)

Electrics: 3-phase 400 VAC, 63A per phase fuse

Expected average power consumption: 15 kW - average per cycle 0,2 kWh

The following utilities are required for the operation of TCP 150 HPE

Electrical Connection: 3-phase 400 VAC, 63A per phase fuse, 50 or 60 Hz

Cooling water: 100l/min, above 15 °C

Compressed air: Oil free, 6 - 8 bar, 1 000 l/min, dew point <3°C

Vacuum: Minimum 50 l/min, final pressure lower than 10 Pa

TC TECH Sweden AB

TC TECH, founded in 2011, is listed at Nasdaq First North Stock Exchange in Stockholm Sweden. Majority owner is Cimon group, a privately held industrial conglomerate.

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