

## 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 m<sup>2</sup>, this system provides a high efficient solution, ready to be placed in a clean room direct in production line. 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:

Cycle time down to 25 s\*)

Pattern transfer: single nanometer

Thickness <0,15 mm

No upper limit for thickness

Double sided pattern

Quality area 340-360x200-220 mm

Footprint: 1000 x 1000 mm

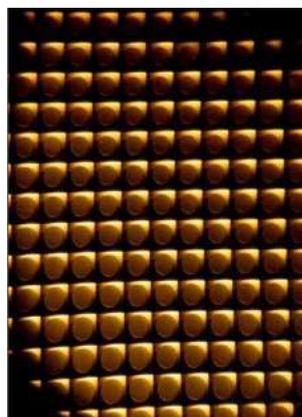
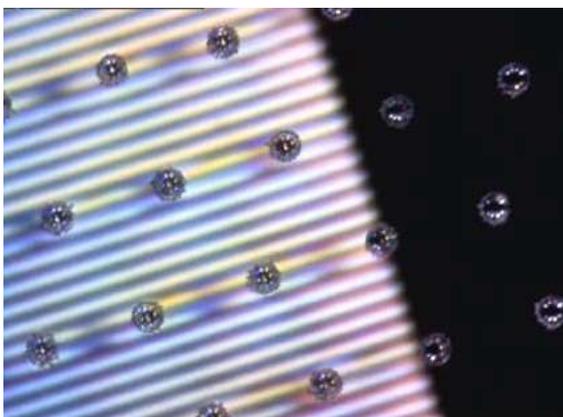
\*) Heating, cooling time, and handling included, depending also on pattern depth, material in substrate and stamper quality.

### High Performance system

- Double sided pattern
- Thickness down to < 0,15 mm
- Flexible, single or multi-cavity
- Cold frame feature 1,0 mm

### Add-on

Roll to Sheet



## TECHNICAL DESCRIPTION TCP 150 HPE

### Servo Electric press and control unit

**Max press force:** 750 kN

**Footprint:** 1000 x 1000 mm

**Height:** 2500 mm

**Weight:** 1 400 kg

**Stamper size:** 404x260 mm

To be defined after receiving drawings.

Estimated cycle time for LGP 15" <25 sec.

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

### Power unit 60 kW

**Footprint:** 600 x 500 mm

**Height:** 2000 mm

**Weight:** 60 kg

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

### Production room requirement

#### Production room:

Depends on the product requirement, for optical parts cleanroom Class 1000 or better is suggested.

**Temperature:** 22 – 25°C

**Relative humidity:** 40–50%

**Electrics:** 3-phase 400 VAC, 120A 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, 120A fuse, 50 or 60 Hz

**Cooling water flow Press** > 60l/min and **electrical cabinet** > 5l/min, **temperature** 15-20 °C

**Compressed air:** Oil free, 7 - 10 bar, 1 000 l/min, dew point <3°C

**Vacuum:** 4 x 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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