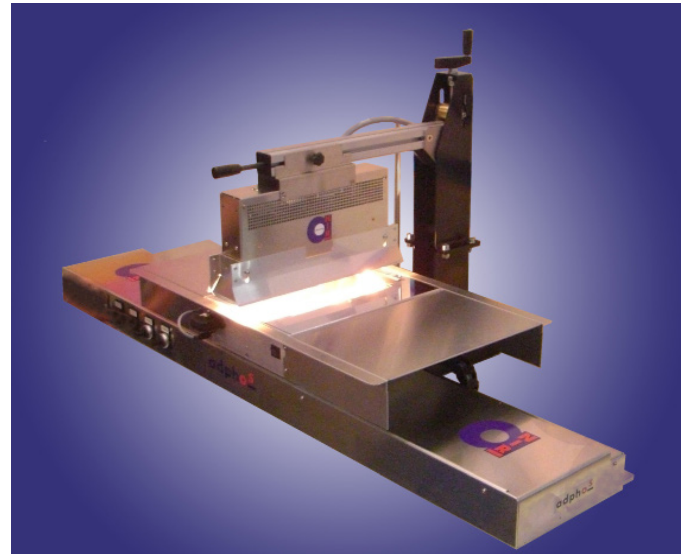
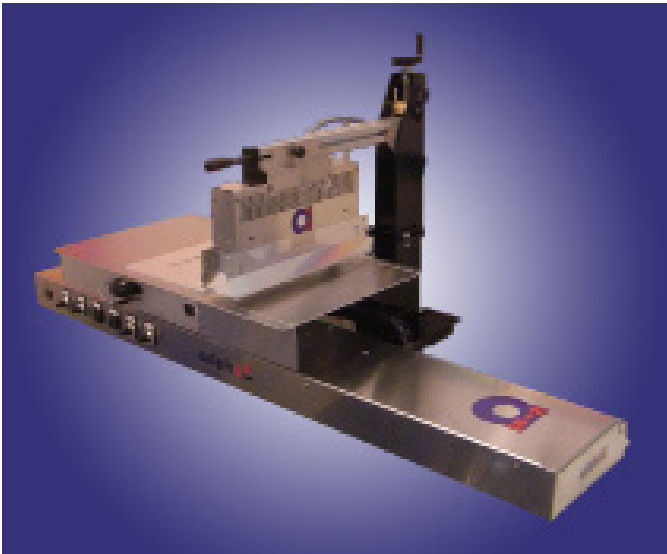


PBT (Platen Based Transport)

R&D and Prototype Curing/Drying System



adphos PBTs (Platen Based Transports) are companion products for x-y inkjet plotters. PBTs allow for “production” drying, sintering and curing in a lab scale device. PBTs are available in two configurations with both stationary and motor driven platens. Both systems include vacuum plate (and air hold down) to maintain product integrity during processing.

Lab Testing to Full Production

Moving from printed electronics concepts in the lab to full production can involve great risks of manufacturability. Products that are currently produced on an x-y machine can now be evaluated on a low cost, high speed transport to simulate your actual production process.

Maximum Adaptability

PBTs allow for open interface to various inkjet heads including: FUJIFILM Dimatix, Hewlett Packard, Kyocera, Konica Minolta and others.

A large selection of adphosNIR® drying, curing and sintering equipment is available for integration with all models of the R2R from high performance adphosNIR® combined with hot air for drying applications to focused reflectors for high density, short duration photonic processing (sintering/annealing). Please consult adphos for different options appropriate for your application.

Specifications for Conveyor-based Systems:

Sheet width: max. 200 mm x 300 mm, others on request

Standard Features:

- Static vacuum sheet holder with integrated vacuum blower to hold samples flat during processing
- Integrated power supply/control
- On/off signal for adphosNIR®-heater modules
- Mounting and vertical adjustment for different adphosNIR®-modules
- N₂/inert-gas processing for Cu-sintering (optional)
- Potentiometer for power adjustment

Features of motor driven platten:

- Speed: up to 12 m/min (40 ft/min)
- Potentiometer for speed adjustment

adphoS

uv

visible



0.8µm

1.5µm

ir

10nm

.38µm

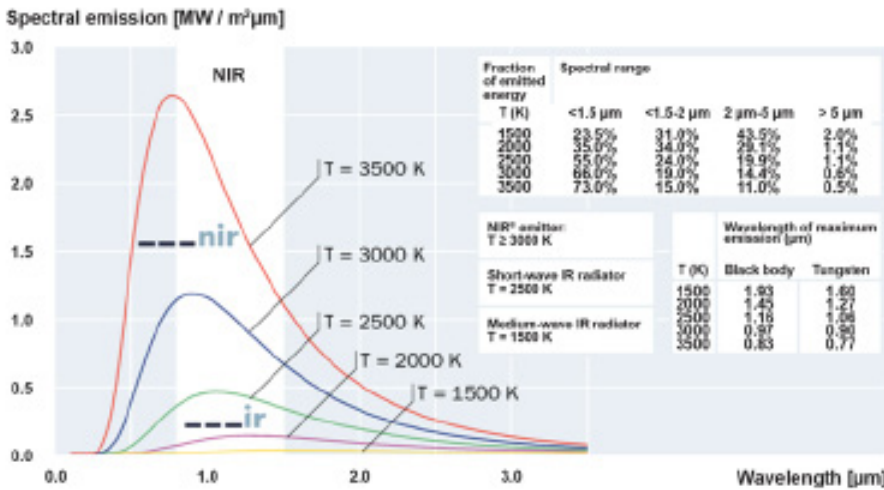
1.2µm
short wave

2µm
medium wave

3µm
long wave

PBT (Platen-Based Transport)

Why adphosNIR®?



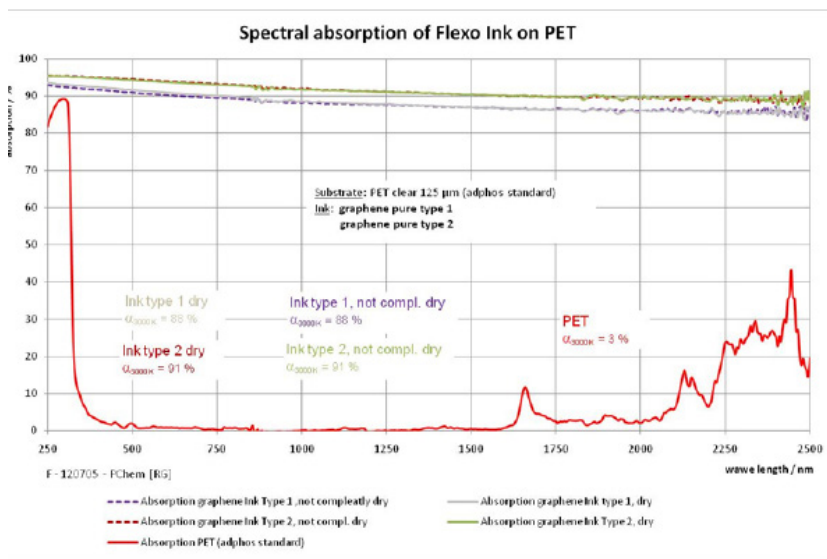
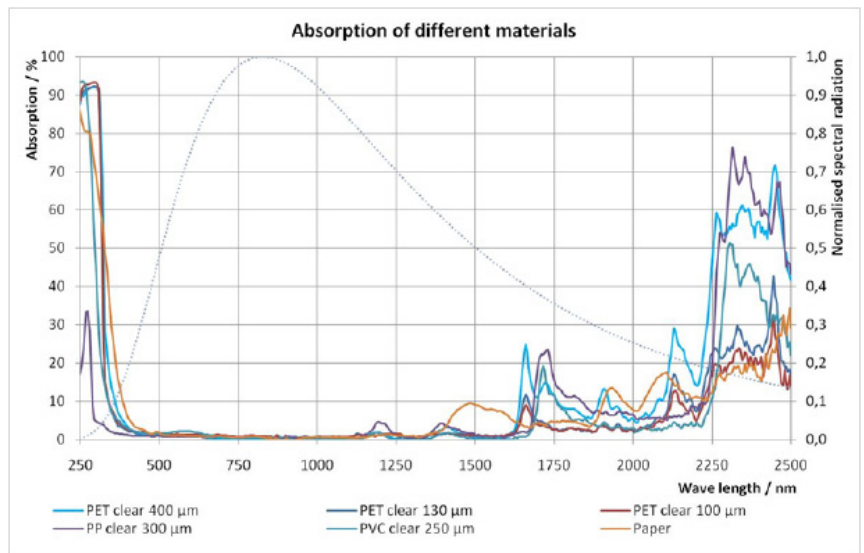
adphosNIR® is not just another IR-Technology

Ultra short wave length energy (T > 3,000 – 3,500°K)

Very high energy density up to 1,000 KW/m² (93 KW/ft²), ultimate 1,500 KW/m² (140 KW/ft²)

Highly focused reflector geometry

Many commercially available films are nearly transparent to adphosNIR® energy



adphosNIR® preferentially heats ink while minimizing direct heating of film or paper

