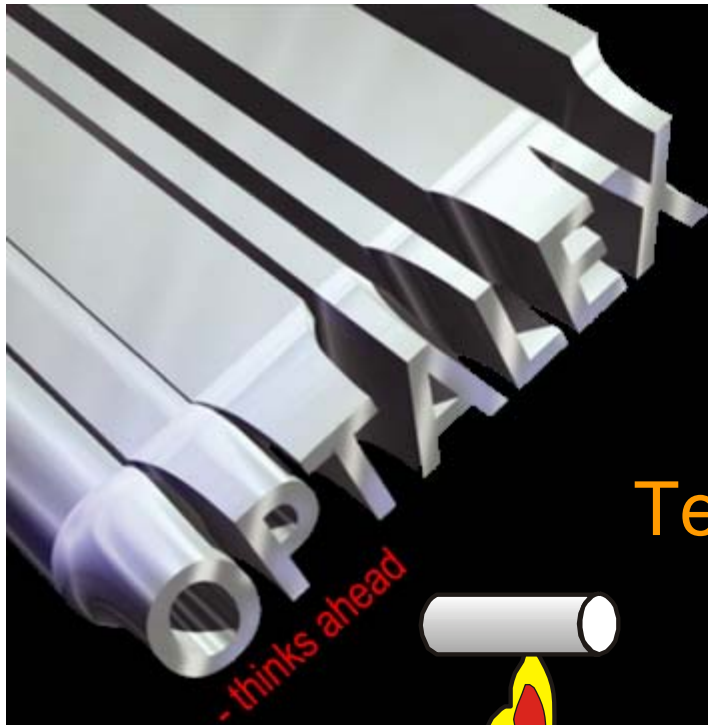
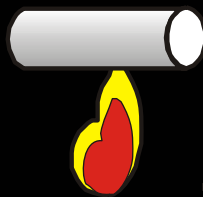


Extrusion



- thinks ahead



Temperature

Temperature

Temperature

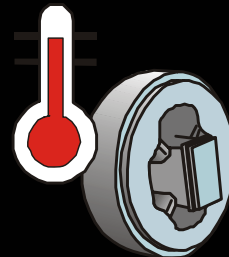
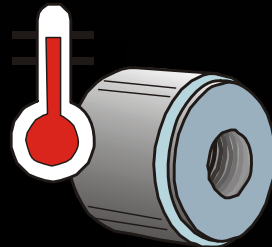
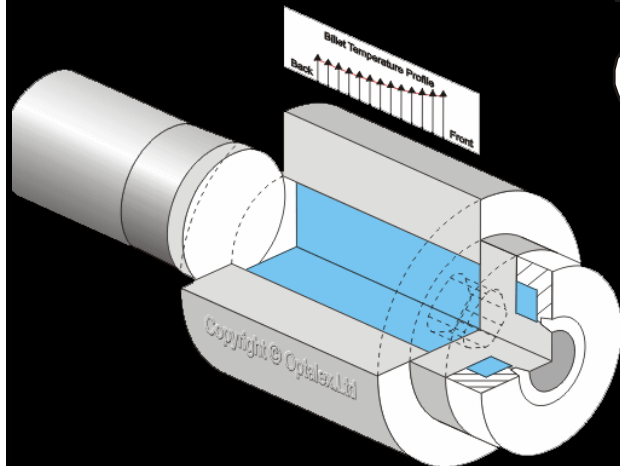
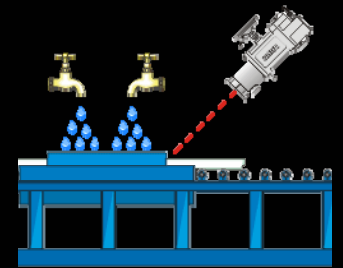
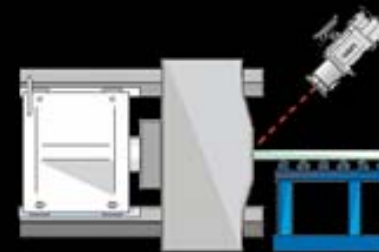
Temperature

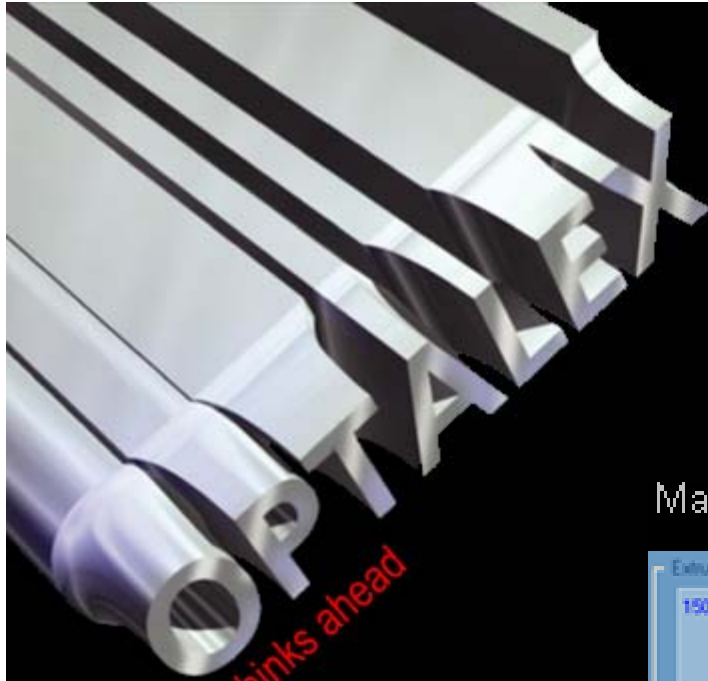
Temperature

Temperature

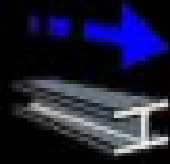
Temperature

Temperature





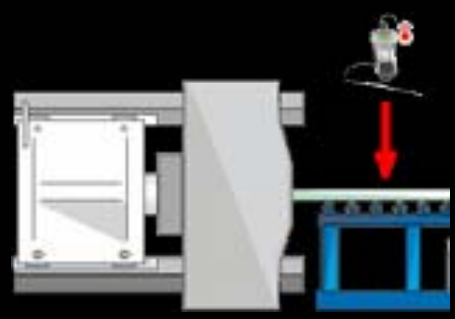
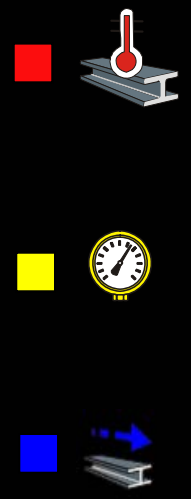
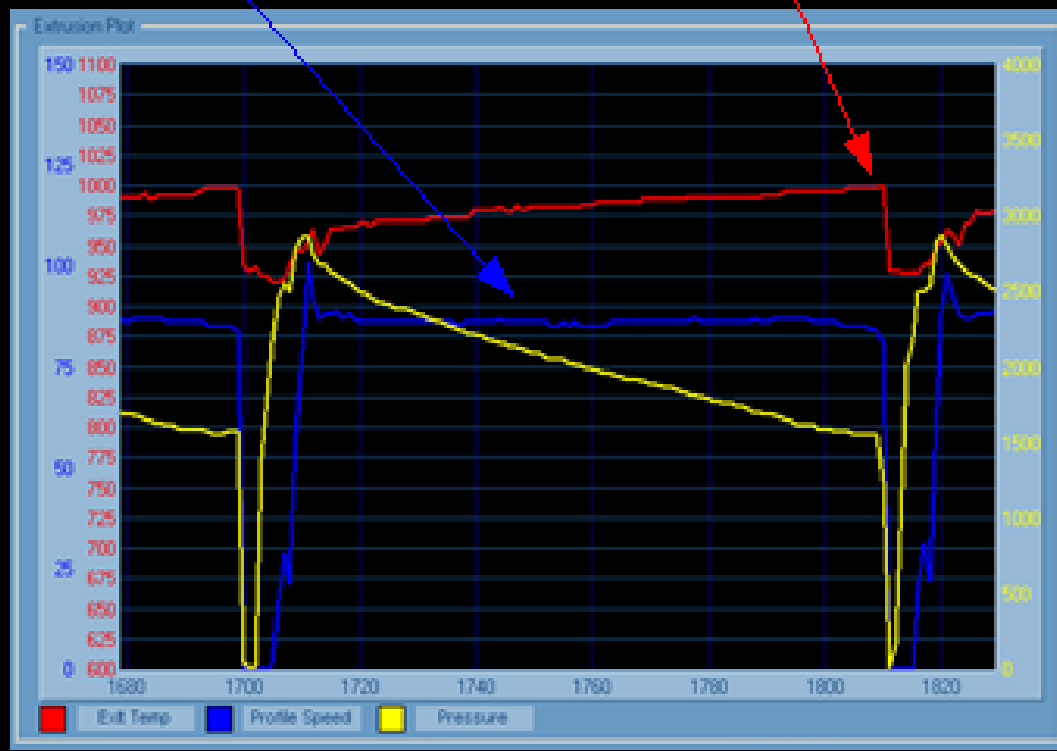
-thinks ahead

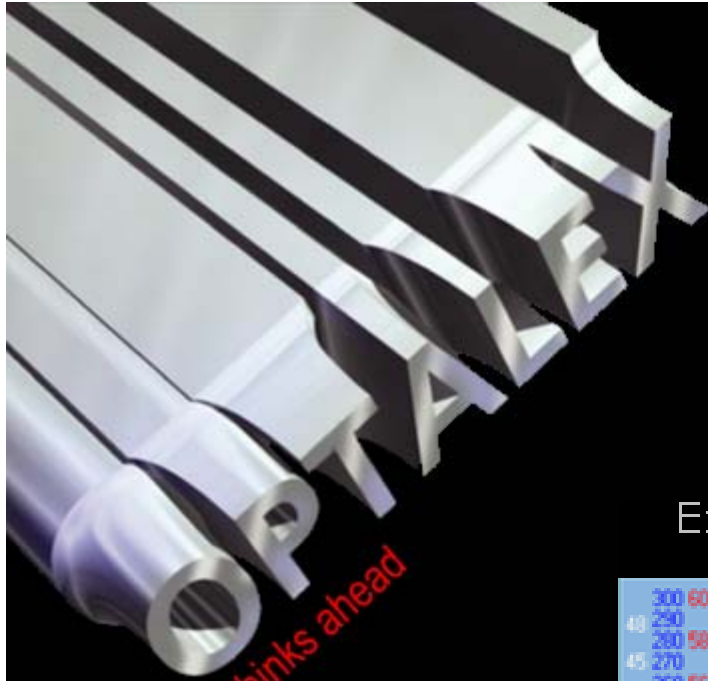


Fixed Extrusion Speed



Maximum Extrusion Speed = Peak Extrusion Temperature





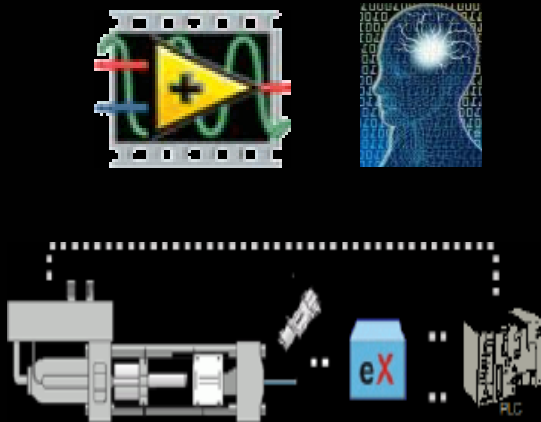
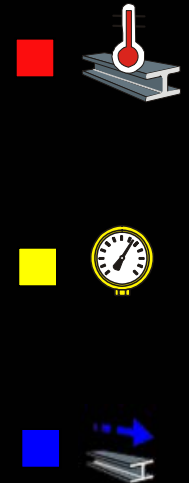
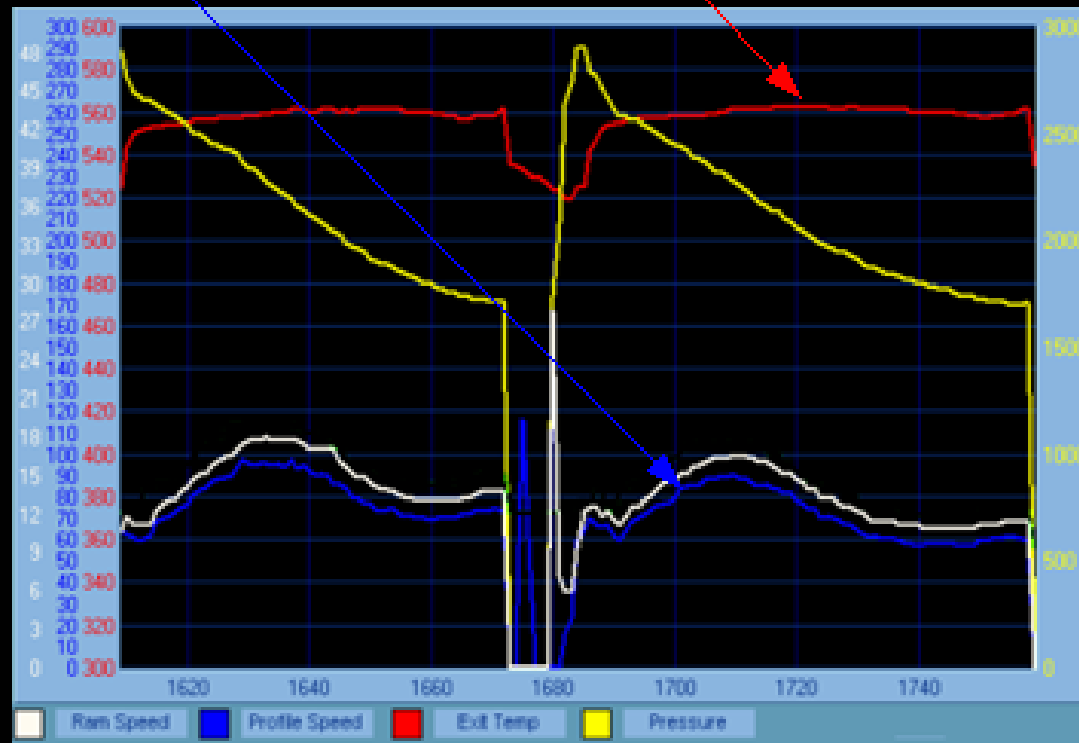
-thinks ahead



Temperature Controlled Extrusion Speed

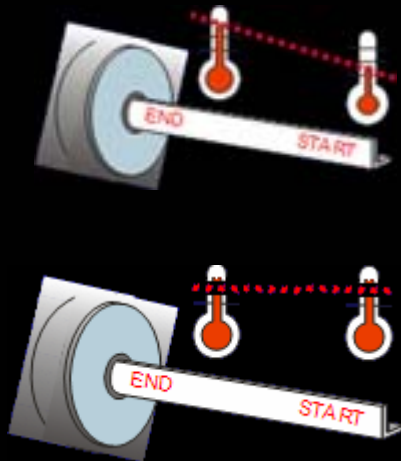
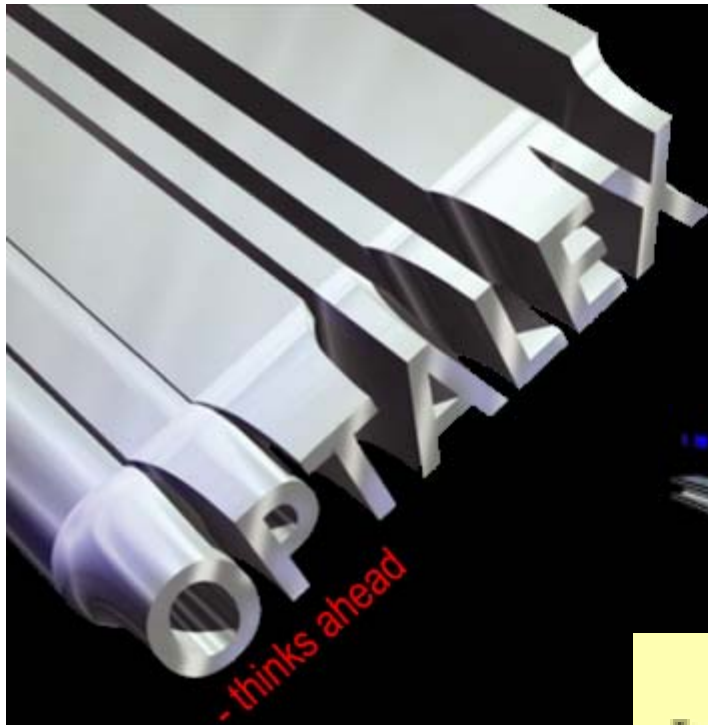
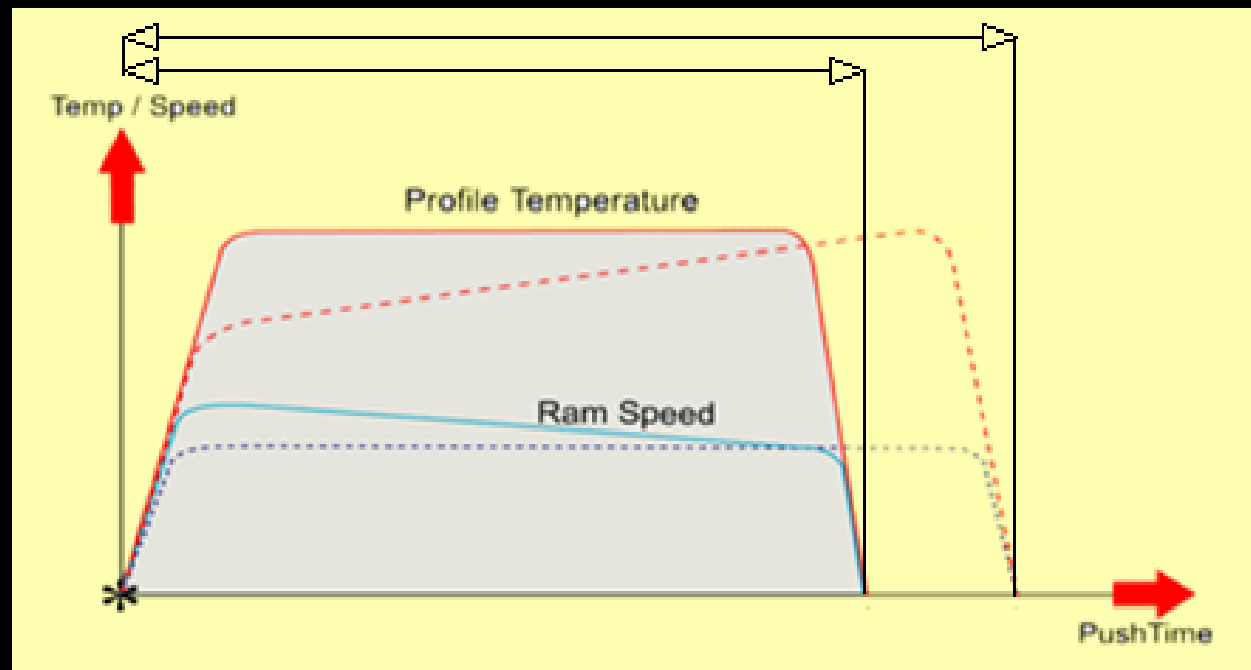


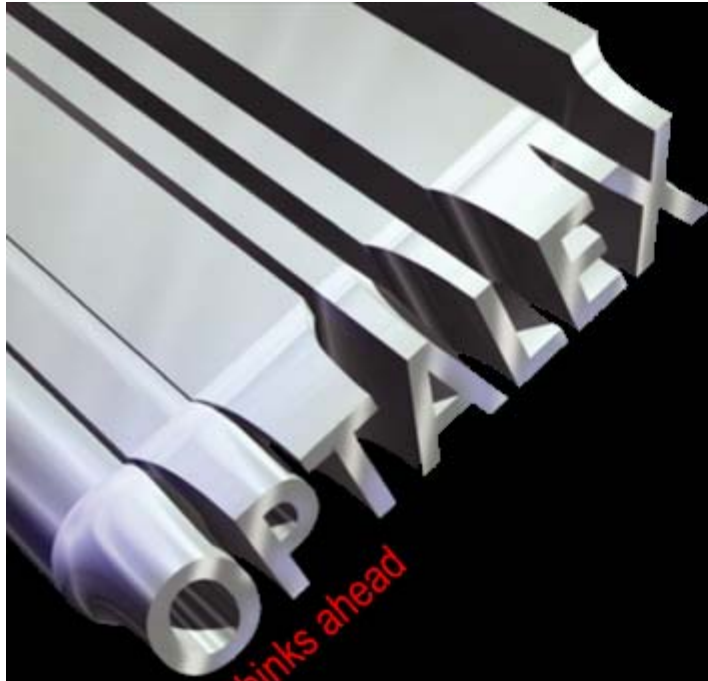
Extrusion Speed Follow Peak Extrusion Temperature



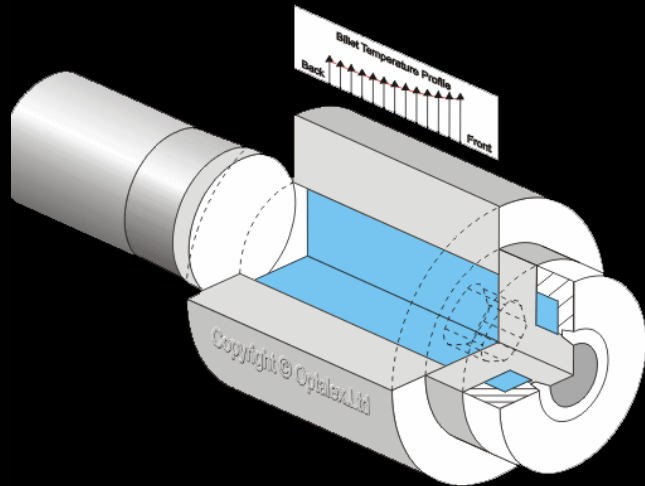
Advantage of using Controlled Extrusion Speed

- 20% - 40% push time reduction
- 2% - 5% reduction in scrap
- Uniform metallurgical properties
- Improved dimension stability





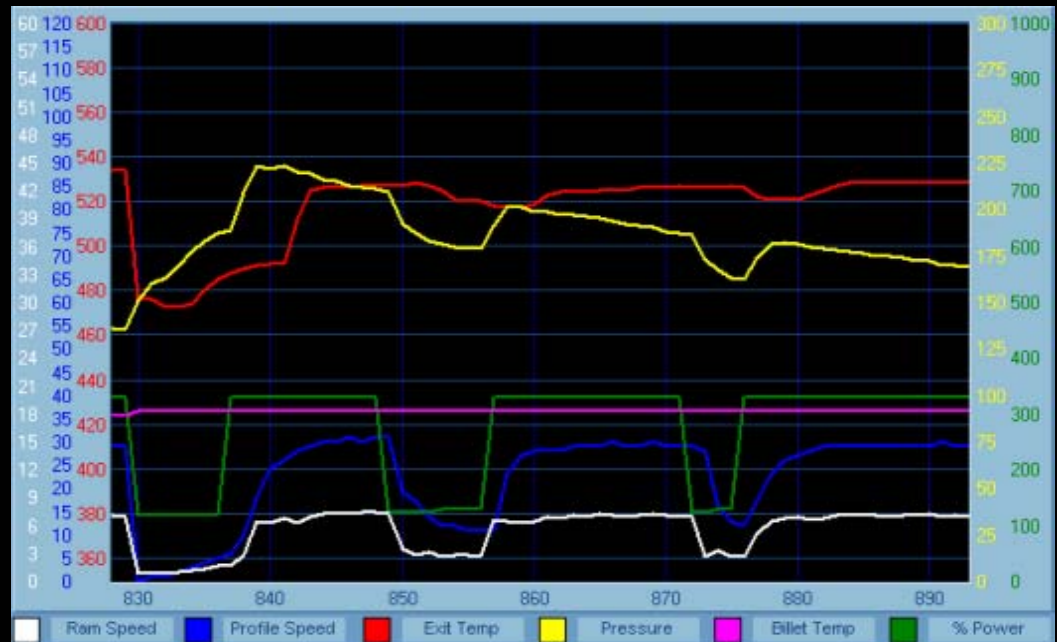
- thinks ahead



Technique behind Temperature Controlled Extrusion Speed

Extrusion temperature Dependent

- Billet temperature
- Die and Container temperature
- Frictional heat created by the extrusion speed

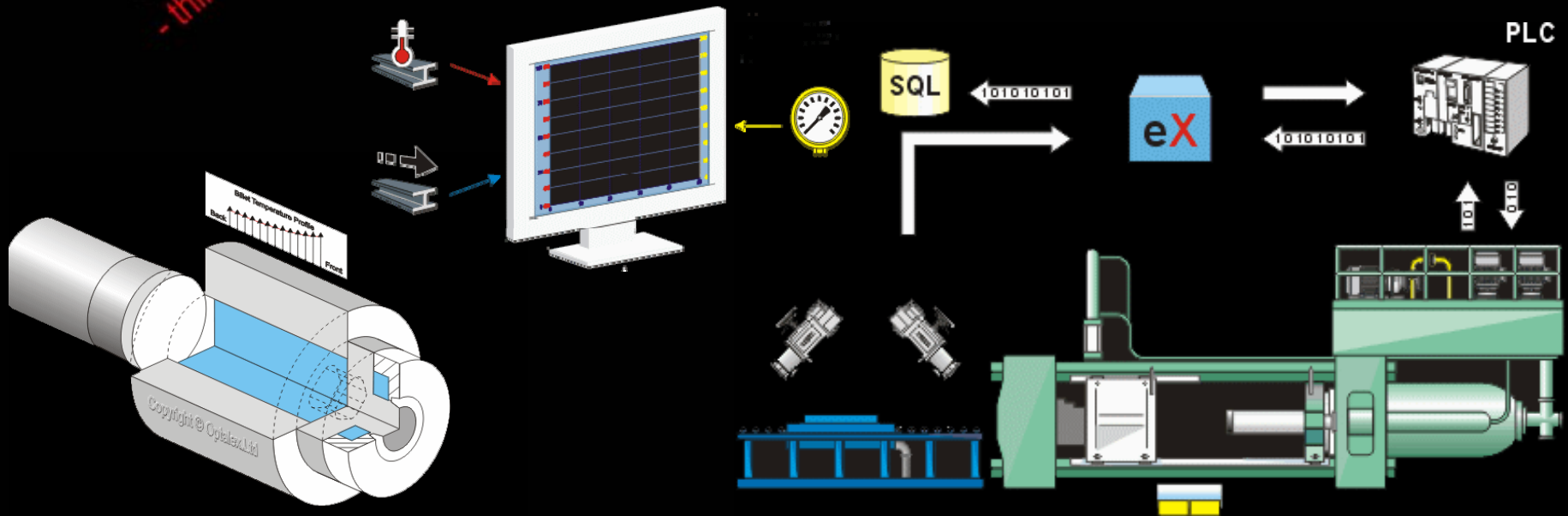


Technique behind

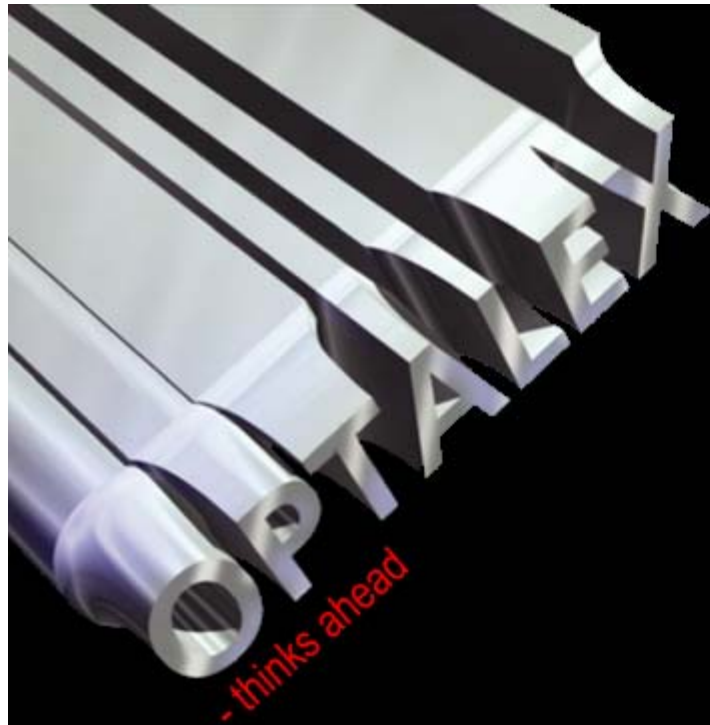
Temperature Controlled Extrusion Speed

- Optalex read the profile temperature 2 x sec.
- Optalex program the extrusion speed 3 x sec.
- Optalex update the graphic displays 1 x sec.
- Optalex store extrusion data 1 x sec.

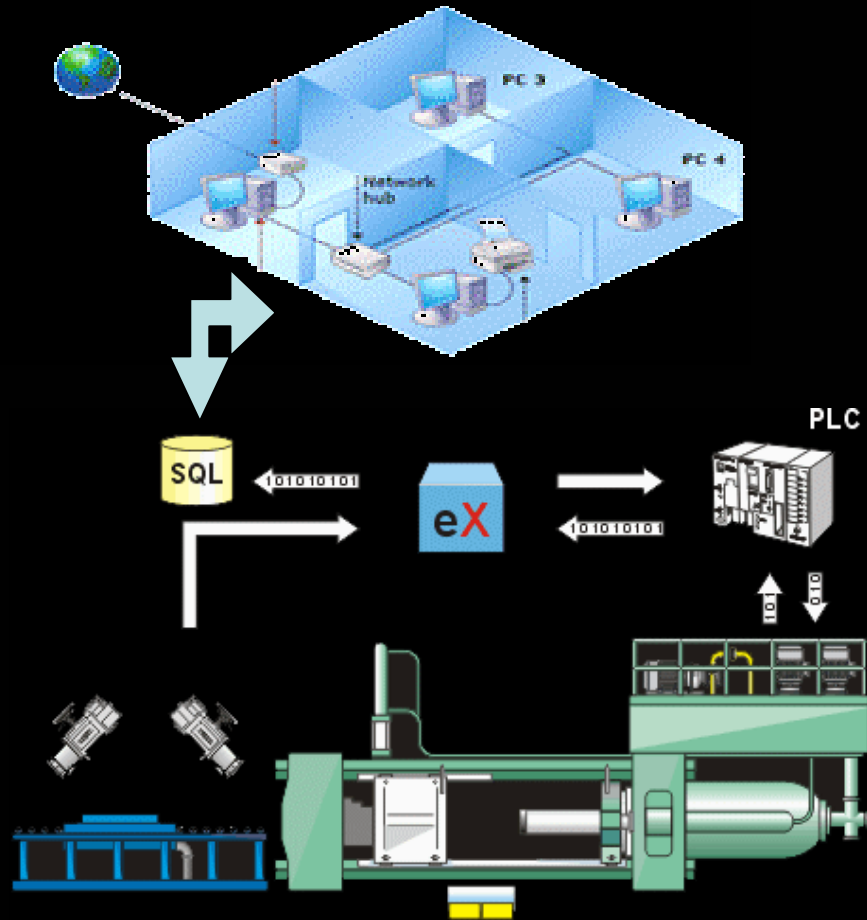
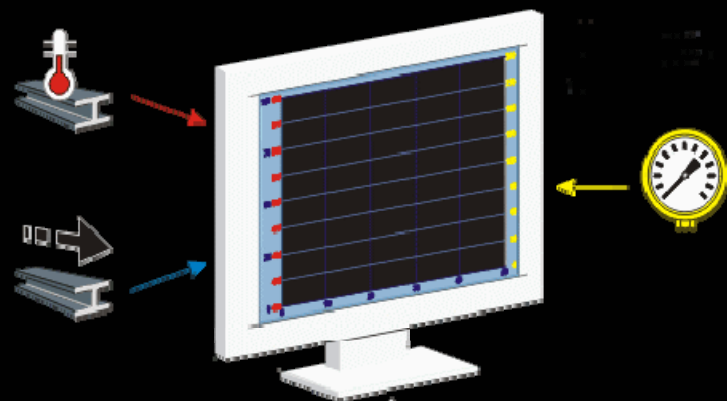
- thinks ahead



Optalex support **real-time press view**
and **reporting services** through
local network and internet connection



- thinks ahead





Founded in 1993



Installed base approaches > 100 systems

