

## Production Capacity

| Competitivity | Time to Market | Return on Investment |

Product	GSD	Overlap/Sidelap	Area/Lift	Area/Month
SPOT HRS Orthoimage and DSM	15m			4 000 000 km <sup>2</sup>
SPOT 1-5 Orthoimage and DSM	10m			2 000 000 km <sup>2</sup>
IKONOS Orthoimage and DSM	1m			40 000 km <sup>2</sup>
ADS40 Colour Ground Orthoimage from existing DTM	1m	30%	6 000 km <sup>2</sup>	144 000 km <sup>2</sup>
ADS40 Colour Ground Orthoimage & Infoterra DTM	0.5m	30%	3 000 km <sup>2</sup>	16 000 km <sup>2</sup>
ADS40 Colour TrueOrtho & Infoterra DSM	0.25m	80%	500 km <sup>2</sup>	2 600 km <sup>2</sup>
UCD/DMC/Analogue Frame Colour Ground Orthoimage & Infoterra DSM	0.16m	60%-30%	500 km <sup>2</sup>	2 400 km <sup>2</sup>
UCD/DMC/Analogue Frame Colour TrueOrtho & Infoterra DSM	0.08m	70%-70%	200 km <sup>2</sup>	400 km <sup>2</sup>

The above figures relate to the automated part of the process and are based on Infoterra's experience with recent large scale projects, using a 5 bi-processor node configuration plus a team of 3 people. Productivity generally noticed: between 2 and 3 times less labor intensive than traditional solution.



### Services & Support

| Smooth Transition from your Existing Environment | Reliability | Rapid Customization |

- Installation & on-site technical support,
- Software & production support,
- Remote software maintenance,
- Software training courses,
- On-demand software development.



### Customer References in supplying software to:

Fugro Earth Data (US), Pasco (Japan), Astrium (Thailand), TerraDigital/Astec (Germany), SPOT Image (France), BSI (China), Catic-Siwei (China), Peace map corps (China), Google (US), K Geomatics (Korea), Shanxi Mapping Bureau (China), Several MoD.

### and end products to:

DGA, NGA, NATO, USGS, European Commission, etc.

### About Infoterra

Infoterra, a subsidiary of Europe's leading space company EADS Astrium, is a leading provider of geo-information products and services for managing the development, environment and security of our changing world. The company owns industrial geo-production systems incorporated into applications used in industries ranging from Government, Local Authorities and Defence to Utilities, Navigation & Telecommunications. Infoterra, together with Spot Image, forms the Earth Observation division of Astrium Services.

## Pixel Factory

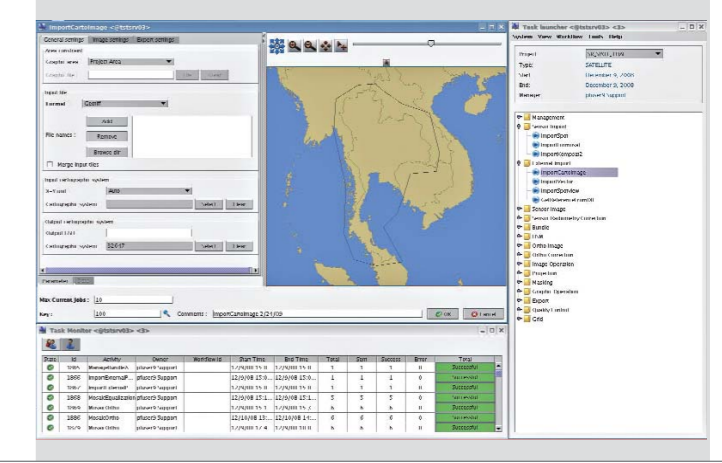
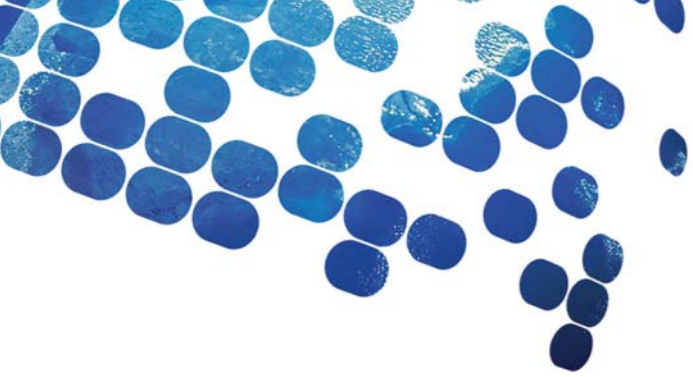
The power of an industrial solution in your hands



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## The Next Generation for Industrial Geo-Production

Infoterra France has developed its own industrial geo-production system containing a revolutionary digital processing chain to produce advanced 3D mapping products of unparalleled quality.

Thanks to its high capacity and native open architecture it is capable of automatically process vast volumes of raw earth observation data from multiple sensors and producing a wide range of cartographic end products (e.g. DSM, TrueOrtho™ and Countrywide ortho mosaic).

Pixel Factory is UNIQUE in that the processing of data both from satellite and airborne digital cameras is a key feature built into its original core architecture.

- Its whole framework is designed to give maximum flexibility in every way, even seamlessly interfacing with your existing third party software and tools.
- Its mass parallel computing power enables you not only to multi-task but also to manage concurrent workflows, with no limitation in terms of volume and size of data.
- Its centralised production management centre, graphical user interface and remote access make it simple to manage.
- Its modular structure allows its core software to be easily scalable to meet your future requirements. New features can be added as and when you need them.

### Complete Tool-Box of Features

| Automation | Reliability |  
| Rapid Response | Accuracy |

### 200+ state-of-the-art algorithms including

- Sensor calibration,
- Raw image enhancement (atmospheric, electronic, etc.),
- Fast aerial & spatial multi-sensor triangulation,
- Rapid automated tie-point generation & filtering,
- Automated dense Digital Surface Model (DSM) extraction,
- Semi-automated Digital Terrain Model (DTM) extraction,
- TrueOrtho & traditional geometrical rectification,
- Automated contour line generation from DTM,
- Automated mosaic creation (orthoimage, elevation image & second generation mosaic),
- Image enhancement (dodging, contrast, equalisation, etc),
- Image and vector reformatting,
- Cartographic tool-box (projection, datum & geoid support),
- The Workflow Editor,
- The Second Generation Mosaic Workflow.

### Multi-Sensor Support

| Versatility | Optimized Results |

Optical satellites, radar satellites, airborne digital cameras, scanned films.

- **Satellite sensor plug-ins:** Quickbird, Kompsat-2, Ikonos, Formosat-2, Aster, Landsat 7, Eros B, Spot 1-5 & HRS, ALOS-Prism Avnir-2, IRS P5, IRS P6, Theos, SSOT, Cartosat2, Geoeye1, Worldview1.
  - **Radar sensor plug-ins:** TerrasarX, RadarSat-1, ERS, RadarSat-2.
  - **Aerial sensor plug-ins:** ADS40/80, UCD, UCX, DMC, Analog camera, DSS Camera.
- ...and much more to come.



### Seamless Interfacing

| Interoperability | Investment |  
| Protection |

Easy integration of third party software & tools

- Photogrammetric workstation,
- Remote sensing software,
- Desktop publishing.

### Pixel Factory Framework

Modularity	Full Resource Visibility
Simplicity	Intuitive Interface
Productivity	Business Continuity

- Automated production workflows,
- Data-driven workflows,
- Embedded production workflows,
- Central data management,
- Complete system administration,
- Remote web-based administration tool
- Remote browsing of project data,
- Centralised quality & error management,
- Automated & custom reporting tool,
- Hot deployment of new features.

### End Products

| Compatibility | Choice | Quality |

- Core: Dense Digital Surface Model, Dense Digital Terrain Model, TrueOrtho & classic Orthoimage.
- Value-added: ADS-40/80 stereoscopic pairs, change detection map, Land use map, 2D & 3D vector databases.
- Native support of multiple output formats: Raster (GeoTiff, BIL, ECW, ASCII, Grid, DIMAP, DTED, USGS, JPEG, JPEG 2000 etc). Vector (Shapefile, DXF, ArInfo ungenerate, SVG, etc.) and GIS (VRML, OpenGIS / GML, etc).

### Three different packages to match your requirements

- **Pixel Factory:** build the customised solution you need for multi-projects. The Pixel Factory framework and your selection of required algorithms and sensor plug-ins. Hardware is optional.
- **Mobile Pixel Factory:** carry out rapid production in the field. A portable, compact and fully integrated production environment. This turnkey product includes both hardware and software.
- **Pixel Factory Framework:** optimise and industrialise your current environment and resources. For integration with your own system or within your own production workflow (incl. ground receiving stations). The software development toolkit (SDK) is also available.