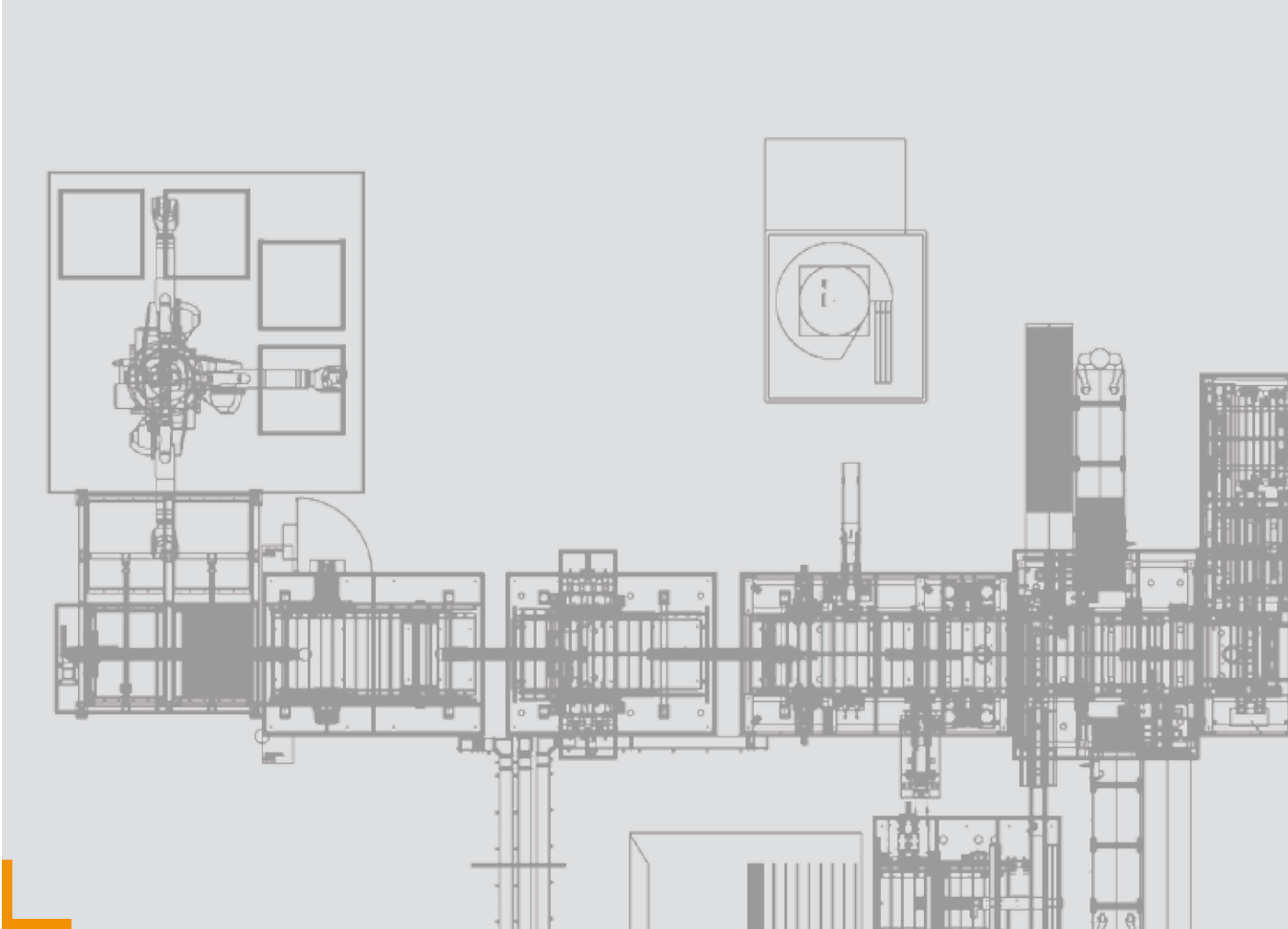




**Contributing to a cleaner environment
and a better tomorrow.**

Automation for the Solar Industries.

ixmation

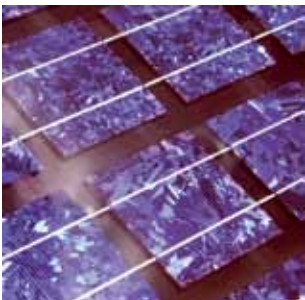


Experience and Capability

- ┌ Product Design
- ┌ Consultation
- ┌ 3D Concept Analysis
- ┌ Engineered Quotations
- ┌ Mechanical Design
- ┌ Manufacturing
- ┌ Assembly
- ┌ Integration
- ┌ Installation
- ┌ Training and Documentation
- ┌ Project Management
- ┌ Software Validation
- ┌ Electrical Design
- ┌ Electrical Panel Build
- ┌ PLC/PC Programming
- ┌ Vision Development
- ┌ Robot Programming
- ┌ Testing
- ┌ System Upgrades
- ┌ Production
- ┌ Service Support

Experience that you have been looking for...

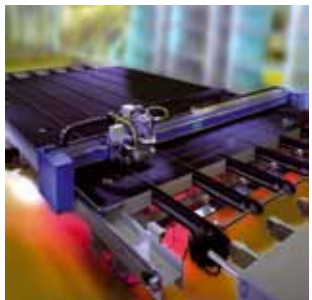
Today, as a result of engineering partnerships with our customers, ixmation has installed numerous solar production systems around the globe. Consider your needs - ixmation can fill in the gaps between your goals and these needs.



Stringer Interconnect



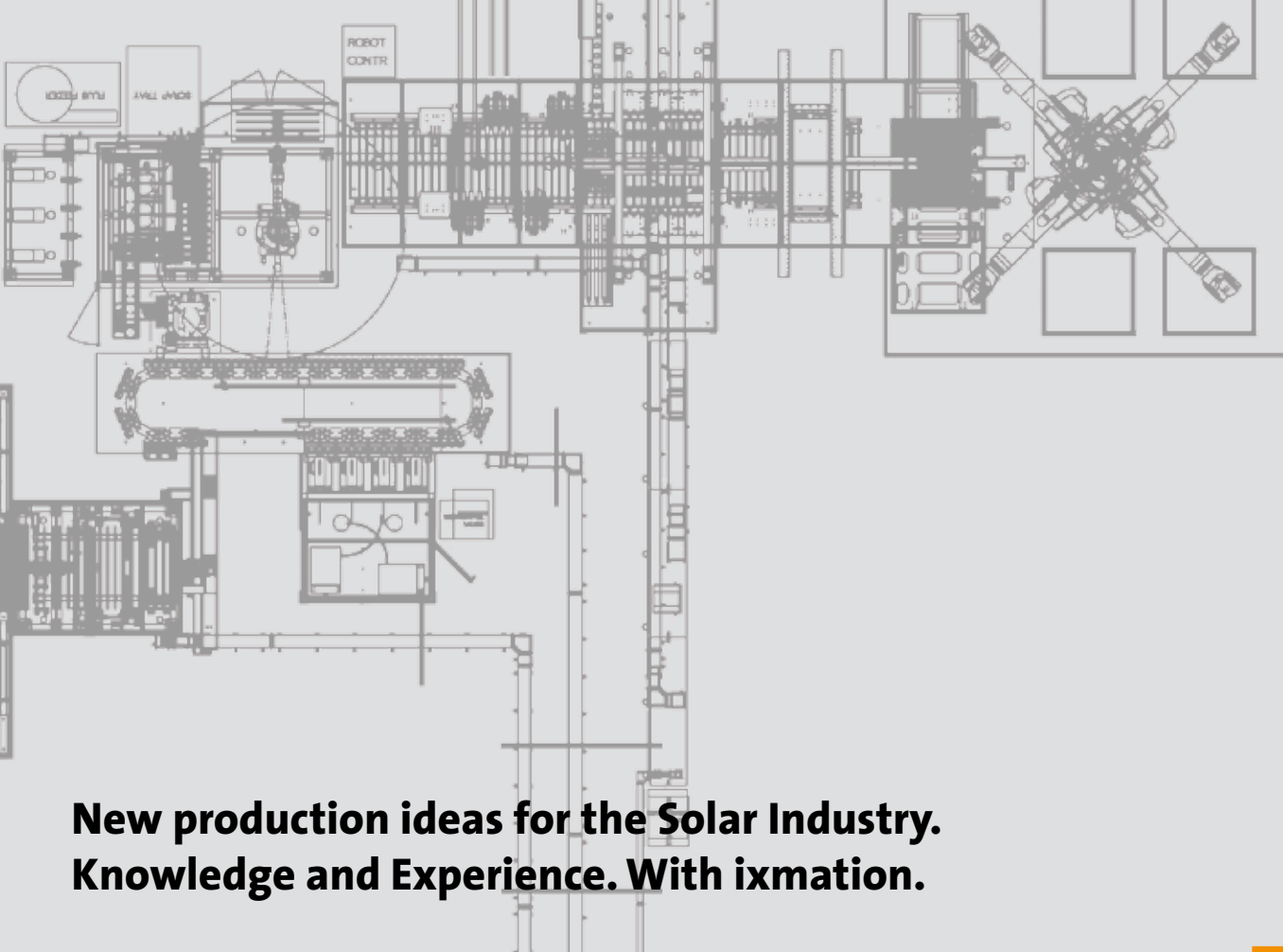
Hermetic Sealing



Glass Cutting



Curing



New production ideas for the Solar Industry. Knowledge and Experience. With ixmation.

- Diversified and extensive solar production technologies
- Co-Development resources for product and production
- Comprehensive dedicated project management

ixmation – your partner for solar automation.

ixmation engineering helps companies develop the next generation of solar technologies and improve current processes and outputs. We also supply engineering services to other alternative energy industries. Engineering partnerships have been ixmation's unique signature in the solar marketplace. ixmation is your partner in solar production.

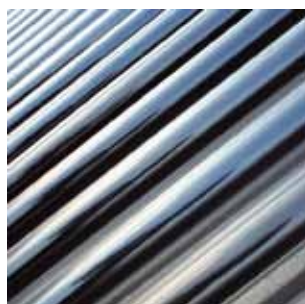
We are full-service automated resources, and these full-service facilities are centrally located in the USA, Europe, Asia and S.E. Asia. Because of ixmation's global footprint, we are likely near your global challenge.



Photovoltaic



Flex Film

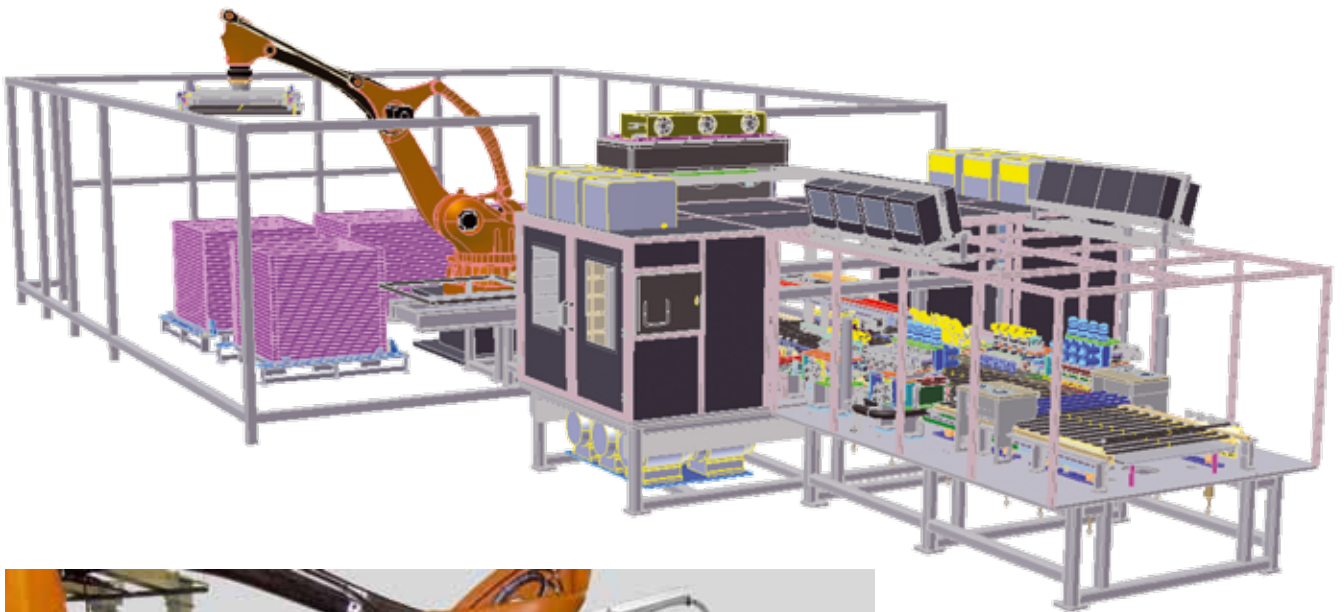


Thin Film



Concentrated Solar Power

- Dedicated co-location resources
- Coordinating cohesive project schedules
- Global footprint for your international projects



Panel handling



Panel framing

ixmation – your solar production partner

ixmation has established strong foundations in the solar market over the last decade. We provide solar companies a complete turnkey environment, from design through manufacture. These full services have laid the groundwork for ixmation's success in the alternative energy landscape. Today's production market needs are demanding and often include simultaneous product finalization, development, and testing while the initial production lines are being realized.

Facilities worldwide.

Solar turnkey solutions. From ixmation.

ixmation – your future business partner

ixmation has been successful in meeting the demanding goals of today's world for clean energy.

We understand time to market is critical. ixmation can place multiple teams on every open task to orchestrate a cohesive result. We are helping the solar industry meet today's product design and manufacturing needs.

ixmation, in close coordination with our customer, builds prototypes and proof-of-principle platforms helping to prove out critical processes. ixmation limits the number of variables, assisting in solutions for your production puzzles.

Our Process Portfolio

- └ Product/Panel handling
- └ Product/Panel packaging
- └ Product liquid and gas fill
- └ Product laser welding
- └ Panel framing
- └ Product vacuum and e-test
- └ Product ablation/edge deletion
- └ Product test and sorting
- └ Induction heating
- └ Crystal growth
- └ Panel Attach/Stringer
- └ Connectorizing
- └ Cell/Product vision inspection
- └ Panel cut
- └ Hermetic sealing
- └ Clean room processing



Clean room processing



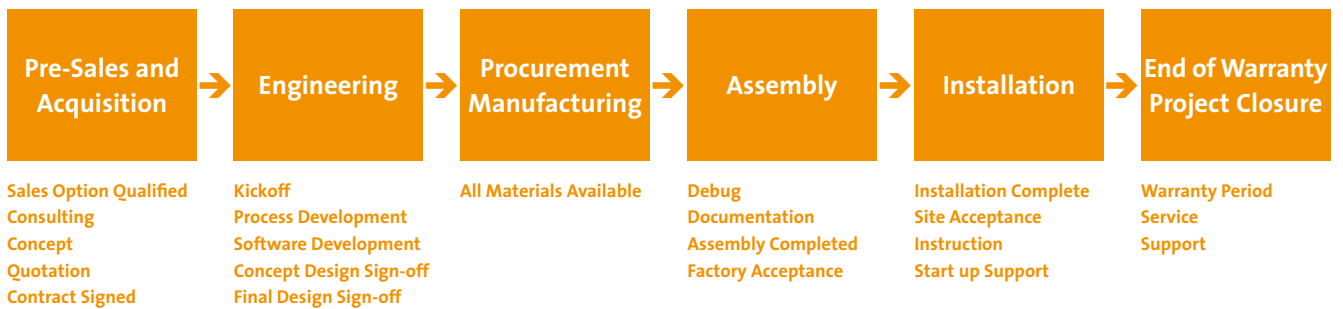
Encapsulation machine



Connectorizing

Focus on sustained customer satisfaction. Reliable Project and Service Performance. By ixmation.

- ✔ “Best Practice” and Project Management Process
- ✔ Assuring consistency across ixmation facilities worldwide
- ✔ “Stage Gate” tool ensures progression by activity milestones
- ✔ Online customer service request form



Regulatory Compliance
 NRC TÜV ISO OSHA NEMA GAMP NFPA UL SEMI FDA EPA ESD SEISMIC CE

Engineering Services

We specialize in solving problems. ixmation is committed to providing engineering services that offer solutions that are not only financially feasible and structurally sound, but help improve safety, reliability and profitability. ixmation provides high-quality tailored solutions, with full operations capabilities, engineering service and support that covers every need and is available at all ixmation facilities.



Project Management

ixmation customers benefit from a seasoned automation project manager as their single point of contact. Our global footprint facilitates the coordination of multi-site globally organized projects. ixmation project managers operate within a realtime database, implemented since 1995. This tool provides accurate information to our Project Managers, allowing them to effect informed decisions in real time.



Project Security

ixmation project security is tailored to your specification. Dedicated project teams work within encrypted/coded programs. From key-card access to hard or soft wall enclosing project build areas, ixmation ensures confidentiality. We know it is paramount, and we can safeguard it through an isolated assembly environment.



Our know how to your hands. Continous Service and Trainings. From ixmation.

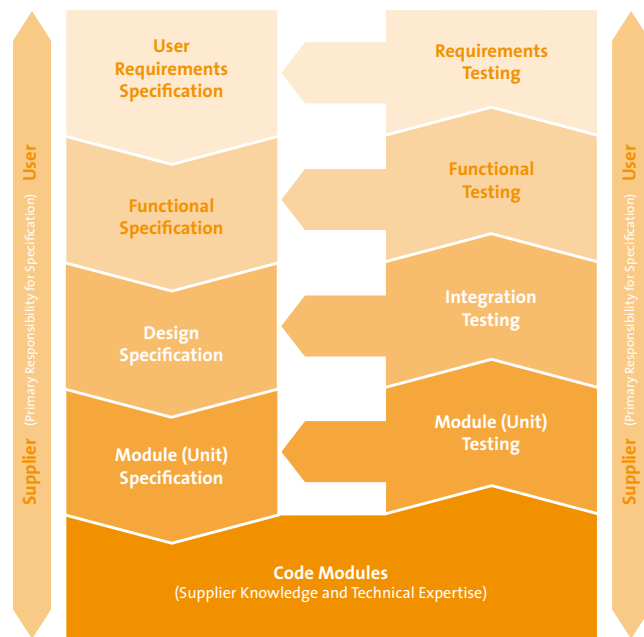
- Customer specific security
- Online customer service request form
- Online Remote Access customer support

Engineering Consulting Solutions

Our team, led by PhD credentials with hands-on knowledge, is the partnership behind your next engineering challenge. Our “quality” tools organize our engineering consulting team at the project level, and begin as a sequential chart that governs activities throughout the process. Quality provides a format for our meetings to ensure that the right questions to our engineering consulting team are asked at the right time. Employees are clear about their objectives and role relative to your program efforts.

Reliable Operator Training

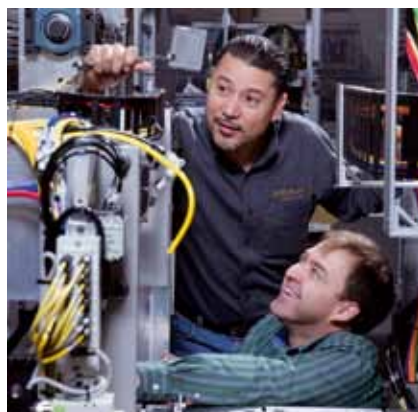
An assembly systems installation is always followed by operator training. This training is offered at our facility for all systems, for your maintenance and operating personnel. The participants learn how to troubleshoot and carry out the required maintenance work on the machine. Preventive maintenance increases the operational reliability, or in other words good operator training reduces down time.



GAMP 5 V Model – Chart for specification and testing.

Ongoing After Sales

Our comprehensive after sales program includes customer support services. Our after sales customer support also includes defined maintenance and individual inspection agreements – to ensure fault-free and reliable operation to keep your plants up and running for years – because the show must go on!



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We can be contacted worldwide through representatives or dedicated branches. Contact us.