



## Material Handling Systems

- Package/Unit Handling Conveyors
- Pallet Conveyors
- Sortation Systems
- Warehouse Distribution Systems
- Bulk Material Handling Conveyors
- Industrial Manipulators
- Warehouse Rack Storage Systems
- I-Beam/Enclosed Track Conveyors
- Pallet Stackers/Dispensers
- Checkweighers
- Continuous/Reciprocating Lifts

## Motion Control Systems

- Motor Control Technologies: V/Hz, Open-Loop Vector, Closed-Loop Vector, DC, Servo
- Electric Actuators
- Multi-Axis Controllers
- Soft-Starts
- Applications: Master/Follower, Web Control, Rotary/Linear Positioning, Lineshafting, Flying Shear, Feed to Length, Coordinated Motion, CAM Profiling, Software Clutch, Product Phasing/Registration and Others

## Robotics

- Palletizing/Depalletizing
- Packaging
- Pick and Place
- Product Assembly
- Vision Guided Robotics

## Control Systems

- PLC/PC Based Control Systems
- UL-Labeled Control Panels
- Operator Interfaces
- Industrial Network Technologies
- Custom Control Panel Design And Fabrication

## ENGINEERING SERVICES

As a leading industrial systems integrator, IBT maintains a broad based engineering staff to support our products and services. The IBT Engineering Services Group specializes in turnkey material handling, motion control, robotics, and control systems utilizing state-of-the-art industrial technologies. Our ability to handle projects from initial concept through factory floor implementation helps us ensure that the delivered system meets our customers' specific needs, while maintaining the important performance criteria and technical integrity that are so important to their bottom line.

## ENGINEERING SERVICES

When you purchase a system from IBT, you will not be handed a box of loose parts. As part of each integrated system we supply, IBT provides a comprehensive package of engineering services.

### Project Definition and System Concept

IBT engineers will visit your facility to make an assessment of your current production systems, discuss their operation with your production and maintenance personnel, and meet with your management team to define the scope of the project and formulate specifications and goals. IBT will then develop a system concept that satisfies all of the goals for the project in the most economical and reliable manner. A thorough system proposal will be written which will document the proposed system scope, operational parameters, sequence of operations, equipment specifications, acceptance criteria, and engineering services to be provided. Proposals typically include a fixed investment amount and detailed project schedule.

### Project Management

IBT believes project management is the key to any successful project. IBT will assign a single Project Manager for the duration of the project who will be responsible for ensuring that all phases of the project are completed in an accurate and expeditious manner. The Project Manager will assign and oversee all engineering responsibilities and will head the IBT Project Team. The IBT Project Manager will report directly to your designated Project Manager or Project Team. The Project Manager will be responsible for maintaining communication between the customer, sub-contractors, vendors, and all IBT personnel and for maintaining the project schedule.

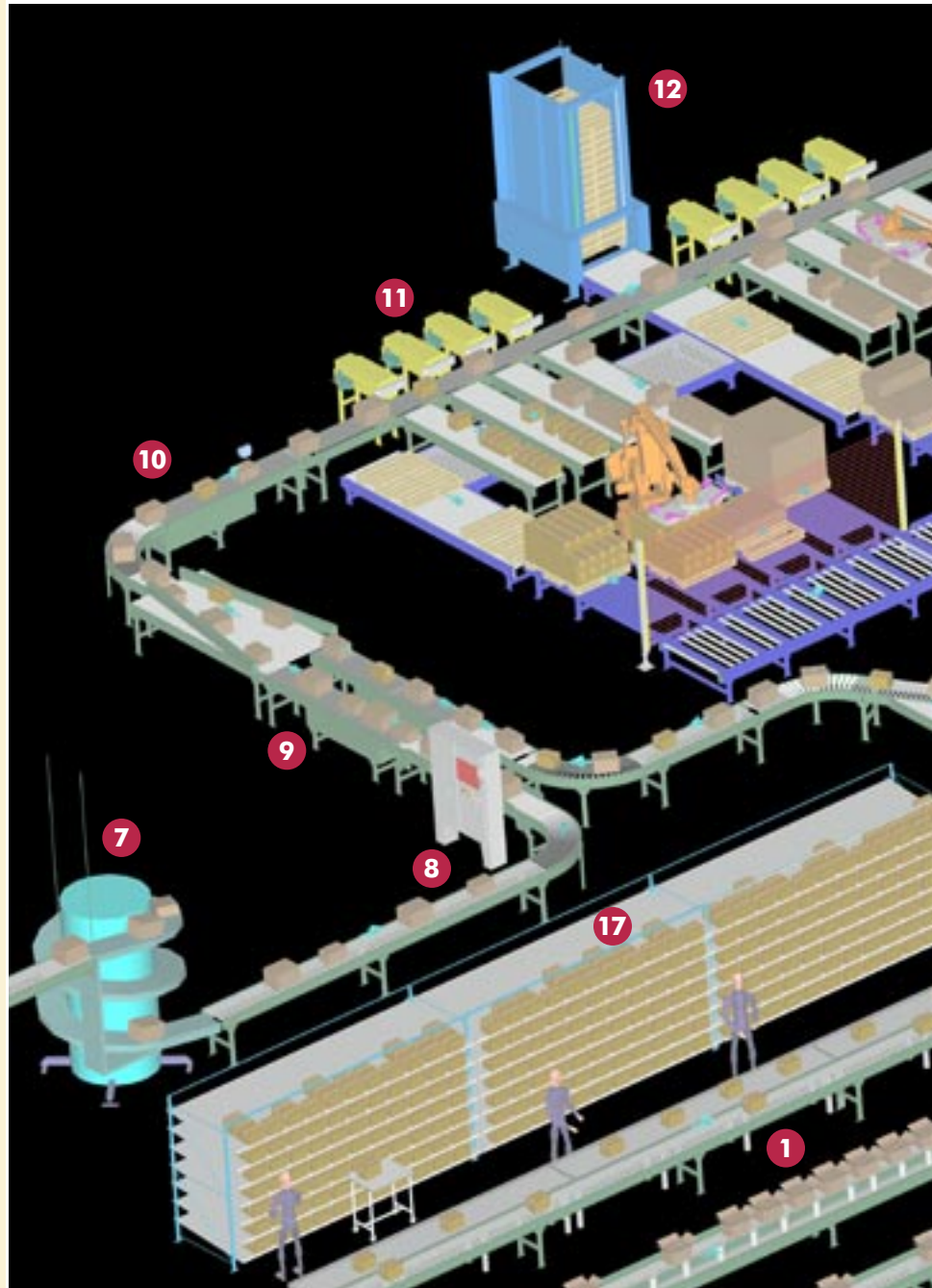
### System Design and Development

IBT's staff of electrical and mechanical project engineers will perform all system design and development engineering functions for your project. They will design the system to meet the performance specifications outlined in the proposal. All system components will be designed/specified with an eye towards system performance and robustness. All custom software for the system controls will be written, tested, debugged, and supported by IBT engineers.

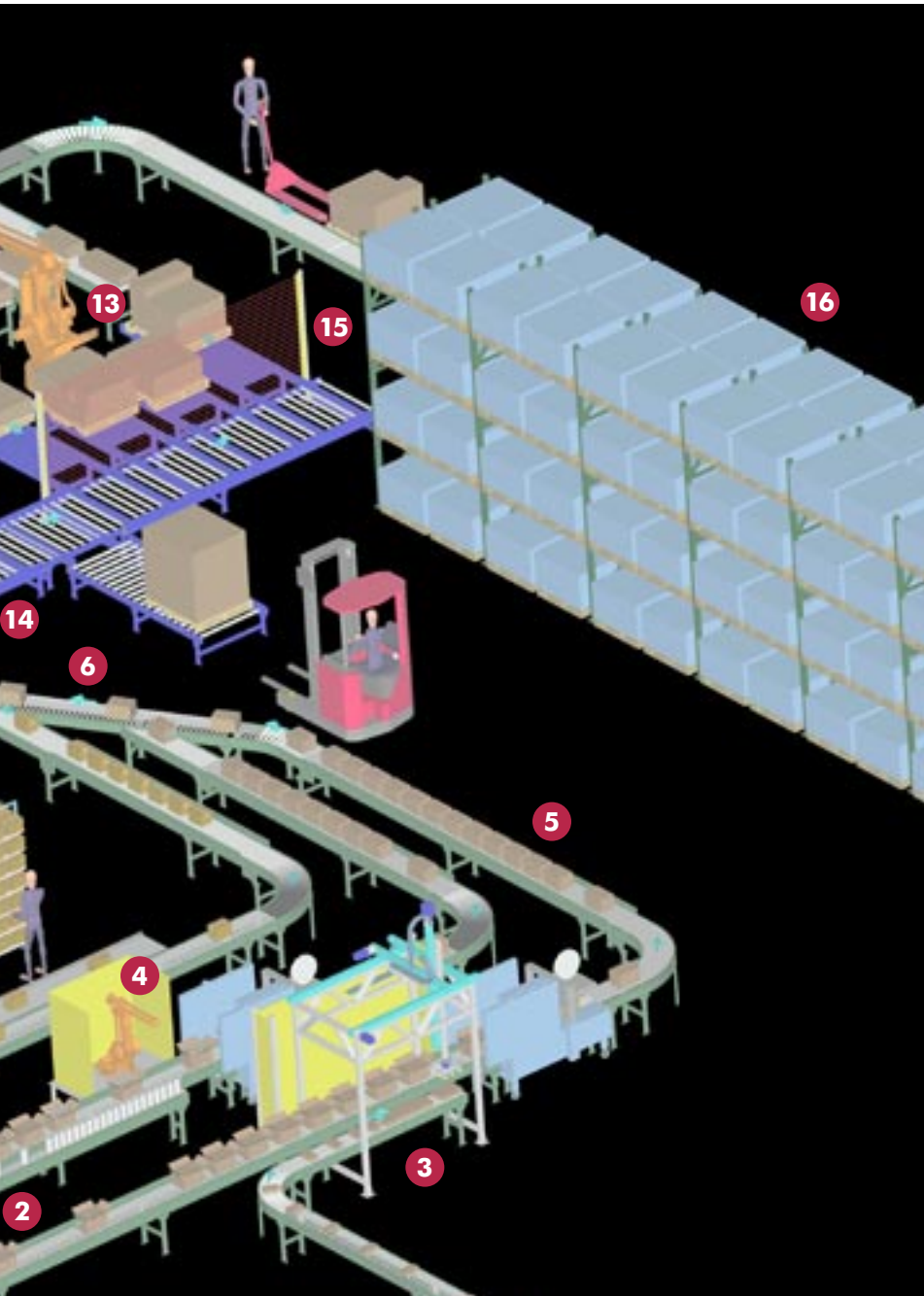
### System Commissioning

The system has been designed, manufactured, assembled and installed. It is now time to throw the switch. This is often the most critical juncture of a project. IBT engineers will be on site to assist in the start-up, debug, testing and commissioning of your system. This is when it pays to have the expertise of the IBT engineers, who will do whatever it takes to get your system up and running to your specifications in a timely manner.

1. Case Conveyors
2. Table Top Conveyors
3. Pick And Place Gantry Robot
4. Packaging Robot
5. Electronic Accumulation
6. Saw Tooth Merge
7. Spiral Conveyor
8. PLC Control Panel w/HMI
9. Servo Belt Merge



- 10. Bar Code Sortation
- 11. Pneumatic Systems
- 12. Pallet Dispenser
- 13. Robotic Palletizers
- 14. Pallet Conveyors
- 15. Safety Light Curtains
- 16. Pallet Storage Rack System
- 17. Shelving System



## Training

In order for our customers to enjoy the full benefit of their systems, IBT feels it is critical that all production and maintenance personnel are properly trained in the operation, maintenance and troubleshooting of the system. IBT will work with you to develop a training program that will meet the needs of your people and operation and allow you to take full ownership of your system.

## System Documentation

As part of each system we supply, IBT will provide a comprehensive set of Operation and Maintenance manuals. The Operation and Maintenance manuals fully describe the design, construction, operation, maintenance, and troubleshooting of the system. A recommended spare parts listing with part numbers and pricing is included in each manual. All CAD generated layout and assembly drawings, and a complete set of electrical schematics are provided. IBT provides you the source code for all custom software developed for your system so that you can make changes or updates to your system, if you should so choose. The Operation and Maintenance manuals are provided in both printed and electronic formats.

## Follow-Up Support

Once your system is up and running, IBT will not walk away and leave you on your own. We offer a complete package of after sale support for the systems we provide. Our local branch locations carry a stock of replacement parts available for immediate delivery. In addition, a large inventory is stocked at our corporate headquarters in Merriam, Kansas. Our engineers, the same ones who designed and commissioned your system, are available for phone or on-site support. Many of our systems are installed with modems that allow us to access the systems remotely and troubleshoot without the cost and time of traveling to the facility. IBT can also put together a maintenance service program for your system to maintain its peak performance.

## Installation Services

Using a network of local and regional labor teams, IBT can provide both electrical and mechanical installation of your system. IBT provides engineering supervision of all sub-contractors. Having IBT install your system ensures that it will be installed in accordance with manufacturer's specifications and will meet the project deadlines.

# IBT TECHNICAL SERVICE CENTER

The IBT Technical Service Center is a U.L. Listed Control Panel Fabrication facility. Electrical control panels designed by the IBT Engineering Services Group are built and tested at the IBT Technical Service Center prior to being shipped to our customers. IBT can supply custom control panels with NEMA and/or IEC rated devices from such leading controls suppliers as Siemens, Allen Bradley, Square D, Cutler Hammer, and others.

The IBT Technical Service Center also serves as a research, testing, evaluation, and demonstration facility for IBT and our customers. A number of pieces of equipment are available for testing of customer product and for product demonstrations. Equipment buy-offs for systems supplied by the IBT Engineering Services Group are also performed at the IBT Technical Service Center.

## **IBT Technical Service Center**

### **Metropolitan Distribution Center**

**5165 Merriam Dr.**

**Merriam, KS 66203**

**(913) 362-5102**

**Fax: (913) 362-5059**



If you would like additional information on any of our Engineering Services, contact your local IBT Branch Service Center or call IBT toll-free at 1-800-332-2114

**IBT**  
Engineering Services

[www.ibtinc.com](http://www.ibtinc.com)