IPS Company Overview

Knowledge, Skill & Passion
IPS-Integrated Project Services, LLC is a global provider of technical consulting, architecture, engineering, project controls, construction management, and CGMP compliance services for technically complex pharmaceutical development and manufacturing facilities worldwide. Our world-class expertise, knowledge, and understanding of industry trends place importance on time-to-market, plant flexibility and cost control to avoid costly project delays and minimize risk while building, designing, constructing and qualifying CGMP regulated facilities.

### COMPANY OVERVIEW

#### Services

- Technical Consulting
- Construction Management
- Full Life Cycle CQV
- Core Services
- Internationally Recognized Technical Expertise
- About Us

### Technical Consulting

- Business Case Consulting
- Operations Strategies
- CGMP Compliance Consulting
- Operational Excellence and Planning
- Strategic Master Planning
- Technology Transfer
- Lean Approaches to Capital Projects
- Calibration Program Management
- Energy Audits / Conservation/ Management
- Environmental Impact Analysis / Assessment

### Construction Management

- EPCM / Design-Build
- Project Controls
- Preconstruction
- Cost Management
- Estimating / Scheduling
- Target Casting
- Open Book SGMP
- Risk Analysis
- Facility / Process Equipment Expediting
- Procurement Strategies
- Project Management
- Risk Analysis
- Turnover Packages
- Safety / Environmental Compliance

### Core Services

- Technical Consulting
- Architecture
- Engineering
- Project Controls
- Construction Management
- CGMP Compliance / CQV
- EPCM
- Technical Staffing

### Internationally Recognized Technical Expertise

- Advanced Aseptic Filling / Barrier Technologies
- API / Small Molecule Manufacturing
- Oral Solid Dosage (OSD)
- Biomanufacturing, Cell & Gene Therapies, Vaccines
- Potent Compounds and Containment
- Scale-up / Tech Transfer
- Critical Utilities / Utility Design
- Laboratories / Vivariums
- Risk-based Commissioning & Qualification
- Serialization & Traceability
- ICDN / Flexible, Lean & Turnkey Modular Construction / Integrated Project Delivery

### Design / Engineering

- Technology
- Process Engineering
- Process Architecture
- Automation
- Architectural
- Mechanical, Electrical, Plumbing
- Building Services
- Fire Protection / Life Safety
- Equipment
- Computer Process Simulation and Modeling
- Environmental
- BIM Technology / CAD
- 3D Simulation
- Conceptual Design / Engineering
- Detailed Engineering
- Energy / Sustainability / Conservation Management

### Full Life Cycle CQV

- CGMP Audits (Domestic/Int’l)
- Project Design Reviews [Design Qualification]
- Early Stage Planning
- Validation Master Planning
- ASTM E2500 Implementation
- Validation Program Development
- Project Management
- Quality System Implementation
- Risk Assessments / FMEA / HACCP / Other
- FDA 483/WL/Consent Decree Remediation
- Validation & CGMP Training
- Project Information Management
- FAT/SAT Support
- Facility, Equipment and System Qualification (IQ/OQ/PP)
- Process Validation
- Cleaning Validation
- Automation and Computer Systems Validation
- Lab Equipment and Analytical Methods Validation
- Environmental Monitoring Specifications (URS/FRS/DDS)
- Bid Packages/Bid Evaluations
- Submittal Reviews
- Commissioning Documents (Pre-Functional/Functional Checklists)
- Risk/Impact Assessments
- Protocols/Test Plans/Test Scripts
- Summary Reports
- Turnover Packages
- Standard Operation Procedures (SOPs)
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Knowledge, Skill & Passion

Aseptic
Compliance
Construction

Biomonitoring
Clinical Supplies
OSD
API

Tom Piombino, PE
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Vince Cebular, LEED AP
Tom Chapman

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Michael Westerman
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Mark Rezac, PE
Kevin Batche

Doyle Johnson
Paul Valerio
Russ Somma, PhD
Robert De Sonier, PhD
Alicia Kiesgo
Steve Huntzinger, MBA

Drugs Development - Dénuxizimab
Dedicated Oncology Medical and Analytical Laboratory (DDOMAL)
Silver Spring, MD

This monoclonal antibody facility overcame the challenges of its urban site location, passing zoning legislation, building and maintaining community relationships, and the atypical cylindrical shape.

Sanofi - Digitally Enabled Integrated Continuous Biomanufacturing Facility
Framingham, MA

The project is a highly-flexible modular facility that builds on widespread disposable technology to provide a platform to produce current products and ultimately a wide range of product modalities.

Pharmalucence - EPCMV New Aseptic Filling Facility
Billerica, MA

This facility received industry recognition for the execution and entrepreneurial spirit demonstrated by the consolidation of generic and contract manufacturing operations into a single, state-of-the-art facility.

Merck - Global Clinical Supplies Manufacturing, Packaging and Warehouse Expansion
Summit, NJ

A three-phased hybrid-build design construction approach was undertaken to consolidate global clinical supplies operations into a single, state-of-the-art clinical manufacturing, packaging and distribution facility.

BMS - Clinical Supplies Manufacturing and Drug Product Technology Expansion
New Brunswick, NJ

IPS brought early and late phase CGMP clinical manufacturing and development scale-up areas together within a single facility allowing BMS to develop and deliver increased compliance, productivity and technical innovation to meet present and future drug development pipeline.

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IPS has integrated state-of-the-art knowledge and project execution around the world.

- IPS India provided a detailed HAZOP study for solvent storage tanks for an API manufacturing client. A nitrogen blanketing automation system was designed to surround over 800 tanks and vessels in accordance with CGMP and the client’s internal standards. The system was designed for safe storage, handling, transfer and process operation, as well as minimizing vapor loss.

- Designed a greenfield aseptic manufacturing complex with the commitment of QBD, CGMP compliance, safety, efficiency, sustainability, and aesthetics. The facilities in the complex ensure a supply of liquid vials and ampoules as well as lyophilized vials to domestic and global markets.

- IPS was retained by a CMO in Ireland to prepare a concept design for a laboratory and manufacturing facility dedicated to manufacturing a vaccine in lyophilized vial dosages for a BSL-3 designated virus.

- Created a large-scale pharmaceutical manufacturing facility for OSD and injectable products for Lupin. This technically complex project set a quality standard and template for how future projects in India should be executed and constructed to compete in the global market place. This project won ENR’s 2019 Global Best Projects Award of Merit for Manufacturing.

- IPS used the iCON™ solution to deliver viral vector manufacturing and cell therapy production units to a facility in Germany. Once delivered, the facility started commercial production at the 50L and 200L scale using iCON units for inoculum prep and Grade D upstream and downstream processing.

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IPS provides services across the world.

- Consulting | Design | Engineering | Project Controls
- Construction | Commissioning | Qualification | Staffing • IPS

Industry Rankings

| PHILADELPHIA BUSINESS JOURNAL |
| ENR Rankings |
| • Top 25 Engineering Firms |
| • Top 25 Architectural Firms |
| • Top 25 Contractors |
| • Top 100 Major Employers |

Design Source Book
- Top 50 Design Firms in the US
- Top 50 Designers in International Markets

Global Source Book
- Top International Design Firms
- Pharmaceutical List
- Chemical Plants List

Construction Source Book
- Top 500 Design Firms in Manufacturing & Telecommunications
- Pharmaceutical List
- Industrial Process List
- Chemical Plants List

2020 Zweig Group Hot Firms List
Ranked as one of the 100 fastest-growing architecture, engineering, planning, and environmental consulting firms in the United States & Canada that have outperformed the economy and competitors to become leaders in our field.

2020 Zweig Group Best Firms to Work For Award
The Best Firms to Work For award recognizes the AEC firms in the US and Canada based on their workplace practices, employee benefits, employee retention rates, and much more. IPS ranked as #1 in the Design/Build category.

2014 Inc. List of the Fastest-Growing Private Companies in America
IPS received recognition for a 131% growth in the past 3 years.

ARCHITECTURAL RECORD
- Top 300 Architecture Firms

BUILDING DESIGN + CONSTRUCTION
- Top 35 Engineering and Architecture Firms
- Top 70 Construction Management Firms
- Top 115 Contractor Management Firms
- Top 110 Reconstruction Engineering Firms
- Top 110 Reconstruction Construction Firms

ENR Rankings
- Top 100 Design-Build Firms
- Top 225 International Design Firms
- Top 600 Contractors
- Top 50 Contractors Working Abroad
- Top 500 Design Firms in the US
- Top 50 Designers in International Markets

Design Source Book
- Top 500 US Design Firms in Manufacturing & Telecommunications
  - Pharmaceuticals List
  - Industrial Process List
  - Chemical Plants List

Global Source Book
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Global Reach

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