



## FACILITY DESIGN & CONSTRUCTION EXPERIENCE

### DESIGN & CONSTRUCTION ENGINEERING: CYTOTOXIC PRODUCTS

YEAR	COMPANY	COMPANY PROFILE	PROJECT DESCRIPTION	EXPERTISE PROVIDED
2005	MAYNE Canada, Montreal, Canada	Pharmaceutical manufacturing. Cytotoxic products (Bleomycin, Dacarbazine, Vinblastine, Vincristine, Fluorouracil, Etoposide...)	Phase 1 : Storage & quarantine Phase 2 : New Manufacturing facility	Project management : Facility & systems design Conceptual Design, detailed engineering
2004-2005	LABORATOIRES GIROUX, St-Hyacinthe, Canada	Contract Manufacturing for hospitals, including cytotoxic products	New ISO 7 manufacturing suite with chemosphere	Project management : Facility design, Re-engineering of the existing HVAC system Conceptual Design, detailed engineering
2004	LABORATOIRES DUCHESNAY, Laval, Canada	Pharmaceutical manufacturing including cytotoxic products and highly potent chemicals (Thalidomide derivatives)	Manufacturing facility	Project management : Facility & systems design Conceptual Design, detailed engineering
2003	CENTRE HOSPITALIER DE MONTREAL (HOPITAL NOTRE DAME) Montreal, Canada	Preparation / reconstitution of cytotoxic drugs	Manufacturing unit	Project management : Facility & systems design
2002	BIOXEL Pharma, Quebec, Canada	Pharmaceutical Manufacturing : cytotoxic product (Paclitaxel)	Drug Master File and conceptual design	Project management : Facility & services design
2001	CENTRE HOSPITALIER DE MONTREAL (HOTEL DIEU), Montreal, Canada	Preparation / reconstitution of cytotoxic drugs	Cytotoxic drug reconstitution unit	Project management : Facility & services design Conceptual Design
2000	PFPM (Pierre-Fabre medication production) (previously Aquitaine Pharma intern.), Idron, France	Contract Manufacturing Cytotoxic drug products	New dedicated facility	Design review (FDA compliance)
1999	ID Biomedical (previously SHIRE BIOLOGICS-BIOCHEM), Laval, Canada	Pharmaceutical development	Kilolab (Cytotoxic products)	Facility & Services design



### DESIGN & CONSTRUCTION ENGINEERING: BIOTECHNOLOGY, CONFINEMENT LEVEL 3

YEAR	COMPANY	COMPANY PROFILE	PROJECT DESCRIPTION	EXPERTISE PROVIDED
On Going	<b>LABORIUM BIOPHARMA, Montreal, Canada</b>	CMO, bulk biotechnology production, freeze drying and aseptic filling	New production facility	Conceptual design Project Management
2001-2004	<b>HEMA QUEBEC, Montreal &amp; Quebec, Canada</b>	Blood derivatives	Construction of 5 new laboratories, relocation of 3 units	Compliance consultant (facilities, systems, services, equipment, compliance documentation, QA)
2003	<b>HMR, Montreal, Canada</b>	Cellular Therapy	Manufacturing facility (BL 3)	Facility & services design Project management :
2001	<b>BIOCHEM PHARMA, Boston, USA</b>	Vaccine Research & Development Facility	R&D manufacturing Facility BL 3 animal facility	Project management : Facility & systems design

### DESIGN & CONSTRUCTION ENGINEERING: BIOTECHNOLOGY, CONFINEMENT LEVEL 2

YEAR	COMPANY	COMPANY PROFILE	PROJECT DESCRIPTION	EXPERTISE PROVIDED
2002-2003	<b>STERIS</b>	Manufacturer of BL2 washers and decontamination units	BL2 test Laboratory	Technical specifications of systems and services
2000-2004	<b>OM PHARMA, Geneva, Switzerland</b>	Biological products	Turnkey Project: Design, Construction, Commissioning, Qualification of a BL 2 fermentation & production facility	Project management : Facility & services design Project management: process engineering
1998 + 2001	<b>CENTRE IMMUNOLOGIE PIERRE FABRE, St-Julien, France</b>	Biotechnology R & D Clinical production	Project of new production unit, Project of facility revamping	Design review (FDA compliance)
1998-2002	<b>ID BIOMEDICAL (ex SHIRE BIOLOGICS-BIOCHEM )- Québec, Qc; Montréal, Qc, Canada</b>	Vaccine manufacturing Anticancer BCG. Clinical and full scale manufacturing	Vaccine Manufacturing Plant (BL 2), BL 2 Clinical production facility,	Design & compliance management Process and Engineering management Compliance management



## DESIGN & CONSTRUCTION ENGINEERING: HIGHLY POTENT PRODUCTS

YEAR	COMPANY	COMPANY PROFILE	PROJECT DESCRIPTION	EXPERTISE PROVIDED
2005	<b>AETERNA ZENTARIS, Quebec, Canada</b>	Development and manufacturing of clinical products, including anticancer drugs	Technology Transfer in a new facility	Facility compliance assessment, revamping strategies determinations
2004	<b>MERIAL, Toulouse, France</b>	Sterile Veterinary products, including penicillin and allergenic products	Construction of 2 new dedicated units (penicillin, allergenic products)	Design review (FDA compliance)
2003-2004	<b>JAAPHARM, Markham, Canada</b>	Antibiotic production (penicillin, cephalosporin)	New manufacturing unit	Project management : Facility & systems design

## DESIGN & CONSTRUCTION ENGINEERING: ASEPTIC PRODUCTION

YEAR	COMPANY	COMPANY PROFILE	PROJECT DESCRIPTION	EXPERTISE PROVIDED
2004-2005	<b>BIOSYNTECH, Laval, Canada</b>	Medical Devices	Conception/construction of laboratories & API pilot unit	Project management : Facility & services design  Conceptual design, detailed engineering, construction management
2003- 2005	<b>McGILL UNIVERSITY, Montreal, Canada</b>	Transplant center & extraction of pancreatic cells	Clean rooms construction : regulatory assistance, engineering assistance	Conceptual design, specifications, detailed engineering review
2003-2004	<b>GENEOHM (previously Infectio Diagnostic Inc), Quebec, Canada</b>	Sterile Diagnostic products	New production unit	Clean rooms and HVAC Design
2002	<b>BECTON DICKINSON, Pont de Claix, France</b>	Sterile Medical devices	Aseptic syringe filling unit	Compliance consulting



## DESIGN & CONSTRUCTION ENGINEERING: OTHER PROJECTS

YEAR	COMPANY	PROFILE	PROJECT DESCRIPTION	EXPERTISE PROVIDED
2005	AVANCE PHARMA, Laval, Canada	Biotechnology R & D	New laboratories	Design
2004-2005	AXCAN PHARMA, Frankfurt, Germany	Pharmaceutical Production	API facility	Design
2004	FERRING PHARMACEUTICALS, Lausanne, Switzerland	Pharmaceutical Manufacturing	Solid dosage form production unit	Conceptual design, specifications, detailed engineering of the plant services
2004	CEPHALON, Nevers, France	Oral lyophilized products	New production unit	Design review (FDA compliance)
2002-2003	MERISTEM THERAPEUTICS, Clermont-Ferrant, France	Biotechnology	Selection of potential production sites	Compliance assessments, review of facilities conversion projects Basis Of Design