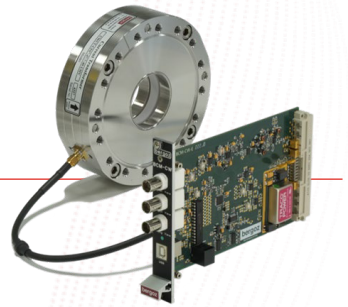
Industry Introductions

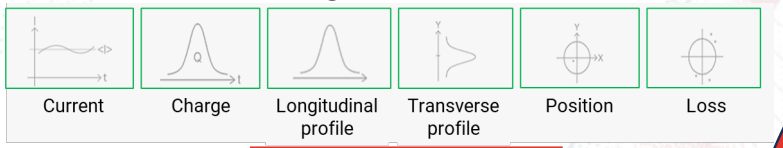
Visit us at the joint booth with GMW Associates

42 years of experience / Scientific recognition



Beam structure

Diagnostics



Provide non-destructive diagnostics solutions for low current measurements

- Synchrotron Light Source
- Neutron Spallation Source
- Free Electron Laser
- Laser Plasma Wakefield
- Cancer Therapy and Radiobiology
- Accelerator Driven System

Example of success story in **collaboration** with end-users

- 2015-2018 : Design and Development of a CWCT for CW beam, with GSI (D)
- 2019-2022: Development of LC-CWCT, an additional module for very low CW current, with KVI (NL)

- **Result : a new kind of CT for CW beam structure, that reaches the users' needs, with:**
  - Operating frequency: from 15 MHz to 200 MHz
  - Three gains available: 0 dB, 20 dB and 40 dB
  - Three outputs with different resolution

- **CWCT performances** (vs output):

Response time (10%-90%)	1 µs	35 µs	3.5ms
Resolution @40 dB	10 µA	5 µA	1 µA

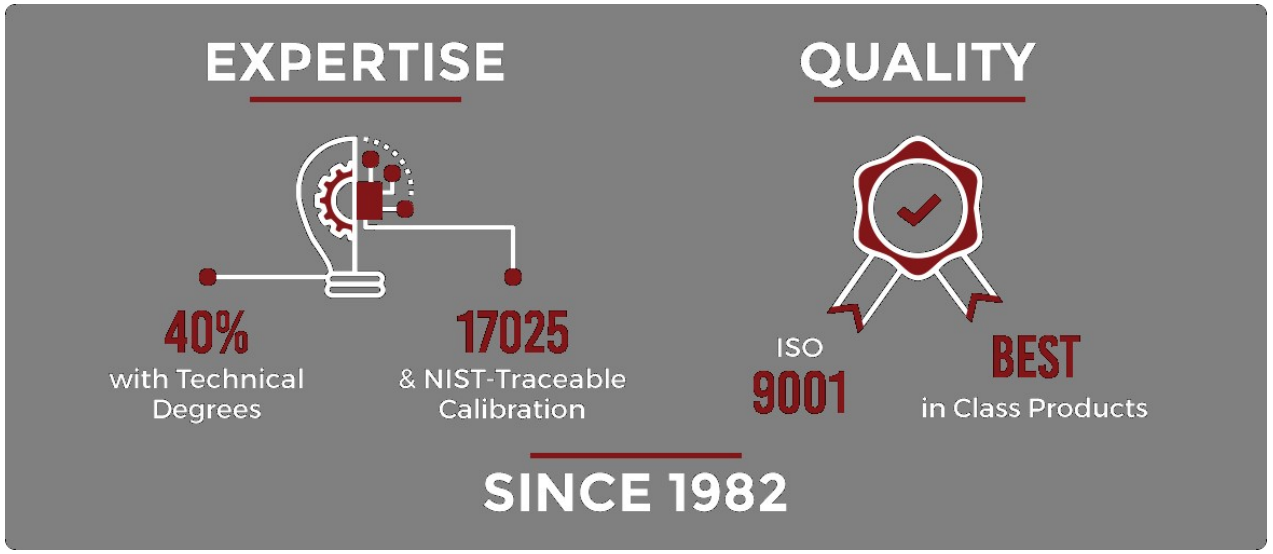
- **LC-CWCT performances (vs output):**

Response time (10%-90%)	1 µs	35 µs	3.5ms
Resolution @40 dB	300 nA	40 nA	5 nA

GMW Associates - Overview

GMW is the designer, integrator, and distributor of Magnetic Systems and Instrumentation based on Magnetics.

- Founded in 1982
- Staff of 20, over 40% with technical degrees
- Headquarters in San Carlos, California (30 miles from San Francisco)
- Background in accelerator physics, MRI instrumentation, materials research, and power electronics



Products and Services

Instrumentation
- Magnetic Field Measurement
- Electric Current Measurement
- Beam Diagnostics

Calibration and Service
- 17025 Accredited Calibration Lab
- Magnetic Field Mapping
- Magnetic Site Survey

Electromagnet Systems
- Dipole Magnets
- Projected Field Magnets
- High Uniformity Magnets
- Magnetic Modeling & Design

www.gmw.com

GMW Associates

LIBERA - SOLUTIONS FOR PARTICLE ACCELERATORS

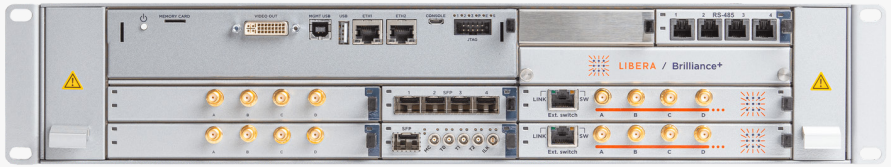
25 INSTRUMENTATION TECHNOLOGIES
25 YEARS OF EXPERIENCE!

Core expertise in electronics for:

- Beam Position Monitoring (position, phase, relative charge)
- Beam Loss Monitoring (integration, counting, interlocks)
- Low-Level RF controls (MHz up to several GHz)
- RF generation and distribution for large machines

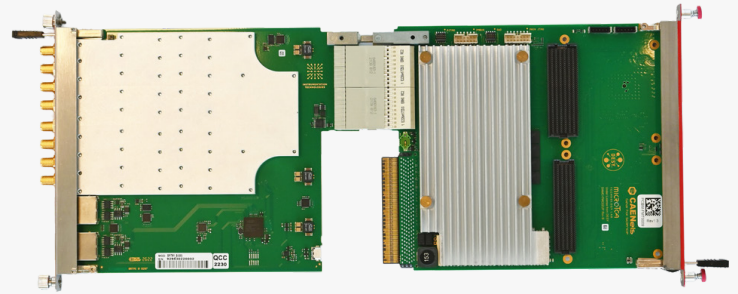
50+ employees

6000+ instruments delivered to more than 70 projects worldwide!



Project specific approaches:

- Off-the-shelf and custom Libera instruments (1 to 1000 pieces)
- Industrialization of customer prototypes and series production
- Development/collaboration on different HW platforms (e.g. MTCA.4)
- Universal SW framework with Control System Adapters (e.g. EPICS, etc..)



Visit us at BOOTH #16!

PFEIFFER VACUUM

BUSCH VACUUM SOLUTIONS

Official Distributor of Pfeiffer Vacuum Products in Canada

Pfeiffer Portfolio – Vacuum Pumps



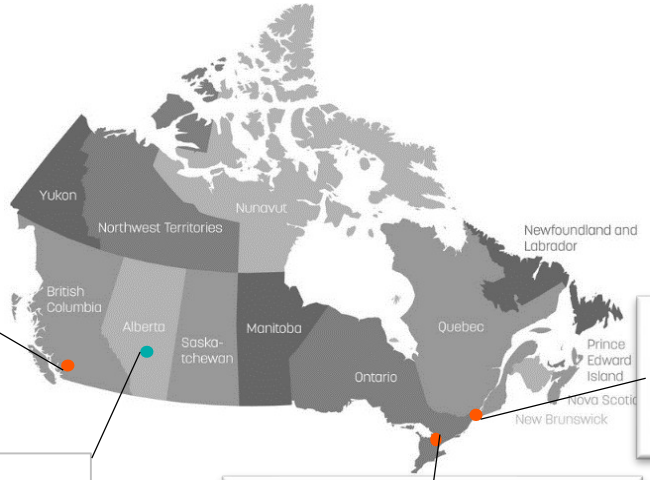



Busch Portfolio – Vacuum Pumps





Delta, BC (Vancouver)



Calgary, AB
NEW Service Centre opening soon!

Total
85
Employees

Boisbriand, QC (Montréal)

Mississauga, ON (Toronto)

Collaboration with National Lab – Light Gas Management


TRIUMF / TUCAN
Ultra-Cold Advanced Neutron project

We provide precision movement, heating and cooling products for Ultra-High Vacuum environments.

SPEED OF RESPONSE **DESIGN COLLABORATION** **EASE OF INTEGRATION** **RELIABILITY**