services

We offer consulting, prototyping, development, commissioning assistance, and technical support for a wide range of research and industrial applications. We recently enhanced our offerings to include software support and development services through our sister company, RadiaSoft.

research

At RadiaBeam, we are committed to continuous innovation. We collaborate with leading scientific institutions worldwide and maintain and extensive internal development program. Our key areas of R+D include:

novel acceleration schemes advanced RF fabrication methods X-ray source instrumentation beam diagnostics

turnkey beamlines

Our professional team and expert collaborators develop custom turnkey beamlines matched to your precise requirements. We offer the following for both research and industrial use:

transport lines turnkey injectors portable radiography sources X-band, S-band, and L-band systems high power sterilization and processing facilities





about us

RadiaBeam has served the accelerator community since 2004, providing diagnostics, magnets, RF structures, and complete systems for research facilities and industrial accelerators across the globe.

We design, engineer, fabricate and qualify all of our products at our headquarters in Santa Monica, California. We also have satellite offices in the San Francisco Bay Area, Massachusetts, and Idaho.





rf structures electromagnetics diagnostics turnkey systems and much more...

rf structures

RadiaBeam is a trusted source of custom normal conducting RF structures and we've developed state-of-the-art capabilities for microwave design, engineering, production, and testing of RF structures, systems and components. We offer:

custom X-, S-, and L-band cavities high gradient structures bunching cavities & compact industrial linacs photoinjectors, systems, & components

photoinjectors

Our S-band photoinjectors build upon our decades of experience in designing and fabricating S-band guns. With multiple operational systems in the field, we have proven expertise to deliver a system customized to your unique requirements.









magnets

We design, fabricate, and test our custom magnets in-house. Our offerings include air-cooled and water-cooled electromagnets and permanent magnet singlets and systems:

quadrupoles, sextupoles, octopoles, dipoles, spectrometers, correctors, & solenoids permanent magnets & final focus systems for <10µm beams undulators & wigglers

diagnostics

RadiaBeam's extensive experience in custom beam diagnostics accumulates the best practices of leading facilities across the globe. Our customizable offerings include:

beam profile monitors & wire scanners pepper pots & emittance slits halo scrapers & adjustable slits RF beam position monitors faraday cups & toroids bunch length diagnostics & deflecting cavities

profile monitors

Our standard and custom modular diagnostic stations are a complete and cost-efficient solution in quantities from one to dozens with resolutions to below one micron.



