f/p design | laboratory equipment
the office for gestaltung



strategies in laboratory design

artificial intelligence and robotics offer great opportunities for further development in laboratory technology.

what opportunities arise for you?

how can you improve workflow efficiency and data accuracy? what possibilities emerge from relieving laboratory personnel, allowing them to focus on more specialized tasks?

to provide realistic yet innovative solutions to these questions, quantitative surveys and qualitative research are as important as strategic design methods such as design thinking.



prof. fritz frenkler
founder

as experts in laboratory technology, you understand the complexity of developing new equipment or digital solutions. you would surely agree that economically successful products only emerge through the collaboration of interdisciplinary teams, including engineers, designers, and end-users, with the it, production, and marketing experts.

economic success is relatively easy to measure, yet determining the specific aspects contributing to it can be challenging. do you, for example, know the exact economic value of your brand, the tangible contribution of a positive user experience, or the benefits of product recognizability?

for a long time, f/p design has pursued a participatory development process that considers all aspects relevant to economic success while simultaneously placing the human element at the forefront.

cover: yamato scientific | re202 | rotary evaporator

f/p design – partner for laboratory design

german design:
precise, minimalistic, timeless.

as a full-service design agency under the leadership of fritz frenkler, f/p design is your partner for economically successful design. our international and multidisciplinary teams in germany and japan support you from brand and product development to communication. with studios in berlin, munich, and kyoto, we have been successfully advising renowned companies and innovative start-ups for more than 20 years.

participatory design for success

our main focus lies on the collaborative development process in the design of new laboratory devices and services. this approach incorporates the experience of laboratory personnel as well as the internal requirements and insights of the company.

the results of such a participatory design are services and products that excel in terms of ergonomics, functionality, technology, and quality. they are economical and sustainable support for the brand appearance.

simplification brings clarity

with increasing complexity of the devices, f/p design relies on reduction. this creates precision, coherence, and clarity. these elements provide security in the use of laboratory devices and increase necessary hygiene. they are easily recognised and offer the user a stress-free environment.

our vision

an important role in our understanding of design belongs to the formula invented by prof. frenkler as chair of industrial design at the technical university of munich (tum). it is based on the idea that design

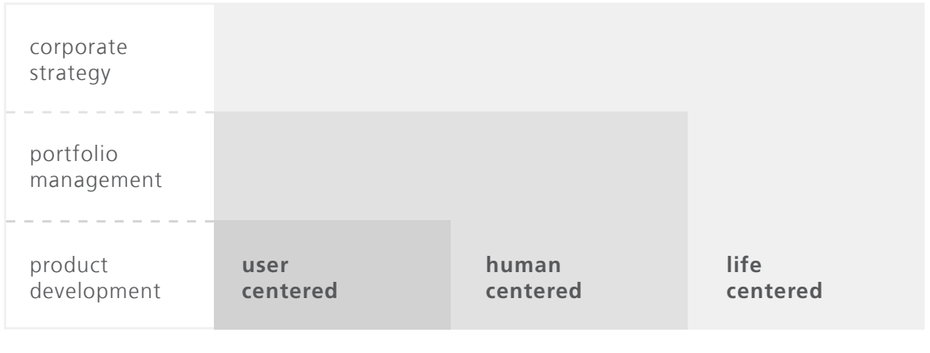
is a complicated system, which, in addition to the usual “form and function”, also includes technology, ergonomics, sociology, ecology, psychology, philosophy, finance, and the brand identity.

$$d_{esign} = \iiint_{function\ form\ experience} \frac{(T_{ech} E_{rg} S_{oc} E_{co} P_{sych} P_{hil} F_{in})^{brand}}{t} \times P_{resentation}^{5/4/3/2/1}$$

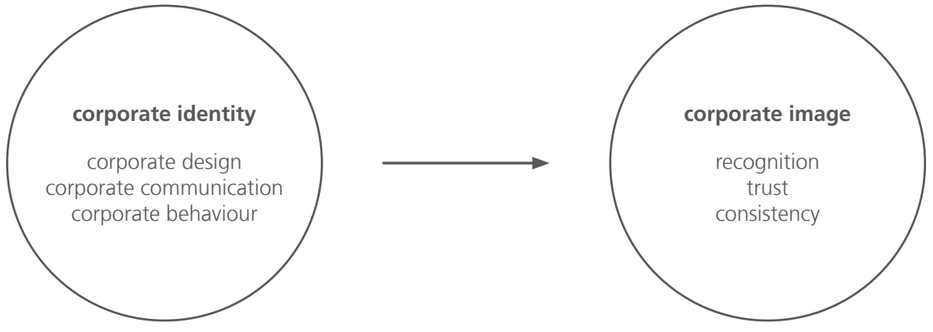
life-centered design

user-centered or human-centered design is nowadays not enough for the laboratory industry to develop sustainable and consistent lines of products.

instead designers must refer to the life-centered design approach, that takes into account environment as a whole and complements corporate strategy.



corporate identity



200+ clients

8 locations



trusted by more than 200 clients

f/p design has partnered with clients across a wide range of industries. many of these collaborations have developed into long-term partnerships built on trust, reliability, and measurable results.
our experience spans six key sectors: medical, laboratory, transportation, industry, office, and living. this cross-sector expertise allows us to transfer knowledge, identify new opportunities, and develop innovative yet practical solutions tailored to each client's needs.
our clients include global corporations, family-owned businesses, and technology startups. every collaboration begins with understanding the capabilities, ambitions, and challenges of the enterprise. by analysing these foundations, we identify opportunities where design can create measurable value and accelerate growth in revenue, margins, and lasting relationships with users.

through strategic thinking, precise design, and a strong focus on user experience, we transform complexity into clear, intuitive solutions that strengthen brands and accelerate business growth.

design services

industrial design



product design



ux/ui design



corporate identity



architectural design



communication design



brand design

TAKAMIYA GROUP

design consulting



azbil | v8c | sapphire capacitance diaphragm gauge

g-mark good design award winner 2023

jury's evaluation:

"its precise design proves a thorough attention down to the minute details. the straight-form elements and organized ventilation slits enhance a sense of precision as a measuring device and give the product an appropriate identity. additionally, a 40% size reduction compared to conventional products shows the manufacturer's considerations for freedom of installation and environment. the design appropriately renders the product's fundamental performance of a high standard and trust for the brand."



safety

safety is the top priority in laboratory design. this includes the avoidance of user errors.





azbil | temperature controller | single loop controller

the single loop controller combines precise process control with a clear and user-centered design. an optimized display architecture enhances visibility, while enlarged controls and a maintenance-friendly structure support intuitive operation. advanced temperature control functions and integrated support tools enable accurate process management, helping to improve product quality and manufacturing efficiency.







usability

intuitive operation and clear interfaces support efficient and reliable process control.

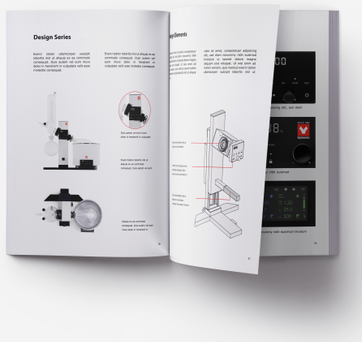




yamato scientific | product design dna

yamato scientific is a leading japanese manufacturer of laboratory equipment and scientific instruments. f/p design has worked with yamato for over 9 years, developing a new product design dna for their portfolio to improve brand recognition and streamline processes.

design dna
product design
packaging design
ux & ui design





yamato scientific | re202 | rotary evaporator

re202 sets a new standard for rotary evaporators, offering a highly efficient distillation process. it features intuitive adjustments and easy flask and condenser connection. its optimized footprint is space-saving and allows flexibility in multiple system setup situations.
a rotatable mount for glass accessories enables left or right placement of the heating bath, adding more personalized applications that fit to individual needs.



functionality

functionality is the core of a product. different set up and workflow, scope of daily procedures, product maintenance and cleaning - understanding the lab environment is essential to optimise functionality. this will result in a stress-free, efficient, and precise operation.



yamato scientific | mfh 800 | magnetic stirrer

mfh 800 and mfd 800 developed by yamato scientific and designed by f/p design are the two new solutions offered to chemical laboratory professionals. the well-considered layout of elements on the control panel offers intuitive operation for precise temperature control and reliable stirring of chemical solutions. the simple product form reduces puddles of spilled chemicals and buildup, making it easy to clean and maintain. highly configurable options are featured to meet diverse needs and requirements.



yamato scientific | re202 | rotary evaporator

water purifier wg 252 features magnetic handheld dispensers for flexible placement and use by laboratory professionals to easily and efficiently fill various sizes and shapes of containers. high water quality and its precise amount needed for tasks can be controlled through the touch panel. the user interface promises intuitive operation to perform routine tasks as well as assist with maintenance tasks through guided graphical instructions.



hygiene

central to laboratory design is the consideration of the maintenance and care of the devices. simplification in design and seamless surfaces facilitate efficient daily cleaning process and sanitation control.



minimalism

a complex lab environment occupied with numerous devices requires a high level of orderliness. f/p design achieves it through simplification of the design elements. reduced visual noises deliver accurate information to the user and facilitate efficient performance.



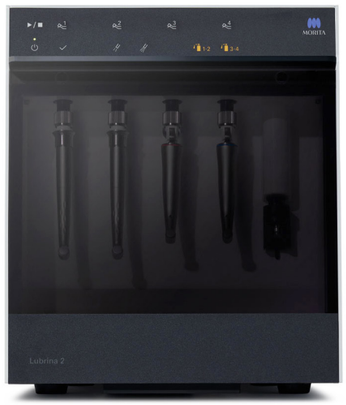
morita | lubrina 2 | dental handpiece maintenance

lubrina 2 is the new dental handpiece maintenance unit for morita. the ingenuity in this unit drastically shortens maintenance time and reduces lubricant usage, yet, ensures improved maintenance results for reliable performance of dental handpieces. its clear design eases daily cleaning of the unit itself and promotes professionalism in the clinical environment.



sanitation

simplification in design and clear surfaces facilitate the daily cleaning process.





arkray | aution idaten ae-4070 | urine analyzer

ae-4070 brings superb processing speed with precise results in its compact form. developed by arkray, this unit offers efficient operation with its auto-start tray for test strip placement, a touch panel with a simple and intuitive interface, and easy maintainability. its form optimises footprint to achieve compactness while providing adequate angle for display reading as well as an integrated thermal printer. the reduced product design facilitates hygienic and professional medical practices and strengthens brand recognisability as a global corporation.



ergonomics

precise implementation of ergonomic insights in design creates a base that facilitates the daily work of laboratory staff.



inveox | product design dna

inveox is a german startup producing laboratory equipment for cancer diagnostic.
we developed an entire design dna for their modular product range from scratch in less than three months, focusing on ease of production and usability, as well as sustainability through repairability.this fresh and eye-catching design helped attract investors and bring the products to market.

design dna
product design
ux & ui design





inveox | pathos ecosystem

the pathos ecosystem is a comprehensive automated pre-analytical system for the optimisation of pathology processes. our design of sample registration module (srm), cassette marking module (cmm), and sample transfer module (stm) offers great usability combined with modern and consistent aesthetics.
the system is designed to be adaptable and customisable, catering to the needs of various medical and laboratory professionals.



modularity

modularity in design enables flexible deployment options and ensures efficiency through customization and scaling.









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