

## Our team



**Peter Mauger**  
DIRECTOR  
PRINCIPAL PROCESS  
ENGINEER



**Fernando Diaz**  
PRINCIPAL MECHANICAL  
ENGINEER



**Michael Pecar**  
PRINCIPAL PROCESS  
ENGINEER



**Anna Hardie**  
SENIOR PROJECT  
ENGINEER



**Sam Cook**  
SENIOR PROCESS  
ENGINEER



**Andrew Hartley**  
DESIGN AND DRAFTING  
MANAGER



**Himanshu Kakkad**  
SENIOR ELECTRICAL &  
AUTOMATION ENGINEER



**Rob Kube**  
SENIOR PROJECT  
ENGINEER



**Mark Winter**  
SENIOR PROJECT  
MANAGER



**Sophia Wang**  
PROCESS ENGINEER



**Aaron Smith**  
PROCESS ENGINEER



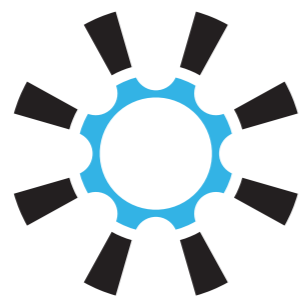
**Sam Rankin**  
MECHANICAL ENGINEER



**Thomas Hazell**  
GRADUATE  
MECHANICAL ENGINEER



**Tom Loipersberger**  
TECHNICAL DRAFTING  
ENGINEER



**Bright**  
ENGINEERING CONSULTANTS

## Associations



**International Society of Pharmaceutical Engineers (ISPE)**  
ISPE is the world's largest not-for-profit association serving its Members by leading scientific, technical and regulatory advancement throughout the entire pharmaceutical lifecycle. <https://ispe.org/>



**American Society of Mechanical Engineers (ASME)**  
ASME promotes the art, science & practice of multidisciplinary engineering and allied sciences around the globe. <https://www.asme.org/>



**Institution of Chemical Engineers (IChemE)**  
IChemE exists to advance chemical engineering's contribution for the benefit of society and to support the development of chemical, biochemical and process engineering professionals. <https://www.icheme.org/>



**Engineers Australia**  
Engineers Australia is the national forum for the advancement of engineering and the professional development of its members. <https://www.engineersaustralia.org.au>



**The Australian Society of Cosmetic Chemists**  
The Australian Society of Cosmetic Chemists is a professional scientific organisation that promotes the advancement of the theory and practice of the science and technology of cosmetics, toiletries and perfumery. <https://ascc.com.au/about-ascc/>

## Contact us

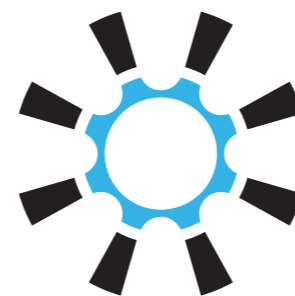
**South Australia** (08) 7100 1122 | [adelaide@bright.com.au](mailto:adelaide@bright.com.au)

**Victoria** (03) 8400 4481 | [melbourne@bright.com.au](mailto:melbourne@bright.com.au)

**Queensland** (07) 3703 1280 | [brisbane@bright.com.au](mailto:brisbane@bright.com.au)

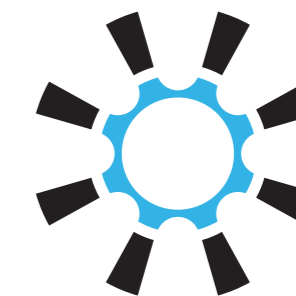
Our engineers are available to provide services anywhere in Australia. Where travel is not possible or cost effective, the latest remote access technology is utilised to ensure successful project delivery, regardless of location.

[www.bright.com.au](http://www.bright.com.au)



**Bright**  
ENGINEERING CONSULTANTS

Design  
Safety  
Quality  
Project Management  
Risk Mitigation  
Drafting



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# Bright

Engineering Consultants  
Pharmaceuticals Profile



## Who we are

Bright Engineering Consultants is a multidisciplinary engineering consultancy firm specialising in the Biotech, Pharmaceutical, Nutraceutical, and Cosmetics industries.

We are a business-needs focused, dynamic and agile engineering consultancy firm with over 80 combined years of relevant experience in the Biotech, Pharmaceutical, Nutraceutical, and Cosmetics industries. We understand the regulatory needs behind cGMP compliant industries, as well as the expectations of our clients. We understand that adherence to safety, good engineering practices (GEP) and Quality by Design are paramount when executing projects to ensure the safety of the end users that put their trust in your products.

We typically work alongside you as part of an in-house engineering department, but can also work independently, acting on your behalf, to provide a single point of responsibility for the required services or deliverables.

Our qualified team, with connections throughout the industries in which we specialise, work closely with our clients to ensure they receive safe, fit-for-purpose, robust and cost-effective solutions backed by engineering best practices and timely, consistent results.

We value experience and knowledge and invest in broadening the experience of our staff through formal training, industry events, and networking. We actively manage our skills matrix to ensure staff practise the skills they need regularly to ensure successful project execution, every time.

Our experience delivering projects for industries subjected to regulatory demands, such as those outlined by TGA, FDA, PIC/S, EP regulations and other relevant ISO standards, makes Bright the ideal partner for your next project.

## What we do

We specialise in clean manufacturing engineering solutions, applying best industry practices in line with local, international, or corporate regulations.

Our specialist team is highly experienced in delivering tailored projects for our clients, catering for their needs, budgets, timelines, and quality deliverables.

We work, with leading local and international firms in the Biotech, Pharmaceutical, Nutraceutical, and Cosmetics sectors. Our clients continue to partner with Bright for effective and compliant engineering solutions.

### Facility Design

We work in unison with you our client and can support projects of any size, including green- and brown-field projects. By using existing or forecasted manufacturing data, we can develop concept design documentation to support cost estimations, business case studies, and CAPEX submissions.

### Process Equipment

We have built solid professional relationships with a range of competent local and international equipment suppliers, who we engage on your behalf. At the same time, we are not affiliated with any particular suppliers, ensuring our technology selection and supplier recommendations are always in line with your best interests and expectations.

### Drafting

We provide the latest in 2D and 3D drafting, starting with 3D laser scanning and physical measurement, inserting OEM equipment models and parts, and designing functional layouts, product-, traffic-, work-, and air- flows through your facility. We communicate this to you using a combination of traditional large format scale drawings and easy-to-use A3 drawings, as well as the latest in virtual- and augmented-reality outputs. Because of this level of detail, we can also provide virtual fly-through video tours for advertising, client engagement, or to improve your Standard Operating Procedures. Using modern video conferencing, we can bring your team together from multiple sites and offices and walk through your new facility before it's built to improve engagement, conduct risk assessments, and minimise the risk of changes during construction.



### Services

Our multidisciplinary team of engineers and professional drafters will design and size the required services for your project. We will develop the required documentation packages for tender and installation, including project timeline and Scope of Works for each trade.

Services and equipment projects that we have delivered for our clients include:

- ISO-Grade cleanroom HVAC systems
- Compendial water systems RO, UF, PW, WFI
- Pure steam generation
- Autoclaves
- Lyophilisers and freeze-dryers
- Bioreactors and incubators
- Centrifuges
- Homogenisers
- Emulsifiers
- Filling lines
- Label and packaging lines
- Parts washers
- CIP systems
- Temperature control units
- Vacuum systems
- Processing vessels
- Gas liquefaction systems
- Liquid waste management systems
- Environmental Monitoring and Control Systems

### Clean Utilities

At Bright we understand the importance of efficient and reliable utilities. In the case of GMP clean utilities, this need is amplified as equipment failure or operation outside of validated parameters may have a direct impact on product quality. We understand that there are people at the end of the supply chain that trust your products are safe for them and their loved ones.

Our team is highly experienced in providing engineering solutions for our clients clean utilities requirements, providing support for engineering design, sizing, vendor selection, installation, commissioning, and system validation.

## Project Management

We can manage your project from concept through to validation. We use specialist software and our own in-house tools to monitor and report on time, cost, and quality. We communicate and coordinate with all relevant parties, from operators to management, government bodies and regulatory authorities, other designers, builders and trades, and follow applicable change control requirements.

### Safety & Compliance

- Risk assessments
- Hazard and Operability Studies (HAZOP)
- Australian Standard audits (guarding, dangerous goods & many others)
- GMP, internal specification audits
- Change control management
- Contractor management (Permits, JSA/SWMS)

### Engineering Design and Innovation

- Concept workshops / sprints
- Rapid prototype development
- Proof of Principle (PoP)
- Proof of Concept (PoC)
- Design and construction drawings

### Time & Process Management

- Project timing, scheduling and reporting
- Work breakdown structures
- Installation and commissioning schedules
- Critical path identification

### Cost

- Project budgeting, cost tracking and reporting
- Capital proposals, including payback modelling
- Tender documents, evaluation and contracts
- Work breakdown structures
- Equipment selection and sourcing

### Quality

- User Requirement Specification (URS)
- Process functional descriptions
- Project scopes, individual scopes of work
- Equipment performance specifications
- Design Qualification (DQ)
- Factory Acceptance Testing (FAT)
- Site Acceptance Testing (SAT)
- Installation supervision and contractor management
- Commissioning and validation (IQ, OQ, PQ)
- Detailed and documented technical inspections (ITPs)
- Hit-list management

### Verification

- Measurement and logging of most common parameters (temperature, pressure, humidity, dust particles, power/current, belt speed, rotational speeds, surface roughness, vibrations, and many more)
- Inspection and test plans

## Our process

