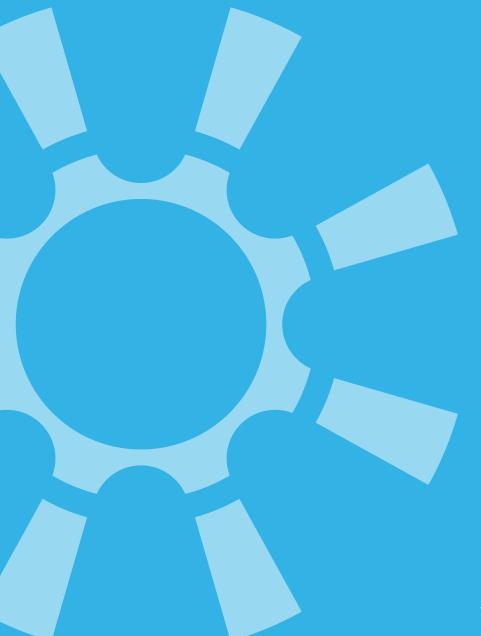
# Bright

Engineering Consultants
Food & Beverage Specialists



Agriculture

Baking

Beverages

Brewing

Confectionery

Custom machinery

Dairy

Equipment sourcing & installation

Meat processing

Nuts

Packaging

Raw produce processing

Snack foods

Wine operations

...and associated services including steam, water treatment and waste water



## Who we are

Bright Engineering Consultants is a specialist engineering consultancy to the food and beverage industries.

Our qualified team, with connections throughout the industries in which we specialise, works closely with our clients to ensure they receive cost-effective, appropriate, robust solutions backed with engineering rigour and timely, consistent results. Our client base includes many household names, major players, as well as small local manufacturers.



We often work alongside our clients, acting on their behalf independent of fabrication and installation, to ensure flexible and competitive options. We specialise in process design and project management, delivering capital projects and using industry networks to complement our offerings with design and other skills required to deliver top-class work.

Our team is business needs focused and has extensive experience in delivering projects for highly regulated industries. We understand the regulatory needs behind all cGMP compliant industries and the expectations of our clients when safety, best engineering practices and quality by design are understood and implemented.

We have a focus on personal growth and achievement, backed by teamwork and information sharing. We value experience and knowledge, and invest in training and broadening the experience of our staff.

## What we do

## **Process**

During processing, ingredients are taken from their raw, bulk or original form and modified, adding value and generating a product that complies to set standards.

Processing often involves many different ingredients in the form of powders, liquids, pastes, foams and gasses and modifying them by heating, cooling, mixing, separating, fermenting or reacting them and then portioning.

Bright can assist with processing by defining current or required processes and practices, using industry standard, accurate and measurable methods.

We review the processing methods, then apply engineering principles and current technology to improve processing times, increase repeatability and reduce production costs. We also assist in identifying bottle necks in production and modelling the process to define additional equipment requirements.

We also assist in commissioning new processes or validating existing ones, developing training packages and training your staff. We design and complete commissioning or remedial cleans and system passivations.

## Packaging

Packaging is the final step in the process, where your product becomes ready to leave the factory. Completion of primary packaging is normally a Critical Control Point, and all forms of packaging form a big part of your customers' perception of your brand.

We have experience with a wide variety of packages, including bottles, jars, pouches, tubes, wraps, sleeves, cups, cartons, punnets, boxes, bulk packs, pallets and many more. We also have experience with mass and volume filling, weighing, inspecting, labelling, coding, printing, indexing, sealing and tamper-evident systems.

Bright can help with identifying critical product and package attributes, developing a User Requirement Specification, and modelling your entire production line including people movements and raw materials storage to ensure each part meets your requirements.

We are independent, and work with many packaging equipment suppliers and act as your representative, developing a scope, comparing different offerings, and assisting with contract preparation. We also assist in commissioning a new production line or validating an existing one, or troubleshooting issues.

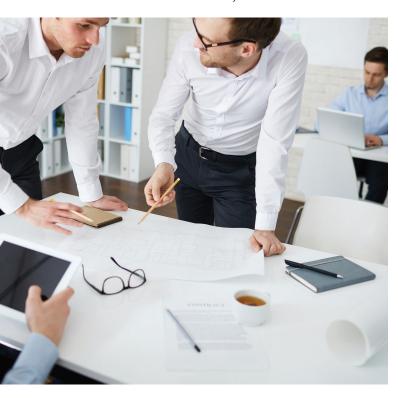
## Design

We start with a concept and readily available information. We complete additional measurements where required, using a range of specialist instruments and data loggers.

We complete detailed calculations and models to ensure the design is fit for purpose.

As part of design, we also ensure we comply with Australian Standards, Codes of Practice, industry norms and client/supplier's requirements.

We also complete the selection of instruments and components, and the documentation and drawings to ensure accurate assembly.



Our design offerings cover:

- Investigation (process discovery)
- Process design
- Mass and energy balances
- Energy balances
- Pipework design
- Piping & Instrumentation Diagram (P&ID) creation
- Process control & functional descriptions
- Mixing & dosing design
- CIP design
- Packaging layouts
- Mechanical design
- Conveyor design
- Transfer design
- Basic machine design
- Dangerous goods store design
- Hazardous area classification
- Machine safety assessments

## Project management

We can manage your project from concept through to commissioning.

We use specialist software and our own in-house tools to monitor and report on time, cost and quality.

We communicate with all relevant parties, from operators to management, government bodies and regulatory authorities, other designers, builders and trades.

Project management is the process of monitoring and controlling all of these tasks against the time-honoured combination of time, cost and quality.

It involves the planning and allocation of the tasks and the monitoring of their progress against a timeline, communication with many parties, speaking each of their unique languages in their field of expertise. We know what value looks like in each of time, cost and quality.

## Safety & compliance

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

#### Time & process management

- Project timing, scheduling and reporting
- Work breakdown structures
- Installing 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

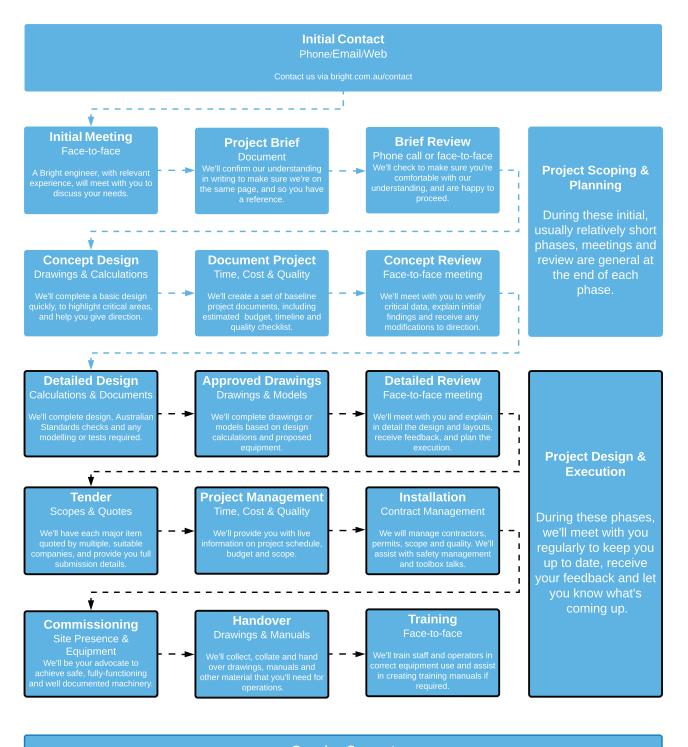
### Quality

- Process functional descriptions
- Project scopes, individual scopes of work
- Equipment performance specifications
- Installation supervision and contractor management
- Commissioning and validation
- Detailed and documented technical inspections (ITPs)
- Factory Acceptance Testing (FAT)
- Site Acceptance Testing (SAT)
- Hit-list management

## Validation

- 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



## **Ongoing Support**

Phone, Email, Site Visits

We'll support your project into the future with information storage, troubleshooting and further upgrades

## Our team



Peter Mauger DIRECTOR PRINCIPAL PROCESS ENGINEER



Michael Pecar NATIONAL OPERATIONS MANAGER



Anton Gurd
OPERATIONS MANAGER
– ADELAIDE
SENIOR MECHANICAL
ENGINEER



Andrew Hartley
QLD OPERATIONS
MANAGER
DESIGN AND DRAFTING
MANAGER



Fernando Diaz NATIONAL ENGINEERING SUPPORT PRINCIPAL MECHANICAL ENGINEER



Mark Winter SENIOR PROJECT MANAGER



Sam Cook SENIOR PROCESS ENGINEER



Anna Hardie SENIOR PROJECT ENGINEER



Sophia Wang PROCESS ENGINEER



Aaron Smith PROCESS ENGINEER

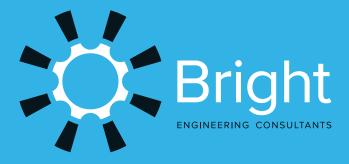


Tom Loipersberger TECHNICAL DRAFTING ENGINEER



Thomas Hazell GRADUATE MECHANICAL ENGINEER

Sub-consultants for additional services, including electrical and structural engineering. We are continually looking for suitable people to join our team. Please contact your preferred office for more information.



## **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



## Food South Australia

Food SA's role is to support and develop the sustainability and profitability of the dynamic food industry in SA. http://foodsouthaustralia.com.au/members/bright-engineering-consultants/



## The Institute of Brewing and Distilling

The aim of the Institute of Brewing and Distilling is the advancement of education, especially in the sciences of brewing, fermentation and distilling. http://ibdasiapac.com.au/



## **Winery Engineers Association**

Providing a forum for New Tehnologies & Processes that advocates Industry Standards & Best Practice. http://wea.org.au/

## Contact us

#### South Australia

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#### Victoria

(03) 8400 4481 melbourne@bright.com.au

#### Queensland

(07) 3703 1280 brisbane@bright.com.au

#### Western Australia

(08) 7100 1122 perth@bright.com.au We also service New South Wales through our network of associated organisations and engineers. While we prefer to work on site wherever possible, we are set up to service anywhere in Australia remotely with hardware encrypted server access, laser scanning, virtual and augmented reality capability. We use these as required, accounting for cost, efficiency, sensitivity or travel restrictions. This allows us to deliver your projects, regardless of location.

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