



## CLIENT

MSD Animal Health

## LOCATIONS

Bendigo, Australia

## CORE CAPABILITIES

- Project Management
- Multidisciplinary engineering: process, mechanical, electrical, control and automation engineering
- 3D modelling
- Commissioning
- GMP validation and compliance services
- V-model engineering lifecycle
- Tender packages and evaluation
- Construction Management

## PROJECT SUMMARY

The MSD production facility in Bendigo currently manufactures a number of viral and bacterial live and attenuated biological vaccines for the animal health sector for local and overseas markets. This project involves increasing the bacterial fermentation production capacity. A new building extension was constructed which interfaces directly with the existing production facility, as well as new services and infrastructure to support the new building extension.

## THE CHALLENGE

The facility needed to be designed and built to meet APVMA GMP requirements, as well as OGTR and DAWR Physical Containment requirements. The existing production facility needed to remain operational during the construction process.

## SYNERTEC'S SOLUTION

The ground level comprised of Grade D, Grade C & B production areas and a trafficable ceiling space above containing air handling equipment, services and process piping. New standalone utilities for chilled water, heating hot water, steam and compressed air were located in a new area designated specifically for mechanical services. Power and data distribution to the new facility and services areas, modification of existing purified water reticulation services and modification of the existing clean steam system is also included in addition to a new storage area for the CIP chemicals and a trade waste treatment system which included an intermediate tank in a underground pit, a thermal decontamination system and a cooling and neutralising pit. Synertec was engaged by MSD Animal Health as the Head Contractor. This project was a design & construct project for the architectural, civil, structural, hydraulic and electrical packages and constructor for the mechanical and process packages. Synertec's role as head contractor involves overall responsibility for Health, Safety and Environmental management of the construction site. This includes coordination of all subcontractors, MSD staff and contractors working on the site, as well as segregation and management of the construction zones to minimise impact of construction activities on the ongoing operations and movement of MSD staff around the site.