

# GSK Cork



# High Containment Capability

We specialise in the Development, Launch and Manufacture of complex and difficult APIs, including your requirements for High Containment and Particle Characterisation



- Ireland's corporation tax rate of 12.5% is amongst the lowest in the world and compares very favourably with other countries
- Ireland also has a favourable holding company regime and is an attractive location to establish corporate support / hub activities
- A 25% tax credit can be claimed for R&D expenditure. Ireland also has a network of double taxation treaties
- Government support is available for capital projects, employment grants and research and development activities
- Ireland is the only English speaking member of both the EU and Euro Zone
- GSK Cork is located 15 minutes from Cork International Airport





do more  
feel better  
live longer



# GSK Cork - High Containment Capability



GSK Cork has over 17 years experience in the manufacture of High Containment products.

The site had 2 high containment buildings

- Building 5 is a state of the art small scale facility (commissioned in 2007) designed for the handling, manufacture and testing of highly potent compounds.
- Building 8 is a state of the art small to medium facility (commissioned in 1999) designed for the handling, manufacture and testing of small to medium scale OHC4/OHC5 compounds

In addition to our high containment facilities the site has significant experience in the maintenance and cleaning of a modern high containment facility. The required Environmental, Health and Safety and Medical Surveillance procedures associated with high containment operations are well defined and familiar to all personnel.

Currently there is free capacity in these facilities to accommodate business development opportunities that exist for the development and manufacture of highly potent products e.g. cytotoxic materials.

GSK Cork is interested in partnering with company's that require a high containment state of the art facility and expertly trained staff.

GSK Cork has extensive experience in the introduction of New Chemical Entities (NCE) from R&D

Recently Cork has completed 3 business opportunities transfers. The experience from the NCE transfers has enhanced key attributes of a process against previous performance at other sites

Some examples of where GSK Cork has added value to customers

- Yield increase by up to 5% per stage of a process manufactured

- Throughput increased by 15% by optimising filtration and drying operations

- Safer plant operation

- Equivalent or better quality performance

- Process optimisation through targeted development work

# Small Scale High Containment Plant - Building 5



Building 5

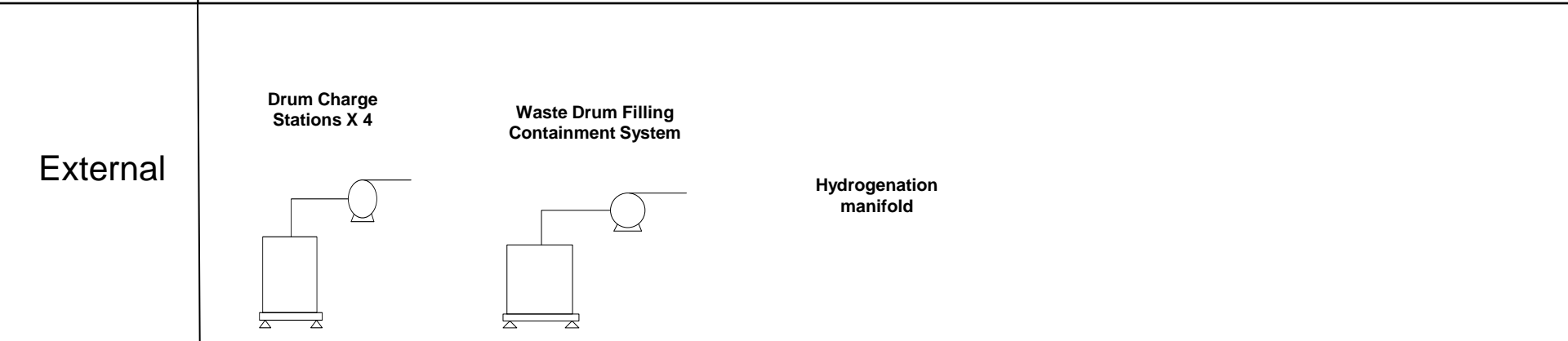
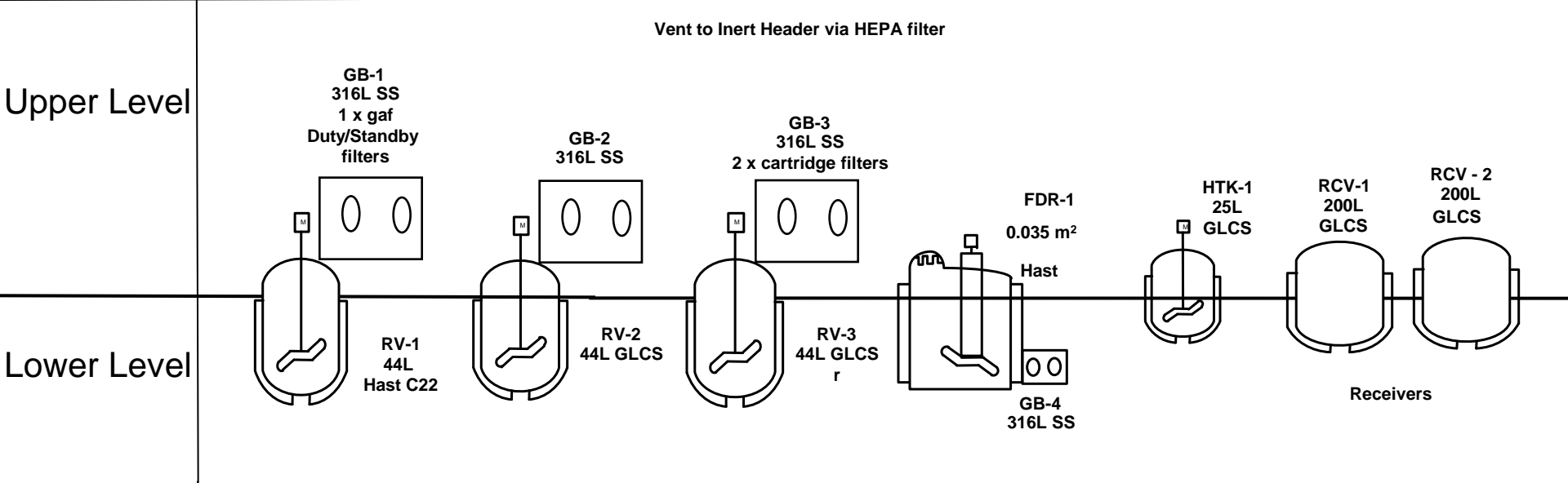
- A small scale multipurpose processing plant for API's and Intermediate stages
- OHC 5(< 1mg/m<sup>3</sup>) capability and highly flexible processing module
  - < 30 nanograms/m<sup>3</sup> demonstrated
- 6 Gloveboxes
- Dedicated development & QC analytical laboratory
- 2 Glass Lined and 1 Hastelloy reactor vessels
- Hydrogenator
- 5L to 44L scale of wet end processing
- 1 Hastelloy Filter Dryer
- Remote manual or batch sequence operation with electronic batch record
- Batch size 300g to 4.5kg (Process dependant)

# Small Scale High Containment Plant - Building 5 Processing Equipment



Building 5

<p>Dispensing Area</p>	<p>3 x Gloveboxes and 2 x fumehoods Solvent Charging fumehood (pressure kettles)</p>	<p>GMP QC Analytical Lab + Development Lab</p>	<p>Utilities area</p>
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# Material Dispensing- BLD 5



# Material Charging- BLD 5





# Primary Processing Area- BLD 5



# High Containment Laboratory- BLD 5



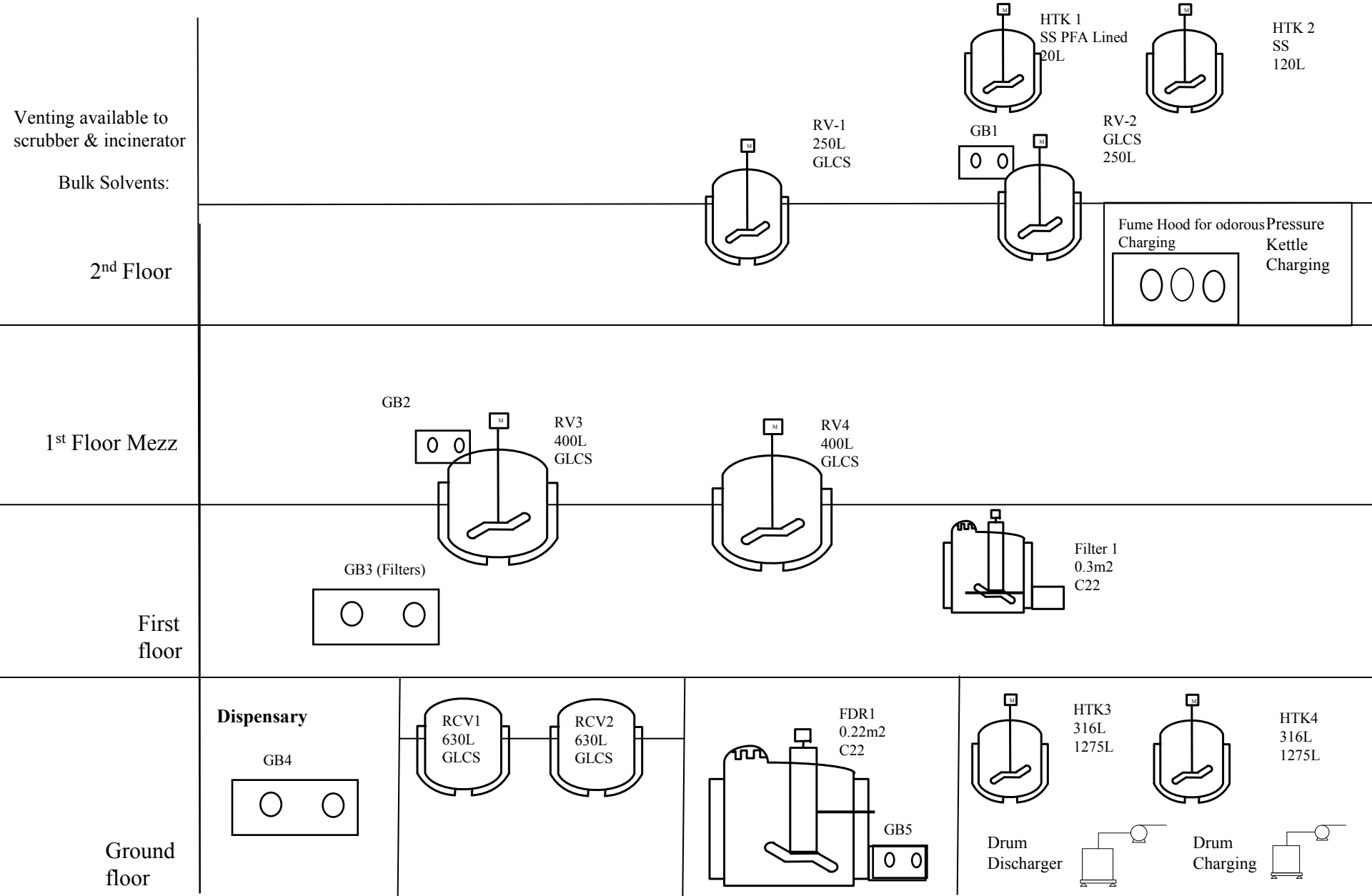
# Medium Scale High Containment Plant

## - Building 8



- A small to medium scale multipurpose processing plant for API
- OHC 5 ( $< 1\text{mg}/\text{m}^3$ ) containment for charging and offload
- 4 Glass Lined reactor vessels
- 20L to 400L scale of wet end processing
- Dedicated scrubber
- 1 Hastelloy Filter Dryer ( $0.3\text{m}^2$ )
- 1 Solids filter
- Contained filterGlovebox
- Dedicated development & QC analytical laboratory
- Remote manual or batch sequence operation with electronic batch record
- Batch size 9kg to 40kg (Process dependant)
- Typical Capacity 1MT to 14MT (Process dependant)

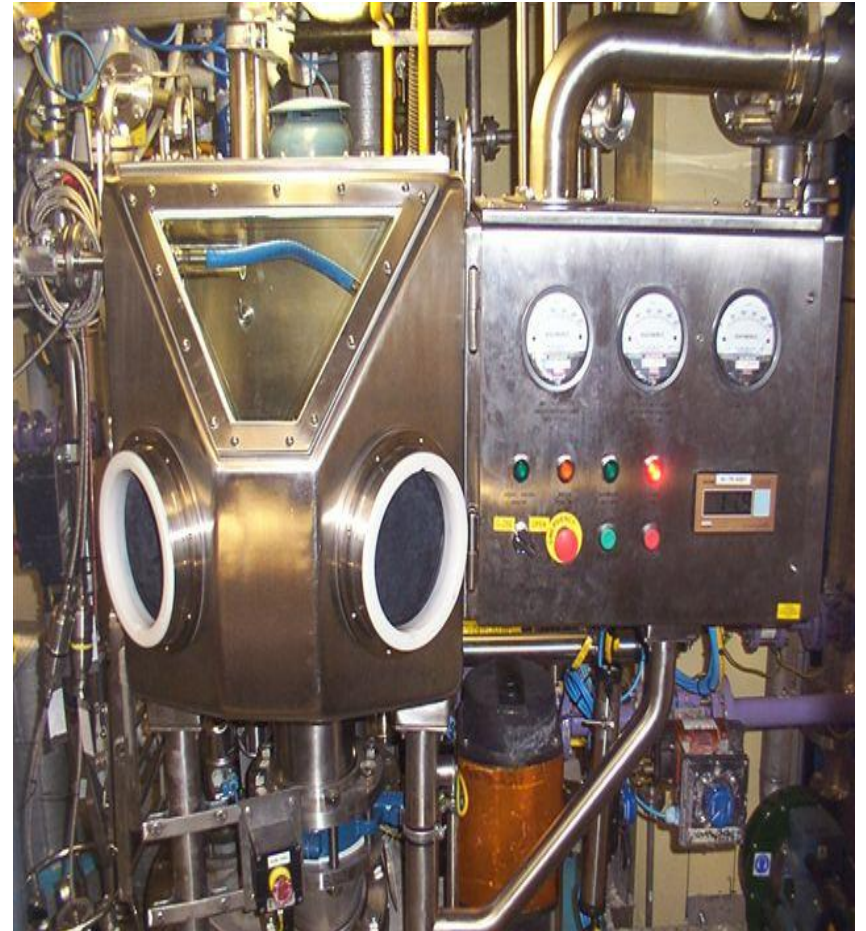
# Small Scale High Containment Plant - Building 8 Processing Equipment



# Material Dispensing- BLD 8



# Material Charging- BLD 8



# Primary Processing Area- BLD 8



# High Containment Laboratory- BLB 8

