



TRUFLOW

Spray Booths (Aust) Pty Ltd

The Elite Series is our premier model, providing the highest level of technology, energy saving features, robust design and trusted Australian made workmanship.


The paint finish and curing times of the Elite provide customers with significant cost savings. The airflow design is laminar and smooth over the entire vehicle thanks to electronic drive fans and pressure monitoring controls.

The Elite Series is today's ultimate water born spray booth oven.



R.O.M | R00

Plasser Australia

Date:	Friday, 27 April 2018	Client:  2 Plasser Crescent, North St Marys, NSW 2760 PO Box 537, St Marys, NSW 1790 www.plasser.com.au Tel. +61 2 8801 9813 Fax +61 2 9623 6502 Mobile +61 422 513 413 Stakeholders: Brian Jones Scott Lawrence Mark Thebridge Stephen Mee
Project Manager / Technical Services:	Chris Spencer National Manager TRUFLOW Spray Booths	
Project Document:	<u>27/4/2018</u>	
Facility:	<u>Large Scale Paint Facility</u>	
R.O.M ref:	<u>TSB-ROM- 4/27/2018 6:20 PM – R00</u>	
From:	Chris Spencer National Manager TRUFLOW M: 0409418058	

Dear Brian and Scott,

Thank you for the opportunity to submit our **ROM** for the New Spray Facility to be installed in St Marys NSW.

We look forward to working with you on this project and trust that our expertise in this field will assist you with the successful delivery of the facility.

Please read through the following brief document to better understand the proposal put forward at this stage of the project.

1.0 TRUFLOW CAPABILITIES AND INTRODUCTION

TRUFLOW Spray Booths has a long standing technical understanding and experience in building and designing corrosion control facilities around Australia. TRUFLOW has built Corrosion control facilities and been involved in major projects for such companies as the Australian defence force, RAAF, ASC, BAE, Caterpillar and many privately owned Aviation, Mining and maritime companies including Sikorsky and Boeing. This technical relationship is born from TRUFLOW's industry recognised capability to deliver state of the art paint and corrosion control facilities meeting specification and budget.

2.0 SUMMARY OF PAINT FACILITY R.O.M

This document provided by TRUFLOW is a **R.O.M (Rough, Order of Magnitude)** – This document has been prepared and baselined from our technical understanding of the specification provided. The result is TRUFLOW have designed, engineered and integrated the technical aspects of this facility to ensure compliance with Australian Standards which are regarded in the industry of spray booths as some of the most comprehensive in the world. This document presents a proposal which will need to be further detailed in discussions with both the consulting team for this project and likely the client's to ensure the final layouts are integrated with the new building as this facility will form part of the facility rather than simply be placed inside it.

The objective of this ROM is to provide an overall order of magnitude cost for this facility with a preliminary level of detail and transparency in order to start the process of communication between the TRUFLOW Team that will implement this project.

3.0 PURPOSE AND DETAIL IN R.O.M

Preliminary design drawings have been issued within this document to provide conceptual context to the facility only. These drawings are not intended to be a final layout, rather they are provided to start a discussion on how the facility can merge with the specification document and the builder's scope.

The footprint size provided does give a semi-accurate space allocation of the overall footprint of this facility.

We have designed One (1) Spray Facility – Each of which provides baking capability being split into three booths.

The process of preliminary and critical design review (PDR and CDR) should take place between the specialist contractor (TRUFLOW) and the Client involving key stakeholders. TRUFLOW is prepared to organise, attend or facilitate a meeting for this project at any stage and we look forward to the opportunity to introduce our team that will be working on this project.

Our R.O.M will include the following information:

- Preliminary facility Drawings
- General Scope Summary – Inclusions and expected exclusions or work by others.
- Capital expenditure schedule
- Trading Terms / Term and conditions.

Should you wish to discuss any of our products please feel free to contact me at any time on **1300 BOOTHS** or my mobile 0409418058 (**Int + 61 409418058**)



CHRIS SPENCER | NATIONAL MANAGER | TRUFLOW SPRAY BOOTHS (AUST)
M: + 61 409418058 Office: 1300 BOOTHS

4.0 SPRAY BOOTH DESIGN SUMMARY

The Spray Booth facility designed is a large scale On Floor Downdraft Spray Booth with side extraction. Filters are installed partially into the side walls on both side which would need to be designed by TRUFLOW to adapt to the facility currently in place. The builder would be required to cut door holes throughout the facility so our escape door requirement can be met to 4114.1:2003. This design will flow evenly allowing for the most efficient respray of the **Plasser units**.

The spray booth size is externally is aproximatly **7.5m Wide x 7.4m High x 50m Long** : the spray booth airflow is provided by a large number of supply AHU's (Air Handling units) and EXF (Exhaust Fan Modules). All of these operate through a specifically designed control system which run all safety and functional aspects of the spray facility.

The volume of air introduced is to meet AS/NZS 4114.1:2003 which is a single pass .25 m/s Airflow velocity through the cabin. This sufficient volume of introduced air is required to meet all requirements and modes of operation and ensure that extracted/exhaust air will carry contaminates through the filters away from the product. The filtration meets and exceeds AS/NZS Standards.

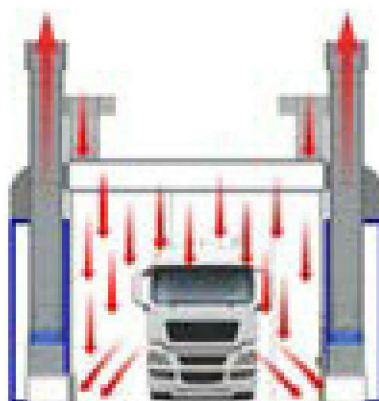
The spray facility will operate in Two (2) modes:

1. **Paint Mode:** This mode is used for large area painting, temperature heating control is to be utilized in this mode to ensure substrate temperatures are correct.
2. **Bake Mode:** Provides a complete 70.C bake cycle with energy re-cycle. 80% of heat is re-circulated during this cycle to maximize temperature retention, manage temperature fluctuations and minimize gas consumption costs for such a large booth.

The spray facility will also be split into three (3) Sections: Each operating individually or as a large system.

Airflow Design:

Downdraft Air @ .25m/s



5.0 TECHNICAL AIRFLOW

Airflow Supply Booth:	Minimum 81,500 l/sec
Airflow Exhaust Booth:	Minimum 81,500 l/sec
Air Velocity in Cabin:	.25 m/s
Ahu Qty:	6 x AHU units Total 13,650 l/sec per AHU 10 air handlers for 82,500 l/sec total flow
Heating capacity:	6000 mj/hr Estimated heating max capability 6000mj/hr 70.C AHU valve package to accommodate the fluctuations in entering air conditions.
Air On:	6°C Estimated – Based St Marys Coolest Average
Air Off:	23°C leaving air temperature on above coolest day.
Cabin Air:	25°C Typical
Summary:	Based on the annual air temperature of St MArY; the system has been designed to process the ambient air from the annual conditions provide and average cabin temp of between 23.C and 25.C in spray and 70.C in bake.

6.0 ROM SCOPE OF WORK

INCLUSION ESTIMATIONS

To Comply to Current Australian Spray Booth Standards

Current State and National Health and Safety requirements
Current State and National Environmental Protection Acts Requirements
Current State and National Councils By-Laws and Requirements
Current state and National Insurance Companies Requirements
Spray Booth Standards 4114.1:2003 and 4114.2:2003
Hazardous Zoning requirements AS60079 used as baseline.
Manufacturing Standards, Quality and Certification processes.

Equipment & Products Supplied and Installed as per scope of works.

Locally manufactured and sourced products where applicable.
High quality imported products for specialist equipment where appropriate
All Equipment to meet minimum local standards or Australian standards where applicable.

Installation, Project Management, Commissioning & Training and Handover as documented.

Supplied, installed and commissioned including engineering and design of the facility. Co-ordination and project management.
Training carried out with key personnel on the operation of the key functional areas as well as service requirements.

Warranty

12 months unconditional – with 5 Year extended on TRUFLOW products with the conditions of service maintenance being upheld as outlined in TRUFLOWS Terms of Warranty by TRUFLOW Spray Booths.

Documentation

Compliance documentation | Safety Documentation and Handover Dossier of completed project works certifications.

Insurances

Public Liability Insurance with cover of \$20,000,000.
Product Liability / PI Insurance / Work Cover Insurance
TRUFLOW has in house and quality sourced OH&S procedures in place for site works and in house core safety.

EXCLUSION ESTIMATIONS

Level Concrete Base, Structural Modifications & Local Council Approvals
Roof Access and Structural Building platforms
Compressed Air Supply to Spray Booth from clean dry air-source.
Building and Builders works - Building Structure & Concrete excavation/fill and construction fit out by Others
Roof Flashing
Hire Equipment for Project Duration, Crane, Scissor Lifts, Fork Lifts, Knuckle Booms, Manitou Lifts TBC
Adequate Gas supply connected to required locations
Adequate power supply to required locations
Adequate Compressed air to required locations
Changes and variations to this scope or allowances nominated.
Works outside Quoted Scope
Variations in Progress Apply to all Quotes provided by TRUFLOW (VIP)



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RECENT PROJECT INSTALL EXAMPLE

DESIGN APPROVED BY:

CHRIS SPENCER

DESIGN APPROVED BY:

CHRIS SPENCER

Plasser Australia

ST MARYS NSW

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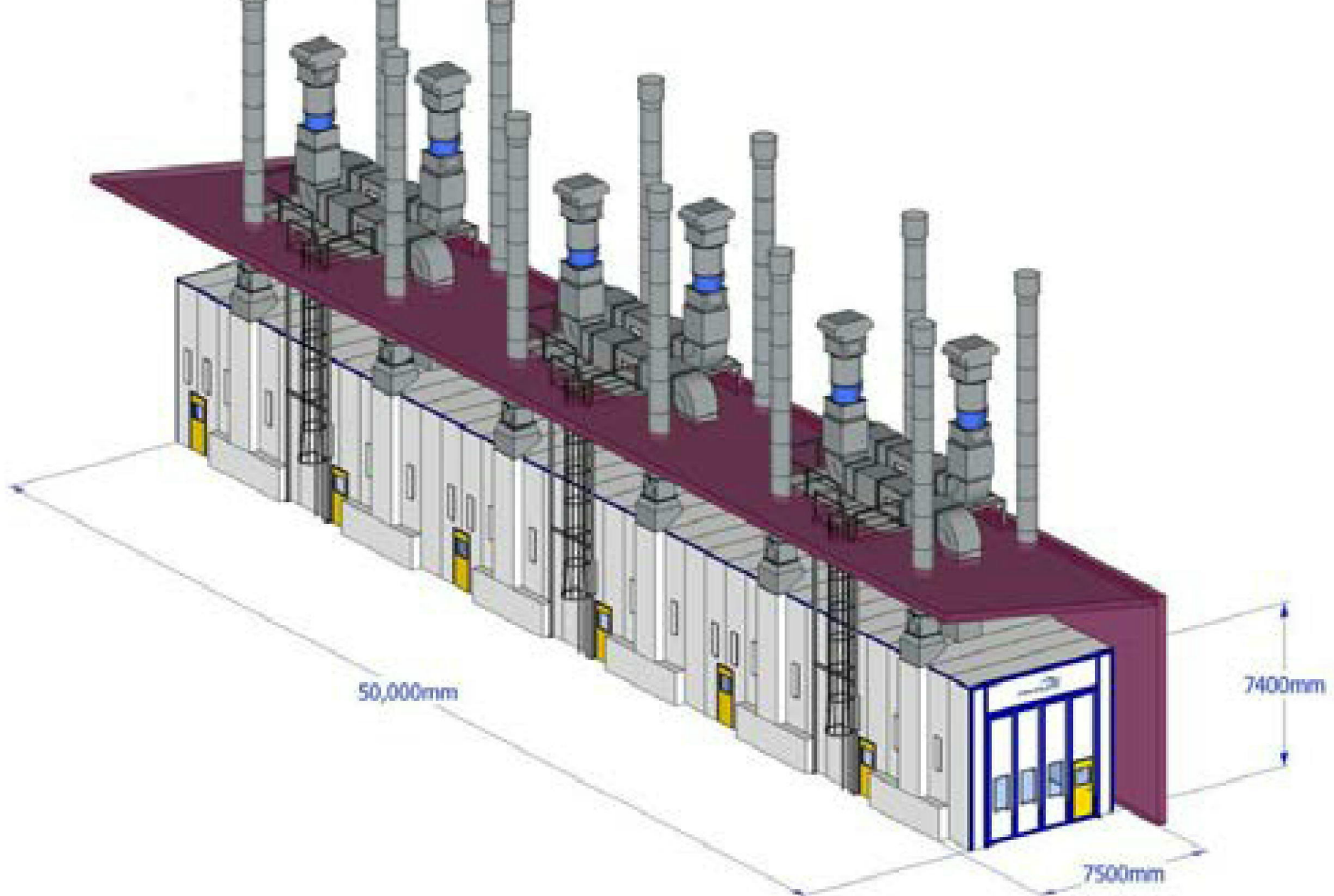
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Custom Plasser Facility
Designed by Chris Spencer
TRUFLOW Spray Booths





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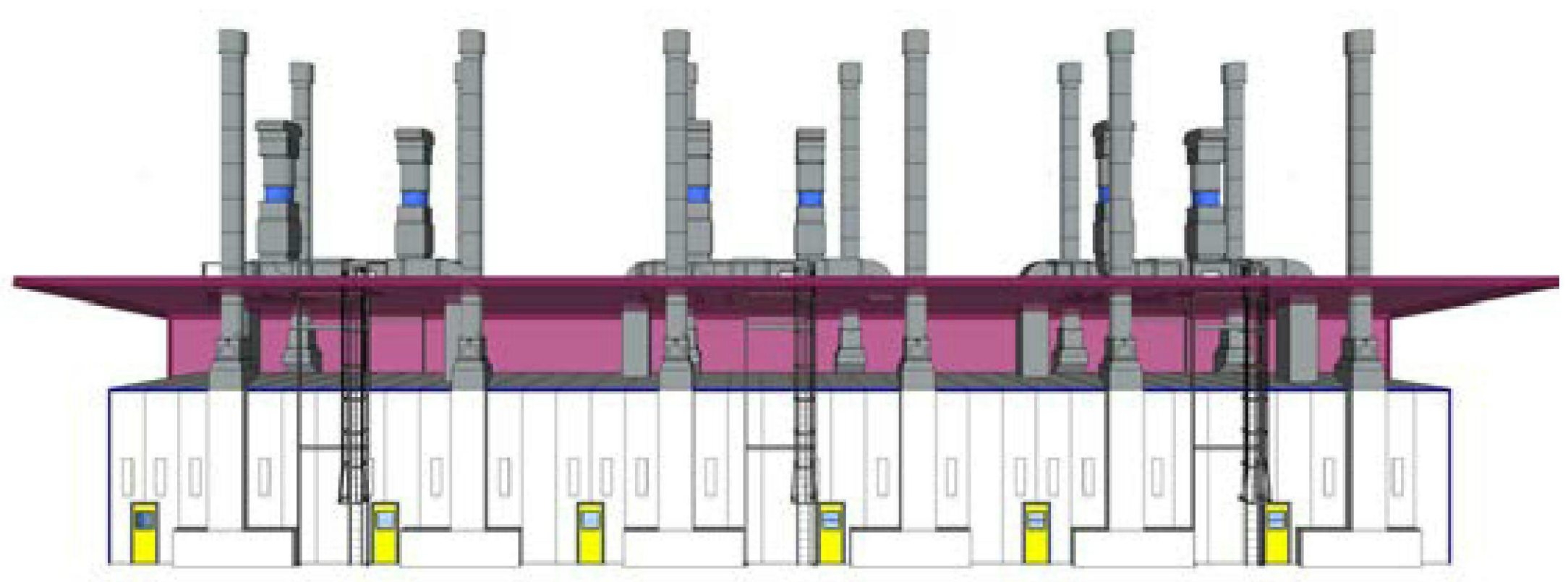
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SINGLE BOOTH SECTION

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