



ROYAL AUSTRALIAN AIR FORCE

TRANSFORMING
AIR POWER
THROUGH PARTNERSHIP
AND INNOVATION

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DEFENCE & AEROSPACE INDUSTRY CONFERENCE - 25 FEBRUARY 2019



Discussion Overview

- An SME's perspective of working with Defence
- How can an SME influence technology advancements?
- How can resource alignment help an SME move their unique technology forward?
- Is there a place for an SME to influence technology and Defence buying strategies?





Company Overview

- Norseld Pty Ltd was formed in 1986 and is a privately held company based in Adelaide, South Australia
- Originally as a laser and control system manufacturer primarily in the medical sector
- Norseld has a world leading specialty coating capability referred to as Diamond Like Carbon (DLC) we call it **CoolDiamond DLC™**
- Norseld is an ISO9001:2015 holder and ISO13485:2003 holder (medical devices) and is ITAR compliant
- Along with Australian Therapeutics Goods Administration (TGA) approval, we have US, Federal Drug Administration (FDA) approval, European Certification (CE) mark and other country approvals for medical devices
- Norseld employs 20 people, 2 being PhD qualified.
- Norseld has been actively working in the Defence Sector for 2 years, it has secured work (purchase orders) and has invested its own money to become commercially/Defence ready

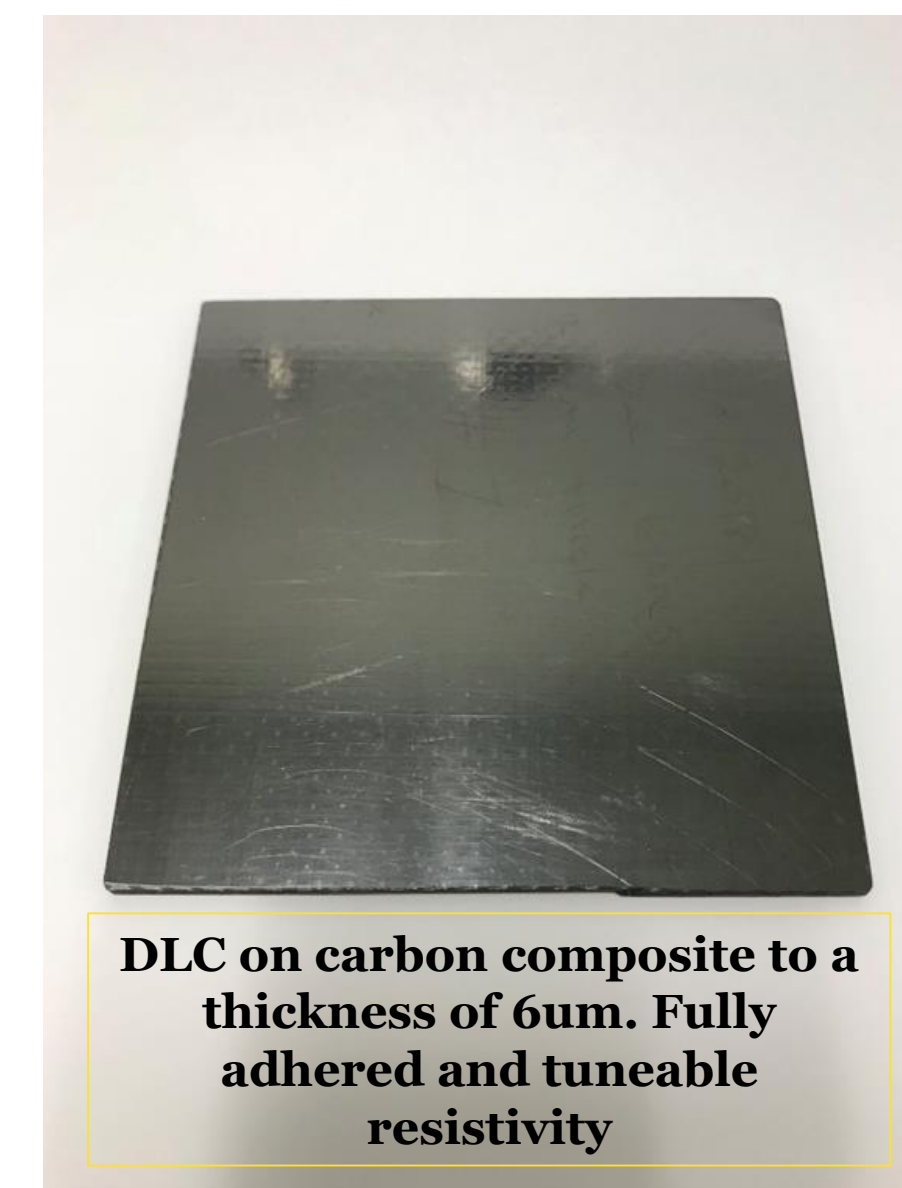
CoolDiamond DLC™





DLC in Defence/Aerostructures

- DLC is the hardest coating material known to man and is used in a variety of applications that need a protective or wear resistant coating
- DLC can be applied to the surface of optical coatings, engine parts, Radar Adsorbing Material (RAM, conductive, tuneable) and can be used as a thermal conductor
- DLC gives superior wear protection against dust, sand, organic chemical solvents (salt spray), other 2nd body particles and various thermal and electrochemical applications
- The Norseld CoolDiamond DLC™ has some unique properties not possible in conventional DLC being, room temperature application, harder by an order of magnitude, RAM (tuneable)
- Norseld has worked with Defence Primes to look at new areas of application. They include :-
Leading edge protection for rotor wing, improved composite cutter coatings, flight deck coatings and composite tool and parts coatings with DLC



CoolDiamond DLC™





Defence engagement

- Norseld is relatively new to defence and took a strategic decision to invest in that sector as part of opportunity assessment
- Our early engagements were with the CDIC, DTC and a defence consultant
- Defence Primes were quick to engage and we have formed excellent relationships through the Global Access Program (GAP)
- Our technology is of particular interest to DSTG and we have a maritime project underway
- Support from Defence Minister and Defence Industry Minister has been strong
- Norseld is receiving advice from DECO in relation to ITAR
- However to date we have not sufficiently engaged Defence Capability Managers and Sponsors and see this as a gap

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Summary

- Norseld sees the Defence sector as a growth platform for its technology
- I propose that with greater access to Defence in particular, Capability Managers and Sponsors together with other supporting agencies CASG and DSTG could help achieve better technology outcomes
- SME's like Norseld could play a part in Defence moving away from more traditional 'platform buying' models
- Imperative that we engage at more 'lead' technology levels within Defence
- SME's may have embedded sovereign capabilities within their technology that could be exportable that are otherwise undiscovered

