



# PIONEERS OF INTELLIGENT ADDITIVE MANUFACTURING (AM)







#### DELIVERING EFFICIENT & SUSTAINABLE SUPPLY CHAINS

Novel 3D metal printing technology that builds more sustainable and robust supply chains and prints parts cheaper, faster, better and with less environmental impact than traditional manufacturing.

#### S BLUE-CHIP CLIENT BASE

Growing blue-chip client base across the energy, maritime, defence and manufacturing sectors.

#### **STATE OF THE PROPERTY OF THE**

Fully operational production facility in Singapore with a part being printed every seven minutes.

#### **SOLUTION STATE OF ST**

Expanding global footprint with production centres being developed within the Port of Singapore and Houston, Texas.



NUMBER OF SECURITIES

**EXISTING SHARES ON ISSUE** 

190,119,285

**EXISTING OPTIONS ON ISSUE** 

1,300,000

% OF SHARES UNDER ESCROW

49.4% \*

SHARE PRICE (27.5.21)

\$0.17

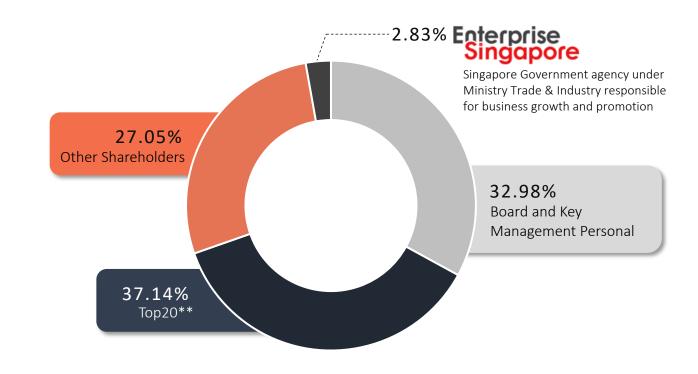
IMPLIED MARKET CAPITALISATION

A\$32.3M

CASH POSITION (31.3.21)

A\$8.01M

# CORPORATE & CAPITAL STRUCTURE



<sup>\*</sup> A total of 93,969,749 shares is subject to various escrow terms

# UNIQUE BUSINESS MODEL WITH MULTIPLE REVENUE STREAMS

#### MORE SUSTAINABLE SUPPLY CHAINS

- Scope, design, equip and operate custom production centres within a customers supply chain
- Produce parts using up to 90% less material and 25% of the energy of traditional manufacturing utilising improved AM design and production technology
- Produce parts 'just in time' near end users to reduce inventory and transportation time and cost
- first of its kind revenue model for AM

Partnership with worlds largest port operator (PSA) to develop proof-ofconcept AM facility within the port of Singapore



#### **IMPROVED MANUFACTURING**

#### **IDENTIFY**

Work with current and future customers to identify parts that could benefit from AM manufacturing

#### **DESIGN**

Design and optimise parts to take advantage of the full benefits of AM

#### **FABRICATE**

Produce the parts using our range of 3D printers along with quality inspections and testing

#### RAPID PART SUPPLY

- Able to produce spare parts urgently in weeks vs months for traditional manufacturing
- Reverse engineering of obsolete parts using advanced hardware and state of the art design software
- Utilised to save entire systems and extend field lifetime for older embedded systems
- ideal for oil and gas, maritime and defence with older installed capacity



**GROWING BLUE-CHIP CLIENT BASE** 









# LARGE ADDRESSABLE MARKETS & HIGH VALUE CUSTOMER SEGMENTS

ENCOURAGING INDUSTRY TAILWINDS ARE DRIVING AM UPTAKE GLOBALLY

Estimated AM Market size 1

2019 US\$11.9BN

2025 US\$47.7BN

3D METALFORGE IS TARGETING THE FOLLOWING INDUSTRIES & AIMS TO PROVIDE UNIQUE MANUFACTURING BENEFITS FOR CUSTOMERS

#### OIL & GAS

- Part design improvement
- Increase part performance
- Simplify the supply chain

#### DEFENCE

- Lead time reduction
- Improve functionality
- Increased customisation
- Complex design parts
- Waste reduction

#### MARITIME

- Reduce lead times
- Enhance availability of parts
- Reduce inventory costs
- Reduce transportation costs

#### HIGH VALUE INDUSTRIAL

- Design more complex parts
- Increase strength of parts
- Eliminate unnecessary material
- · Reduce weight

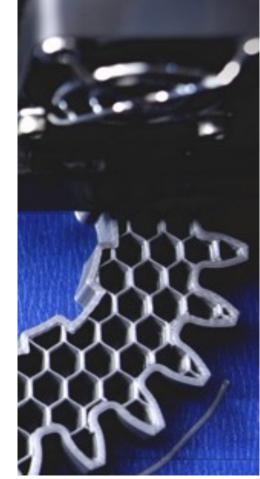
# ADVANTAGES OF AM MANUFACTURING

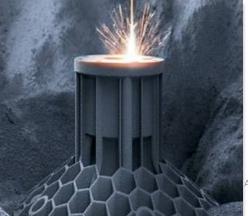
Transformative approach to industrial production by depositing materials in layers.

- S Less material waste and environmental impact
- So Cost effective small and large scale production
- S Rapid prototyping and production
- Almost unlimited ability to produce structures and shapes



AM is helping industries reduce development and manufacturing costs, increase production speed and produce new structures and shapes.





## BENEFITS OF OUR TECHNOLOGY

Swivel joint printed in Stainless Steel 316L on powder bed printer



EXTENDS LIFESPAN OF OLDER EQUIPMENT

Saves entire systems by reverse engineering and printing obsolete parts

Saves \$000's in replacement costs

Pump impeller printed in 25% of legacy manufacturing



REDUCES STORAGE & INVENTORY COSTS

Reduces storage costs and delivery times by printing locally on demand

Up to \$5k per part and months faster

Trim printed in Inconel 625 with intricate internal channels



IMPROVES PRODUCTIVITY

Improves manufacturing productivity by printing complex parts in one piece

~10-20% savings of productivity on suitable parts

Air filter parts printed in 50% less time at 40% of cost of traditional manufacturing



REDUCES WASTE AND IMPROVES SUSTAINABILITY

Reduces material waste, uses less energy and reduces emissions through cycle

Up to 90% less material and up to 25% less energy

Hanger designed with bio mimicry lattice to reduce weight by 30%



IMPROVES PART PERFORMANCE

Improves part performance and longevity by redesigning parts for AM

~15-30% material savings

## WORLD LEADING EXPERIENCE & CREDENTIALS







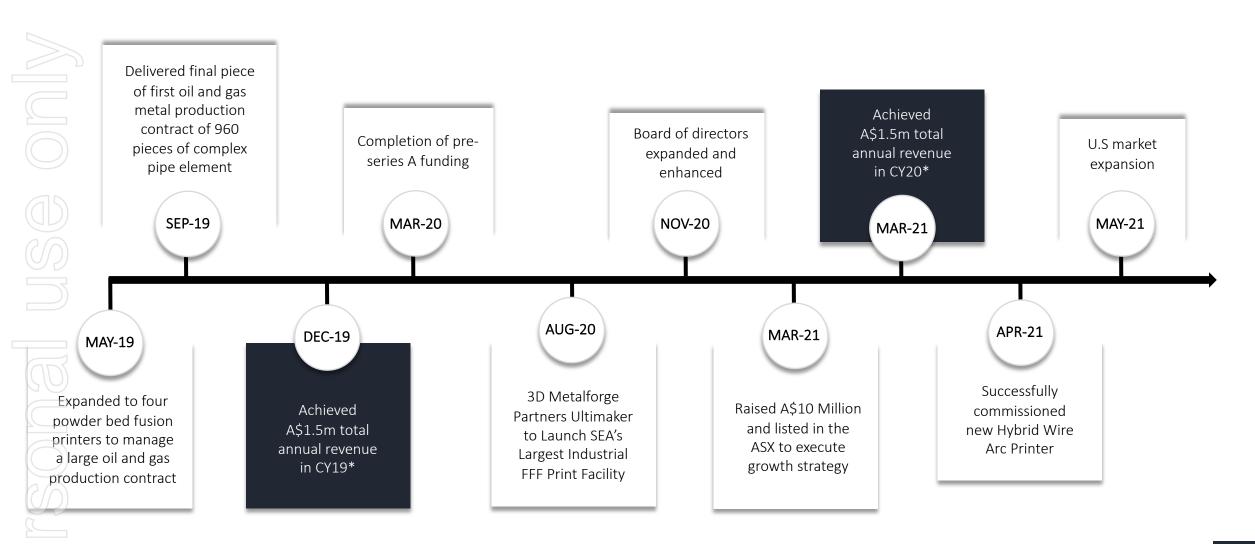






WE ARE ONE OF ONLY 6 MANUFACTURERS CERTIFIED BY LLOYDS REGISTER TO PRINT METALLIC PARTS

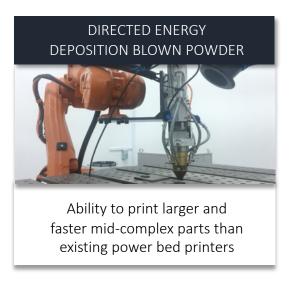
# RECENT MILESTONES HAVE POSITIONED 3D METALFORGE TO SCALE GLOBALLY



### **OUR SINGAPORE FACILITY**

# SELECTIVE LASER MELTING

High detail complex printing suitable for small metal parts



#### MULTIJET FUSION PRINTING



Low cost and 10x faster than comparable printers making it ideal for short-run manufacturing

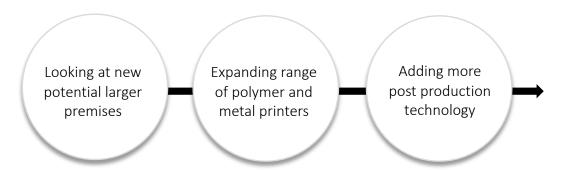


Reliable and robust desktop printer with dual extrusion capabilities for multi-material parts

#### **CURRENT CORPORATE HEADQUARTERS**

- Highly experienced and talented in-house team comprising of 3D designers, engineer, sales managers as well as technical and solution specialists.
- **S** Extensive range of **best-in-class equipment** and technology.
- Facility has historically underpinned 3D Metalforge's printing infrastructure and revenue.

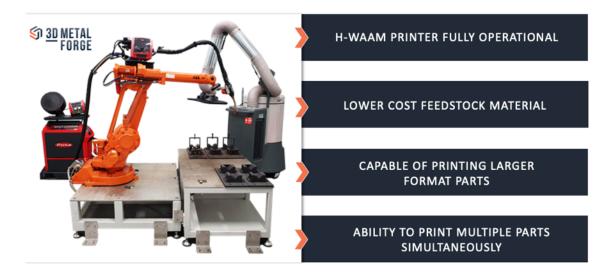
#### SINGAPORE EXPANSION ACCELERATING



### COMMISSIONING FIRST SUPPLY CHAIN FACILITY

- In partnership with PSA, 3MF is commissioning a new additive manufacturing facility within the port of Singapore.
- PSA is the Singaporean flagship of PSA International, the **world's** largest port operator with 50 ports in 26 countries.
- The facility allows 3MF to target high-demand industrial parts and produce them faster, cheaper and with less environmental impact than traditional manufacturing.
- Signary PSA will gain the ability to produce maritime parts on demand, reduce their overall inventory and re-design parts to improve part performance and longevity.
- Si Estimated to be operational Q2-Q3 CY21

#### RECENTLY COMMISSIONED HYBRID WIRE ARC PRINTER LOCATED ON SITE



Completing the site will represent an opportunity for 3D Metalforge to demonstrate its unique capabilities with a view to <u>develop additional sites globally.</u>

### U.S. MARKET EXPANSION

- Secured a 20,000 sqf factory located in Houston Texas which will be converted into a production facility to service the entire U.S market.
- The new facility will accelerate 3D Metalforges's ability to support clients building more sustainable and robust supply chains using less energy, materials and emissions to manufacture parts near point of use.
- North America is the largest market for additive manufacturing.
- Houston is the global centre for the oil and gas industry and the most important corporate location to target decision makers and high value engineering groups who service the sector.
- A wide range of larger capacity 3D metal printers will be installed to specifically target industrial scale part production.
- 3MF also plans to **target the defence**, **space and medical sectors** which have a strong presence in Houston.



A number of key personnel have recently been hired for operational and business development activities including an experienced Marketing Manager, Senior Client Account Manager, Operation Manager and Design Engineer.

### **AUSTRALIA EXPANSION**

- 3D Metalforge is upgrading its Perth office to focus on developing opportunities primarily in the Australian energy, resources, industrial and defence sectors.
- **Early-stage discussions are already underway** with our existing global client base, many of whom have offices and manufacturing facilities in Australia.
- The Company is currently in the process of securing a Business Development manager.
- Opportunity to set up production facility and bring our unique printers to the Australian market.
- Initiated discussions with research institutions for R&D collaboration in the Additive Manufacturing sphere.





Potential for 3MF to become a foundation AM company in Australian market

### **EXPERIENCED BOARD & MANAGEMENT**



Matthew Waterhouse CEO, Founder

Matthew has over 20 years of Senior Management Experience in MNCs, including 7 yrs as Associate Principal at McKinsey & Co and COO for Keppel Integrated Engineering responsible for building \$1Bn+ infrastructure projects.

Keppel Infrastructure

McKinsey & Company



Michael Spence
Chairman

Michael is an angel investor with a portfolio of eight companies in Australia & SEA. He retired from full-time work in 2019 as a Senior Director of Partners in Performance, an operations improvement consultancy. He has 33 years' experience split between consulting (PIP & McKinsey & Company) and line management (Ford, ITT, Valeo, Ayala Corp).



Samantha Tough
Non-Executive Director

Distinguished career in the energy, resources and engineering industries as both a director and senior executive. Chair of Horizon Power, Chair of the National Energy Selection Panel, Director of Clean Energy Finance Corporation, Director of Buru Energy Limited (ASX: BRU), UWA PVC Engagement and former Director of Saracen Mineral Holdings Ltd (ASX:SAR)/Northern Star Resources and others.



Geoffrey A. Piggott,
Non-Executive Director

Geoff has over 50 years in infrastructure engineering in Sydney Water, Black & Veatch, Keppel Infra and Deep Tunnel Sewerage System.



**David Buckley** *Advisor* 

David is Chairman of Royal Bank of Canada (Europe) and formerly European CFO for Morgan Stanley and Intl Treasurer for Goldman Sachs.

