







3	OUR STORY
4	VISION-MISSION
5	COMPANY INFORMATION
6	KEY MANAGEMENT TEAM
8	OUR TECHNOLOGIES
9	PRODUCT AND SERVICES
15	OUR PARTNERS
16	MEMORANDUM OF UNDERSTANDING
17	CERTIFICATE AND REGISTRATION
18	PROJECT LIST

3D Gens or 3D Generation are established with the aim to industrialize Digitization, 3D modeling and 3D Printing.

# **Our Story**

3D Gens or 3D Generation is established with the aim to industrialize 3D modeling and 3D Printing. With a vision to become the pioneer in introducing digital manufacturing anchored by the solid foundation in engineering modeling and Additive Manufacturing Technology. The founder, Dr. Izhar Aziz has resolute courage to bring 3D Printing technology to a realization in Malaysia and has a strong believe that one day 3D Printing will be a new manufacturing culture. The company started by penetrating Malaysia medical industry tackling niche areas such as surgical planning and customized medical implants and devices. The response are overwhelming thus expanding to orthopedics, maxillofacial and dentistry. Applications are not limited to medical, we only need to tap the right product and right process.

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## VALUES

Knowledge. Technology. Expertise

Medical

## VISION

To establish as the Centre of Excellence (CoE) for 3D Printing technology that driving product innovation, pioneering digital manufacturing and deliver the best manufacturing solutions to Our Client

> Engineering Design & Rapid Manufacturing

## Dentistry MISSION

To be a technology oriented Engineering company adopting 3D Printing technology that revolutionized conventional manufacturing for better quality services

To be a certified and accredited Manufacturing company for Engineering & Biomedical Devices by adopting 3D Printing technology



Product Design



## COMPANY INFORMATION

Company Name	3D Gens Sdn. Bhd.
Company Registration Number	1184557-P
Corporate Status	Private Limited
Date of Incorporation	20th April 2016
Registered Address	No. 18, Jalan Kerawang U8/108, Perindustrian Tekno Jelutong, Seksyen U8, 40150 Shah Alam, Selangor.
Company Secretary	Mazelan & Co
Tax ID No	E 9146957504
Business Address	No. 18, Jalan Kerawang U8/108, Perindustrian Tekno Jelutong, Seksyen U8, 40150 Shah Alam, Selangor.
Phone	+603 783 27140
Website	www.3dgens.com
Email	info@3dgens.com
Bankers	Maybank



## Meet the Key Management Team



Dr. IZHAR ABD. AZIZ Managing Director

Hold B.Eng (CAD/CAM), M.Eng(Materials Science) and PhD (Mechanical Engineering). Experienced R&D Engineer with highly competitive technical expertise and in-depth knowledge in materials and processing area. Knowledgeable in new product and process development, standards & regulatory compliance, engaged in rapid prototyping & manufacturing technologies particularly in biomedical devices. Motivated leader with strong organization and prioritization abilities.

Started an Oil & Gas service company in 2014. From there he met with his current partner Dr Izhar bin Aziz whom also works for an Oil & Gas service company. After the sudden drop of oil prices in 2014, many Oil & Gas services company faces turmoil and uncertainty in the industry. Following this bleak outlook, Umar and Dr Izhar started working together in the medical sector. He holds a First Class Degree in Accounting and Finance from Coventry University. Has experience in marketing and business development and also a keen leniency towards any sort of technological advancement especially in the Medical Industry.



UMAR IKRAMULLAH Executive Director



HANNA ZULIKA Finance & HR Hold Bachelor's Degree in Finance/Accountancy/Banking from Universiti Malaya with over 15 years of experience. She started working as account admin at Bosmara Holdings Sdn Bhd, Y L Tan Consultancy and Services, RNJ Contracts Sdn Bhd. Then, as a senior auditor for 5 years at Khairuddin Hasyudeen & Razi. Currently, an accurate and performance, driven finance manager at 3D Gens with an extensive experience in being charge of all financial functions within the company. Adept at managing financial teams, allocating budget, completing financial reports and statements, and conducting financial forecasts. Effective communicator with great time management skills and welldeveloped analytical abilities.

## Meet the Key Management Team



HOSNI MUBARAK Business Development

Hold Bachelor Degree in Economics (Majoring Economics Development) with over 10 years of solid experience in various role and responsibility. He started working with Amanahraya JMF Assets Management in Marketing and Client Services. Where then he further his career with SME Corporation. During his tenure with the company, he had gained experience in Economics, Policy Planning as well as Programmed Coordination to serve Small and Medium Enterprises (SME) in Malaysia. Excellent in seeking the perfect business opportunities to grow company. Possessed a highly developed skills in problem identification and providing an effective solutions as well as proven entrepreneurial approach towards objectives and tasks.

Holds Diploma in Tecnology Mold from Kolej Kemahiran Tinggi Mara Balik Pulau (KKTM BP). In 2012 he joined Rapid Team Solution Sdn Bhd as an Application Engineer. He has ten years experienced in CAD/CAM industry. Knowledgeable in researching and developing ideas for new products and production systems and also control and maintain the design standard of the products. He has a great analytical as well as technical mind and can work on a project that involves talent.



BADRUL HAFIZ Head of Engineering



SHAHRUL IRWAN Sales & Operation Holds Bachelor of Mechanical Engineering, Masters in Business Administration (MBA) from Universiti Malaya. Experienced R&D Engineer at Samsung Sdn Bhd, National CAD CAM Program SIRIM Berhad specialized in reverse engineering for 3D scanning and Coordinate Measuring Machine for 5 years. Assistant Manager Oil and Gas for industrial Automation for 4 years. Currently, working as sales & operation manager in 3D Gens. Ambitious sell-starter who excels at creating, developing, and implementing product specific integrated marketing, initiatives, along with effectively evaluating needs to attract appropriate consumers and achieves outstanding sales.





We are continuously upgrading our equipment and improving on technologies used to obtain the highest level of accuracy with our result and analysis



## **Our Technologies**

#### 3D Metal Printing

Direct metal laser sintering (DMLS) uses a fiber laser system that draws onto a surface of atomized metal powder, welding the powder into fully dense metal parts

#### Capabilities

We offer numerous 3D printing material options that are regularly updated to meet prototyping and master fabrication needs. Our DMLS selection includes aluminum, cobalt chrome, Inconel, stainless steel, and titanium

#### **3D Plastic Printing**

Selective laser sintering (SLS) uses a CO2 laser that lightly fuses nylon-based powder, layer by layer, until final thermoplastic parts are created

#### Capabilities

materials including multiple grades of thermoplastics, metals, and elastomers. When selecting a material, consider the mechanical properties, manufacturability characteristics, cosmetic appearance, and cost

## Our Product & Services



#### **3D Scanning**

We provide comprehensive 3D scanning services, inspection and reverse engineering services throughout Malaysia & Indonesia. Using the principle of triangulation, points of the surface are captured from different perspectives into a surface. The output is a 3D scan area. The scanned area model can be measured and converted to a solid model using specific surfacing software so that reverse engineering job can be accomplished.

#### **3D Modelling**

Starting from the 2D sketches or just an idea in your head, we modelled the development including surface, patterns, tiles and etc. 3D Printing and digital workflow commissioning a model as cheaper then ever before with lead times that start from just a few days.

#### **3D Printing**

Transform your CAD design to a physical piece in your handsThe lead time for a high detail plastic and resin prototype is as fast as 24hr, something that would be just possible with the traditional manufacturing methods. The advantages are not just from an economical point of view, working with a design studio in the early stages is a crucial step to understand which material and processes will be best suited for the product sparing us a lot of challenges down the line.





# <image>

3D Simulation Analysis | Anatomical Model | Customised Implant

### LOGIC System Patient Specific Implant



We able to provide 3D data visualization and simulation information for surgical planning prior to operation as well as 3D anatomical models to aid in cases that require multidisciplinary approach. With our Patient specific Implant (PSI), we eliminate In-situ as well as trial and error implant dimensioning. These result to shortened operation time and reduce in surgical risk or operation.

## **Digital Dentistry**



**Digital Case** 

Veneer

**Clear Aligner** 

#### LUCID Digital Dentistry



#### Digital dentistry has greatly improved patient care and effective treatment planning. As a result of our hard work, we now offer a wide variety of implants such as lucid clear aligner, ceramic crown, veneer, cast models and other additional services . This recent and revolutionary technique of 3D printing offers a great design freedom, a high retention level, and a high quality product.



## Engineering



"With 3D printing, manufacturers can lean-produce according to demand, as needed, and despite higher per-part cost, the supply chain is highly simplified "

Dr. Izhar

#### Beyond prototyping technology

More and more engineering, prototyping, and design companies are adopting 3D printing. They either own a 3D printer or use 3D printing services. Usually, 3D prints are used for visual concepts and for prototypes. However, due to major advances in material science that are occurring each year, 3D printer can now print stronger and more resistant parts as close to functional parts.



Aerospace & Defence

Automotive

### Training & Consultation



It is critically crucial to choose the right 3D Printer for your design. Many things need to be considered before purchasing a 3d printer such as part size, surface quality, speed, volume and purpose of having it. Our years of experience in rapid prototyping and manufacturing let alone the post processing technique specifically for products that design for 3D printing. Knowledge and experience make all the difference. Buying a 3D Printer and knowing CAD software is not enough, 3D Printing required a set of knowledge from design, data preparation and printing. There are so many post processing and equipment to master before you can get a good finished products. We can tailored our training to suit your needs.

"3D Printing required a set of knowledge from design, data preparation and printing. There are so many post processing and equipment to master before you can get a good finished products"

Dr. Izhar

#### Research & Development

"Through the collaboration, we bridging the gap between the industry and researcher by producing what they need for a better health care"

Dr. Izhar

One of our focus area is the research and development. we understand the potential of 3D Printing technology and the need of new material and processes that can be used for many applications; medical, automotives, jewelry just to name a few. A collaboration with SIRIM Berhad is mainly in medical implants and devices. Through the calibration, we bridging the gap between the industry and researcher by producing what they need for a better health care. We also work with Innovative Product Development Centre (IPDC), in the United Kingdom for joint product development which focus in metal 3D Printing that stretches to automotive, Oil & Gas and consumer products



## **Our Partners**

One of our main priorities is to build a network of a very distinguished partners. 3D Gens partnering with big international and regional partners with different and same industries empowers us to provide the best customized offerings that fit our customers' varied requirements.



## **Certificate and Registration**



#### KEMENTERIAN KEWANGAN MALAYSIA

SITIL AKUAN PENDAFTARAN SYARIKAT BUMIPUTERA

: BP22178091761739235

: 05/04/2017 - 22/02/2020

NO SITIL NO RUIUKAN PENDAFTARAN : 357-02272396 TEMPOH SAH LAKU

Bahawa dengan ini diperakui syarikat

3D GENS SDN BHD (1184557-P) 10-02 LEVEL 10TH PLAZA AZALEA PERSIARAN BANDARAYA SEKSYEN 14 PETALING 40000 SHAH ALAM SELANGOR, MALAYSIA

Telah diiktiraf sebagai Syarikat Bumiputera oleh Kennenterian Kewangan Malaysia. Taraf Bumiputera bukannya hak dan boleh ditarik balik sekiranya syarikat gagal mematuhi syarat/dirteria yang ditetapkan. Kebukaan ini adalah tertaklak kepada syarat-syarat seperti yang dinyatakan di Sijil Akuan Pendaftaran Syarikat Bumiputera (Lampiran C).

DATO' OTHMAN BIN SEMAIL Bahagian Perolehan Kerajaan hp Ketua Setiausaha Perbendaharaan Kementerian Kewangan Malaysia

Tarikh Berdaftar Dengan Kementerian Kewangan Malaysia : 23/02/2017

(Siul ini adalah cetakan komputer dan tidak memerlukan tandatangan)

#### **Bumiputera Cert**



KEMENTERIAN KEWANGAN MALAYSIA SIJIL AKUAN PENDAFTARAN SYARIKAT

NO. SUIL NO. RUJUKAN PENDAFTARAN : 357-02272396 TEMPOH SAH LAKU

: K66485283762434874 : 31/12/2019 - 21/02/2023

PENGARAH

PENGARAH

3D GENS SDN BHD ( 1184557-P ) NO.18, JALAN KERAWANG US/108 PERINDUSTRIAN TEKNO JELUTONG SEKSYEN US PETALING 40150 SHAH ALAM SELANGOR MALAYSIA

Bahawa dengan ini diperakui syarikat :

Telah berdaftar dengan Kementerian Kewangan Malaysia dalam bidang bekalan/perkhidmatan di bawah sektor, bidang dan sub-bidang seperti di Lampiran A. Kekulasan ini adalah tertakluk kepada syarat-ayarat seperti yang dinyatakan di Lampiran B. Individu yang diberti kuasa deh syarafika tagi urusan perolehan Kerajaan adalah seperti beritut :

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800104145622

IZHAR BEN ABD AZIZ UMAR BRRAMULLAH AHMAD HOSNI MUBARAO BIN ABU ASMARA HANNA ZULIKA BINTI ABU ASMARA

11 DATO' ZAMZURI BIN ABDUL AZIZ Perbendaharaan Malaysia Semenanjung b.p. Ketua Setiausaha Perbendaharaan

Kementerian Kewangan Malaysia Tarikh Berdaftar Dengan Kementerian Kewangan Malaysia : 31/12/2019

(Sijil ini adalah cetakan komputer dan tidak memerlukan tandatangan)



**MIDF Cert** 

#### **ISO Certification**

Client	Project Title & Scope of Work	Date Completion
SIRIM	<ul> <li>Craniofacial Implant</li> <li>Defined as those which replace the geometry of two or more bony surfaces.</li> <li>Simpler reconstructions such as orbital floors or cranioplasty plates would be likely to involve fewer critical design considerations.</li> <li>This design case study is between cases of trauma, unique craniofacial defects, fibrous dysplasia, treacher collins and congenital rhinia.</li> </ul>	12.04.2016
SIRIM	<ul> <li>Dental Implant</li> <li>Cone beam computed tomography (CBCT) is the preferred method for assessing the characteristics of the proposed implant site band facilitating pre-surgical planning for customized dental implants.</li> <li>In CBCT technology, the fan-shaped x-ray beam used in conventional CT has been substituted by a cone-shaped x-ray beam to acquire projection data via a flat detector during a single 180 degree or 360 degree, from which a volumetric data is reconstructed.</li> <li>The volumetric data is exported in DICOM format.</li> </ul>	25.05.2016
SIRIM	<ul> <li>Hip Implant</li> <li>Acetabular cup, femoral head and femoral steam will replace the actual hip.</li> <li>Each case required disease excision and alloplastic reconstruction in the acetabular cup, polyethkene insert, femoral head, neck and femoral stem.</li> <li>The cases varied in four key ways; design rules; the degree of digital planning which is undertakn and naturally in specific design details.</li> </ul>	23.07.2016
SIRIM	<ul> <li>Knee Implant</li> <li>To design the customized knee implants. femoral, tibial and plastic spencer will replace the actual knee joint.</li> <li>Each case required excision and alloplastic reconstruction in the femoral, tibial and plastic spencer.</li> </ul>	01.11.2016

Client	Project Title & Scope of Work	Date Completion
Gelombang Data Sdn Bhd	<ul> <li>Electronic Case</li> <li>Project 1- Design a casing for the electronic components. The client is doing the R&amp;D in developing a noise, humidity, temperature dectector/sensor that can be monitored online.</li> <li>Project 2- Improved version of Project 1 with smaller electronics and different approach in placing the casing.</li> </ul>	02.02.2019
Lembaga Getah Malaysia	<b>Capal Design</b> • Designed a customized capal for them to display in their gallery. Printed with flexible display in their gallery. Printed with flexible material (TPU 95)	12.03.2019
MREPC	<ul> <li>Hand Model</li> <li>Involves the scanning and 3D printing of a human arm and editing the design to fit the glove that the client is promoting.</li> <li>The model is to be used in international and local exhibition that promotes rubber-based products.</li> </ul>	04.05.2019
Sii Ishizaki Sdn Bhd	<ul> <li>Loader Blade</li> <li>Design and 3D print a spare part for one of the client's machine based on the drawing provided (Loader Blade).</li> <li>The dimension and surface roughness of the product was emphasized in this project.</li> </ul>	06.05.2019
SMK Seksyen 9	<ul> <li>4*4 Airless Tyre</li> <li>The school team that participate in a 4x4 design competition won the national level and currently preparing for the international competition.</li> <li>We help them in designing and 3d printing airless tyre for their RC vehicle.</li> </ul>	20.05.2019

Client	Project Title & Scope of Work	Date Completion
Easwari	<ul> <li>Spice Bottle</li> <li>Redesign existing spice bottle for mass production. Current bottle design is a bit bulky and short.</li> <li>The volume is kept the same with some modification on the bottle's lid.</li> </ul>	21.06.2019
Gelombang Data Sdn Bhd (RT tech)	Electronic Case/Enclosure • Project 3: Design and 3D print attachment for casing from Project 2. A grip and phone holder for casing from Project 2 is required as the device now can be handheld.	11.07.2019
Texchem Life Sciences Sdn Bhd	<ul> <li>Nasopharygeal Swab</li> <li>After the Covid 19 outbreak, nasal and throat swab tests is a must.</li> <li>The tool used for this test can be produced using our surgical guide resin that is autoclavable and biocompatible.</li> </ul>	15.09.2019
Hospital Sultanah Nur Zahirah	Laryngoscope • To design casing for the laryngoscope that has been upgraded by the client. It must be presented with the feature of an ergonomic design	25.08.2019
Nor Hisham Osman	Water Tank Miniature & Gasholder Miniature • To design casing for the laryngoscope that has been upgraded by the client. It must be presented with the feature of an ergonomic design.	09.09.2019

Client	Project Title & Scope of Work	Date Completion
University Sains Malaysia, Penang	• Siphon Prototype • 3D Print siphon with an actual size of 1 meter and design the locking system to combine each separate parts. With a proper techniques post processing to get a good result.	15.09.2019
3D Gens Product	Face Shield • With a critical shortage of PPE various design of face shield to help this breakout has been made. Mass production of face shield can be manufactured using a moulding technologies.	11.10.2019
3D Gens Product	Face Mask • The impact of COVID-19 has caused a serious mask shortage. We designed the masks using 3D printing technology. We used 3D printing technology to create a mask that can be used sustainably by replacing the filter only.	12.11.2019
Scientific Lab	<ul> <li>Glove Port Design for Intubation Box</li> <li>Design a glove port with a dimension that have been given by the client with a consideration of deformation temperature of material.</li> </ul>	16.04.2020
MyTani Resources	<ul> <li>Agriculture Drone</li> <li>Duplicated (scanning) the original drone.</li> <li>Redesign the drone with Malaysia concept which is "Wau".</li> </ul>	22.04.2020
Techmark Malaysia	<ul> <li>Sensor Casing</li> <li>Duplicated (scanning) the original drone.</li> <li>Redesign the product with accurate dimension</li> <li>Do material testing on product.</li> </ul>	15.05.2020

Client	Project Title & Scope of Work	Date Completion
Federal Metal Printing Factory Sdn Bhd	Redesign Pull <ul> <li>The pull is scanned and redesigned for CNC Machine</li> </ul>	15.04.2020
Recove Sdn Bhd	<ul> <li>The sketch, design concept and design development are prepared</li> <li>Ergonomic term is the design focus</li> <li>3D print part for sample and testing.</li> </ul>	28.05.2020
Arisze Engineering	<ul> <li>Laser Gun</li> <li>This project consists of 3D scanning process to convert the actual object to 3D digital data for reverse engineering process from 3D CAD software</li> <li>3D printing process is carried out to get an actual product that has same design and fits well for actual use.</li> </ul>	06.06.2020
PPUM Research	<ul> <li>Orbital Volume</li> <li>Since the volume of the orbit is a significant determinant of the facial appearance, and is influenced by many diseases and situations, understanding the volumetric values and charges with respect to body parameters and gender is likely to be of guidance in the resolution of serious clinical issues.</li> <li>3D printing process is carried out to get an actual product that has same design and fits well for actual use.</li> </ul>	26.04.2020
UITM SgBuloh	<ul> <li>Mirror Arm Box</li> <li>Mirror therapy has been tested and has shown promising results for the treatment of other health problems, including chronic pain, reeducation of the brain after stroke, and even arthritis.</li> <li>Size is not too large and user friendly.</li> </ul>	23.05.2020
		and the





#### 3D GENS SDN. BHD.

For further information, please contact No. 18, Jalan Kerawang U8/108, Perindustrian Tekno Jelutong, Seksyen U8, 40150 Shah Alam, Selangor

> Email: info@3dgens.com Website: www.3dgens.com Telephone: +603 78327140



Please visit our Corporate Website for more information on our businesses