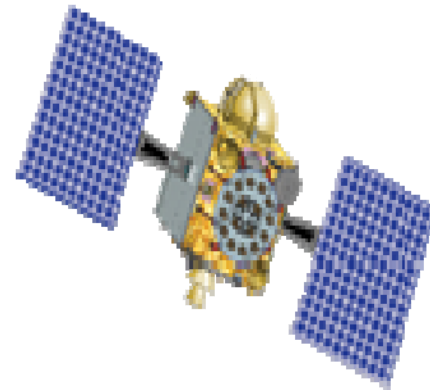


Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

FROM SIMPLE NAILS TO SPACECRAFT



Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

AUTOMOBILES



Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

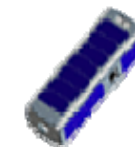
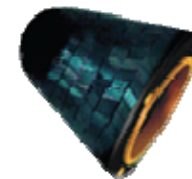
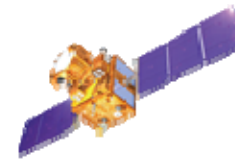
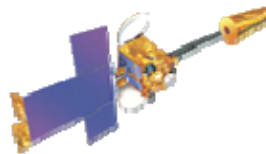
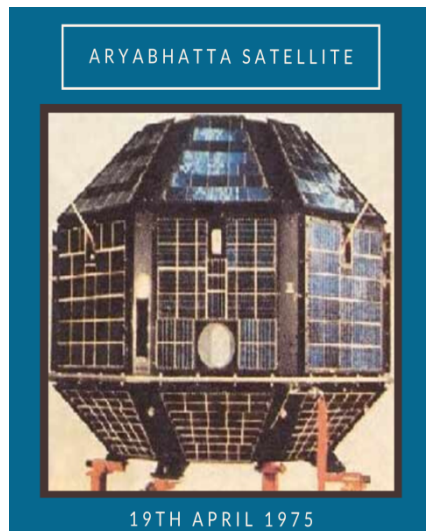
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Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

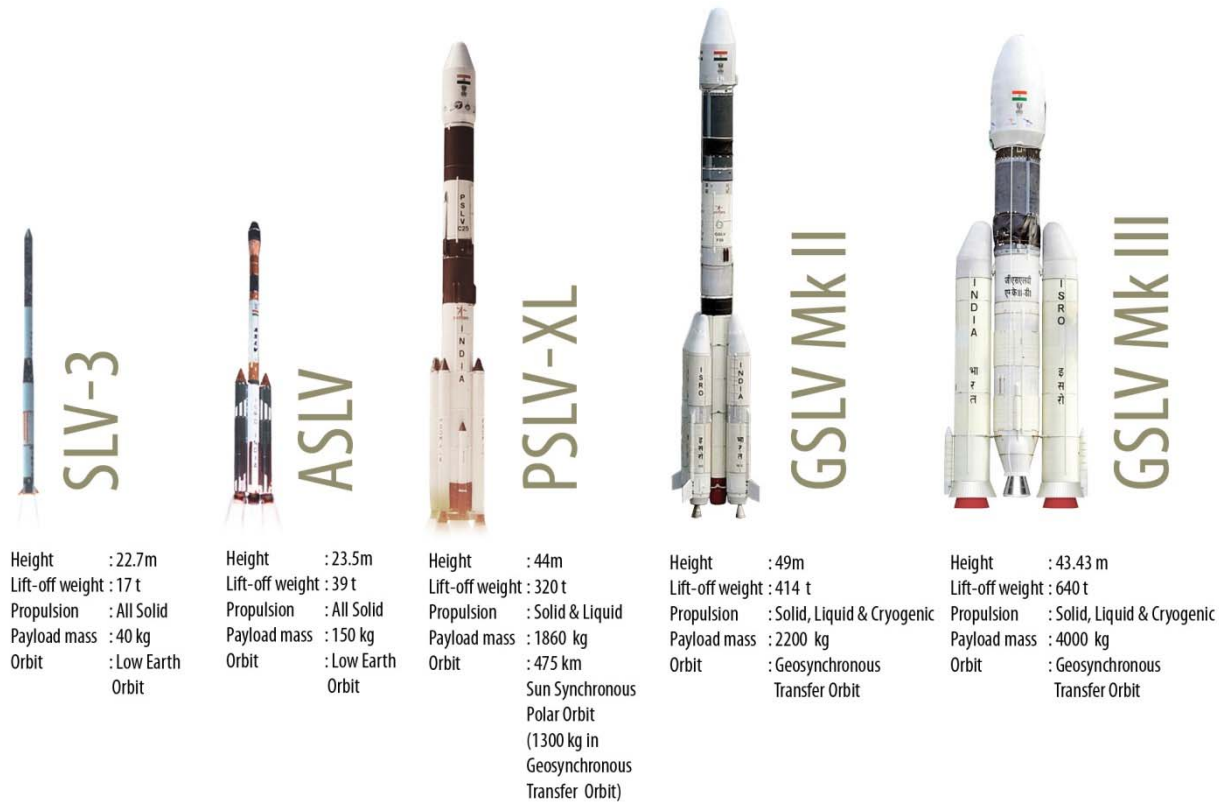
SPACECRAFT



Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

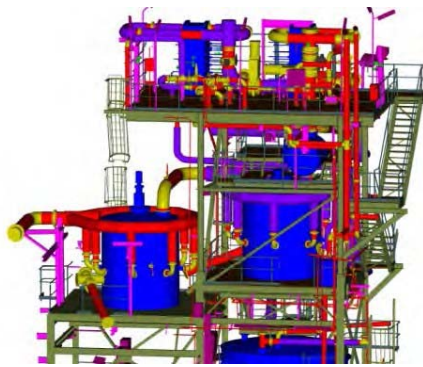
SATELLITE LAUNCHERS



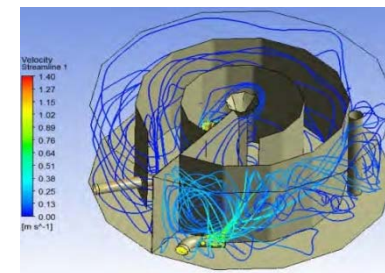
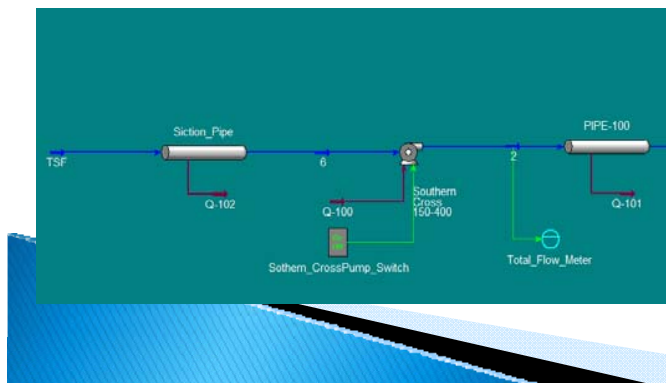
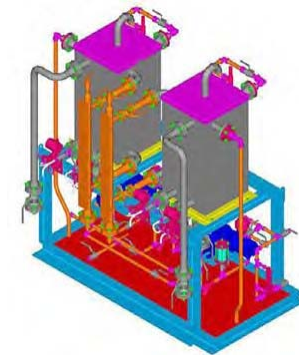
Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

ENGINEERING



- 2D or 3D Fabrication Drawings
- HYSYS for Process Simulation
- Plant Design Management System (PDMS)
- Caesar II for Pipe Stress Analysis
- STADD Pro for Structural Analysis
- CFD in ANSYS Fluent
- PV Elite for Vessels & HTRI for Exchangers
- FEA, Fatigue Analysis, Stress Analysis
- Simatic Manager and CX Supervisor



Eipe Chundamanni



Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

ENGINEERING

Specialised technical staff solutions & Project Resource Supply

Engineering Technical Staffs all disciplines

Design Consultants

Process Consultants

Procurement Specialists

Cost Management Specialists

Project Scheduler and Planner

Third Party Inspection Services

Quality Inspectors for Piping and Structural

Specialised commissioning Technicians

Project, Construction Managers

Safety and Quality consultants.

Project resources (Mechanical, Electrical, Instrumentation, control system & PLC and SCADA specialist engineers and technicians)

Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

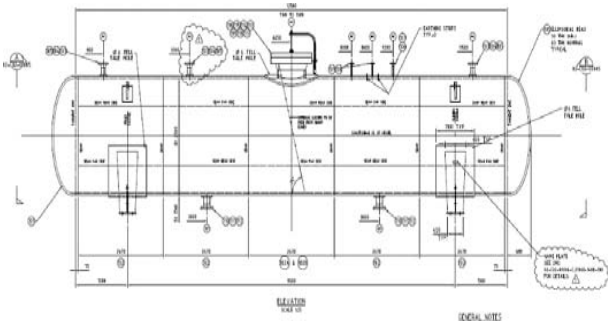
ENGINEERING



Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

MANUFACTURING



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Western Australia's Economic Relationship with India

INDIA'S ENGINEERING & MANUFACTURING CAPABILITIES

PHARMACEUTICALS

- 

Largest vaccine producer in the world

- 

Bio-Pharma is the largest sector contributing to 64% of the total revenue

- 

Indian Pharma Industry generates over \$11 bn of trade surplus every year

20%	\$19.3 Bn	70%	21%
Generics medicines exports share (global)	Pharma exports worth	Generic drugs revenue share	Patented drugs revenue share

<p>Innovation and R&D</p> <p>To develop new complex generic drugs, supplemented by the New Drugs and Clinical Trial Rules, 2019 and the Atal Innovation Mission (a Government of India initiative with the objectives of entrepreneurship and innovation promotion via mentorship, competition etc.)</p>
<p>Medical tourism</p> <p>Quality services at marginal costs compared to US, Europe, and South Asia</p>
<p>Infrastructure development</p> <p>India has the highest number of US-FDA compliant plants outside the US</p>
<p>Strong drug manufacturing</p> <p>Expertise in low cost generic patented drugs and a movement towards end-to-end manufacturing</p>
<p>Strong domestic demand</p> <p>Launch of the National Health Protection Scheme, the largest government funded healthcare programme globally, as well as an economic growth-driven increase in healthcare spending</p>

Western Australia's Economic Relationship with India

RECOMMENDATIONS

DEVELOP PARTNERSHIPS WITH HIGH TECHNOLOGY / R&D INSTITUTIONS:

UWA / other Universities could partner with ISRO Indian Space Research Organisation / VSSC Vikram Sarabhai Space Centre. WA Universities could start a space program which would initially assist others, but could lead to self sufficiency in future.

Partner with Major Hospitals and Medical Colleges like AIIMS, JIPMER, CMC and others – Student exchange programs whereby our students get exposed to Indian conditions with many more medical conditions than we have here.

Affiliate with Automobile industry leaders for research and development. Extend facilities for Indian manufacturers to establish showrooms here in WA.

RESOURCES SECTOR:

BHEL and Libcoin are already in talks for Lithium battery manufacture in India

Denso / Toshiba expected to start production in India soon. Many others will follow.

Iron and other ores, Uranium are in high demand in India

AGRICULTURE INDUSTRY:

India requires better utilisation of the land under cultivation – this requires better qualities of seeds, latest agri-machinery, mechanised handling of produce etc.

HANDICRAFTS:

Indian handicraft manufacturers to be extended a welcome to come and set up shop here.

CAPITAL:

India is looking for Capital and this is a good time to invest in India.

REGIONAL HUB:

Set up a Free Trade Zone in Perth / Fremantle / Kwinana – invite Indian companies to utilise facilities for easier access to the South East Asian markets.

LOBBYING:

As prevalent in most countries, it is very difficult to push our agenda in a foreign country and WA should look at the possibility of hiring a lobbyist / lobbyists to represent us and push our products and services in various states of India.