

ISAP Project Review



Wealth Unearthed

Investor day : 28 October 2010



Objectives of this Session



“To provide an update on the ISAP project”.

“To field questions”



ISAP project objectives

- To provide the market with competitive shock tube initiating systems.
- To assist customers to convert to shock tube.
- To develop technologies required for a world scale shock tube plant.
- To improve safety and environmental standards.
- To construct and fully ramp up the asset.
- To achieve the targeted investment hurdles.
- To offer more competitive shock tube technologies internationally.
- To enhance the AEL brand.

ISAP



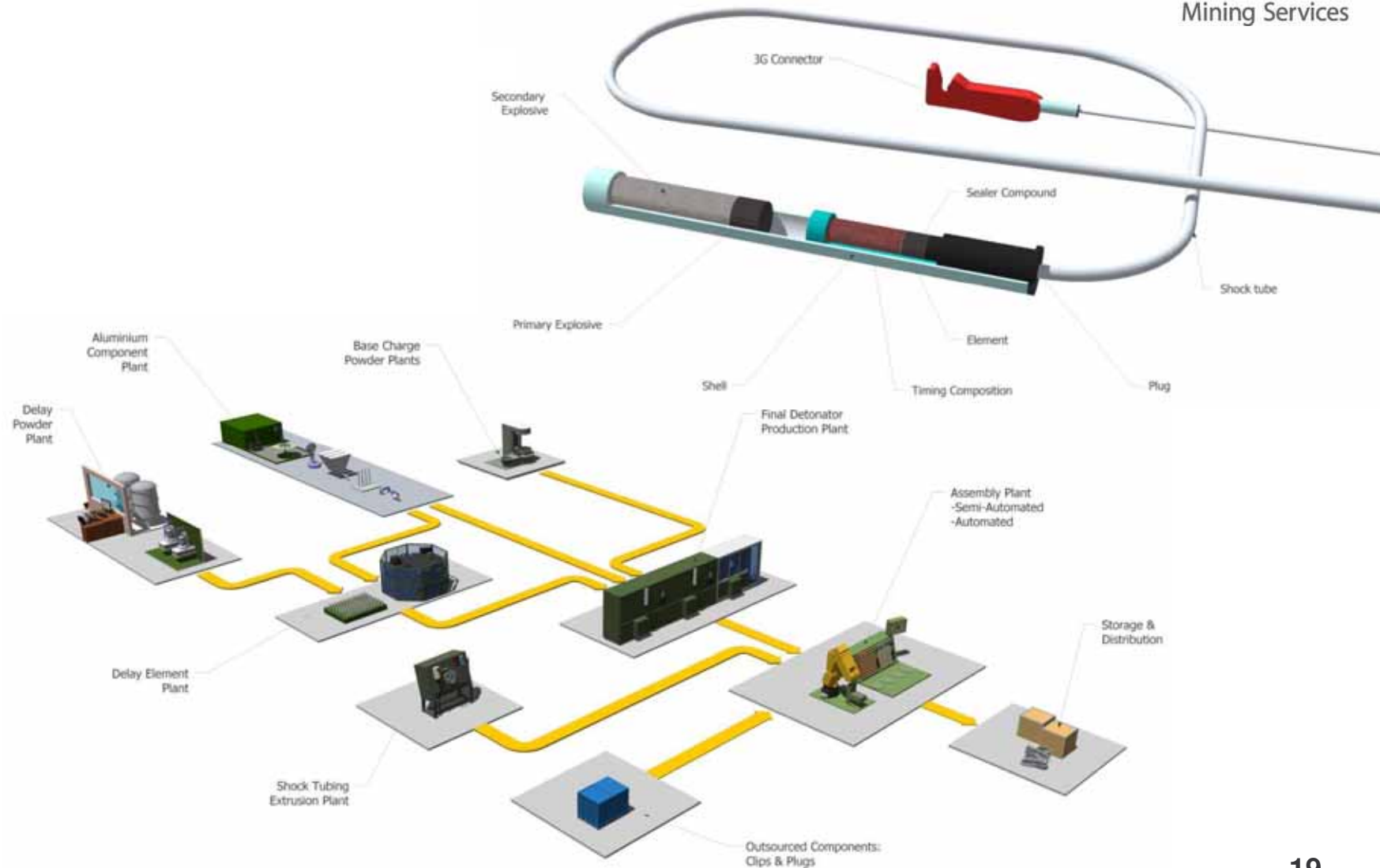
ISAP Comprises Three Plants

- Shocktubing Plant
- Detonator Plant
- Assembly Plant
- Development of Outsourced Components



Mining Services

Basic Flow of a shock tube Plant



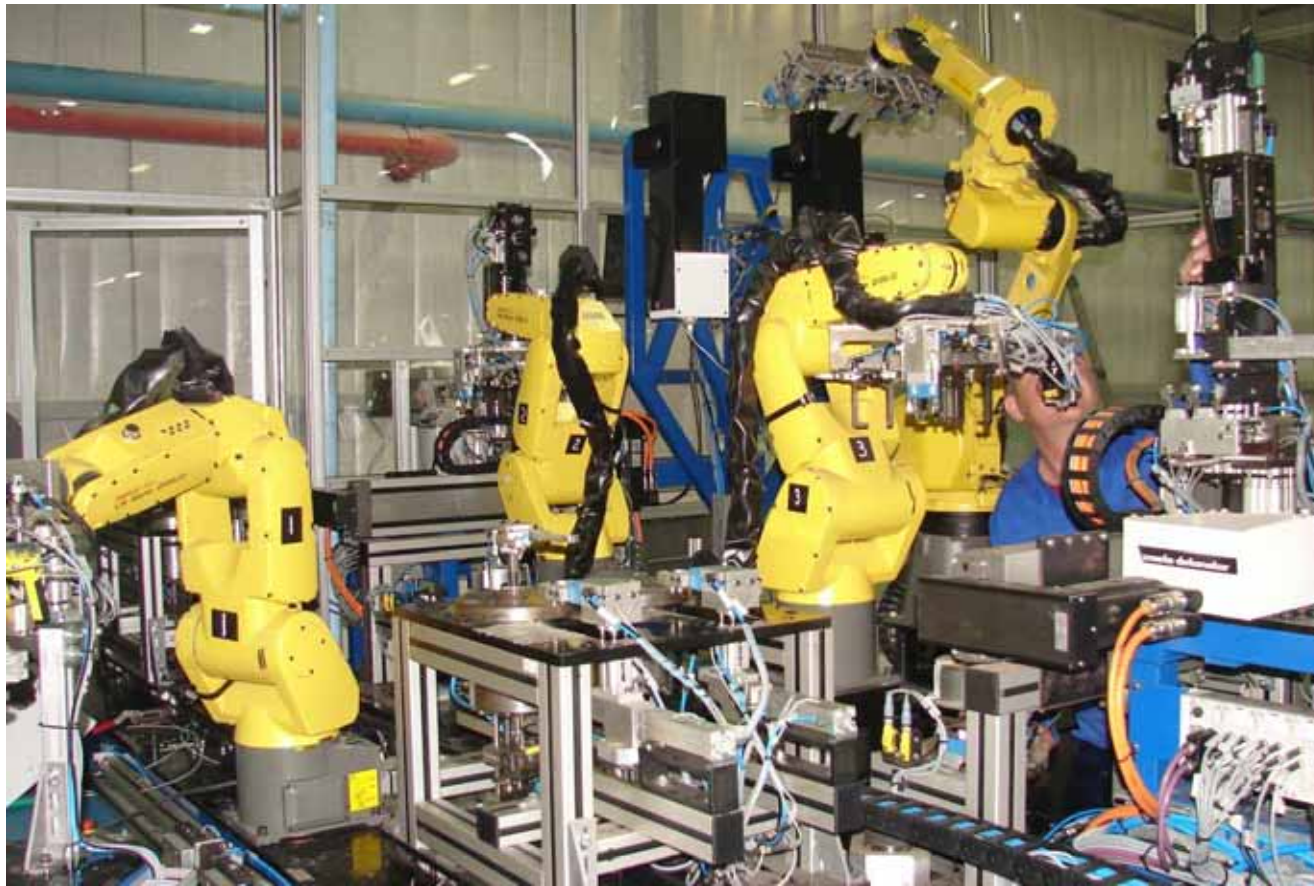
Detonator Plant - Final Stage



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ISAP – Flexible Automated Robotic Assembly





Key Metrics

- Latest total output requirements:
 - Final assemblies: Base load of minimum 80 million units.
70% auto-assembled - 30% conventional
 - Detonators: Base loading minimum 140 million.

- Plant to operate 24/7.

- Product Split
 - Over 80% to be narrow reef.
 - Remainder : surface range and
components for export/remote assembly.



Key Benefits

- Safer processes.

- Improved product performance.
 - Step-up in product quality
 - More accurate shock tube product.
 - Improved ease of use.

- High volume benefits:
 - Safety
 - Large batch sizes, consistency and quality
 - Purchasing power.
 - Lower overheads per unit.

- New propriety technologies and know how.

Key Developments

- Chemistry, Plant processes, Equipment

- Shocktubing.

- Delay powders.
- Delay elements.
- Base charge

- Detonator production.

- Auto-Assembly.
 - Modular single purpose high speed.
 - Flexible Robotic Assebly.
 - Conventional / Semi automatic

Key Considerations

- Narrow Reef Range
 - Over 80% of output.
 - Tight range of products.
 - Short lengths.
 - High speed long runs.

- Surface and Massive Range
 - Smallest volume demand.
 - Very wide range of products
 - Wide range of different delay elements.
 - Different clips
 - Large amount of changeovers required.

- 1st Priority : Narrow Reef Range – 80% of the project benefit



Key Development Work

- Outsourced components – completed.
- Tubing – completed
- 4000ms ISAP Detonator – completed
- 200ms Detonator – ISAP market trials in Nov 2010.
No concerns
currently using conventional 200ms.
- Then starting with remaining 20% of delay element range for surface. Base work already established.
- Some work on base charge powders to extend capacity.



Key Development Work

- Equipment all functional and in production.
- In full ramp up mode.
- Post installation - technical improvements and debottlenecking
- Journey of exploration – but now known territory.
- Achieving new records:
 - September output – world record:
 - Total of 18 million elemented detonators.
 - 7.4 million from Isap Detonator Plant
 - 11 million from conventional plants.

Ramp Up



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 - September output – world record:
 - Total of 18 million elemented detonators.
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Ramp Up Level	Jun 10	Sep 10	
■ Shock tubing plant	80%	90%+	completed
■ Detonator plant	44%	64%	confident > 80% Dec `10.
■ Auto assembly plant	30%	35%	secondary focus – to pick up. confident 50% - 60% Dec `10



ISAP – Investment Returns

- Project IRR reviews remain above hurdle rate of 22% real.
- Jun `10 spend to date 554 million – estimated final R650 to R700 million.
- Relies only on own volume conversion to meet hurdle

- Cautious with conventional plant shut down – ISAP track record and exports.
- Conventional plant ramp down – circa 600 positions in April 2011.

- Hybrid product margins lower than full ISAP product.
- Some material margin gains already achieved.

- R120 million fixed cost and R80 million material margin remains on track.
- Largely auto assembly dependent, most complex plant to ramp up
- Confident for end 1Q2012 - Auto assembly fully ramped up.

Focus



- Ramp-up – general debottlenecking and 200ms narrow reef detonator.
- Surface range delay element development.
- Continued development of world class operations management processes.

Key Dates:

- Dec 2010: 200ms ISAP detonator in the market.
Over 10 million/mth ISAP detonators produced.
Over 2.5 million/mth ISAP Auto assembled units produced.
- Apr 2011: Start of closure of part of conventional plant capacity.
- May 2011: First full ISAP surface product into market.
- Mar 2012: Auto assembly fully ramped up and project completed.

Questions



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