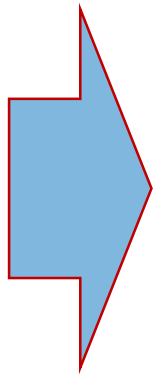
ALPS introduction

ASIA LOSS PREVENTION SOLUTIONS

YOU and ALPS

- **YOU** need:
  - **Support** for the implementation of specific fire protection standards like e.g. NFPA or FM **for a construction project** in Asia/Pacific?
  - **Training for fire protection systems** in view of design, or inspection, testing and maintenance of fire protection systems.
  - A “classical” engineering or property **risk assessment and market report**?.
  - A **quantification and risk assessment for a product liability and/or product recall** insurance coverage?
  - A risk assessment methodology and costing approach for **property and casualty risk rating and costing tools**.



- **ALPS** provides:
  - **Construction support for fire protection systems** for landlords, investors, planners, contractors or main consultants and project managers.
  - **Fire protection** (design) and safety (inspection, testing and maintenance focus) **trainings** for designers and installing contractors, facility managers and safety officers.
  - **Market reports** for “classical” risk engineering surveys both for project (engineering coverage) or operational phase (property) of “a risk”.
  - **Market reports** for casualty line of business risk analysis surveys in particular for product liability and product recall insurance coverage
  - **Consulting** for tool development needs at (re)-insurance companies or brokers if they want to develop property and casualty risk rating and costing tools.

Construction Project Support:

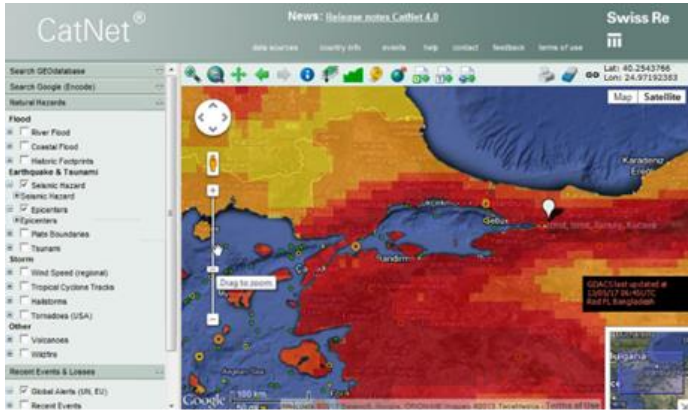
Design Specification, Plan Review, Acceptance Testing

- ALPS can provide **comprehensive loss prevention construction project support** for large industrial construction projects (green field and expansion) with focus on fire protection for most industries.
- Dedicated engineer will be responsible from design to commissioning phase including acceptance testing, thus supporting planning teams and investors with "turn key" loss prevention solutions in accordance with international standards for fire protection (e.g. NFPA, FM datasheets, GB code (China), and others).
- Coordinating and **representing investor's interests with design and build contractors** during all phases of the project as per investor's instruction and mutual agreements.
- International experience and extensive experience in wider Asia region in construction projects consultancy for large industrial clients and a member of NFPA (National Fire Protection Association)

Construction Project Support

1. Project Risk Analysis:

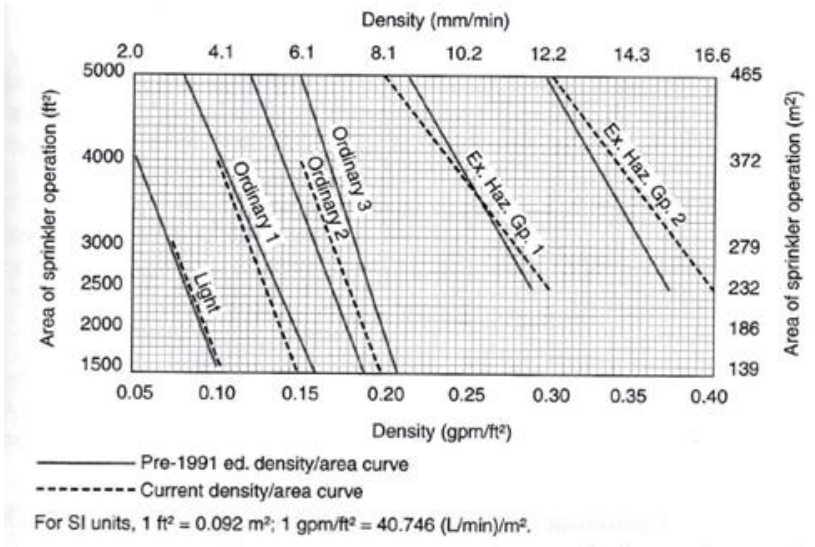
- Estimation of local natural hazard exposures and suggestions for loss avoidance and mitigation prior to and during the construction project phase as per e.g. Swiss Re CatNet ®
- Guidance on loss mitigation with respect to "man made" hazards, in particular fire protection and explosion mitigation.



Construction Project Support

2. Definition of fire protection design requirements:

- ALPS can act for the landlord as “the authority having jurisdiction” (in the absence of respective review bodies) to define appropriate necessary fire protection design requirements according to applicable codes like e.g. NFPA.
- ALPS typically would suggests that very well known applicable international codes are applied (NFPA, FM), but there may be reasons when ALPS would suggest to use other codes, e.g. in the case where local designers are more familiar with local codes that might also be appropriate. In those cases ALPS will amend the local codes with additions from international codes where local codes lack important details.



Construction Project Support

3. Design and plan review and approval:

- ALPS can support investors/landlords in their communication with local planners and installing contractors and make sure, among others that:
  - the most cost effective protection systems are installed
  - the most reliable systems are chosen
  - the least maintenance intensive systems are chosen
  - all systems comply with respective international standards (e.g. NFPA)
  - systems are well balanced and consider existing boundary conditions like e.g. large water tanks in existing factories during expansions.

Construction Project Support

4. Online Project Support:

- ALPS can provide online support and consultation during the project phase and give valuable support for project managers in view of collaboration with installers and supervision of work progress.
- This can be organized in close collaboration and support would be as per need of the landlord/developer. Typically this online support can include:
  - Conference calls with landlord/developers/designers
  - On-site meetings for decision finding when issues arise

Construction Project Support

5. Acceptance testing and Commissioning:

- ALPS will instruct installers and equipment manufacturers to perform acceptance testing and commissioning as per applicable codes for fire protection installations (e.g. NFPA 20 for fire pumps).
- The investor/owner gets a full acceptance test report from ALPS that can be used in future for insurance purposes that confirms compliance with installation with respect to the codes.
- ALPS will also provide test data in excel sheet that the client will be able to use going forward to do the necessary testing of equipment (pumps, sprinkler systems) based on those templates.
- At the same time the local safety officers will get the training on how to run or supervise the tests and how to interpret the data.

Risk Engineering Training:
Focus: “Insurance Risk Engineer”

- ALPS risk engineers have worked for many years supporting property and engineering underwriters during their careers.
- ALPS can therefore train “insurance risk engineers” for insurance companies with focus on:
  - Characterization and choice of industry occupancy codes
  - Underwriting “risk quality” in various industries (Construction, Occupancy, Protection, Exposures) focusing on man-made as well as natural peril risks
  - Hazard mitigation and protection systems in various industries
  - Loss estimates, namely classical “MFL” (maximum foreseeable loss) and also mitigated loss estimates like ALPS defined “AML” (anticipated mitigated loss) or “NLE” (normal loss expectancy) concepts and methodologies.
  - Loss prevention strategies and fire protection (see further focus points)
  - Issuance of risk improvement measures

8 RISK RATINGS

8.1 EXPOSURE RATINGS

Section	Less than typical	Typical	Slightly higher than typical	Exceptionally high exposure
Process hazards	Less exposure			
Storage hazards	Less exposure			
Other hazards		Typical exposure		
Business Interruption		Typical exposure		
External Exposures			More exposure	
Utilities				High exposure

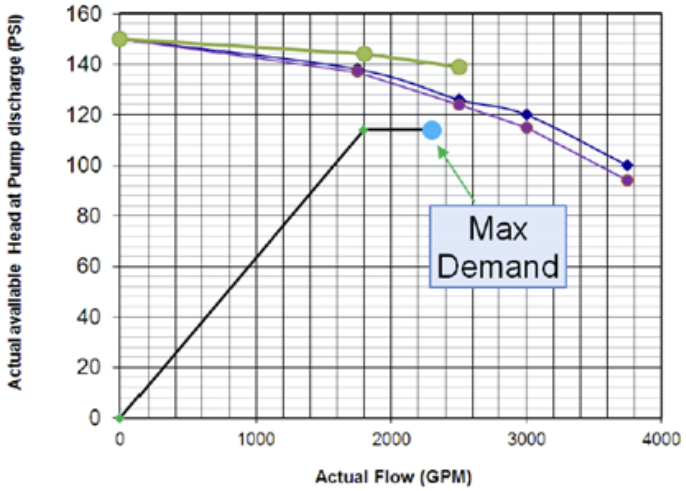
8.2 PROTECTION RATINGS

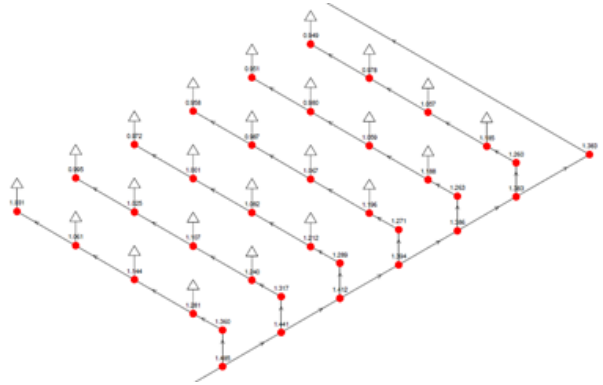
Section	AA Rating	A Rating	B Rating	C Rating
Layout				C
Construction	AA			
Water supply		A		
Automatic sprinklers	AA			
Other fire extinguishing systems		A		
Fire detection systems Alarm systems	AA			
Hydrants and Manual firefighting appliances		A		
Fire department and emergency team			B	
Site security			B	
Management programs				C
Inspection & Maintenance				C

Fire Protection Systems Design Training:

Focus: Design and Installation

- ALPS risk engineers have extensive experience in fire protection systems choices, designs and installation issues and collaboration with designers and installation contractors.
- ALPS can therefore train “designers and installers” of fire protection systems respectively with:
  - How to chose “occupancy classes” or “commodity classes” in fire protection codes (e.g. NFPA) as the basis for any protection concept
  - Choice of best suitable protection concepts (e.g. sprinkler systems, ESFR vs “classical control mode” approach, in-rack sprinklers, etc)
  - Basics of hydraulics, hydraulic calculations
  - Hydraulic analysis and design of water based fire protection installations
  - Water supply installations (pumps and tanks and water mains)
  - Automatic fire protection systems (e.g. sprinklers)
  - Dedicated fire alarm installations
  - Main applicable codes (e.g. NFPA 13 and 20) and their interpretation
  - Avoidance of major mistakes with respect to these codes





Fire Protection Systems Training:

Focus: Basic Inspection and Testing

- Once fire protection systems are installed, they need to be regularly inspected, tested and maintained. ALPS can provide:
  - Tailor made fire protection installation inspection training
  - Basic inspection and testing training for safety officers and technicians at industrial facilities
  - Inspection and testing training of various fire protection systems and their dedicated fire alarm installations
  - Explanations of the main applicable codes (e.g. NFPA 25) and their interpretation
  - Understanding of responsibilities with respect to these codes
  - Execution of basic tests like “inspector connection test”

Fire Protection Systems Training:

Focus: Full Inspection, Testing and Maintenance

- ALPS can provide training that goes beyond basic inspection and testing for fire protection installations:
  - Explanations on “higher” requirements regarding inspection, testing and maintenance of system by applicable codes (namely NFPA 25)
  - Execution of “higher” requirement tests like “2 inch drain tests” and reason for the test
  - Execution for weekly pump tests and proper procedure
  - Execution for pump performance or acceptance flow tests
  - Execution of a hydrant test based analysis of a water supply system (including pitot reading)
  - Explanation for necessary procedures for valve inspection and supervision including impairment procedure

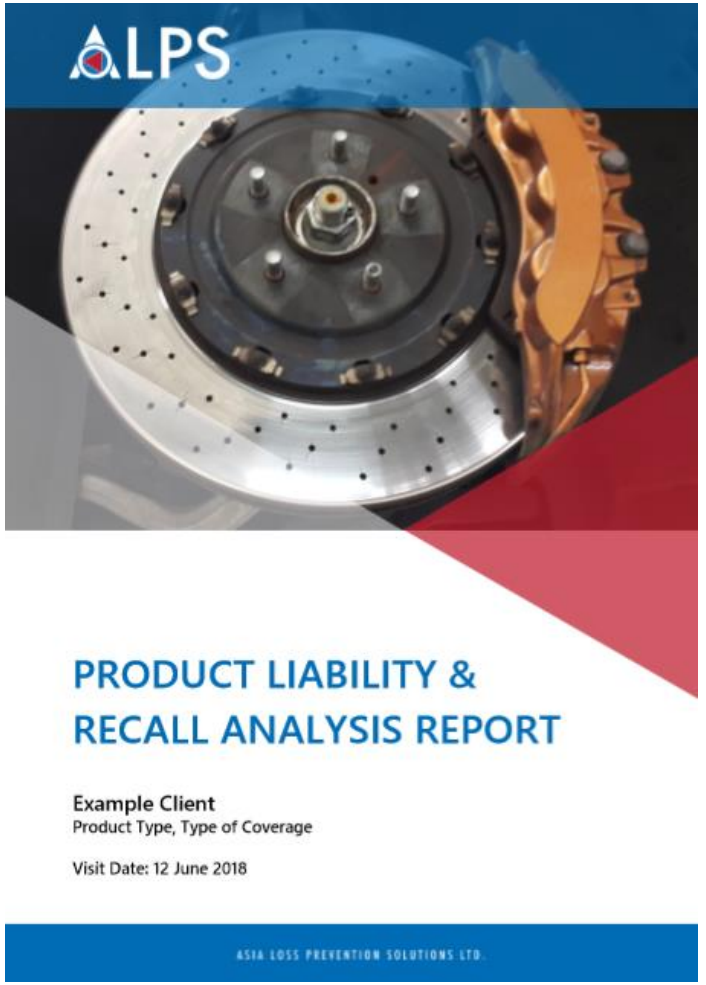
Underwriting Support:
Focus: Engineering and Property

- ALPS provides support for insurers or reinsurers or their brokers as well as risk managers by providing underwriting and/or marketing support with risk assessments based on site visits for any kind of industry segment. Our product in every case is a **underwriting risk assessment report**.
- We can **use your report template(s) or our own ALPS templates** with our own structure and a full typical market report content, namely:
  - A descriptive section describing the risk and also giving a risk assessment
  - A values section that also includes loss estimates based on commonly used definitions (ALPS uses its own additional loss estimate “Anticipated Mitigated Loss” (AML).
  - A risk improvement section with suggested measures for the client to improve the risk
- ALPS uses typically two standard report formats, one a comprehensive “risk engineering and improvement report” and the other one a “risk improvement summary”

Underwriting Support:

Focus: Product Liability and Recall

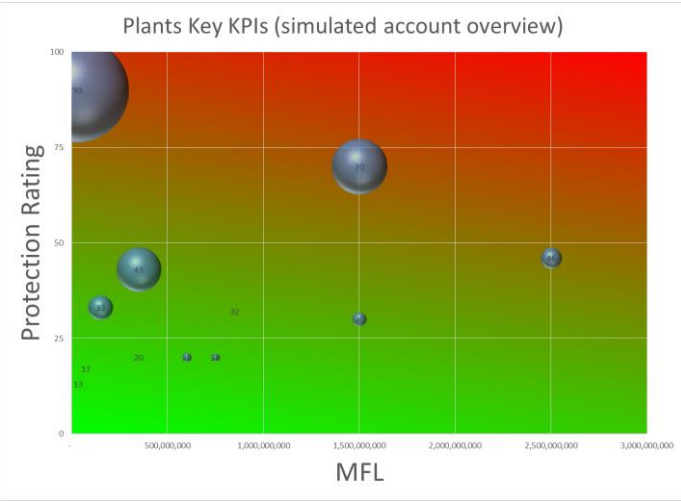
- ALPS engineers have in depth experience in product liability and product recall in particular for the automotive and electronics industry. Our product in every case would be n **underwriting risk analysis report**.
- We will **use our own ALPS templates** and be able to suggest to you the respective content, namely:
  - A descriptive section describing the risk and comparing it within its industry and rank it with respect to its relative risk, e.g. comparing a certain component of a vehicle to other car components, thus being able to rank various automotive suppliers.
  - A quantitative section, where – e.g. together with your actuarial team – we can develop a costing strategy also for products that are currently in a phase of strong change (e.g. electro mobility, batteries, etc)
- ALPS can thus directly support a risk based costing approach for product liability and recall insurance offerings



Risk Consulting:

Risk assessment and quantification methodologies and tools

- ALPS engineers have experience in developing risk assessment and quantification and benchmarking methodologies and tools, including respective IT applications to be used by underwriters and risk engineers within the insurance industry.
- ALPS would typically be able to support you during such projects e.g. for:
  - The definition of rating criteria, i.e. choosing the relevant “risk and protection elements” for the assessment/benchmarking methodology
  - The implementation into existing underwriting and risk engineering processes
  - The interaction with IT programming and development
  - The definitions of various project phases and suggestions for implementations
- ALPS can support you to implement risk based costing benchmarking methodologies and systems for both property as well as casualty lines of business.



ALPS Operators

- ALPS has currently 3 own risk engineers / loss prevention consultants based in the Pearl River Delta area. Each has more than 20 years of professional engineering experience, whereof at least some 15 years respectively in the risk engineering / loss prevention practice
- ALPS engineers are HPR trained and we have industry specialists for most industries and can therefore lead property risk engineering visits for most industries
- Some ALPS engineers also have product liability and recall skills
- ALPS' main territory for action is currently focusing on Asia (due to the current base of our three main operators), but we can also provide services in other areas.

ALPS Company Facts

- Asia Loss Prevention Solutions Limited (“ALPS”) is a Limited Company based in Hong Kong.
- ALPS was founded in March 2014 and has rendered an operational profit every year since establishment.
- The company was founded by Toby M. Muster, a certified Chemical Engineer of the Federal Institute of Technology (ETH) Zurich, citizen of Switzerland and permanent resident of Hong Kong with relevant risk engineering experience of more than 15 years. He acts as the company’s managing director.
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  28 Queens Road, Central
  Hong Kong
- Phone Number: +852 9256 0158
- Email address: info@lossprevention.asia
- Website: www.lossprevention.asia

ALPS China Branch

- ALPS has a sister company called “Shenzhen Asia Loss Prevention Solutions Consulting Co. Limited”, based and registered in Shenzhen, China to operate out of mainland China, which can enable easier transactions with mainland China clients.
- Its registered office is:
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