THE ART OF DECEPTION
From Camouflage to Force Protection – deceiving the enemy will always be a key to success. Staying one step ahead, you’ll have the advantage of acting before the opposition - or not to act at all. Some call it signature management. At Saab, we call it the art of deception.
Saab is the world's leading supplier of products and services within multispectral signature management and force protection technology. Saab is at the front line of research and development within the area and the company has built a solid competence, when it comes to optimizing signature management solutions.

First in camouflage for over 50 years
Saab started its business with camouflage in Sweden in the 1950’s. Today, the company has grown into a truly international organisation, with operations around the globe and representatives in more than 40 countries. Add to that the customer base of more than 50 countries worldwide and you have a success story unheard of in the camouflage industry.

As sensors are becoming more advanced and threats increasingly difficult to anticipate, the demand for advanced signature management technology is constantly rising. With a long history of innovation and superior technical competence, Saab stands well prepared to meet both current and future challenges.

Saab offers a wide range of customized products and services within signature management. Products are always tailored to suit the requirements of each customer and the advanced technical capability along with a strong international presence ensures quality in every aspect.

Your partner in signature management
Saab is the world’s only complete system house within signature management. The company develops, manufactures and markets a comprehensive range of products for increased survivability and force protection. By working with Saab, you can be certain that you picked the best and most capable partner in the signature management industry.
Signature Management is the advanced art of avoiding detection. With more than 50 years of experience within the area, Saab has built a unique Signature Management capability that no other company can match.

Signature Management is the first level and most basic layer within the force protection aid suite. Signature Management includes all possible measures in order to adjust the signature in applicable parts of the electromagnetic spectrum. Properly developed, it will safeguard vehicles, fixed installations and personnel from the ever increasing sensor threat, and will deny your enemy superiority by forcing him well within your firing range in order to detect you.

The field of Signature Management consists of four main parts: stealth design, surface treatment, add-on materials and CCD (Camouflage, Concealment and Deception). Saab’s Signature Management includes engineering within the entire field, and by changing ultraviolet, visible, near infrared, thermal infrared and radar signatures, our systems ensure that your forces will remain undetected.

All different objects and backgrounds require an adapted Signature Management solution. There are no two military objects or countries with the same kind of camouflage. Our systems are tailor made to suit the object, the environment and your required level of protection. Saab offers a full range of customized Signature Management solutions providing multispectral protection for any object in any situation.

**Unique Capability**

Saab has built a unique Signature Management capability that no other company can match.
Multispectral, lightweight and easy-to-handle camouflage screens are still the most important and widely used solution to hide military objects in static position and to achieve protection against advanced sensors.

**Static camouflage - cover all your needs**
Saab’s most sophisticated multi-spectral static products are the three dimensional screen and the reversible screen. Both screens have properties not seen in any former generation camouflage nets and provide outstanding protection against all types of reconnaissance sensors and target acquisition systems. The static camouflage screens can be adjusted to specific signature requirements including: Visual (VIS), Near infrared (NIR), Thermal infrared (TIR) and Broadband Radar (BBR) properties and patterns.

Saab’s multispectral camouflage screens represent the most advanced technology available on the market today. Vegetation, colour and temperature of an environment can change quickly over a short distance, which means that camouflage screens have to be designed to allow rapid adaptation to different surroundings. Both Saab’s static screens have multispectral capabilities that will endure throughout their service life. Whether your requirement is a screen adapted to a specific object or a screen for general purposes - this is the product. One net covers all.

**Ultra lightweight non-snagging construction**
Due to the unique design and construction, the multispectral screen is 50% lighter than former generation camouflage screens. A base scrim that eliminates snagging ensures that the screens are easy to use and greatly reduces time for deployment. Due to the easy handling and low weight, only one customized screen is needed per object to provide outstanding multispectral protection.

**Accessories**
A wide range of shape disruptors/support poles of different designs are available as complements to static camouflage screens. The shape disruptors enable easy and rapid deployment, and simplify when you need to optimize the screen shape to different surroundings.

The multispectral camouflage nets by Saab are the ideal protection in static position and are adapted for any environment.
The art of deception > mobile camouflage

More than 20 years ago Saab realised the importance of protection while on the move. As sensors get smarter the need for state-of-the-art multispectral protection increases. When protecting mobile forces you should rely on the best camouflage. MCS gives objects protection in all relevant bands of the electromagnetic spectrum including broadband radar.

MCS also gives you an excellent protection against target acquisition sensors and smart ammunition. All MCS are individually designed for each type of vehicle or equipment in order to achieve as perfect camouflage effect as possible.

Saab has performed a wide range of MCS projects with deliveries all over the world. MCS has been used in all types of climatic conditions.

HTR - Heat Reduction (CoolCam).

When MCS is used in tropical or desert environments the vehicles and other equipment need to be protected from heat build up and the solar loading effect. Saab has for 15 years supplied armed forces with Heat Reduction System (HTR CoolCam). This system reduces the heat penetration through the hull into vehicles operating in extremely hot climates, to protect personnel, sensitive equipment and ammunition.

The HTR CoolCam properties can be incorporated in the regular MCS or it can be supplied as a stand alone system.

The non-glossy and 3-dimensional surface structure of the HTR CoolCam helps the vehicle blend in with the surroundings and obstructs visual detection. Colours, near infrared values and pattern can be adapted to the environmental conditions of the intended region. Conspicuous parts of the vehicle can be furnished with additional contour disrupters.

The multispectral mobile camouflage system by Saab protects forces on the move against all known sensors and is tailor made for any vehicle and equipment.

Over the years defence forces around the world have focused on hiding in static positions. Despite the fact that it is easier to detect a moving object than a static object, Saab has since the late eighties improved our Mobile Camouflage System (MCS) to perfection.

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Protecting your most valuable asset. As sensors are getting smaller, less expensive and easier to acquire, multispectral Signature Management has become vital for ensuring soldier survivability. It is no longer sufficient only to protect armoured vehicles from smart sensors such as night vision devices and thermal imagers. Individual soldiers are in as much need of advanced protection, if not more. In a changing battlefield uniforms simply are not enough to protect your most important resource, the soldier.

Saab has developed a series of lightweight personal camouflage solutions capable of protecting soldiers in all types of operations. These multispectral systems are adapted for a wide range of situations, from the personal net developed to be a part of every soldier’s equipment, to the most sophisticated SOTACS or SCOPES, adapted for special operations.

Customized for any background. All Saab’s personal camouflage products are fully customized in accordance with end user requirements and are available in any colour or pattern desired. With over 50 years of experience within Signature Management, Saab can provide Personal Camouflage Systems adapted for any climate zone and background.

One of Saab’s personal camouflage systems is the Two-man collapsible tent, TOMCAT-2. Using proven multispectral camouflage materials, these lightweight systems enhance the survivability of Warfighters and can be used as effective camouflage for various homeland defense and border patrol missions.

A wide range of multispectral and lightweight personal camouflage solutions for protecting soldiers in all types of operations.
Many situations require object-adapted solutions. Saab customizes multispectral systems for any type of equipment or object. The systems include a tailored support structure that provides multispectral protection without compromising operational mobility or use.

The time span between detection and attack is constantly being reduced. In the near future it will be realistic to encounter systems with detection and attack in real time. To counter this development, Saab designs and produces object-adapted multispectral camouflage systems.

Portable Shelters are an example where Signature Management technology together with several integrated support systems create a complete camouflage system capable of protecting aircrafts and vehicles as well as personnel and equipment.

QuickCam™ combines different Saab products in a single solution to achieve a fast and optimal camouflage result every time. The support systems are integrated with the object to ensure easy handling and optimal object adaptation. This allows both shooting and regrouping of the object with the camouflage in deployed position.

Since they lack the protection of movement, fixed installations are some of the most vulnerable military objects. Therefore, these objects should be given extra attention.

Saab has developed a unique material with both multispectral properties and durability for extended exposure in fixed installations – Shadecam.

Shadecam provides cost effective protection for valuable sites against multispectral surveillance and smart munitions.

An effective Signature Management solution is sufficient to reduce the probability of success of precision attacks – even with today’s thermally guided munitions.

CLOAK - Camouflage Large Open Area Kit is a modular system supported by air beams. The system is used for UV protection for liquid bladder storage, refueling stations, maintenance areas, ammo storage, medical facilities and tactical operation centers and effectively reduces energy costs.
Saab can offer a unique package of force protection solutions. Armed Forces around the world are facing different kinds of challenges when performing in overseas deployments. We offer protection against RPG and vehicle attacks as well as protecting vehicles, ammunition and personnel from heat build-up. Saab offers also protection against armored piercing ammunition and fragmentation both for military and civilian use.

COBS CT
COBS CT (Counter Observation Barrier Screen - Counter Terrorist) is an extension of the counter observation capabilities of the COBS system to include actual protection against missile/RPG and vehicle attack. Added to the COBS system is a steel mesh CT screen which has been proven to consistently disrupt or prematurely detonate rocket propelled grenades and similar shoulder-launched HE and HEAT missiles. Both the CT screen and the Shadecam counter observation screen can be rapidly replaced if damaged by hostile attack. If the threat warrants, a COBS CVB (Cable Vehicle Barrier) can be added to the COBS CT in front of the COBS CT to stop attacking light to medium vehicles. The COBS CVB has been tested using vehicle crash test methods, and has successfully stopped vehicles up to 3 tons GVM at 60 kph (37 mph), and can be upgraded for protection against heavier vehicles. The COBS CVB uses unique, low-cost, steel energy absorbers that can work against multiple attacks before replacement. Typical applications for COBS CT would be to protect a small deployed military camp in a remote location where the time of deployment would not warrant installation of protective bastions or berms, or as a first line of defence against attack with the final protection located behind the COBS CT. A one kilometre (.62 miles) COBS CT package used in a square camp configuration would provide 20,000 m² (215,280 ft²) of RPG-protected area, and an additional 36,000 m² (387,500 ft²) of non-sensitive stowage area within the line of the COBS CT.

Soft Armour
Saab’s Soft Armour system provides protection against ballistic penetration up to NATO 7.62 mm AP ammunition (STANAG level III). The system is a box concept filled with hard ceramic balls. The system is especially designed to enhance survivability and can be fitted to any structure prior to mission, or even retrofitted to existing structure in operational theatre.

A unique ceramic material protects against ballistic penetration. Soft Armour is a patented ballistic protection technology that provides security for people in vulnerable environments. Soft Armour also protects critical equipment and facilities. Soft Armour protects against all small arms ammunition including armour piercing. The system has a lower total cost than ceramic and composite protection, with reusability, multi-hit capabilities and high flexibility.

SOLSCONS
Saab’s Solar Shading and Concealment System (SOLSCONS) is a multispectral system which obstructs thermal and visual reconnaissance by enemy forces, including snipers, while allowing outward observation by the user. The system significantly reduces solar heating of the Warfighter, and can be customized to meet end-user specifications.

Additionally, SOLSCONS is lightweight, offers rapid deployment and stowage, and has been proven on a variety of vehicles.

HTR CoolCam
Heat Reduction (HTR) CoolCam. This system is designed to reduce the heat penetration through the hull into vehicles operating in extremely hot climates like desert and tropical regions, to protect personnel, sensitive equipment and ammunition.

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A fighter pilot only has a few seconds to detect, identify and locate the target, lock the weapon system and fire. When the enemy is forced to make a split-second decision, a well-placed decoy might spell the difference between a successful strike and a wasted effort.

As a major part of Signature Management, deception continues to be an important element in modern warfare. Decoys can be used for many different tactical and strategic purposes and present a flexible way of protecting your resources by misleading enemy intelligence and fire.

Saab makes durable decoys that are easily transported and rapidly deployed. On request we design and build any vehicle, aircraft, vessel or missile system. The decoys are built on many different structures such as soft covers on a metal structure or by using inflatable elements.

Decoys of any object can be designed and provided with visual, near infrared, thermal and radar signatures to mimic the signature of the real object. The construction withstands the abuse of disassembly, transport and reassembly. It stands up against harsh environmental exposure and absorbs multiple hits and shrapnel without collapsing.
This expertise with advanced experience is found in a variety of Signature Management fields covering:
- research and development programmes
- customized studies
- multispectral signature measurements including analysis of recorded data
- comparable analysis of data from uncamouflaged objects with data from similar objects equipped with the required camouflage system
- multispectral analysis of data from environmental studies gives important input to the development of camouflage nets and systems
- UAV for evaluating operational characteristics of the camouflage
- characterization of materials with focus on special camouflage properties
- Saab has a certified radar testing facility to test and evaluate radar performance on materials from 6 to 95 GHz
- Saab also has the only apparent colour lab that is contractor certified
- advanced materials
- surface treatment
- simulation
- design

Saab also provides maintenance and training programmes to help get the best use of soldiers and equipment/systems.

As sensors and weapons are becoming increasingly smarter, the use of advanced engineering will provide the advantage of always being one step ahead. Saab provides complete engineering from software to hardware.

High-level of competence and experience within Signature Management can be offered to customers.
In accordance with the United States International Traffic in Arms Regulations and the U.S. Munitions List, Saab Barracuda LLC strictly adheres to the export control requirements that apply to defense articles.