## HellermannTyton is a leading cable management supplier with operations in:

- Argentina
- Australia
- Austria
- Brazil
- Canada
- China and Hong Kong
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Hungary
- Ireland
- Italy
- Japan
- Korea
- Mexico
- Netherlands
- Norway
- Philippines
- Singapore
- Slovenia
- South Africa
- Spain
- Sweden
- Thailand
- United Kingdom
- USA

For detailed information on our full range of products and services you can reach us at:

HellermannTyton Sharston Green Business Park 1 Robeson Way Off Altrincham Road Wythenshawe Manchester M22 4TY

HOTLINE: 0161 947 2200 FAX: 0161 947 2233 info@hellermanntyton.co.uk



To view our full product range order your HellermannTyton product catalogue today





## Defence Capabilities







# Military Precision

## Defence Capabilities Introduction

HellermannTyton is one of the world's leading suppliers of cable management products, offering a one-stop solution for 'everything around the cable'. This includes a comprehensive range of fastenings, fixings, enclosures, tools, insulations, identification, protection systems and heatshrink shapes. HellermannTyton has a global presence with sales and manufacturing operations in 32 countries worldwide.

HellermannTyton uses its manufacturing capabilities and world-class technical leadership to offer its clients a unique product design and development service. Whatever the application, HellermannTyton can create a bespoke product solution using its in-house design team and will also appoint on-site staff to co-ordinate projects from concept to completion.

Through its customer projects HellermannTyton is able to work closely with industry leaders to shape the creation of future projects and ensure its goods are relevant to the changing needs of the market.

HellermannTyton continues to play a pivotal role in supporting the tri services both in the UK and in countries around the world.

Our knowledge, experience and relationships with the major Prime Defence Contractors, the MoD and sub-contractors has continued to strengthen our presence in this market.

With over 20,000 NATO stock numbered (NSN) items we are able to provide a range of products and specialist expertise to suit refurbishment and build projects across Air, Land and Sea.

Our wide-ranging product portfolio offers you more than just product but important functional and cost saving benefits for all electrical and electronic applications.

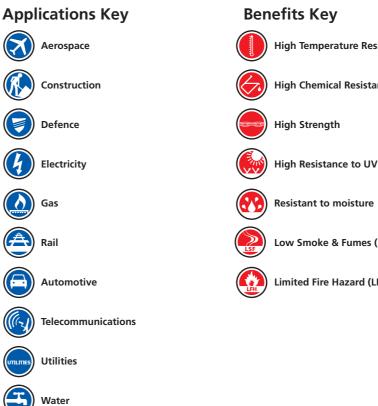


As the first dedicated Defence publication from HellermannTyton, this guide is designed to highlight HellermannTyton's capabilities in the defence sector. Divided into easily identifiable categories, each section comprises of information on products, services, benefits, approvals, case studies and product application information.

Land Introduction	5
Land Products and Services	6-8
Air Introduction	9
Air Products & Services	10-12
Sea Introduction	13
Sea Products & Services	14-16
Information and Communication Systems	17
Integrated Project Teams	18
Quality	19
Practical solutions	20

When considering the use of products for a project, safety factors are paramount. Every area where a cable management product is used requires an element of health and safety consideration, protecting against loss, damage or increased risk of fatalities. This information is

very important as individuals are now held legally responsible for the wrong choice of products that could lead to injury or death. By using the HellermannTyton Safety Solutions symbols you will be able to easily identify products that suit your specific requirements.





n-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

n-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

## Defence Capabilities

## Contents

Our blue icons identify products that are suitable for specific industries and our red icons identify products that have particular product benefits and features suitable for specialist applications.

esistance	High Security
ance	Flammability
	High abrasion resistance
V light	Halogen
2	Metal detectable
(LSF)	vo vo
LFH)	Zero conductivity

## **Exceeding Expectations**

HellermannTyton work closely with key companies including General Dynamics and BAE Systems such as the Land Systems divisions and their respective subcontractors in this sector. We have also provided direct support to the MoD for defence cable management equipment for specialist utility vehicles. We have delivered cost effective component part support and complete solutions on programmes such as Panther, Bowman Radio and Grumman FBCB2 Global Postioning System. Our products offer important functional and cost saving benefits for electrical and electronic land applications ranging from insulation and protection of individual components to fabrication of complete inter- connecting cable harness assemblies.

## **Product Information**

Our key strengths include a full range of high performance Insulation, Protection, and Identification products, which are complemented PEEK with an extensive range of fixing products.

Our key products include:

Cable Ties and Fixings: Edge Clips, Mounting Bases, High Temperature/ Fluid Resistant Cable Ties and accessories, Snappers, Speedy Ties, Mil Spec Ties, Releasable ties.

Insulation: Transitions, Helsyn Sleeves, Connector backshell covers, Moulded Shapes Series 156/150/1150/203/1301 and others, all sizes available with and without adhesive Heatshrink Tubing, PSTH/ W24/Viton-E Hellerine lubricant, Helsyn rubber tubing.

Identification: Thermal Identification Printing System for easy fastening and identification in hazardous environments.

Protection: Helawrap.

Edge Protection and Grommets: Grommet Strip.

## **Key Materials** Halogen Free

LSF

## All these products and more are available in a wide range of sizes and material options.

Approval/ Specification Information Our high performance product range are approved to all stringent global specifications.

- UK Defence Standard.
- German VG.
- US Milspec.
- US Automotive Tank.



## **Case Study**

As part of the General Dynamics Bowman project HellermannTyton provided a robust range of mounting bases specially designed to be used with cable ties, This solution was used to fasten cables within vehicles and onto the Bowman Communication System Framework itself.

The Bowman radio installation cables incorporated TIPS markers, heatshrink moulded shapes coated with a one part-epoxy adhesive W24 to provide fast assembly together with a low installation cost.

Hellermanntyton have also worked on a variety of Armoured Vehicle programmes such as the FV 430 Warrior, Panther and E.T.S together with several expert contracts such as Singapore Technoligies Kinetic Vehicle, Koreans NIFV programme US M109 and M88 and Leopard I & II vehicles.





Helashrink 313C series Convoluted Boot, Low profile with adapter lip.

This style is used in conjunction with circular grooved adapters to provide multi cable locking positions and if adhesive is used, excellent environmental sealing can be achieved.

The convoluted design provides the flexibility to accommodate different cable outlet ranges.





-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence



Straight plug-and-socket connector terminal casing. This style is used in conjunction with circular grooved adaptor, providing protection against environmental stresses. The inside lip has been designed to provide extra reinforced stress relief. Special fitting 199-4-G for audio plugs has external ribs for an improved grip.



## Helashrink 1100 Series

Right-angle, low profile shape with rib, VG/ Mil style, often used on airborne harnesses to achieve low profile, compact strain relief and mechanical protection.

The photo above shows a shape style that provides connector strain relief and is used in applications of partially loaded connectors with small cable diameters.



## Defence Capabilities

## Land





**Edge Protection Grommets** 

HellermannTyton edge protection grommets, made of cadmium-free, flexible PVC or Polyethylene, come in a wide range of shapes and sizes. They are resistant to various minerals and environmental effects.

Edge protection grommets are used wherever cable and wires are routed through outlets and apertures. HellermannTyton grommets offer excellent mechanical protection.



## **Double Mounting Base For** Weld Studs

### **Features and Benefits**

These are three part fixing ties, with a stud fix mounting base and two cable ties. The mounting base can be fitted to the weld stud prior to installing the cables, the cables are simply laid alongside the base and the cable ties then pulled tight. Having two separate 'cradles' allows for the installation of the two cable runs at different times.

The design of the stud retainer means excessive force is not required for installation - it is simply a 'soft push' action by hand.

Having separate ties to the fixing means that the head of the tie can be easily rotated to ensure the easiest possible assembly.

### Application

Many applications require cables to be run parallel to each other but separated to avoid abrasion, the double mounting base, when used with two cable ties allow this to be achieved simply and guickly. Widely used for securing cables, pipes and hoses in the automotive and truck building industries, the mounting base is simply pushed onto a 5mm diameter weld stud or bolt.



**T** Series MIL Spec Ties

#### **Features and Benefits**

Available in a wide range of materials, these cable ties all feature internal serrations, allowing for a positive hold onto cable, hose and pipe bundles. The design of the head guarantees a high tensile strength whilst allowing a very low insertion force, this, combined with the bent tail design of many of the ties, ensures a simple and quick installation. Whilst easily installed by hand, - manual and pneumatic (for high volume applications) tensioning tools are available to ensure a consistent and safe installation.

### Application

For the routing, bundling and securing of cables, pipes and hoses.



TF31

**Features and Benefits** 

With its high shrink ratio TF31 can easily cope with varying substrates. Typical TF31 applications are for example: insulation and identification of wires, cables and light duty harnesses. Inventory can be reduced significantly as only a few sizes cover a wide range of diameters.







## Features and Benefits

Due to its flame-retardant additives, Helagaine HEGPVOX braided sleeving is self-extinguishing according to UL94 V0. HEGPVOX should be used wherever fire protection is important.

The special structure of the Polyester braiding keeps out moisture and dirt. HEGPVOX is also resistant to acids.

## Application

Helagaine HEGPVOX braided sleeving offers superior cable protection for car and railway vehicle manufacturing as well as machine tools, robotics and automatic equipment.





Helagaine HEGPA66 Braided Sleeving

#### **Features and Benefits**

The thread diameter of the Polyamide 6.6 is approximately 10% larger than that of Polyester. This results in tougher sleeving with excellent resistance to abrasion.

Despite its toughness, Helagaine HEGPA66 can be easily applied even over very irregular shapes.

#### Application

Helagaine HEGPA66 is particularly suitable for vehicle manufacturing as well as plant construction.

#### Application Method

Fraying of the braided sleeving can be avoided by using a hot-knife to cut the sleeving. Braided sleeving can also be supplied in pre-cut lengths on request.



n-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

n-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

## Defence Capabilities

Land



## LRT, RT250 Series Releasable Ties

The extended pawl allows for quick and simple release of the ties. An eyelet on the head of the ties allows any excess tail to be tucked neatly away - this also helps to prevent the trigger from accidental release.

## Application

Used in a wide range of industries these releasable and reusable ties are ideal where temporary installation or the addition or removal of cables is required, for example: theatres, outdoor events or harness work.

These ties are ideal for larger or heavier applications.

## **Rising to the challenge**

HellermannTyton's repeated success in major projects has driven demand for its product range in the Fixed Wing and Rotor Aircraft Sector. This demand is from the RAF direct and a range of prime suppliers and tier subcontractors. Some of these include BAE Systems, Airbus, Rolls Royce, Smiths Industries, MBDA, QinetiQ, Augusta Westland, EADS, SELEX sensors and Airborne Systems, Ultra Electronics, Raytheon and Lockheed Martin. We offer a wide range of parts suitable for harnessing, releasable harnessing, missile racks, undercarriage and fuel tanks, general purpose protection and bundling, and wing electrical systems, aircraft support vehicles and we are approved to supply products in the storm shadow project for MBDA.



## Case Study

One of our key successes in aircraft applications has been the introduction of the new T Series Outside Serrated Ties in heat stabalised material. These have since been introduced onto the Panavia Aircraft Specification and received further approval with the portfolio also being taken on board by Augusta Westland.

Other projects include Harpoon Tying systems on wing cabling for the Airbus aircraft electrical protection system against lightening strike. In addition we have worked with MBDA supplying a range or markers, clips, ties and identification products for their rocket and missile products.

For the Raytheon USA's AIM 9X project HellermannTyton achieved preferred supplier staus providing custom solutions. The custom moulded part produced in Mil R material was able to maintain high flexibility and bending at very low temperatures.



### **Product Information**

Our key products in this area include:

Cable Ties and Fixings: PEEK, Outside Spec, HS Ties (to Panavia specs) and Harpoon Ties, P Clips, Edge Clips and MB3 bases.

**Protection:** Helagaine, Spiral binding.

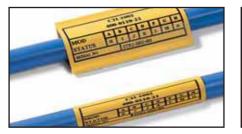
Insulation: Helashrink Moulded Shapes Series 156/150/1150/203/1301 with and without adhesive, Heatshrink Tubing PSTH, W24, Viton-E, TULT, TSFM, Heatshrink sleeving and Hellerine Lubricant.

Approval/ Specification Information All of our products supplied meet Tornado and For some of our key partners such as Augusta Westland and Airbus we have provided written product specifications relating to cable Identification: TIPS Thermal Idenfication Printing management products and their use onboard

> For the Eurocopter EC120B project we are approved and supply VG epoxy lined boots.







Printable Heatshrink Tubing

Polyolefin heatshrink tubings have excellent mechanical strength and good resistance to organic solvents and chemicals. They are resistant to cold flow, self-extinguishing and are highly flexible. The material is supplied on flat reels that fit neatly into a printer either fitted with perforator or without.





up to +260° C. Their chemical resistance, even against acid and gamma radiation is excellent. Furthermore, they have good abraison resistance. With as little as 4.5mmC strap cross-section it holds a tensile strength of 230N, but needs only 6N insertion force. The design offers a good ratio weight to tensile strength. The contoured head takes up less space, therefore usage in areas with space restrictions are ideal. Due to the outside serrations, PEEK Ties minimise any indentation or damage to cable insulation.

-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence



PEEK Ties will withstand temperatures from -55° C The PEEK Tie has been designed for the Ministry of Defence and Aircraft industry in co-operation with leading companies, being ideal for high temperature applications. The PEEK Tie is an extraordinary product, combining the mechanical performance and resistance to environmental influence of a metal tie, with the ease of use of a polyamide cable tie.



## Defence Capabilities





## MB Self Adhesive Cable Tie Mounts

adhesive mounting` this range offers a safe and secure mount.

Simple to install with a screw or bolt, they give excellent security, particularly in areas

The Self Adhesive mounts are designed to offer the maximum surface area, and in conjunction with the specially developed adhesive ensures that a very high pull-off force is achieved.

tie, enabling quicker and more flexible installation.

Designed specifically for holding heavier cable bundles, these mounting bases can be used in many industries from agriculture to truck manufacture. They offer a very secure fixing duty cable ties up to 8mm wide.





## Heatshrink 1200 Series

90° (right angled) transition parts (T-joints) are used for a simple time-saving insulation of the branch point of a cable, where it is split into single wires. Adhesive lined T-joints also serve to relieve the mechanical tension in cable harnesses.





### Helagaine HEGPX

Helagaine HEGP and HEGPX braided sleeving offer flexible cable protection, high abrasion resistance and ease of application. HEGP and HEGPX are specially woven to expand when compressed and contract when pulled apart.

HEGP provides a high level of surface coverage as well as a high rate of expansion for easy slip-over application. To achieve an optimal fit, HEGP braided sleeving is available in 13 different sizes for application diameters of 1mm to 66mm.

If fewer sizes and easier application are important, Helagaine HEGPX offers an expansion ration of 3:1. Only 7 sizes cover an application range of 2mm to 70mm."

To prevent fraying, the sleeve is cut with a hotcutting machine, which melts and cleanly fuses the ends of the yarn. For more information on the HSG0 hot-cutting tool, please contact us.





Helashrink 573H series transition, 1 to 3 cables

low profile - this style provides excellent strain

relief, sealing and mechanical protection on



#### 300 series breakout boots

Branching parts are used for easy, time-saving insulation of the branch point of a cable where mechanical tension in cable harnesses.

## Helagaine HEGPA66 Braided Sleeving

#### Features and Benefits

The thread diameter of the Polyamide 6.6 is approximately 10% larger than that of Polyester. This results in tougher sleeving with excellent resistance to abrasion.

Despite its toughness, Helagaine HEGPA66 can be easily applied even over very irregular shapes.

#### Application

Helagaine HEGPA66 is particularly suitable for vehicle and aircraft manufacturing as well as construction plant equipment.

#### Application Method

Fraying of the braided sleeving can be avoided by using a hot-knife to cut the sleeving. Braided sleeving can also be supplied in pre-cut lengths on request.





n-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

## Defence Capabilities Air



## Helashrink 1100 Series

Right-angle, VG style shape with rib. This style provides connector cable strain relief and can it is split into single wires. Branching parts with be installed directly onto connector rear thread.



HellermannTyton

## **Excellent Performance**

Whether for use on surface or sub-surface vessels, HellermannTyton's wide portfolio of products are specifically designed for sea-going equipment. Our sub-surface activity includes Submarines, submersible search and rescue craft as well as underwater weaponary such as torpedoes and missiles. Our on-surface experience covers Type 23 Frigates, Type 45 Destroyers, Royal Fleet Auxiliary Ships and the CVF aircraft carrier. Our major customers include BAE, Thales, Babcock, Vosper Thorneycroft, and DML. To complete the supply chain we also support a range for first and second tier suppliers, as well as the MoD itself.

Major products within this area include: Pre and post termination markers with and without adhesive.



## **Product Information**

Cable tie accessories: bases, edge clips and

Application Tooling: Automated Metal Tying

Identification: Helamark, Markers, TIPTAGS,

**Insulation:** LFPC tubing and other heat shrinkable

**Approvals and Specifications** 



## Case Study

On a number of projects such as the CVF aircraft carrier and astute class submarine programmes we have met and exceeded customer needs by offering innovative solutions.

Introducing BAe to the HellermannTyton Automatic Metal Tying and Metal Ball Tying Systems we were awarded the Bronze Chairmans Award. For producing significant time and cost savings whilst maintaining the vigorous safety characteristics required for cable banding systems. After vigorous testing and approval by BAe and MoD we also introduced the VO ties as the final part of the solution to give a complete cable management coverage.

## Full Cable management system on Type 45 Destroyer

Working closely with the Design Engineering, Production and Commercial team at BAe Systems (now Surface Fleet Solutions) on the Type 45 Destroyer, HellermannTyton developed the Automated Metal Tying System (AMTS). This was then used in conjunction with their Metal Ball Ties (MBT), LFPC channel and associated installation tools which when combined produced significant time and cost savings, whilst maintaining the vigorous safety characteristics required for cable banding

The joint BAe Systems and HellermannTyton development team achieved the Bronze Award in the BAe Chairman's Awards 2005 for the Cable Banding Cost Reduction Programme.

Following thorough Toxicity and performance testing, BAe Systems and MoD approved the introduction of six sizes of Nylon 66 cable ties to UL94VO. The ease of application using VO cable ties, resulting in time and cost savings, has been rewarded once again with the joint BAe Systems and HellermannTyton development team securing the 2007 Chairman's Bronze award for Nylon Tie use for final Bundling.





## AMTS

The Automatic Metal Tie System will improve the consistency and speed of high performance metal tie application. The AMTS applicator is designed for HellermannTyton AMTS-Metal Ties. The cable tie will come in pre-cut lengnths, ready to use, with optiional protective channels just in case you need to bundle very sensitive cables. Outstanding imperishable Metal Ties and an Automated System to tie them are the components required if you have to bundle heavy cables in a very strong manner. The AMTS-Metal Ties withstand all impact tests HellermannTyton could perform, even a 70G Force "Exocet Missile" impact test. This system offers installation time savings of up to 30 percent.



## AMTS Kit consists of:

- Application Tool
- Battery powered driver
- Two batteries
- Battery charger
- Application CD

**Optional:** A holster complete with belt to allow for hands free when initially applying the Application Tool.

The applicator in conjunction with the strap will be ideal where being "in time" is a key factor. The heavy load this tie can hold, makes it suitable for any heavy-duty job in the Defence and Offshore industries. With its metal nature AMTS ties are able to cope in extreme environments.





n-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk amples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence



## **MBT Range of Stainless Steel** Cable Ties

## Features and Benefits

The MBT (Metal Ball Bearing Ties) have a non-releasable locking mechanism that offers infinate adjustment along the length of the tie. These ties are available in both 316 and 304 grades of stainless steel.

## Application

The M range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from Mass Transit, Ship building, oil rigs, mining, chemical to theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits.



## Defence Capabilities





## **OS Series Outside Serrated Ties**

#### Features and Benefits

The ever increasing demands within the mass transit, automotive and data cable installation industries for tighter bundles has led to cable tie design causing damage to cable

The OS range of outside serrated cable ties have overcome these problems. The design offers high tensile strengths, low insertion forces and a smooth surface to the cable insulation - minimising any the tie to follow the contours of the cable and takes up less space than other designs of cable ties.

#### Application

Designed originally for the automotive market these ties are now being used in many areas



## MAT and MLT Range of Stainless **Steel Cables Ties**

The MAT range of stainless steel cable ties can be used in the most arduous of conditions or MAT cable ties are cable ties which can be put series can be tightened smoothly and are locked by folding over the strip and the bar in the head area. This produces a solid and permanent bundling.





## LFPC Protective Channel

Features and Benefits Manufactured from Polyolefin the LFPC

flame retardant. Covering the underside and edges of the MBT ties to give full protection to the cable bundle.

#### Application

When used in conjunction with the MBT range of stainless steel cable ties this channel gives in nuclear power stations.



## **Printable Marking Systems**



#### **TIPTAG-HF Marketing Tags**

Printable tags "from the roll" can be printed using the TT range of printers. Tiptags are presented in a special perforated format which includes fastening slots for cable ties. They are especially suited for marking larger cable diameters. Other lengths are available on request.





#### **New Premium TT4000 Printer Series**

Designed for heavy duty industrial applications, the latest HellermannTyton thermal transfer printer is capable of high definition printing of 2D barcodes as well as standard alphanumeric characters and text at up to speeds of 250mm/s. Using specially formulated ribbons, a permanent abrasion resistant mark is produced on all HellermannTyton thermal identification products. The TT4000-2-UV includes the addition of a fitted sensor enabling the printer to process perforated tubing.

A comprehensive range of materials to cover all your identification needs are available, all of which can be printed on the TT4000 printer series. Labelling design is made easy by using our recommended software, TAGPRINT PRO. A selection of accessories for thermal transfer printers are also available.

Other printers for special applications are available on request.





## New TIPS24 Identification **Print Service**

TIPS24 is a next day printing service for identification sleeves and route markers producing a professional, durable and clearly visible standard of TIPS marker every time.

Applications: The TIPS24 service is ideal if you don't have your own on-site printing system, or you have infrequent, varied and complex marking requirements with the added bonus of no stock holding.



-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

## Defence Capabilities Sea





## **T** Series MIL Spec Ties Features and Benefits

## Features and Benefits

Available in a wide range of materials, these cable ties all feature internal serrations allowing for a positive hold onto cable, hose and pipe bundles. The design of the head allowing a very low insertion force, this, combined with the bent tail design of many of the ties, ensures a simple and quick installation. Whilst easily installed by hand, - manual and pneumatic (for high volume applications) tensioning tools are available to ensure a consistent and safe installation.

## Application

For the routing, bundling and securing of cables, pipes and hoses.



HellermannTyton

## Information and Communication Systems

## **Reliable Performance**

We continue to support in-vehicle communications upgrades, maintenance and refurbishment programmes for radio, radar and specialist vehicle applications such as radio man packs.



## **Case Study**

On the General Dynamics Bowman project we supplied a comprehensive range of convoluted blow-moulded shapes to allow for multiple 'clocking' positions to be achieved between cable and connector.

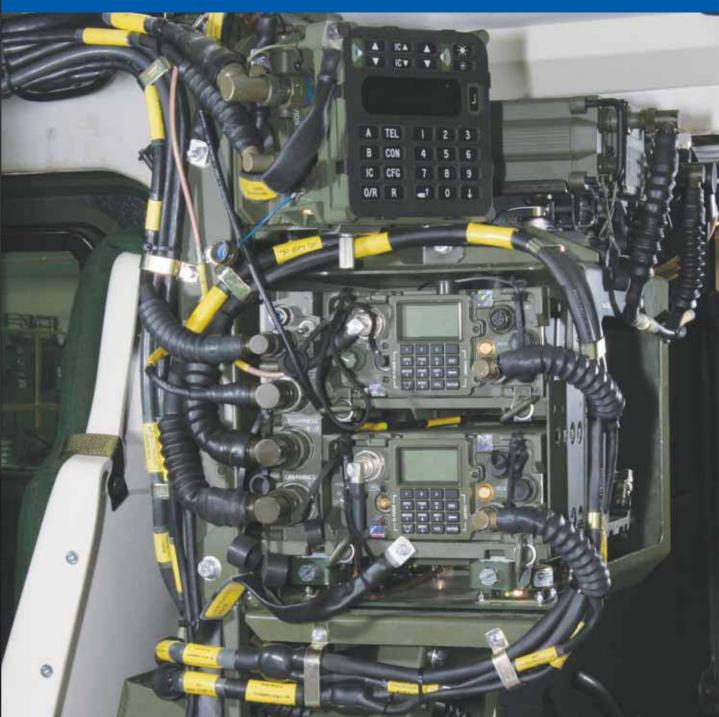
Future Integrated Soldier Technology Programme. For this project HellermannTyton has developed a range of minituarised moulded shapes to compliment the latest generation of circular connectors as used on the Future Soldier harness and also in motorsport applications.



## IPT

In support of equipment supply into general areas we are a supplier to the MoD Defence Equipment and Supply function. This covers:

- Defence Clothing IPT: Nylon ties used for handcuffs and fastening of camoflague netting.
- General Stores IPT: Previously NPPO HT Transfer of supply from MOD to Industrial Prime Vendors Babcock partnership for the supply of identification, heatshrink moulded shapes, cable ties and other components.
- Engineering Systems Support: Speedy Ties for Tank Support group.





n-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence



## **Product Information**

**Insulation:** Helashrink Moulded Shapes series with and without adhesive, Heat Shrinkable tubing PSTH.

Cable Ties and Fixings: Mounting bases MB3S, MB45, MK1, T5i.

Idenitification: TIPS thermal identification printing system.

Outside releasable ties, Spiral Binding and Outside Serrated Ties.

Application tooling: Manual and Automated Cable Tying System.



Defence Capabilities

Integrated and Project Teams

- Information Communication Support IPT: Supply of releasable and non-releasable cable ties, fastenings and Identification linked to Bowman project.
- General Support Vehicles. Mil Spec ties, clips, fasteners and identification products.



## Quality

## HellermannTyton Product Standards Overview

BS	British Standard	Great Britain
BV	Bureau Veritas.	DUREAU VERITAS
DEF STAN	Defence Standard.	DEF STAN
DNV	Det Norske Veritas.	
MIL	USA Military Specification.	MIL
SAE	Society of Automotive Engineers.	SAE.
VDE	German Commision for Electrical, Electronic and Information Technologies of DIN and VDE.	

Please note that not all of our approvals are product specific. They sometimes relate to the material or the whole product range.



## **Practical Solutions**

At HellermannTyton we believe that only the most effective and innovative solutions can be achieved through direct dialogue with our customers. Listening to your most exact production work closely across a worldwide network to deliver optimal solutions, service and support which you will find unmatched anywhere else.

Our company philosophy is not only focused on achieveing unique products, but offering equally unique supply solutions. We understand that the Defence Industry is geared towards requirements our defence team, engineers and strong supplier networks. That's why we aim to • Project Management provide a one-stop solution working with our key partners such as: Habia Cable and Hypertac • UK and Global Manufacture Connectors and others to deliver your full solution. • Full after sales support We are also a member of FASES Federation of Aviation Support Equipment Suppliers.

## W24 One Part Epoxy Adhesive

No Post Cure required! W24 is a non-tack gel that does not require excessive initial heating in order to melt the adhesive, before subsequent bonding. It is not susceptable to moisture absorption, therefore delamination from the surface will not take place. Handling strength is acheived after iniatial recovery 80% cure. Harnesses can be moved immediately.

W24 along with our existing range of hotmelt and thermoset adhesives, can be factory applied into all the Hellermanntyton range of small electronic heatshrink shapes and blowmouldings.







-house demonstration? Contact our hotline on 0161 947 2200 or email info@hellermanntyton.co.uk Samples? Catalogue? Contact our hotline on 0161 947 2200 or email sales@hellermanntyton.co.uk Find out more about our defence team visit: www.hellermanntyton.co.uk/markets-industries/defence

## Practical Solutions

## Key skills

- Research
- Testing
- Custom products
- In-house Tool Making

- Through life-cycle product development

HellermannTyton