

Snap-on Industrial

DELIVERING EXCELLENCE

Tools @ Height

PRODUCT AND USER GUIDE



**STOPS
DROPPED
TOOLS**

Snap-on

Snap-on Industrial

DELIVERING EXCELLENCE

Tools @ Height



PROTECTING PEOPLE



PREVENTING DAMAGE



**PROVIDING HIGH QUALITY
TOOL SOLUTIONS**



Snap-on Industrial understands that working at height is one of the most dangerous activities that can be undertaken during construction, installation, maintenance and repair operations so we have developed our **Tools@Height** safety system over the past decade to meet the ever growing demands for safe, high performance tools.

Comprising over 1,000 tools, the highly successful system is used by a vast array of trades involved in Aviation, Communication, Oil, Gas, Nuclear, Wind, Utilities and many other industrial sectors. In addition, our leading range of safety lanyards and tool pouches are designed to complement our expanding portfolio of tools and deliver the very best in safety, reliability and ergonomics.

The Work at Height Regulations 2005 specify the minimum requirements that should be in place to promote safety and health as primary considerations when planning and undertaking work at height for the benefit of employees, employers, contractors and the general public.

Designed to reduce injuries, fatalities and near misses by putting fall and drop prevention at the forefront of working at height operations, the Regulations specify that approved safety equipment and systems must be used to stop personnel falling or being struck by a dropped object.

Building on these regulations, we operate an extensive research, development and quality management programme which has resulted in advanced design, manufacturing, testing and operation procedures covering all elements of the **Tools@Height** system.

All tools, accessories and lanyards are thoroughly tested against demanding criteria and certified by SATRA, a world leading testing authority. This demonstrates our total commitment to achieving the highest safety and quality standards.

Choose **Snap-on Industrial** and let our professional guidance and tool safety expertise help you in selecting the right products to meet your needs.



Tools @ Height

Inspection - Operation - Storage

Introduction

There is a significant risk of dropped objects when using tools and portable equipment at height so all tools and equipment must be properly secured to prevent them dropping.

Designed and developed by Snap-on Industrial, **Tools@Height** is a proven tool retention system used in the oil & gas, energy, utilities, construction, aerospace, and other sectors worldwide.

Tools@Height delivers total tool control and security, from storage in the workshop, to transportation to the work site, to reliable retention of tools when working at height.

History

Tools@Height was launched into the UK market in 2000 when we were asked to provide tool retention systems to enhance maintenance safety at nuclear power stations.



In 2003, we worked with leading drilling companies to develop tools and special kits for safe working at height on oil & gas drill rigs and production facilities, offshore and onshore.

Tools@Height is continually evolving and expanding to meet the demands of customers in many sectors worldwide.

Extensive Range

There are over 1,000 tools and accessories in the system. Each tool is fitted with a strong and reliable lanyard attachment point which is designed not to compromise the tool's effectiveness. Various types of Snap-on tool lanyards are available which can, depending on tool weight, be attached to the operator or to a suitable fixed point in the work area adjacent to the operator. **Tools@Height** products are tested and certified in accordance with the Snap-on ISO 9001 Quality Management System.



High level uses

Drilling derricks, wind turbines, aviation, buildings, telecommunication masts, power line pylons, bridges, cranes, hangars, gantries

Low level uses

Prevents tools from falling into machinery, food production lines, water filter beds, mine shafts, fuel rod cooling ponds, crushers, restricted access areas

Site Safety

1. Tools@Height should be used for tasks undertaken at 2 metres or above, or where a tool can drop more than 2 metres, for example, when working at or near a handrail.
2. All personnel must be properly trained, possess appropriate safety certificates and be competent to use Tools@Height.
3. The site safety officer should do a risk assessment of the proposed task and prepare a method statement defining tool types, equipment, check lists and permit to work procedures.
4. Check the work area is clear of loose objects and debris.
5. Check equipment and structures within the work area to ensure all fittings, bolting, covers etc. are properly secured.
6. Check floor grating in work area is safe. If necessary, use tie-down covers to stop small items falling through gaps.
7. Place barriers around the "drop zone" below the work area.
8. Check toe-boards are fitted to any scaffolding platforms used.
9. Equipment/materials to be anchored to stop them dropping.
10. When work is in progress, keep area tidy to reduce incidents.
11. Be aware of other activities around and under the work area.
12. When work is complete, check that no tools, equipment or materials have been left at height.
13. Ensure the work area is left tidy and all tools, equipment and materials are returned to their proper storage place.

Secondary Retention

As previously mentioned, a pre-work site survey should include checking that all permanent equipment is properly secured. There are regular occurrences of various types of equipment detaching from their fixings and becoming potentially lethal missiles.

Floodlights, navigation lights, CCTV cameras, loudspeakers, warning beacons and other items can come loose due to wind, wave, collision, corrosion and poor maintenance.

Snap-on can provide effective Secondary Retention tethers and fittings to mitigate against these potential safety violations.

We can supply certified standard tethers for loads ranging from 5kg to 250kg. We can also provide custom tethers for higher loads and special applications.



Tool Retention



1. Snap-on tools and lanyards are tested and certified. They must not be modified or mixed with products from other sources.
2. Tools to be secured during transit and in the work area.
3. Tools must be securely stored in bags or pouches which have internal lockable hooks to which tools should be attached.
4. Kit bag should be used to hoist tools to the work location.
5. Tool bag/pouch must be securely attached to the operator using the chest strap or belt loops and leave both hands free.
6. Tool bag/pouch must not impede the functioning of operator's safety harness or equipment.

7. Radios, gas detectors and other equipment are often dropped so all handheld devices should be secured against falling.
8. Carry pouches must always be used for radios and other portable equipment which do not have attachment points.
9. Small components should be stored in the internal pocket of a tool bag/pouch or in separate tethered storage bags.
10. Belt clips that allow a radio to become detached when turned 180 degrees should never be used.
11. Snap-on can provide tethered pouches and bags for all types and sizes of portable equipment.

Checking Equipment

1. Before use, check equipment to ensure it is suitable for the intended use, it operates correctly and is in good condition.
2. Inspection requirements for tools, lanyards and bags can be found in the relevant sections in this document.
3. Equipment must also undergo regular inspection by a competent person in accordance with an approved schedule.
4. Additional inspections should be made where a hazard is present that could cause deterioration of the equipment, for example, acidic, alkaline or grit blasting environments.



5. After a dropped tool incident, the tool and lanyard must be inspected for damage and checked for correct functioning. Inform the site safety officer of the incident who may require the equipment withdrawn from service.
6. Damaged, worn or defective equipment is to be withdrawn from service immediately and the site safety officer informed.



Tool and Lanyard Selection

1. Tool and lanyard selection needs to be carefully considered to ensure operator safety and comfort.
2. In addition to our wide range of standard lanyards, we will manufacture special lanyards for specific applications.
3. Tools@Height lanyards are fitted with lockable screwgate hooks at each end. Hooks are permanently attached to the lanyard material so they cannot be accidentally detached.
4. Tools up to 5lbs (2.3kg) may be attached by lanyard to the operator but a lower limit may be preferable for operator comfort, safety and ease of operation.
5. Most individual tools can be attached to the operator by a lanyard. For example, 95% of the tools in the Tools@Height system weigh less than 2lbs (0.91kg) each so can be attached to the operator, if required.
6. Most tool combinations can also be attached to the operator. For example, assembling a 32mm socket and 11" extension to a 1/2" drive ratchet gives a total weight of 3.24lbs (1.47kg).
7. Attaching tools to the wrist requires special care to avoid injury to this vulnerable area. Our wrist straps and wrist lanyards are rated for tools up to 5lbs (2.3kg) but a lower limit is recommended. The operator should decide if a tool under 5lbs (2.3kg) is suitable for attachment to the wrist. Tools over this weight must not be attached to the wrist.
8. Tools over 5lbs (2.3kg), and all weights of flogging wrench, should not be attached to the operator. These should be attached, by lanyard, to a suitable fixed point in the work area adjacent to the operator.



9. Select a lanyard to suit the weight of tool you intend to use. The weight of each tool can be found on the kit data sheet while each lanyard is fitted with a safety label stating the maximum tool weight it is rated for.
10. One lanyard hook should be locked to a suitable attachment point on the operator's safety harness, belt or wrist strap.
11. The other lanyard hook should be locked to the tool.
12. Dropped tools or equipment must be reported immediately.
13. After use, or before moving location, lock the tool to a screwgate hook fitted within the bag/pouch.

14. When not in use, both lanyard hooks can be clipped to the bag/pouch external "D" ring and the lanyard stowed inside.



Snap-Coil Tool Anchor

1. Tools@Height wrenches and several other tools are fitted with the Snap-Coil Tool Anchor which was invented by Snap-on to avoid the use of welded fittings. The Snap-Coil has no weld to break or inspect and has superior flexibility and shock-absorbing properties over fabricated fittings.



2. Snap-Coils are made from 316 stainless steel and chrome plated. They are available in several sizes to suit different tools. Samples of each size are drop tested and certified.



3. Before use, check the Snap-Coil is correctly fitted to the tool and shows no damage or distortion.



4. A Snap-Coil is not designed to "breakaway" from the operator if a tool is snatched into moving machinery. No "breakaway" device can be guaranteed 100% effective so best practice is for machinery to be shut down, isolated and a safe working area designated before any work is undertaken nearby.

5. A Snap-Coil is not designed to "breakaway" from the operator if a tool is trapped when climbing or moving location. Before climbing or moving location the operator must stow tools in a Tools@Height bag or pouch and lock tools to the internal hooks.

Tool Storage

1. Tools@Height tools and lanyards must be securely stored when not in use, be fully controlled at all times during transit and when in the work area.

2. Tools and lanyards are supplied in distinctive bags or roll-cab storage cabinets which are identified with the Tools@Height logo and fitted with a data label showing the kit serial number and date of manufacture.

3. Drawers are fitted with high density, two colour, foam pads which have recesses for each tool. Each recess has a bright colour allowing a missing tool to be easily identified.

4. Standard drawer foam colour is black with a yellow recess. Other colour options are available.

5. A missing tool must be immediately recovered. It may have been left at the work site where it could fall and harm personnel, damage equipment or disrupt production.

6. Tools@Height kits contain a Data Book which identifies each tool using part numbers, drawer images and layout drawings.

7. One person per shift should be designated as responsible for tool storage, serve as key holder and be the custodian of the Tools Register. The person responsible will log all tools in and out on the Tools Register.

8. Kits can be optionally supplied with the Snap-on Level 5 Asset Management System which provides electronic security access and complete tool control and accountability.

9. Level 5 kits can be networked and monitored remotely by operations, maintenance and safety specialists who can download reports on tool and consumable usage and rapidly audit multiple Tools@Height kits.

Snap-on Industrial UK
 ISO9001 Quality Assured Supplier of Choice
 Unique Kit Identification Number
2001011566
 Please quote this number in any correspondence
 Customer Services: Fax: +44(0)1526 413 904
 www.snapon.com/ukindustrial
 E-mail: uk@snapon.com or europe@snapon.com
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Hammers

Handles are fitted with a lanyard attachment shackle in the end of the handle. Shackles are stainless steel and have a riveted pin.

Check the shackle and shaft for damage or wear. Do not use if the head is chipped, cracked or mushroomed.



Adjustable Wrenches

A stainless steel Quick-Link is fitted in a hole drilled in the threaded tang. This acts as a lanyard attachment point and a stop to prevent the tang being un-threaded and becoming a dropped object.

Check the tool for damage or wear. Ensure the locking nut is not loose and tighten if necessary.



Pliers, Chisels, Hacksaws and Knives

Handles are fitted with a stainless steel lug or 25mm split ring as a lanyard attachment point.

Check the lug or split ring is secure and has no major distortion or damage.



Punches, Screwdrivers and Hex Keys

These are fitted with a rotating stainless steel lug which is retained by a stainless steel collar pinned to the shaft.

Check the lug to ensure it rotates freely and the collar is not loose.



Torque Wrenches

A stainless steel D-shackle lanyard attachment point is fitted at the end of the handle.

Check the screws on D-shackle are not loose and tighten if necessary.



Files

Handles are fitted with a stainless steel D-shackle. Check the shackle pin is not loose and tighten if necessary.

Check the file blade is fully and firmly fitted into the handle. Check locking pin is in place.



Lock-on Sockets and Extensions

Lock-on sockets and extension shafts were invented by Snap-on to prevent accidental release from the ratchet driver. Instead, a positive action is needed in order to detach a socket or shaft.

The operator must insert the probe from a KSPINTOOL pin release tool in the side hole of the socket or extension shaft and depress the spring-loaded retaining pin. This must be done in a safe area in case a component is dropped.

- Check the driver pin is not stuck and operates correctly.
- Check socket side holes are clear and do not obstruct the driver pin.



Power-Safe HV Insulated Tools

Power Safe tools comply with EN60900 and are marked with the 1000V symbol. A sample of each tool from every production run is dropped tested, stripped-down, inspected and certified.

Insulated pliers, cutters and wrenches have a lanyard attachment point built into one handle.

- Check insulation for nicks, cuts and worn areas.
- Check black bush is fitted correctly and undamaged.
- Check shackle pin is not loose and tighten if necessary.



Insulated screwdrivers feature a rotating collar with eyelet to which a lanyard can be attached.

- Check the collar and tool insulation are not damaged
- Check the tool is functioning correctly.



Power Tools@Height

Snap-on Power Tools@Height (PTAH) are fitted with a steel lug to which a lanyard can be attached. They are also fitted with Snap-on Lock-on drives to which Lock-on sockets and extension shafts can be fitted.

Our Lock-on system ensures sockets and shafts are not accidentally released from the drive. Instead, a deliberate action is required to detach them.

PTAH units feature a dual, slide-on rail for battery power-packs. Power packs have double-button locks for positive retention.

- Do not use any power tools unless you are trained and authorized to do so.
- Do not wear rings, jewellery, or loose clothing when operating power tools.
- Wear appropriate Personal Protective Equipment (PPE), such as safety goggles, etc.
- Read the PTAH instruction manual before use
- Inspect the tool for wear or damage and ensure moving parts operate correctly.
- Plan work in advance and configure the tool with the required sockets/extensions.
- PTAH units should only be used with THCARA15 and THCARA25 lanyards.
- Ensure the power pack is fully engaged on the slide-on rail and locked in position.
- Replace sockets and extensions in a safe area where they cannot fall.
- Replace power pack in a safe area where it cannot fall.
- Position charger in a safe location where it cannot fall.



Lanyards

Lanyards are manufactured from high quality materials, batch tested and certified.

Lockable snap-hooks are fitted to lanyards to ensure positive tool retention.

Each lanyard is fitted with a safety label stating the maximum tool weight to be used.

Safety Label - Side 1



- Maximum tool weight
- Warning
- Wear Safety Goggles
- Do not use near rotating or moving machinery
- Inspect before use
- Do not use if worn or damaged

Safety Label - Side 2



- Part number
- Tools Lanyard
- Serial number
- Snap-on Industrial
- tah@snapon.com
- www.snapon.com/industrialuk

Lanyard Hooks

Stainless steel, screwgate, locking hooks (40mm, 60mm and 80mm) are fitted to lanyards.

Check as follows before use:-

- Inspect hook for distortions, cracks, corrosion, or pitted surfaces.
- Keeper (latch arm) must seat into the nose without binding.
- Keeper must not be distorted or obstructed.
- Keeper spring must exert sufficient force to firmly close the keeper.
- Knurled locking ring must easily engage with, and rotate on, the threaded portion.
- Knurled locking ring must secure the keeper in the closed position and prevent it opening.



Webbing Lanyards

LANWRIST1 - for tools up to 5lbs (2.3kg)
300mm x 10mm wrist lanyard with stainless steel screwgate locking hooks.



LANWEB - for tools up to 10lbs (4.5kg)
1.0m x 25mm web lanyard with stainless steel screwgate locking hooks.



TCWS1 - for tools up to 5lbs (2.3kg)
Wrist band with velcro fastener and stainless steel 'D' ring for lanyard.



Check as follows before use:-

- Bend webbing over a pipe and look for cuts, breaks or defective stitching.
- Check for discoloration, cracks or charring which may be chemical/heat damage.
- Check snap-hooks as described above.

Wire Lanyards

LANWIRE for tools up to 15lbs (6.8kg)
Heavy tools must be attached to a local hard point using stainless steel wire lanyards fitted with locking hooks.



LANWIRE-S - 1.5m long
LANWIRE-1S - 1.0m long
LANWIRE-0.5S - 0.5m long

Check as follows before use:-

- Rotate lanyard and look for broken strands or excessive wire wear.
- Check the thimble is firmly seated in the eye of the splice.
- Thimble edges must be free of sharp edges, distortion, or cracks.
- Splice loop must be securely crimped with a stainless steel ferrule with at least 1mm of wire protruding from the ferrule.
- Splice must not have loose or have cut strands.
- Check snap-hooks as described above.

Coiled Lanyards

LANCOIL1-S for tools up to 5lbs (2.3kg)
Stretches to 1.0m



LANCOIL2-S for tools up to 10lbs (4.5kg)
Stretches to 2.0m

Hi-Vis 6mm urethane coiled lanyards with manganese bronze swivels and stainless steel, screwgate locking hooks.

LANCOIL1-S with **TCWS-1** Wrist Band



LANCOIL2-S attached to pouch D-ring

Check as follows before use:-

- Bend and stretch lanyards and look for cuts, breaks or wear.
- Check snap-hooks as described above.



Retracting Lanyards

THCARA15 for tools to 15 lbs (6.8 kg)

High strength 3/4" nylon webbing with self retracting inner coil and two stainless steel screwgate locking snap-hooks.
Extends to 3' 6" (1.07m) approx.



THCARA25 for tools to 25 lb (11.3 kg)

High strength 1" nylon webbing with self retracting inner coil and two stainless steel locking snap-hooks. Extends to 10' (3.0m) and has overload warning flag.



THCARA25 should be attached to an anchor point in the work area. It should not be attached to an individual.

Check as follows before use:-

- Bend and stretch lanyards and look for cuts, breaks or defective stitching.
- Look for an activated drop indicator or other signs of deployment. If warning signs are found, remove the lanyard from service.
- Check snap-hooks as described above.

Tool Bags and Pouches

Snap-on bags and pouches provide secure tool transportation, are easy to use and comfortable to wear.



- Tools must be securely stored in Snap-on bags or pouches which have internal lockable hooks to which tools can be attached.
- Kit bag should be used to hoist tools to the work location.
- Tool bags and pouches must be securely attached to the operator using the chest strap or belt loops and leave both hands free.
- Bags and pouches must not impede the operator's safety harness or equipment.
- Metal fittings to be checked for cracks, corrosion, pitted surfaces and correct functioning.
- Material to be checked for splits, abrasion and worn stitching.
- Bend belts/straps over a pipe and check for cuts, breaks or worn stitching.

Cleaning

The proper storage and care of safety equipment will help it to perform correctly and prolong its working life.

Wipe down tools and stow them in their correct locations in the tool cabinet drawers.

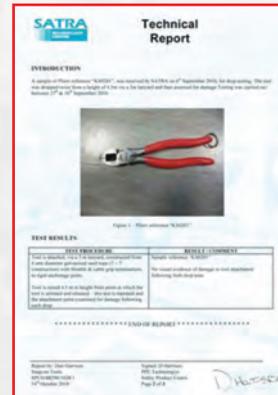
Clean bags, pouches and lanyards of dirt, corrosives, or contaminants and store in a clean and dry environment, free from fumes or corrosive elements.

Nylon and Polyester

- Wipe off surface dirt with a sponge dampened in plain water.
- Dip sponge in mild solution of water, soap or detergent, work into a thick lather and clean article.
- Wipe with clean cloth and hang to dry away from heat, steam, or sunlight.

Testing and Certification

Tools@Height tools and lanyards are tested and certified in accordance with our ISO 9001 Quality Management System. The following pages are extracts from reports of testing undertaken by SATRA, a world leading product research and testing organisation.



KS0201 Pliers



KS0323 10" Pipe Wrench



KS02441 Fluke Meter



KS03000 1/2" Impact Wrench



[Nous contacter :](#)

