



The first step in preventing a hand injury is recognising where the hand enters the hazard.

PRACTICAL GUIDE FOR EHS, OPERATIONS, PRODUCTION, MAINTENANCE, FABRICATION & MATERIAL HANDLING

How to Conduct a Hand Safety Survey

The Find The Hand™ Self-Assessment Method

Identify where hands enter industrial hazards. Understand why they enter. Find a safer way to perform the job.

FIND

Where the hand enters the hazard

UNDERSTAND

Why the hand is there and what function it performs

REPLACE

Find a safer method to perform the same job

What Customers Generally Ask Us to Assess

Can you visit our plant, assess our activities and recommend the right solutions?

This is one of the most frequent requests received by PSC Hand Safety India.

Companies want to conduct comprehensive hand-safety surveys covering production, fabrication, maintenance, material handling, projects and other activities involving direct hand contact.

They generally want the assessment to:

- Identify hand-injury hazards and high-risk activities.
- Observe actual work practices.
- Understand how workers presently interact with machines, materials, components, tools and moving loads.
- Identify potential cuts, pinch points, crushing, caught-between, entanglement, impact and ergonomic risks.
- Review the suitability and condition of existing hand tools.
- Identify tasks where the human hand has become the method of controlling the job.
- Find opportunities to eliminate or reduce direct hand contact.
- Consider engineering controls, improved tools, fixtures, handling aids and mechanisation.
- Recommend safer tools and work methods.
- Develop an activity-wise action plan based on priority and risk.

A physical site assessment can provide this support. However, it is not always necessary to begin with a site visit.

The employees performing and supervising the work already know where hands are being used. What they need is a simple and consistent method for recognising and documenting the exposure.

That method is Find The Hand™.

DO NOT WAIT FOR AN INJURY

No accident required. No near miss required.

If a hand is entering a hazardous area during a normal task, the exposure already exists.

What Does "Find The Hand" Mean?

Stop looking only at the machine,
material or load.
Look at where the hand goes.

Traditional safety observations frequently begin with the equipment or hazard:

- Is the machine guarded?
 - Is the load properly rigged?
 - Is the worker wearing gloves?
 - Is the correct procedure available?
 - Is the tool in good condition?
- These remain important questions. However, Find The Hand™ begins with a more fundamental observation: **Where is the worker's hand?***

Look for any activity where the hand approaches a moving object, a suspended load, a pinch point, a closing space, a sharp edge, a rotating component, a striking zone, stored energy, a hot surface, a falling-object path, a fixed structure against which the hand could be trapped, or an object that may unexpectedly roll, shift, tilt or settle.

WHY DOES THE HAND ENTER?

Workers place their hands near hazards because they are trying to complete a necessary task. They may be trying to:

Guide	Hold	Push
Pull	Align	Position
Stabilise	Retrieve	Lift
Catch	Clear	Support
Rotate	Steer	Control

The Human Hand Is Not a Tool™

The objective is not to stop the work — the job still has to be completed. The objective is to identify another way to guide, hold, push, pull, align, position or control the object *without placing the hand inside the hazard*.

The Find The Hand™ Five-Question Method

The method can be applied during a toolbox talk, safety walk, job observation, risk assessment or departmental survey. For every activity, ask five questions.

QUESTION 1

Where Does the Hand Enter?

Observe the complete work cycle. Identify the exact moment when the hand enters or approaches the hazardous area — not the general location, but the specific interaction. Examples: fingers placed below a component while it is being positioned; a worker holds a chisel close to the striking point; a worker pushes against a suspended load to stop it rotating; a worker inserts a hand between two sections during alignment; a worker reaches into equipment to remove an obstruction; a worker catches or steadies material as it is lowered; a worker places a hand near a rotating part during adjustment.

QUESTION 2

Why Is the Hand There?

Identify the function being performed by the hand. Is the worker trying to guide, hold, push or pull it? Align two components? Stabilise an unstable load? Position it accurately? Retrieve a sling, chain or object? Lift or carry it? Prevent it from rolling? Clear a jam? Feel whether it is properly seated? Protect another part of the equipment?

This question is critical. A suitable control cannot be selected until we understand the job the hand is performing.

QUESTION 3

What Could Happen?

Identify every possible movement or release of energy. Could the object fall, swing, rotate, roll, tilt, shift, drift, settle, slide, close, start unexpectedly, release tension, release pressure, or move because of gravity or inertia? **Do not assume that an object will remain where it is merely because it appears stable.**

QUESTION 4

What Injury Could Occur?

Consider: pinch injury, crushing, caught-between injury, cut or laceration, puncture, struck-by injury, struck-against injury, impact injury, entanglement, burn, abrasion, ergonomic strain, or finger, hand or wrist injury. Use the company's existing risk-assessment process to determine severity and priority.

QUESTION 5

Can the Same Job Be Done Without the Hand Entering?

Consider whether the hand can be replaced by:

- A purpose-designed tool
- A handle or extension
- A push-pull tool
- A magnetic positioning tool
- A tagline
- A gripping or retrieval tool
- A chisel, punch or striking-tool holder
- A manual lifting aid
- A hook or tong
- A fixture or clamp
- A jig
- A mechanical handling device
- Remote operation or mechanisation
- A revised sequence of work
- Task substitution or complete elimination

THE THREE STEPS

Find the hand.



Understand what the hand is doing.



Find another way to do that job.

Where Should the Team Look?

A good assessment must examine actual work as it is performed. Reviewing written procedures from an office is not sufficient.

PRODUCTION AND ASSEMBLY

- Manual fitting and assembly
- Holding components during fastening
- Supporting parts during installation
- Aligning holes; placing shims or spacers
- Reaching between components
- Removing finished components
- Feeding, receiving, clearing or adjusting material
- Checking seating or alignment by touch

FABRICATION

- Holding chisels, punches and wedges
- Holding workpieces during striking
- Handling plates, sections and sharp materials
- Aligning structural members
- Positioning parts during fitting or welding
- Moving fabricated components
- Handling hot or recently processed material
- Using improvised tools; hands near clamps, presses and fixtures

MAINTENANCE

- Loosening and tightening components
- Holding objects during hammering
- Removing bearings, couplings or covers
- Working around rotating equipment
- Clearing jams and obstructions
- Handling heavy spares
- Supporting components during dismantling
- Tensioned cables, springs and stored energy
- Pressurised equipment; restricted spaces
- Hands placed beneath unsupported components

STRIKING ACTIVITIES

- Chiselling, punching, pin removal, wedge placement
- Holding fasteners during striking
- Slogging-spanner work
- Hammering near another worker's hand
- Objects that may fly, slip or rebound

MATERIAL HANDLING AND LIFTING

- Guiding suspended loads by hand
- Stopping loads from swinging or rotating
- Landing and positioning loads
- Aligning a load with its final position
- Attaching or retrieving slings and chains
- Pushing or pulling loads
- Preventing cylindrical materials from rolling
- Loading, unloading and stacking materials
- Hands between load and a fixed structure
- Hands beneath loads
- Manual lifting and carrying
- Handling awkward or unstable objects

PROJECTS AND SITE ACTIVITIES

- Equipment erection and structural alignment
- Pipe handling and equipment positioning
- Temporary installation work
- Loading and unloading
- Contractor activities
- Non-routine lifting
- Improvised methods developed at site
- Work where the final method has not yet been standardised

Observe routine work, non-routine work, contractor work and maintenance work.

The activity that happens only once a month can still create a serious exposure.

How to Document an Activity Correctly

A recommendation is only as good as the information available. A close-up photograph of a hand is usually not sufficient. The reviewer must understand the complete task, the surrounding space, the direction of movement and what the worker is trying to accomplish.

For each activity, provide the following:

1 ONE WIDE PHOTOGRAPH

Show the worker's position, the complete equipment or load, surrounding structure, available working space, direction of movement, other people involved and nearby obstructions.

2 ONE CLOSE PHOTOGRAPH

Show the precise hand position, the hazard or contact point, the distance between the hand and hazard, the surface or component being controlled, and the possible pinch, crush, cut or impact area.

3 A SHORT VIDEO WHERE MOVEMENT IS INVOLVED

A short video is particularly important when:

- A load swings, rotates, or a component rolls
- The activity includes lifting or lowering
- The operator changes position during the task
- The hand enters only during one stage
- The risk occurs during final alignment or positioning
- The movement cannot be understood from still photographs

Where safely possible, record the normal work cycle from preparation to completion.

4 BASIC APPLICATION INFORMATION

Record plant and location, department and area, activity name, description of the work, what the hand is doing, load or component weight, relevant dimensions, material and surface type, temperature, working height, available clearance, frequency of the activity, number of workers involved, existing tool or method, known incidents or near misses, existing controls and internal risk rating.

WIDE PHOTOGRAPH

Full context: worker position, equipment, surrounding space and direction of movement

CLOSE PHOTOGRAPH

Hand position relative to hazard, contact point and clearance distance

SHORT VIDEO

Record the complete work cycle — movement and changing hand positions

IMPORTANT PHOTOGRAPHY RULES

- Obtain permission before taking photographs or videos
- Follow the plant's confidentiality requirements
- Never stage an unsafe act for the assessment
- Never ask a worker to repeat a hazardous exposure
- Record activity only during authorised operations
- Stop immediately if imminent danger is observed
- Do not delay corrective action because the assessment is incomplete

SHOW US THE TASK — NOT ONLY THE HAND

We need to understand what the worker is trying to accomplish before recommending another way to perform it.

Find The Hand™ Self-Assessment Form

A — GENERAL INFORMATION

COMPANY		ACTIVITY REF. NO.
PLANT AND LOCATION		
DEPARTMENT	SPECIFIC AREA	
ASSESSMENT DATE	CONDUCTED BY	SUPERVISOR NAME

B — ACTIVITY

ACTIVITY NAME

DESCRIBE THE TASK FROM BEGINNING TO COMPLETION

FREQUENCY	NO. OF WORKERS
ROUTINE / NON-ROUTINE	WRITTEN PROCEDURE AVAILABLE?
EXISTING TOOL OR METHOD	

D — APPLICATION INFORMATION

APPROX. WEIGHT	DIMENSIONS	MATERIAL
SURFACE CONDITION	TEMPERATURE	WORKING HEIGHT
ACCESS AND CLEARANCE		
EXISTING CONTROLS		
PREVIOUS INCIDENT OR NEAR MISS		
INTERNAL RISK RATING		
☐ High ☐ Medium ☐ Low ☐ As per attached risk assessment		

E — VISUAL REFERENCES

WIDE PHOTO REF.	CLOSE PHOTO REF.
VIDEO REFERENCE	DRAWING / DIMENSION REF.

C — FIND THE HAND

WHERE DOES THE HAND ENTER OR APPROACH THE HAZARD?

AT WHAT STAGE OF THE ACTIVITY DOES THE EXPOSURE OCCUR?

WHAT IS THE HAND DOING? (SELECT ALL THAT APPLY)

☐ Guiding	☐ Holding	☐ Pushing
☐ Pulling	☐ Aligning	☐ Positioning
☐ Stabilising	☐ Retrieving	☐ Lifting
☐ Catching	☐ Clearing	☐ Supporting
☐ Other:		

WHAT CAN MOVE, FALL, SWING, ROTATE, ROLL, SHIFT, CLOSE OR RELEASE ENERGY?

WHAT INJURY COULD OCCUR? (SELECT ALL THAT APPLY)

- | | | |
|---|---|---|
| ☐ Cut | ☐ Pinch | ☐ Crush |
| ☐ Caught between | ☐ Struck by | ☐ Struck against |
| ☐ Impact | ☐ Entanglement | ☐ Burn |
| ☐ Puncture | ☐ Ergonomic strain | ☐ Other |

F — INITIAL IMPROVEMENT REVIEW

CAN THE HAND BE COMPLETELY REMOVED FROM THE ACTIVITY?

☐ Yes ☐ No ☐ Requires further assessment

COULD THE ACTIVITY USE: (SELECT ALL THAT APPLY)

☐ Push-pull tool	☐ Magnetic tool
☐ Tagline	☐ Hook, tong or gripping tool
☐ Striking-tool holder	☐ Manual lifting aid
☐ Fixture or clamp	☐ Mechanical handling
☐ Task redesign	☐ Mechanisation
☐ Substitution	☐ Elimination
☐ Requires PSC review	

IMMEDIATE CORRECTIVE ACTION TAKEN, IF ANY

COMMENTS

Complete one form for each activity. Attach the corresponding photographs and videos using the same activity reference number. The customer's EHS team remains responsible for formal risk classification and approval of any revised work method.

What Happens After the Self-Assessment?

The six-stage process from observation to pilot implementation.

1 YOUR TEAM IDENTIFIES THE EXPOSURE

Walk through the plant and observe where hands enter or approach hazards. Do not wait for an accident, injury or near miss. Document the exposure even if the activity has been performed in the same way for many years.

2 YOUR TEAM COMPLETES THE FORM

Complete one Find The Hand™ self-assessment for every selected activity. Begin with:

- High-frequency activities
- High-consequence exposures
- Repeated manual interactions
- Known pinch and crush points
- Activities involving suspended or unstable loads
- Tasks where workers depend on improvised tools
- Activities with a history of incidents or near misses

3 SHARE THE INFORMATION WITH PSC

Send:

- Completed self-assessment forms
- Wide and close photographs
- Short videos
- Dimensions and load information
- Relevant operating restrictions

4 PSC REVIEWS THE APPLICATION

PSC will study:

- Why the hand is entering and what function it performs
- Type and direction of movement
- Load or component geometry and working distance
- Access restrictions, material and surface
- Existing work method and required degree of control
- Possibility of eliminating direct contact

5 PSC RECOMMENDS A CONTROL APPROACH

Depending on the application, this may include: tagline or remote load control, non-magnetic push-pull tool, magnetic positioning tool, hooking, gripping or retrieval tool, chisel or striking-tool holder, manual lifting aid, fixture or clamp, mechanical handling, mechanisation, task redesign, substitution or elimination.

Not every application can be solved with an existing hand-safety tool. In some cases, the correct recommendation may be to redesign the task, change the sequence of work, introduce a fixture or mechanise the operation.

6 BEGIN WITH A CONTROLLED PILOT

Where a suitable tool or control is identified, PSC can recommend a small pilot quantity to determine whether the proposed solution:

- Removes or reduces direct hand contact
- Provides adequate stand-off distance
- Allows the worker to retain control
- Is suitable for the load geometry and available space
- Is practical for the frequency of use
- Requires training or procedural changes
- Can be standardised across similar activities

The customer should conduct the pilot under controlled conditions and through its normal safety approval process.

Free Preliminary Review. PSC's preliminary remote review of the submitted Find The Hand™ self-assessment is provided without charge for the purpose of identifying suitable control and pilot opportunities. This is not a statutory audit or a replacement for the customer's formal risk-assessment process.

Optional On-Site Hands-Off Assessment

Many activities can initially be reviewed through properly completed assessment forms, clear photographs and short videos. An on-site assessment may be appropriate in the following situations.

WHEN AN ON-SITE ASSESSMENT IS APPROPRIATE

- A comprehensive plant or department survey is required
- Numerous activities must be observed
- The task cannot be properly understood remotely
- The movement is complex or unpredictable
- Work practices vary across departments or shifts
- Measurements and clearances must be physically verified
- Existing tools or controls have proved unsuitable
- Different functions must jointly review the activity
- The plant requires an independent written assessment report
- Pilot opportunities must be identified across several operational areas

WHAT THE PROFESSIONAL FEE INCLUDES

- Travel within India and accommodation
- One on-site assessment day
- Walkthrough of the agreed departments and areas
- Observation of activities made available during the assessment
- Identification of cut, pinch, crush, caught-between, impact, entanglement, striking and ergonomic exposures
- Review of how hands are presently being used
- Discussion with operations, production, maintenance and EHS representatives
- Photographic documentation where permitted
- Activity-wise observations and identification of priority improvement opportunities
- Recommendations for suitable control approaches and safer tool categories where applicable
- Identification of suitable pilot applications
- Written assessment report

PSC HAND SAFETY INDIA — ON-SITE
HANDS-OFF ASSESSMENT, INDIA

Professional Fee

₹45,000

per assessment day + 18% GST

**Total Including GST: ₹53,100 per
assessment day**

THE ASSESSMENT REPORT WILL GENERALLY INCLUDE

- Department and activity
- Description of the observed task
- Location of the hand exposure
- Function being performed by the hand
- Nature of the hazard and potential injury
- Existing work method
- Suggested control approach
- Recommended tool or solution category, where applicable
- Pilot recommendation
- Priority for further action

SCOPE CONDITIONS

- The fee applies per assessment day and per agreed plant location
- Departments and activities to be covered must be agreed before the visit
- The assessment will cover activities available for observation on the scheduled day
- The customer must coordinate site entry, safety induction, permissions, escorts and access
- Photographs and videos will be taken only where permitted
- If requested coverage cannot reasonably be completed in one day, additional days will be proposed at the same daily rate
- The customer remains responsible for formal risk classification and implementation
- Pilot tools and product purchases are not included in the assessment fee
- Formal SOP development, management-of-change documentation, operator certification, custom-product engineering and detailed mechanisation studies are not included unless separately agreed

Important: This is a structured technical assessment — not an open-ended vendor demonstration. The objective is to produce actionable, application-wise recommendations that can lead to practical pilot implementation.

Start by Finding the Hand

You may not need to begin with a site visit.

Begin with one department. Walk through the actual working area with the Find The Hand™ self-assessment form. Whenever you see a worker using a hand to guide, hold, push, pull, align, position, stabilise, retrieve, lift, catch or control an object — stop and observe the complete task.

ASK
Where does the hand enter?

ASK
Why is the hand there?

ASK
What could move?

ASK
What injury could occur?

ASK
Can the job be done without the hand?

Document the activity. Take one wide photograph. Take one close photograph. Record a short video where movement is involved. Add the relevant dimensions, load information and operating constraints.

Then share the completed assessment with PSC Hand Safety India.

We will review the information and help identify:

Possible engineering controls and appropriate tool categories	Suitable pilot applications
Activities requiring further investigation	Applications that may require task redesign or mechanisation
Situations where an on-site assessment would be more appropriate	

Find the Hand. Remove the Exposure. Then Select the Control.

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ENGINEERING HANDS
OUT OF HAZARDS

Disclaimer: This publication provides a practical method for identifying potential hand exposure. It does not replace the plant's statutory safety obligations, formal risk-assessment process, operating procedures, engineering review or management-of-change requirements. All tools, controls and revised work methods must be evaluated and approved by the customer under actual site conditions before implementation.