



Hand Safety and Injury Prevention

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Cummins Sales and Service - Gulf Region

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Approach

- Corporate Policy
- Business Unit policy
 - Implementation and Maintenance Team (IMT): Site safety leader shall facilitate and lead a cross-functional hand safety management team. Functions or departments typically comprising the team are: HSE, Maintenance, Facilities, Manufacturing, Operations, Purchasing and Engineering.
- Tool Kits
- HIRA
- JSA
- JSO
- PPE selection process
- Review of incidents against known hazards
- Investigate all PPE failures

Process - toolkits

Hand Hazard Identification and Assessment

Latest Revision: 04/09/2010

Name: _____

Area: _____

Date: _____

Hazard type	Hazard sub-type	Potential hand hazard IMPORTANT NOTES: - If more than one hazard sub-type is identified, add as many lines needed or describe hazards in the back to the sheet. Make sure to include hazards where incidents or near misses have occurred.	Describe exact hazard location <small>(Be as specific as possible: Operation No., Asset Number, Operation name, etc.)</small>	Describe each identified hazard <small>(Add as many lines as needed for additional hazards)</small>	Describe available controls for this hazard (If any)	Hand risk assessment (Optional)		
						Severity <small>(Choose value from 1 to 5 according to rating)</small>	Exposure and Probability <small>(Choose value from 1 to 5 according to rating)</small>	Score <small>(Severity X exposure and probability) See prioritization action plan</small>
Mechanical	Rotating objects	Are there any rotating objects where hands can be caught (i.e. lathes, drills, machining processes, saws, bench grinders, milling machines, routers, belts, gears, shafts, sprockets, spindles, drums, flywheels, chains or any other)?						0
	Pinching points	Is there any area or space where hands can be pinched or caught (i.e. press, clamps, covers or any other)?						0
	Moving objects	Are there moving objects where hands can be struck, entangled or caught (i.e. automated machines, robots, transportation lines, belt or chain conveyors, accidental starts, jewelry use or any other)?						0
	Material handling	Can hands be caught between manually transported objects or lifting equipment (i.e. hoist, cranes, pulleys, lifting chains, hooks, manually handled material or any other)?						0
	Hand tools - Impact	Can hands be injured by use, misuse or failure of impact tools (i.e. hammer, chisels, mushroomed tool, splinters, non sparking tools or any other)?						0
	Hand tools - Twist	Can hands be injured or struck by use, misuse or failure of twist tools (manual torque levers, wrenches, spanners, vises or any other)?						0
	Hand tools - Cut	Can hands be injured by use, misuse or failure of cutting tools (i.e. cutter, scissors, blades, knives, snips, hand saw, pliers, wire cutters or any other)?						0
	Power tools - General	Can hands be injured by contact/hit with objects that fly, fall, are abrasive or splash from power tools (i.e. electric, pneumatic, liquid fuel, hydraulic, and/or powder-actuated tools with spindles, sockets, abrasive wheels, nails, staples, jig saws or any other)?						0
Power tools - Electrical	Can hands be injured by contact with electricity from frayed or damaged cords, hazardous connections or improper grounding?						0	
Ergonomic	Repetitive motion	Are hands exposed to repetitive motion (i.e. same motion with little or no variation every few seconds for more than six hours with no awkward postures)?						0
	Awkward Posture	Are hands held in an awkward position for more than 2 hours?						0
	Forceful exertions	Are hands exposed to excessive grip force or bad wrist positions (i.e. pinching unsupported object >= 2 pounds or gripping unsupported object >= 10 pounds)?						0
	Vibration	Are hands exposed to vibration from tool or machine use?						0
	Extreme temperatures	Are hands exposed to extreme hot or cold activities?						0
Environment	Sharp edges	Are there any sharp edges or puncture points in the work environment where hands can be cut (i.e. unfinished surfaces, metal sheets, sharp corners, needles, sharp objects, materials, supplies, workplace or any other)?						0
	Impact	Can hands be injured from impact with hard surfaces. (i.e. Metal table corners or pallet stacks.)						0
	Falling objects	Is there any potential of falling objects that can struck hands (i.e. objects in shelves, hanging objects or any other)?						0
	Burning surfaces	Can hands be injured / burned by contact with hot surfaces (i.e. ovens, welding, oxy cut or any other) or extreme freezing processes (nitrogen)?						0
Chemical	Skin contact	Can hands be in contact with ANY chemical in the area (i.e. oil, coolant, degreaser, detergent, fuel, rust preventer or any other)?						0
Biological	Bloodborne pathogens	Can hands be in contact with blood? (i.e. emergency first responders, medical staff, help injured people or any other case)?						0
	Animal/Insect bites	Can hands be in contact with poisonous animals or insects in the workplace (i.e. spiders, bees, snakes or any other poisonous animal)?						0
Other	Please specify...							0

Hand Protection Guide

Hazard Type	Mechanical								
Hazard Sub type	Rotating Objects	Power Tools-General	Power Tools Electrical	Pinch Points	Moving Objects	Material Handling	Hand Tools-Impact	Hand Tools-Twist	Hand Tools-Cut
Potential hand hazard	Are there any rotating objects where hands can be caught (i.e. lathes, drills, machining processes, saws, bench grinders, milling machines, routers, belts, gears, shafts, sprockets, spindles, drums, flywheels, chains or any other)?	Can hands be injured by contact/hit with objects that fly, fall, are abrasive or splash from power tools (i.e. electric, pneumatic, liquid fuel, hydraulic, and/or powder-actuated tools with spindles, sockets, abrasive wheels, nails, staples, jig saws or any other)?	Can hands be injured by contact with frayed or damaged cords, hazardous connections or improper grounding?	Is there any area or space where hands can be pinched or caught (i.e. press, clamps, covers or any other)?	Are there moving objects where hands can be struck, entangled or caught (i.e. automated machines, robots, transportation lines, belt or chain conveyors, accidental starts, jewelry use or any other)?	Can hands be caught between manually transported objects or lifting equipment (i.e. hoist, cranes, pulleys, lifting chains, hooks, manually handled material or any other)?	Can hands be injured by use, misuse or failure of impact tools (i.e. hammer, chisels, mushroomed tool, splinters, non sparking tools or any other)?	Can hands be injured or struck by use, misuse or failure of twist tools (manual torque levers, wrenches, spanners, vises or any other)?	Can hands be injured by use, misuse or failure of cutting tools (i.e. cutter, scissors, blades, knives, snips, hand saw, pliers, wire cutters or any other)?
Task examples	Working with Lathes, drills, grinders, etc.	Working with any sort of power tool (electric, pneumatic, liquid fuel, hydraulic and/or powder-actuated). Working with/using grinders.	Live electrical work, testing, trouble shooting, etc.	Working around presses, seal covers, etc.	Working around belt or chain conveyors. Working around automated equipment.	Moving Engine Components Working with Sharp Objects Handling Oily Parts	Using hand tools such as hammers, impact wrenches, chisels, etc.	Using hand tools such as Torque wrenches	Box Cutter/Knife Use Working with sheet metal Working with ceramics
Glove options from Supplier A (US Safety Dept)									
Material	Not suggested	Dyneema with PU Palm Coat Duralon with PU Palm Coat Nylon with PU Palm Coat Leather Palm with PE Cuff Kevlar/Stainless Steel with Nitrile Palm Coat Pigskin Driver Taeki 5 with Leather Palm	Rubber Electrician Glove with Leather Protector	Synthetic Leather	Dyneema with PU Palm Coat Duralon with PU Palm Coat Nylon	Dyneema Coated with Nitrile Dyneema with PU Palm Coat Abratex Synthetic Leather	Lykra with VEP	Synthetic Leather	Dyneema with PU Palm Coat
General Description	Not suggested	Part Number: 8305 Sizes: XXS - XXL Description: Terminator Glove @ , Max-Ply @ seamless knit liner with All Grip® palm coating. Cut Level 2 Part Number: 3605 Sizes: 6 - 11 Description: All Grip® Glove, 15 gauge gray Duralon® liner with gray All Grip® palm coating.	Class 00 (500 volts AC Max) Class 0 (1000 volts AC Max) Class 1 (7500 volts AC Max) Class 2 (17,000 volts AC Max) Class 3 (26,500 volts AC Max) Class 4 (36,000 volts AC Max)	Part Number: 2123 or 2123NF Sizes: S - XL Description: Reversed cowhide palm with padded patches for added protection. Stretch knit back sewn-in TPU knuckle guard. Available in full finger (2123) or No Finger (NF) versions.	Part Number: 8305 Sizes: XXS - XXL Description: Terminator Glove @ , Max-Ply @ seamless knit liner with All Grip® palm coating. Cut Level 2	For Oily Applications: Part Number 5110 Sizes: 5110 (S - XXL) Cut Level 2 Part Number 99-1-9745 Sizes: 99-1-9745 (S - XL) Cut Level 2 Both gloves are made from Dyneema with a foam Nitrile coating.	501-00 Sizes: XS - XXL IMPACTO Fingerless four-way stretch Polycotton lycra glove liner. Visco-elastic polymer (VEP) padding in the palm. 601-00 Sizes: XS - XXL IMPACTO full finger polycotton lycra glove liner. Impact absorbing VEP padding in the palm and fingers.	Part Number: 2123 or 2123NF Sizes: S - XL Description: Reversed cowhide palm with padded patches for added protection. Stretch knit back sewn-in TPU knuckle guard. Available in full finger (2123) or No Finger (NF) versions.	For Razer Sharp Blades: Part Number: 9105 Sizes: XXS - XXL Description: Razer Glove, Max-Ply® Dyneema® Composite with All-Grip® Palm Coating. Cut Level 3
Glove Picture	Not suggested								

Q+A

