



IMPACT GLOVE PROTECTION BUYING GUIDE

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WHY IMPACT PROTECTION ON THE BACK OF YOUR HANDS IS NECESSARY



You use your hands every day at work, which means that they are at risk of injury from a variety of hazards.

Here are just some of the many activities industrial workers engage in where impact protection is required:

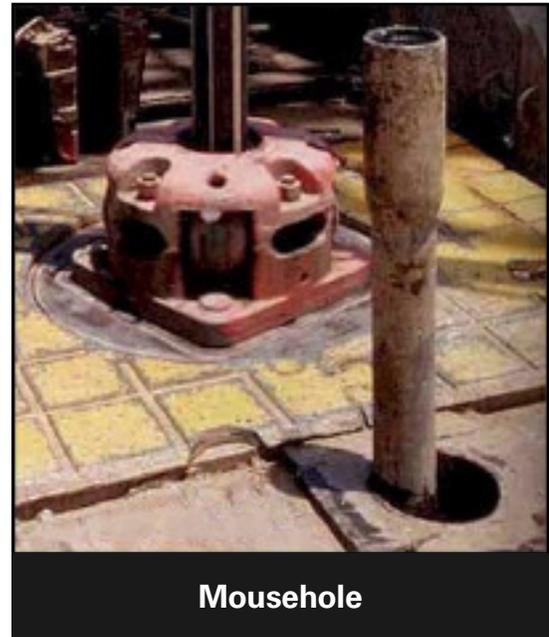
- Falling overhead objects and falling insecure materials
- General hazards during routine maintenance
- Heavy material handling and heavy loads being moved
- Improper use of tools that are loose and cracked, eventually breaking apart
- Objects that are in motion, whether moving, swinging, flying, or falling
- Repair and demolition work
- Use of mobile equipment
- Working in close quarters where pinch points are common

WHY IMPACT PROTECTION ON THE BACK OF YOUR HANDS IS NECESSARY

Common sources of injuries in the oil and gas Industry are:



- Being pinched or struck by the core barrel
- Being struck by the core as it is removed from the barrel
- Being struck by debris or overhead objects
- Construction site and rig site clearing
- Crush and impact from objects, materials, and machines
- Employees using catlines to hoist material



- Getting pinched between tongs or between pipe spinner and pipe
- Handling pipe and transferring drill pipe to the drilling platform
- Losing footing while swinging the kelly out over the mousehole
- Material handling

WHY IMPACT PROTECTION ON THE BACK OF YOUR HANDS IS NECESSARY



- Pinching fingers when latching the tongs onto the pipe
- Pinching fingers or other body parts between slips or slip handles and rotary table
- Swinging kelly and pipe
- Slippery tool handling; working with damaged tools
- Workers swinging and latching a tong
- Workers lifting, pushing, and pulling heavy items
- Valve handling
- Working with heavy spinning chains, heavy pipes, and overall heavy equipment

IMPORTANCE OF IMPACT PROTECTION IN THE OIL AND GAS INDUSTRY



Impact protection can mitigate the above hazards and risks mentioned.

Our recent blog post about the new [impact protection standard](#) explains how the industry has continued to evolve with worker safety in mind. The new standard enables employers and workers to know just how much protection is offered by the various gloves on the market.

This guide explains the impact protection rating for our gloves so that you can be sure to get the best pairs for your specific needs.

Lastly, the proper protective garments and eyewear should always be worn. You never know what material might fly off a drill pipe.

IMPORTANCE OF IMPACT PROTECTION IN THE OIL AND GAS INDUSTRY



According to the [National Safety Council](#), a workplace injury occurs every 7 seconds: 510 per hour, 12,3000 per day, and 4,500,000 per year. When you examine the injuries that involve the hand, several statistics jump out and confirm why back-of-hand protection is so important:

- Hand injuries at work were second only to back injuries in 2015. According to the Bureau of Labor Statistics, in 2015, [workers sustained more than 143,000 injuries](#) to their hands. The Bureau has also found that 76% of hand injuries occur due to cuts and crushes.
- A report in [Occupational Health and Safety magazine](#) reminds us that in the oil and gas industry, 50% of workplace injuries are to hands, though that number can rise to a whopping 80%!
- 20% of disabling workplace injuries [involve the hands](#)—with the primary cause being equipment not performing as expected. From 2009–2013, impact injuries to the wrist, finger, and hand accounted for [20% of all body parts injured in the oil and gas industry](#). A single oilfield hand injury can cost a company more than \$21,000.

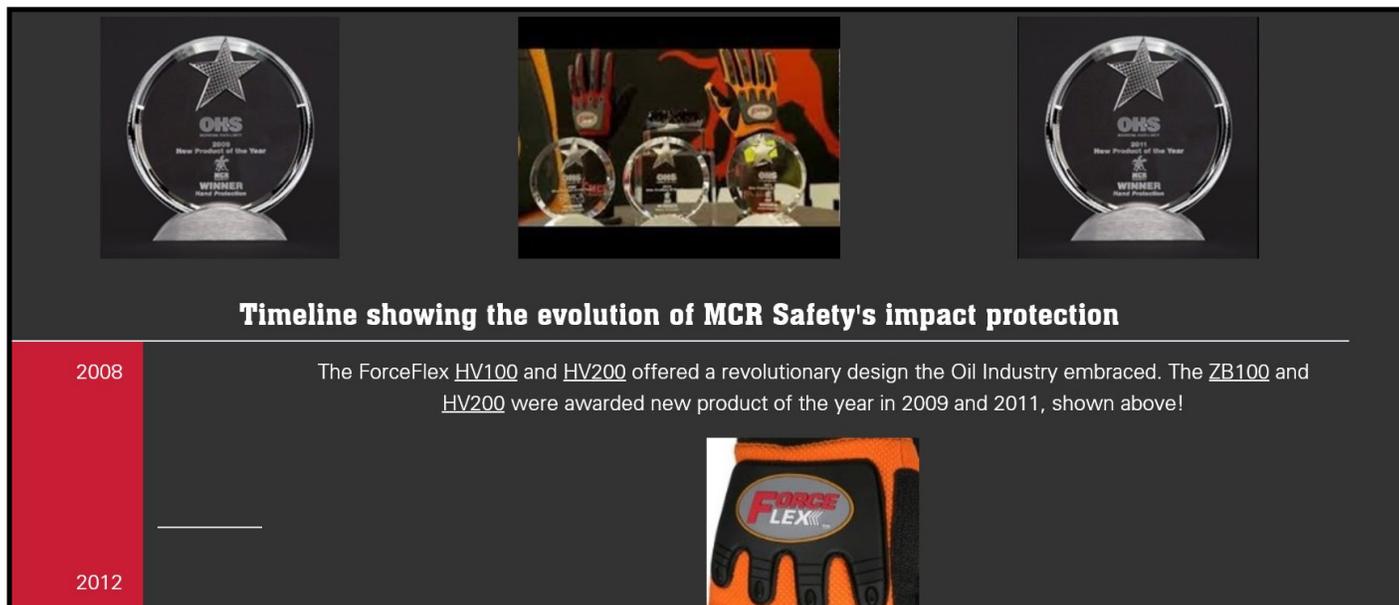
With these kind of stats, wearing the right impact gloves is essential for oil and gas workers.

WHO NEEDS IMPACT PROTECTION IN THE OIL AND GAS INDUSTRY?

The oil and gas industry employs over 297,000 workers. We outline all the occupations on our [oil and gas resource page](#). Here are the positions that definitely need to consider impact protection:

- **Derrickman** – inspects derricks, repairs mud tanks, and sets crown blocks to posts at the top of derricks
- **Installation and Maintenance Worker** – cleans machines and machine parts
- **Rotary Driller Operator and Helper** – connects sections of drill pipe, operate drilling equipment, and raise drill pipes
- **Roustabouts** – tightens pipes, casings, and pump rods
- **Service Unit Operators / Tool Pusher** – moves stuck pipe, casing, tools, or other obstructions from drilling wells, as well as installs pressure-control devices, maintains safety inspections, and operates cranes.
- **Midstream Mechanic** – fixes, maintains, and repairs all the mechanical equipment needed to move and install midstream pipes
- **Assemblers and Fabricator** – assembles bolts using many different types of tools and moving heavy parts.
- **Wellhead Pumper** – operates pumps, unloads pipes and pumping equipment, repairs oil gauges, and performs routine maintenance

MCR SAFETY'S HISTORY OF IMPACT PROTECTION



Timeline showing the evolution of MCR Safety's impact protection

2008

The ForceFlex [HV100](#) and [HV200](#) offered a revolutionary design the Oil Industry embraced. The [ZB100](#) and [HV200](#) were awarded new product of the year in 2009 and 2011, shown above!

2012



The safety of our customers has always been our top priority. Over the past forty-five years, we've used our knowledge and experience to continually bring our customers personal protective equipment that they can trust and rely on every day.

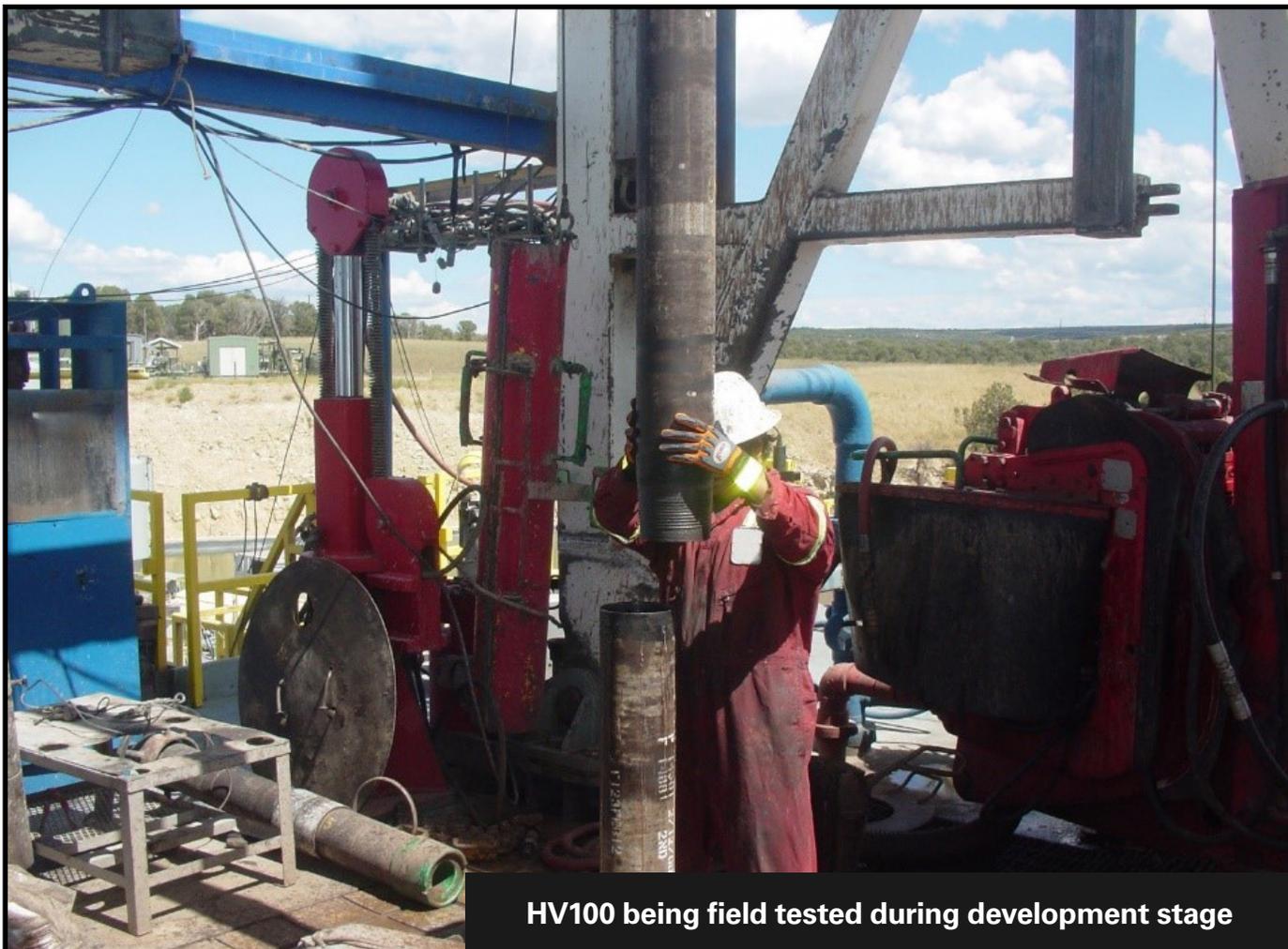
Prior to 2008, impact protection was not a key component of glove manufacturing, and most workers had to use all-purpose gloves for hazardous applications.

In May of 2008, MCR Safety and a leading oil and gas production company began [collaborating on the development of a](#)

[petrochemical industry glove](#). The goal was to create a glove that protected the backs of workers' hands to help reduce hand injuries and set an industry standard for glove protection. We succeeded with our ForceFlex [HV100](#) gloves, forever changing the industry.

By 2010, there was a confirmed 30% reduction in hand injuries for workers wearing the HV100 glove. In addition, field trials showed an average wear time of 14 working days, much longer than a standard cotton glove could offer. Now workers are protected with state-of-the-art impact protection and companies are saving money by replacing fewer gloves less often!

MCR SAFETY'S HISTORY OF IMPACT PROTECTION



Five years later, in 2013, we began offering gloves with tire tread design, which offered the most comprehensive coverage in the industry, and we've only continued to innovate. This year, we introduced our **D30® Impact Protection** gloves. These are the most innovative impact protection gloves ever introduced, with unmatched performance levels, and, of course, we're still not done.

NEW IMPACT STANDARD

2019 brings with it exciting and necessary changes to the PPE industry, specifically to impact protection gloves.

The Occupational Health and Safety report details OSHA's finding that around 30 percent of hand injuries occurred because hand protection was inadequate, damaged, or misapplied.

When it comes to impact protection, inadequate gloves are a thing of the past. There has not been a set of industry-wide standards that glove manufacturers have followed with regard to the production or testing of gloves, and claims about their effectiveness have been impossible to verify. ISEA 138, the American national standard for performance and classification for impact resistant hand protection, changes that.

Under the new standard, gloves will be rated on an impact-protection scale from level one to three. A classification of 3 means that a glove offers the

The infographic features a blue and orange work glove with various test points marked. A red line indicates a 25mm distance from the tip of the finger, and a green line indicates a 50mm distance. Yellow triangles on the knuckles represent impact points. To the right is a table titled 'Table 1. Classification for Impact Resistance' with columns for Performance Level, Mean (kN), and All Impacts (kN). Below the table are three icons representing ANSI/ISEA 138 levels 1, 2, and 3. The MCR SAFETY logo is in the bottom right corner.

Performance Level	Mean (kN)	All Impacts (kN)
1	≤ 9	< 11.3
2	≤ 6.5	≤ 8.1
3	≤ 4	≤ 5

Test Points
Distance from tip of finger
— 25mm from tip
— 50mm from tip
▲ Knuckle Impact

most protection, while a classification of 1 means that a glove offers the least. A higher performance level indicates a greater degree of protection, or reduced transmitted force.

Please take the time to read our recent blog post, "[Everything You Need to Know About The New Impact Protection Standard](#)," so that you know what changes mean for you and your workers.

IMPACT PROTECTION PAGE



MCR Safety's Impact Protection page is your go-to source for selecting the appropriate impact level protection for your individual needs. We provide a simple-to-use tool that shows gloves based on their performance level.

Click the impact protection image to select impact gloves based on performance levels.

Click on the colored bar and see all MCR Safety solutions for each ANSI Impact Level

Extreme Impact Hazards	
High Impact Hazards	2: D30 Protection
Medium Impact Hazards	1: TPR Protection
Bump Protection	0: TPR Protection

OUR GLOVES BY IMPACT PROTECTION RATING



Gloves with the **Impact Level 2** rating can transmit up to and including ≤ 6.5 kN of mean transmitted force to the back of the hand.

IMPACT LEVEL 2



FF2930 moving some heavy pipe

We're expanding our ForceFlex® line of multi-task gloves. We are proud to be the first manufacturer to offer D3O® technology high-shock absorbing protection both in the palm and back-of-hand in multi-task gloves. These gloves are must-haves for anyone in the oil and gas, construction, mining, manufacturing, demolition, transportation, and landscaping industries, as well as anyone who operates heavy equipment. [See them in action!](#)

**IMPACT
LEVEL 2**

FF2930 FORCEFLEX[®] MULTI-TASK



FF2930

**D3O[®] Back of Hand and Padded Palm
Gloves Available in sizes M-XXL.**

FF2930's great features:

- Back of hand D3O[®] impact dissipation up to 54% better while 57% thinner
- D3O[®] Impact dissipation on fingers up to 46% better while 37% thinner
- Patented D3O[®] palm padding helps dissipate impact and vibration
- Orange MaxGrid™ pattern reinforced palm tailored to provide grip in dry, wet, or oily conditions

OUR GLOVES BY IMPACT PROTECTION RATING



ANSI / ISEA 138



1

IMPACT LEVEL 1
Medium Impact Hazards

Gloves with the Impact Level 1 rating can transmit up to and including ≤ 9 kN of mean transmitted force to the back of the hand.

IMPACT LEVEL 1



MU3634K holding a striking wrench

Impact level 1 gloves are tough! They'll allow you the ability to get difficult jobs done while protecting your hands from a variety of hazards across a wide range of industries: oil and gas and beyond. From baggage claim to the railroad, salvage to sanitation, construction to demolition, forestry to automotive work, gloves in this category have you covered.

Products with an Impact Level One are broken up into two categories. One category has TPR protection and the other has Predator tire tread TPR protection.

Forceflex TPR protection

- [HV100](#), available in sizes M-XXXL
- [KV200](#), available in sizes M-XXL
- [MO100](#), available in sizes M-XXL
- [MO200](#), available in sizes M-XXL

MCR Safety TPR protection

- [MU3634K](#)

MCR Safety Ninja Alchemy TPR protection

- [N2685HVO](#)

Predator Tire Tread TPR Protection

- [PD2901](#), available in sizes M-XXL
- [PD2903](#), available in sizes M-XXL
- [PD2904](#), available in sizes M-XXL
- [PD2906](#), available in sizes M-XXXL

**IMPACT
LEVEL 1**

**HV100
FORCE FLEX TPR
PROTECTION**



HV100

- Rough Kevlar® reinforced palm with EVA padding in a reinforced palm
- Neoprene slip-on cuff with side flex panels
- Reflexite® micro-prismatic retroreflective material on both sides of cuff



IMPACT LEVEL 1 WITH CUT PROTECTION

KV200 FORCE FLEX TPR PROTECTION



KV200

- Adjustable hook and loop wrist closure with pull tab
- Kevlar® 360 lining and TPR padding on back of hand and fingers



DuPont™
Kevlar.



IMPACT LEVEL 1



MO100



MO200

MO100 AND MO200 FORCE FLEX TPR PROTECTION



MO200 100 gram
Thinsulate™ lined
with a water and
windproof bladder



- D3O® reinforced palm to assist with impact and vibration
- Tough but touchscreen-friendly synthetic palm scores a high level 4 abrasion
- Shadow Grass® Blades® pattern on the breathable material back

IMPACT LEVEL 1 WITH CUT PROTECTION



MUG3634K

- Premium brown goatskin leather
- A second layer of premium brown goatskin in the palm, fingertips and knuckle
- Sewn with DuPont™ Kevlar® thread
- DuPont™ Kevlar® lined for outstanding cut protection

MUG3634K MCR SAFETY TPR PROTECTION



DuPont™
Kevlar.



IMPACT LEVEL 1 WITH CHEMICAL AND LIQUID PROTECTION



N2658HVO

- 14" gauntlet cuff PVC double coated
- 15 - gauge nylon shell
- Sandy finish
- Waterproof

N2658HVO NINJA ALCHEMY TPR PROTECTION



IMPACT LEVEL 1



Predator Tire Tread TPR Protection

- [PD2901](#), available in sizes M-XXL
- [PD2903](#), available in sizes M-XXL
- [PD2904](#), available in sizes M-XXL
- [PD2906](#), available in sizes M-XXXL



PD2903 in action at a refinery

**IMPACT
LEVEL 1**

**PD2901
PREDATOR TIRE TREAD
TPR PROTECTION**



PD2901

- Multi-task, red textured PU-coated synthetic palm
- High-visibility lime-colored



**IMPACT
LEVEL 1**

PD2903 PREDATOR TIRE TREAD TPR PROTECTION



PD2903

- D3O® palm padding to reduce impact and vibration
- Cow-grain palm
- Reinforced thumb crotch



**IMPACT
LEVEL 1**

**PD2906
PREDATOR TIRE TREAD
TPR PROTECTION**



PD2906

- Multi-task, red textured PU-coated synthetic palm
- High-visibility lime-colored



**IMPACT
LEVEL 1**

**PD2904
PREDATOR TIRE TREAD
TPR PROTECTION**



PD2904

- Synthetic leather palm
- Polymer pads on fingertips, palm, and thumb crotch



OUR GLOVES BY IMPACT PROTECTION RATING

BUMP PROTECTION



These gloves offer great bump protection in a wide range of industries. They provide back of hand protection and a great grip. Some have a reinforced thumb crotch and several offer additional padding on the palm.

[PD2950](#)

[PD2951](#)

[PD2952](#)

[PD2953](#)

[PD2954](#)

[PD2955](#)

BUMP AND CUT PROTECTION

PD2955 PREDATOR TPR BUMP PROTECTION



PD2955

- Salt and pepper 13-gauge Hypermax™ synthetic shell
- Black foam nitrile palm and fingers



BUMP AND CUT PROTECTION

PD2954 PREDATOR TPR BUMP PROTECTION



PD2954

- Salt and pepper 13-gauge Hypermax™ synthetic shell
- EVA foam-padded palm
- Black foam nitrile palm and fingers



BUMP PROTECTION WITH THERMAL INSULATION

PD2951 PREDATOR TPR BUMP PROTECTION



PD2951

- Black 15-gauge nylon shell
- 7-gauge brushed acrylic liner
- Black foam nitrile palm and fingers



BUMP AND CUT PROTECTION

PD2952 PREDATOR TPR BUMP PROTECTION



PD2952

- Black 10-gauge DuPont™ Kevlar®/synthetic shell
- EVA foam-padded palm
- Black foam nitrile palm and fingers



DuPont™
Kevlar.



BUMP PROTECTION WITH HIGH DEXTERITY

PD2950 PREDATOR TPR BUMP PROTECTION



PD2950

- Black 13-gauge nylon shell
- Black foam nitrile palm and fingers



BUMP AND CUT PROTECTION

PD2953 PREDATOR TPR BUMP PROTECTION



PD2953

- Salt and pepper 13-gauge DSM Dyneema® Diamond Technology shell
- EVA foam-padded palm
- Blue foam nitrile palm and fingers



ULTRATECH® TPR BUMP PROTECTION



MC504 holding a large hammer

- [MC500](#), available in sizes S-XXL
- [MC502](#), available in sizes M-XXL
- [MC503](#), available in sizes S-XXL
- [MC504](#), available in sizes M-XXL
- [UT2952](#), available in sizes S-XXL
- [UT2953](#), available in sizes S-XXL

BUMP AND CUT PROTECTION

MC500 ULTRATECH TPR BUMP PROTECTION



MC500

- Hypermax™ synthetic shell with brushed nylon lining
- Silicone diamond patterned palm



BUMP PROTECTION

MC502 ULTRATECH TPR BUMP PROTECTION



MC502

- Synthetic leather palm
- G-shaped palm padding with reinforced high-abrasion material
- Padded palm provides impact and vibration reduction



BUMP AND CUT PROTECTION



MC503

- Premium goatskin palm
- DSM Dyneema® Diamond Technology palm lined
- Wing thumb with reinforced thumb crotch

MC503 ULTRATECH TPR BUMP PROTECTION



BUMP AND HEAT PROTECTION



MC504

- Corded cotton double palm for added heat-resistance
- Tested to ANSI Contact Heat Level 2 – 200°C or 392°F
- Reinforced thumb crotch

MC504 MCR SAFETY TPR PROTECTION



BUMP AND CUT PROTECTION



UT2952

- 13-gauge salt and pepper Hypermax™ synthetic shell
- Orange foam nitrile palm and fingers

UT2952 MCR SAFETY TPR PROTECTION



BUMP AND CUT PROTECTION



UT2953

- 13-gauge salt and pepper Hypermax™ synthetic shell
- Red foam nitrile palm and fingers
- Padded palm provides impact and vibration reduction

UT2953 MCR SAFETY TPR PROTECTION



OUR GLOVES BY IMPACT PROTECTION RATING



WELDING IMPACT LEVEL 1 GLOVES

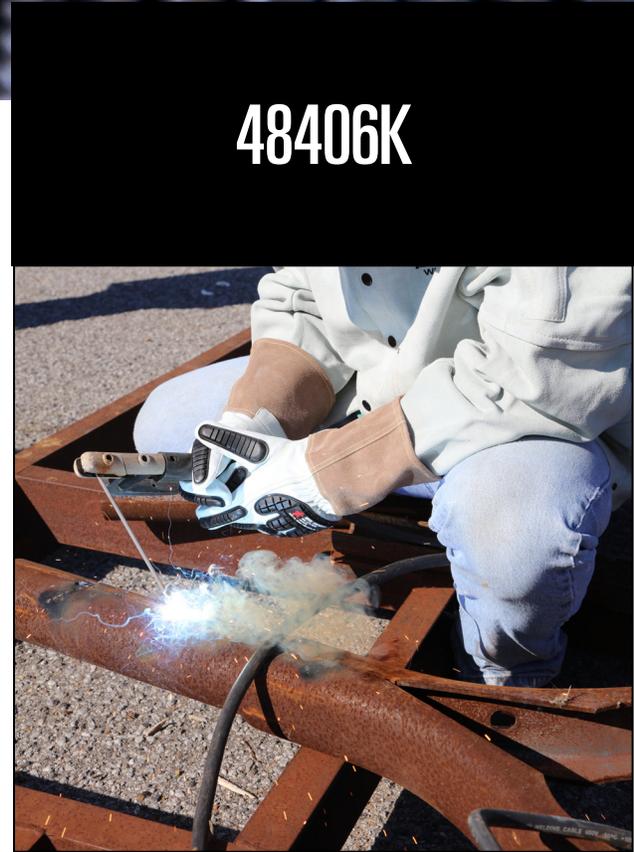
MCR Safety offers a [variety of welding gloves](#) for all your welding needs. Check out our brand new impact level one welding gloves featured on the upcoming pages.

WELDING IMPACT LEVEL 1 WITH CUT PROTECTION



48406K

- Premium Top Grain Goatskin
- Padded palm
- Lined with DuPont Kevlar for additional heat and cut protection
- Sewn with Dupont™ Kevlar®
- 11" total length including a 2.5" brown split cow leather cuff



DuPont™
Kevlar.



WELDING IMPACT LEVEL 1

48406T



48406T

- Premium Top Grain Goatskin
- Padded palm
- Thinsulate® lined for protection in cold environments
- Sewn with Dupont™ Kevlar®
- 11" total length including a 2.5" brown split cow leather cuff

MCR SAFETY
**CUT
PRO**

DuPont™
Kevlar.



WELDING IMPACT LEVEL 1 WITH CUT PROTECTION

36136HP



36136HP

- Select Grade Grain Goatskin
- Hypermax™ lined to allow ANSI A4 cut protection
- TPR back for added impact protection

MCR SAFETY
**CUT
PRO**

H
HYPERMAX

OIL AND GAS INDUSTRY RESOURCES

Didn't find what you were looking for in our guide? No worries. We cover a whole lot more on our [oil and gas](#) sub-industry pages.



Exploration Drilling and Production



Pipeline Transportation and Storage



Refining



Oilfield Equipment and Services

More information about impact protection can be found on our [Impact Protection Resource Page](#) and in our [blog posts about Impact Protection](#). Don't forget to read our post about the new standard, [everything you need to know about the new impact protection standard](#).

PROTECTING PEOPLE EVERY DAY

When it comes to safety in the oil and gas industry,
our position can be summarized by our motto:

We Protect People.

If you have any questions at all about how to choose the
right personal protective equipment for yourself or your
workers, we are happy to get you pointed in the right
direction based on your specific needs.

Just [contact us](#) to get started.

