RADIANS®

CUT PROTECTION GLOVES

FAST FACTS

sales@radians.com | www.radians.com | 877-723-4267

A FEW FUN FAST FACTS ABOUT HANDS:

DID YOU KNOW EACH HAND CONTAINS:

- 29 major and minor bones (many people have a few more)
- 29 major joints
- At least 123 named ligaments
- 35 muscles which move the fingers and thumb
  - -17 in the palm of the hand, and
  - -18 in the forearm
- 48 named nerves
- 3 major nerves
- 24 named sensory branches
- 21 named muscular branches
- 30 named arteries and nearly as many smaller named branches
- The bones in your fingers are no stronger than a lead pencil

THE COST OF UNSAFE HANDS:

HERE ARE SOME HAND STATISTICS FROM THE CDC & OSHA:

If all workers, from medical to industrial and everything in between, would just wear gloves, then more than 1 million hospital emergency visits by U.S. workers per year could be avoided (according to the Centers for Disease Control and Prevention).

- Hand Injuries have cost employers over **$740 MILLION** dollars in the US last year (lost time, settlements, etc).
- Non-compliance of PPE hand protection is among one of the most common OSHA citations to date, costing employers on average **$6,000** per citation.

OSHA 1910.132(h)(1) *requires that protective equipment, including PPE, shall be provided by the employer at no cost to the employees. It's not a one shot deal- as a business owner, you have to be compliant every hour of every day. Safety has to be top of mind, comfort leads to compliance. Don't let your workers become a statistic!*

ANSI CUT LEVEL RATINGS

There are many kinds of cut hazards, and each one requires a different level of protection. Use the table below to help determine the cut level rating necessary for your work environment.

ANSI/ISEA CUT LEVEL A1

LIGHT CUT HAZARDS:
material handling, assembly, maintenance, packaging, warehouse, general purpose, construction

200 - 499 grams

ANSI/ISEA CUT LEVEL A2

LIGHT/MEDIUM CUT HAZARDS:
material handling, assembly, maintenance, packaging, warehouse, general purpose, construction, metal handling, appliance manufacturing

500 - 999 grams

ANSI/ISEA CUT LEVEL A3

LIGHT/MEDIUM CUT HAZARDS:
material handling, assembly, maintenance, packaging, warehouse, general purpose, construction, metal handling, appliance manufacturing

1000 - 1499 grams

ANSI/ISEA CUT LEVEL A4

MEDIUM CUT HAZARDS:
bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing

1500 - 2199 grams

ANSI/ISEA CUT LEVEL A5

MEDIUM CUT HAZARDS:
bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing

2200 - 2999 grams

ANSI/ISEA CUT LEVEL A6

MEDIUM/HEAVY CUT HAZARDS:
bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing

3000 - 3999 grams

ANSI/ISEA CUT LEVEL A7

MEDIUM/HEAVY CUT HAZARDS:
bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing, meat processing

4000 - 4999 grams

ANSI/ISEA CUT LEVEL A8

HEAVY CUT HAZARDS:
bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing, meat processing

5000 - 5999 grams

ANSI/ISEA CUT LEVEL A9

HEAVY CUT HAZARDS:
bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing, meat processing

6000+ grams

EN388

EN388

EN388 ratings are also noted on Radians hand protection. EN388 includes more specific information about the resistance to particular types of hazards you may encounter on the job. There are five numbers listed which indicate the level of resistance to puncture, tearing, blade cut and abrasion. Look at the diagram to the left to reference which number corresponds to which hazard.

4 X 4 4 C X

- → Impact Test
- → TDM-100 Test
- → Puncture Resistance
- → Tear Resistance
- → Blade Cut Resistance
- → Abrasion Resistance

A EN388

LIGHT CUT HAZARDS:

Light material handling, small parts assembly without sharp edges

204 - 508 grams/2 - 4.9 newtons

B EN388

LIGHT/MEDIUM CUT HAZARDS:

Packaging, warehouse, light duty general purpose

509 - 1,019 grams/5 - 9.9 newtons

C EN388

MEDIUM CUT HAZARDS:

Light duty metal handling, metal stamping, HVAC, light duty glass handling, plastics, material handling

1,020 - 1,529 grams/10 - 14.9 newtons

D EN388

MEDIUM/HEAVY CUT HAZARDS:

Light duty metal handling, appliance manufacturing, bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC

1,530 - 2,242 grams/15 - 21 newtons

E EN388

MEDIUM/HEAVY CUT HAZARDS:

Metal stamping, sheet metal handling, glass handling, automotive assembly

2,243 - 3,058 grams/22 - 29.9 newtons

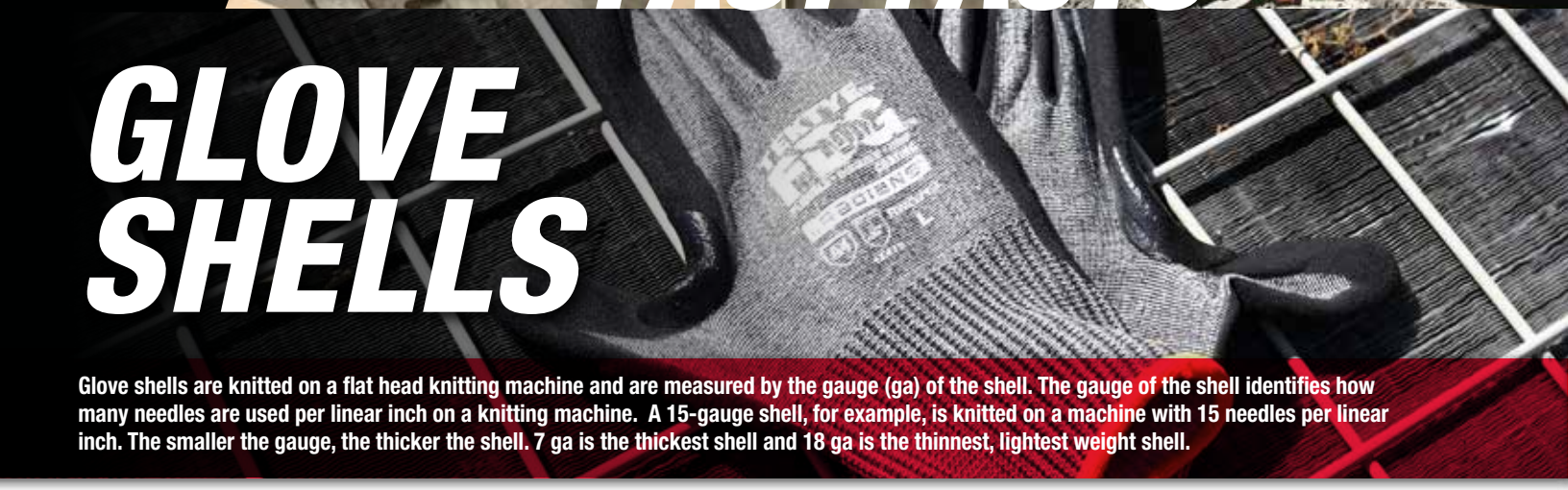
F EN388

HEAVY CUT HAZARDS:

Heavy duty metal stamping, metal recycling, food processing, pulp and paper

3,059+ grams/30+ newtons

GLOVE SHELLS

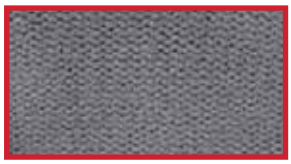


Glove shells are knitted on a flat head knitting machine and are measured by the gauge (ga) of the shell. The gauge of the shell identifies how many needles are used per linear inch on a knitting machine. A 15-gauge shell, for example, is knitted on a machine with 15 needles per linear inch. The smaller the gauge, the thicker the shell. 7 ga is the thickest shell and 18 ga is the thinnest, lightest weight shell.

SHELL DESCRIPTIONS

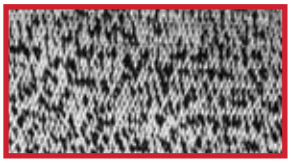
POLYESTER:

- Monofilament Yarn
- Single Fiber, Not Twisted



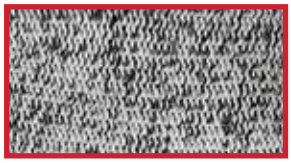
NYLON:

- Man-Made Yarn
- Durable
- Excellent Abrasion Resistant
- Varying Luster



HPPE:

- High Performance Polyethylene
- Same as HDPE or UHMwPE
- Offers Cut Levels A2-A3

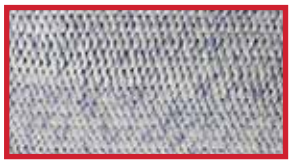


HPPE WITH FIBERGLASS &/OR STAINLESS STEEL :

- Reinforced HPPE
- The addition of fiberglass can increase to A3 cut level
- The addition of stainless steel can increase to A5 or higher cut level

KEVLAR®:

- Engineered Yarn by DuPont®
- Fire Resistant
- Offers High Cut Levels
- Is available in gloves and cut sleeves



DYNEEMA® DIAMOND TECHNOLOGY:

- Uses embedded micro fibers to strengthen fibers up to 2x
- Offers higher cut levels
- Has great durability and abrasion resistance
- Cool to the touch

TEKTYE™ by RADIANS®

This engineered yarn can get to an ANSI cut level of A4 **WITHOUT THE USE OF FIBERGLASS OR STAINLESS STEEL.**

Provides more comfort and dexterity vs HPPE with Fiberglass or Stainless Steel.

Cost effective option for higher cut levels.

GLOVE COATINGS

To address specific work-related hand protection issues, Radians uses several different types of palm coatings: smooth nitrile, foam nitrile, sandy foam nitrile, foam latex, sandy foam latex, crinkle latex, PU (polyurethane), and FDG™. Palm coatings allow for better gripping capabilities and tactile sensation without losing dexterity.

COATING DESCRIPTIONS:

SMOOTH NITRILE

- Excellent Abrasion Resistance
- Synthetic Rubber, Latex Free
- Excellent Puncture Resistance
- Tactile Sensitivity and Flexible Grip

FOAM LATEX

- Micro Texture
- Better Breathability and Comfort
- Excellent Flexibility
- Resistant to Tears and Cuts

FOAM NITRILE

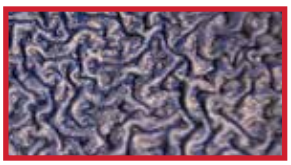
- Lightweight Micro Texture
- Good Grip in Wet or Dry Applications
- Breathable, Flexible and Porous
- Excellent Abrasion Resistance

SANDY FOAM LATEX

- Micro-Roughened Texture
- Better Breathability and Comfort
- Excellent Flexibility
- Resistant to Tears and Cuts

SANDY FOAM NITRILE

- Micro-Roughened Texture
- Excellent Grip in Wet or Dry Applications
- Breathable, Flexible and Porous
- Excellent Abrasion Resistance



CRINKLE LATEX

- Rough Texture for Better Grip and Abrasion
- Better Breathability and Comfort
- Excellent Flexibility
- Resistant to Tears and Cuts

MICROFOAM NITRILE

- Micro Textured
- Excellent Abrasion Resistance
- Good Grip in Wet or Dry Applications
- Breathable, Flexible and Porous

PU (POLYURETHANE)

- Semi-Smooth Texture
- Extremely Flexible
- Superior Dexterity
- Not as Durable as Nitrile or Latex

- Proprietary, Engineered Coating by Radians
- Flexible and Durable
- Provides Better Grip than Nitrile

FDG: WHY IS IT IMPORTANT?

When dealing with Foam, Micro Foam or Sandy Foam Nitrile to get the best grip you must give up some abrasion resistance and to get the best abrasion resistance you have to give up some grip.

With FDG you no longer must give up any of these. You get the **BEST OF BOTH WORLDS.**

GRIP
Good: Micro Foam Nitrile
Better: Foam Nitrile
Best: Sandy Foam Nitrile
Exceptional: *FDG™*

ABRASION
Good: Sandy Foam Nitrile
Better: Foam Nitrile
Best: Micro Foam Nitrile
Exceptional: *FDG™*

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HEADQUARTERS
5305 Distriplex Farms Drive
Memphis, TN 38141
Toll Free: 877-723-4267
Phone: 901-388-7776 • Fax: 901-266-2558
www.radians.com

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