

## HAND PROTECTION TEST STANDARDS

Standards specify test methods and focus on levels, not the measured property. Two hand protection performance standards are widely used: the American National Standards Institute/International Safety Equipment Association (ANSI/ISEA) 105 “American National Standard for Hand Protection” and the European standard EN 388 “Protective Gloves Against Mechanical Risks.” ANSI/ISEA 105 defines levels for the mechanical, thermal, chemical and dexterity performance of hand and arm PPE.

### ANSI/ISEA 105



LEVEL	A1	A2	A3	A4	A5	A6	A7	A8	A9
WEIGHT*	≥ 200	≥ 500	≥ 1000	≥ 1500	≥ 2200	≥ 3000	≥ 4000	≥ 5000	≥ 6000

\* Weight (grams) needed to cut through material with 20 mm blade travel.

### EN 388 MECHANICAL HAZARDS TEST DATA



TDM-100 TEST	NEWTON SCORES*
A	≥ 2
B	≥ 5
C	≥ 10
D	≥ 15
E	≥ 22
F	≥ 30

\* Weight (grams) needed to cut through material with 20 mm blade travel.

- 1 Abrasion Resistance 0-4 Rating
- 2 Cut Resistance 0-5 Rating
- 3 Tear Resistance 0-4 Rating
- 4 Puncture Resistance 0-4 Rating
- 5 Cut (TDM-100 Test) A-F Rating
- 6 Impact Protection P

## GUIDE TO NEW CUT LEVELS

### ANSI

#### OLD CPPT CUT TEST METHOD

LEVEL	Level 1	Level 2	Level 3	Level 4	Level 5
WEIGHT*	≥ 200	≥ 500	≥ 1000	≥ 1500	≥ 3500

\* Weight (grams) needed to cut through material with 25 mm blade travel.

#### NEW TDM-100 CUT TEST METHOD

LEVEL	A1	A2	A3	A4	A5
WEIGHT*	≥ 200	≥ 500	≥ 1000	≥ 1500	≥ 2200
LEVEL	A6	A7	A8	A9	
WEIGHT*	≥ 3000	≥ 4000	≥ 5000	≥ 6000	

\* Weight (grams) needed to cut through material with 20 mm blade travel.

### EN 388

#### OLD COUPE TEST METHOD

COUPE TEST	Level 1	Level 2	Level 3	Level 4	Level 5
CUT INDEX*	≥ 1.2	≥ 2.5	≥ 5.0	≥ 10.0	≥ 20.0

\* Force applied is constant at 5 Newtons.

#### NEW TDM CUT TEST METHOD

ISO 13997	Level A	Level B	Level C	Level D	Level E	Level F
NEWTON SCORES*	≥ 2	≥ 5	≥ 10	≥ 15	≥ 22	≥ 30

\* Weight needed to cut through material with 20 mm blade travel.