# **Crash Test Results**

**New Car Safety** 

# **HYUNDAI i30 (LHD)**

Oct 2009 on Front+side+head airbags



Occupant Protection

#### Occupant Protection Score 32.54 out of 37

Variant: GLS 5dr hatch Eng: 1.6

Kerb weight: 1290 kg Category: CAR - SMALL Vehicles built: 2007 Tested by Euro NCAP

**Important note**: The *left-hand-drive* European model was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

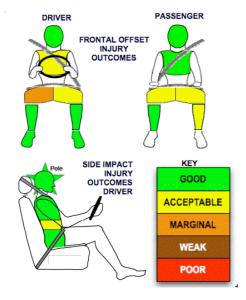
#### **Model History and Safety Features**

The tested model of Hyundai i30 was introduced in Australia during 2007. This 5-stars rating applies to all i30s built from October 2009. Prior to this some i30s were rated 4 stars (see separate ANCAP ratings).

Dual front airbags, side airbags, head-protecting side curtains, antilock brakes (ABS) with electronic brake distribution (EBD) and electronic stability control (ESC) are now standard on all variants. Intelligent seat belt reminders are fitted to both front seats. Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

## **OCCUPANT PROTECTION: 5 Stars**

The i30 scored 12.97 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver. The vehicle scored 15.57 out of 16 in the side impact crash test. There was a slight risk of serious abdomen injury for the driver. A further two points were earned in the optional pole test.





Offset crash test at 64km/h

## FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.04 pts, upper legs 2.17 pts, lower legs 3.76 pts.

The passenger compartment held its shape well in the offset crash test. The clutch pedal moved 97mm rearward and 25mm upwards. The steering wheel hub moved 1mm forward, 13mm downward and 4mm sideways. The front ("A") pillar moved 16 mm rearwards. All doors remained closed during the crash. High effort was required to open the driver's door after the crash.

The airbag cushioned the head of the driver and contact was stable. The side curtain also deployed. Dash components were a potential source of injury for the driver and passenger knees. The passenger's head was cushioned by the airbag.

#### SIDE IMPACT CRASH TEST (v4.1)

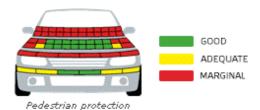
Body region scores out of 4 points each: Head 4 pts, chest 4 pts, abdomen 3.57 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

#### **PEDESTRIAN PROTECTION RATING (v4.1)**

Protection for the head of a struck child was predominantly fair. However, protection of adults' heads was poor, as was the protection offered by the front edge of the bonnet.

PEDESTRIAN PROTECTION	Child head impacts	8.73
ANCAP	Adult head impacts	Zero
Rated ★ ★ ★	Upper leg impacts	Zero
	Lower leg impacts	4.84
Tested by Euro NCAP	Total (out of 36)	13.57



#### November 2009

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# TECHNICAL DATA - HYUNDAI i30 - Oct 2009 on

#### **INJURY MEASUREMENTS**

Body region		Offset Crash Te	Side Impact Crash Test at 50km/h (v4.1)	
		Driver	Passenger	Driver
Head HIC		156	200	48
Acceleration (g for 3ms)		33.0	36.4	30.7
Neck - Shear (kN)		0.40	0.43	-
Tension (kN)		1.12	0.79	-
Extension (Nm)		7.9	24.1	-
Chest Accln (g for 3ms)		-	-	-
Compression (mm)		28.75	19.44	19.88
Viscous criterion (m/s)		0.12	0.06	0.13
Abdomen - Force (kN)		-	-	1.160
Pelvis - Force (kN)		-	-	1.010
Upper legs Force (kN)	Left	1.86	2.85	
	Right	1.89	0.21	
Knee displ (mm)	Left	0.10	0.00	
,	Right	7.87	0.40	
Lower legs Force (kN)	Left	0.69	2.36	
	Right	1.27	1.61	
Index (Upper/Low)	Left	0.17 /0.16	0.41 /0.23	
, , ,	Right		0.39/0.3	

#### **Bonus points (maximum 5)**

Pole Test: 2

Seat belt reminders: 2 (see table below for details)

#### Modifiers - deductions from offset test scores

Head No deduction
Chest No deduction

Upper leg Variable contact` 1 pt deduction Drv L & R 1 pt deduction Pass L & R

Lower leg No deduction Foot score Score 4 points

# Modifiers - deductions from side impact test scores

Chest No deduction

# Safety features (all i30 built from October 2009)

These specifications are subject to change. Please check with manufacturer for the latest specifications.

Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution/Brake Assit	S/S/X
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S
Side airbags, front seats - chest protection	S	3 point centre rear seat belt	S
Side airbags. front seats - head protection	S	Active head restraints - front seats	S
Side airbags. rear seats - head protection	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	Х	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners front/rear outboard	S/X	Rear seat belt status indicator	X*

<sup>\*</sup> The vehicle rated by Euro NCAP had a rear seat belt status indicator. This is not available on the Australian model. Key:

S = standard on all variants

O = optional on base variant. May be standard on higher variants

V= not available on base variant but standard or optional on higher variants

X = not available on any variant



