

# Global and China Automotive Safety System Industry Report, 2009-2010



Traditional automotive safety system mainly refers to airbag and seat belt. The driver's airbag is installed on the steering wheel, and the airbag can only help while the occupant is wearing the seat belt, therefore, the main products of traditional automotive safety system manufacturers are airbag, steering wheel and seat belt, and airbag is the most important.

An airbag system mainly consists of electric devices and components including ECU, crash sensor (installed within ECU in centralized systems, and outside ECU in distributed systems), alarm device, airbag inflator and airbag cover, seat occupancy sensor, connectors and wiring harness.

Sensor and MCU (ECU core) are electronic products, and there is no airbag manufacturer capable of producing them. Veteran airbag manufacturers are capable of independently producing airbag inflators and airbag covers, while new entrants such as Jinheng and Mobis need to buy such products. Japan's Daicel and the United States' ARC Automotive are among the few airbag inflator manufacturers, and the United States' ITG is one of the few airbag cover manufacturers.

The airbag market potential is huge. Now, the majority of low-end auto models are equipped with two front airbags, middle-end models, with additional front side airbags, mid-to-high-end models, with additional front and rear air curtains, luxury models, with additional rear side airbags or knee airbags. While only luxury cars had front passenger seat airbags a decade ago, the cars sold at RMB50, 000 today are equipped with both driver and passenger airbags, front side airbags and front and rear air curtains. The number of airbags, especially the airbags for low-end auto models, is increasing, since people are always willing to pay for safety. It is expected that the average number of airbags per passenger vehicle will be 2.8 by 2013, and the total airbag demand will be five times higher than that in 2008.

In the meantime, the airbag industry is changing, and the entry barrier has become lower. It's no longer difficult to buy MCUs, sensors, airbag inflators and airbag covers, as well as to manufacture airbags. A number of airbag manufacturers have emerged, though holding market shares far less than that of veteran airbag manufacturers.

Key automotive safety system manufacturers include AUTOLIV, TAKATA, Toyoda Gosei, KSS and TRW. AUTOLIV, the leader in automotive safety systems field, dominates the markets in North America, Europe, Asia-Pacific, India and South America. It acquired Delphi automotive safety systems business at the end of 2009 to further consolidate its dominance.

TAKATA and Toyoda Gosei are the first choices for Japanese auto brands. TAKATA is affiliated to Toyota, but Toyota is not its biggest client. It became a supplier of BMW through the acquisition of Germany's Petri, and it's also the key supplier for Ford and Chrysler. Toyoda Gosei generally only supplies Toyota, TRW mainly supplies VW, GM, Ford and Chrysler, and KSS mainly supplies Ford and Fiat.

### Revenue of Global Major Automotive Safety Systems Manufacturers, 2009-2010

	Revenue, 2009 (USD mln)	Revenue, 2010 (USD mln)
AUTOLIV	7347	8924
TAKATA	3774	3780
TRW	2904	3545
Toyoda Gosei	1547	1350
TOKAIRIKA	868	820
Jinheng	143	160
East Joy Long	31	40
KSS	1008	1120
Mobis	408	452
Delphi	350	
Others	520	508

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