

LINEAR IMPACTOR

ARIES offers flexible turn-key solutions specifically designed to fit each customer's needs.

ARIES provides state-of-the-art impact systems ranging from the basic linear impactor to more complex solutions including:

- Interior safety testing.
- Synchronized testing (Airbag evaluation).
- Guided or free-flight impacts.
- Different impactors: headform, bodyblock...
- Lighting system integration.
- Single actuator for full energy range cover.

These facilities can be used for R&D purposes and to check international regulations and standards compliance (ECE R12, ECE R21, FMVSS 203, FMVSS 201, etc.).



DIN EN ISO 9001: 2000
GLC n.: QS-1547 HH



Key Features

Wide energy range without system modification.

Hydraulic instead of pneumatic powered.

Hydraulic control.

Closed loop speed control.

External guides.

Benefits

Single accelerator covers low and high-end energies without necessity of changes.

Hydraulics provides the possibility of performing high energy tests without penalty on the size or on the safety.

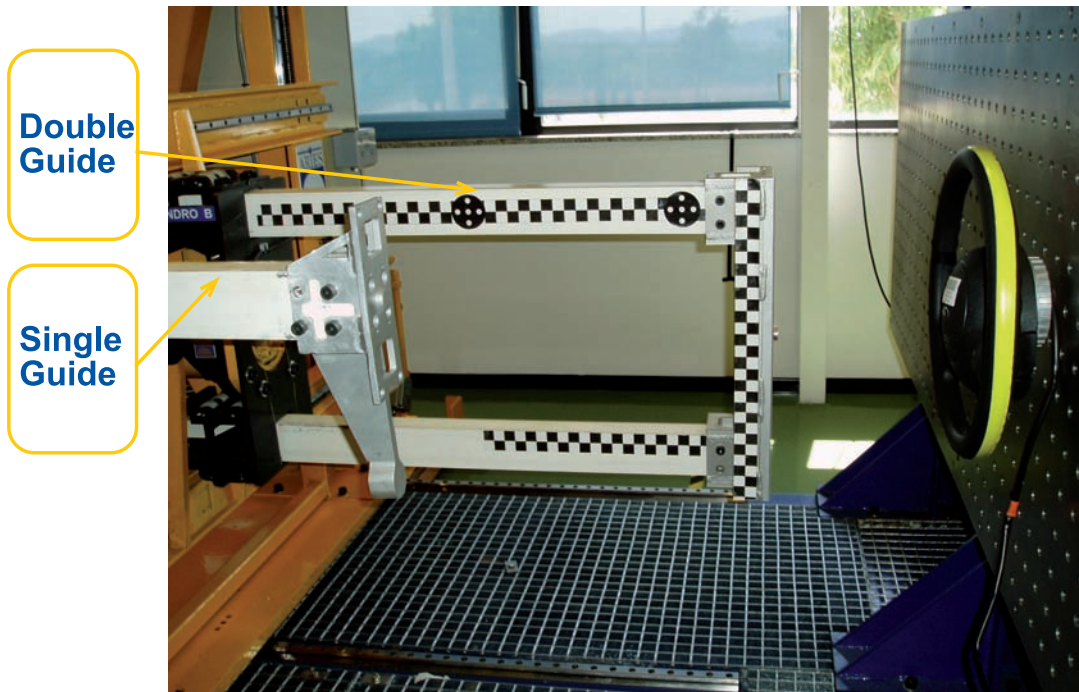
High repetatability and synchroization possibility.

Real time speed / force control.

Avoids misaligned loads over the cylinder shaft and makes adaptation to custom impacts easier.

MULTIPLE POSSIBILITIES IN ONE IMPACTATOR

ARIES basic impactor can be easily upgraded to perform complex tests taking advantage of the common hardware. Very accurate synchronization of one or more actuators with any event (e.g. Airbag deployment) is possible thanks to the electro - hydraulic control system.



Control system:

A PC + Real Time Controller control system automatically manages the event preparation and trigger. It also provides continuous monitoring and control of the safety interlocks in a user fully customized friendly interface.

Guiding system:

An external guide system ensures the cylinder rod takes only axial forces improving the life-cycle of the product and its maintenance requirements.

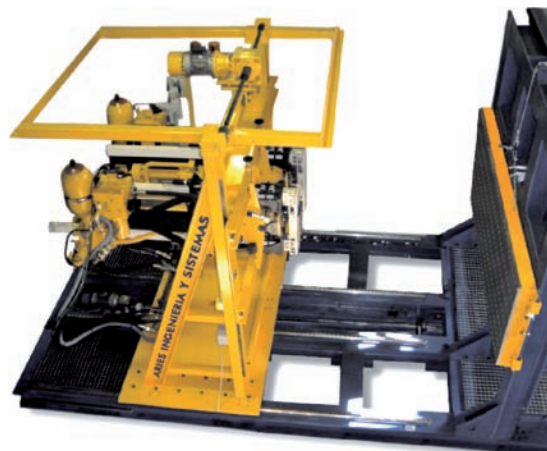
System main characteristics

- Impact masses from 2,5 to 70 kg.
- Impact speed up to 15 m/s for 25 kg form.
- High impact speed accuracy.
- High repeatability.
- Body block & headform launch synchronized with airbag deployment.
- Free flight or guided impact options in the same system.
- 4 degrees of freedom actuator positioning X, Y, Z & Alpha (XY plane).

Various solutions based on a common flexible hardware



Linear Impactor



Double Linear Impactor



Universal Launcher