

ARCS – Access Rate Control System



The Access Rate Control System (ARCS) is a fully mechanical, ready-to-install kit that controls the speed of a person's entry through full-height turnstiles. The faster the entry speed, the more resistance is generated by ARCS on the rotor to slow the operator. At a preset normal entry speed, the operator can pass through with minimal rotor force, and ARCS freewheels on exit. All internal components are furnished in a weather-protected steel housing. This low-cost kit can be installed quickly on new or existing turnstiles, cost-effectively providing a new layer of security.

SECURITY

Features

- Fully mechanical, ready-to-install kit
- Automatic response to rotation speed
- Weather-protected stainless steel housing
- Customizable design that works with various turnstile models
- Permanently lubricated, sealed gearing

- Airports
- Border crossings
- Perimeter security

Patents & Awards

- U.S. Patent No. 8,136,297
- 2007 Government Use Award

Inventor

Lee Bzorgi

Benefits

- No tension adjustments or sensitivity alignments in the field
- Controlled entry speeds, exit speeds unaffected
- Quick installation, low maintenance
- Cost-effective security
- No external power/control circuitry needed

Technology Readiness Level (1–9)



Actual application of the technology in its final form and in Y-12 production use.

Applications

- Law enforcement
- Military
- Penitentiaries
- Stadiums
- Event Centers
- Farms/Agriculture

Partnering Opportunities

Y-12 is seeking an industry partner to fully commercialize this technology.

If you would like more information, please contact the Office of Technology Commercialization and Partnerships:
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