



GAT50

The Gatsometer celebrates its 50th birthday in 2008. Kevin Borrás looks back over the first half-century of a company with ironic origins...

Timing is everything

KEVIN BORRAS on a success story borne out of the ultimate irony. A racing driver, tired of inaccurate, 1950s lap timing devices seemingly denying him precious fractions of a second, inadvertently invents the speed camera. Half a century later and the name of his company is as synonymous with the technology as Hoover is with vacuum cleaners and Biro with disposable pens...

Ever since Dutch racing driver Maus Gatsonides won the Monte Carlo Rally in the 1950s, the Gatsonides name has been synonymous with both speed and innovation.

During his active motor sport career, Gatsonides developed several accurate time-keeping systems, not just for motor sport but also for possible use as control equipment for the police and government.

Having invented the 'Gatsometer', an ingenious speed measuring technique that indicated precisely the number of seconds he was behind or ahead of the official time schedule, he continued to perfect it to such an extent that it was soon to be used for a very different purpose - speed surveillance on public roads.

Taking the name of the first speed measuring device as the company name, Gatsometer was founded in 1958, and by the 1960s had developed the first camera for the capture of road traffic offences. The 1970s saw the introduction of their first radar system for speed enforcement. More pioneering 'firsts' followed in the 1980s, including a mobile radar speed monitoring system and a combined red light and speed camera.

The first Gatso digital red light camera was launched in the 1990s, followed in 2004 by their integrated digital camera which captures both the licence plate and the driver's face.

Gatsometer today

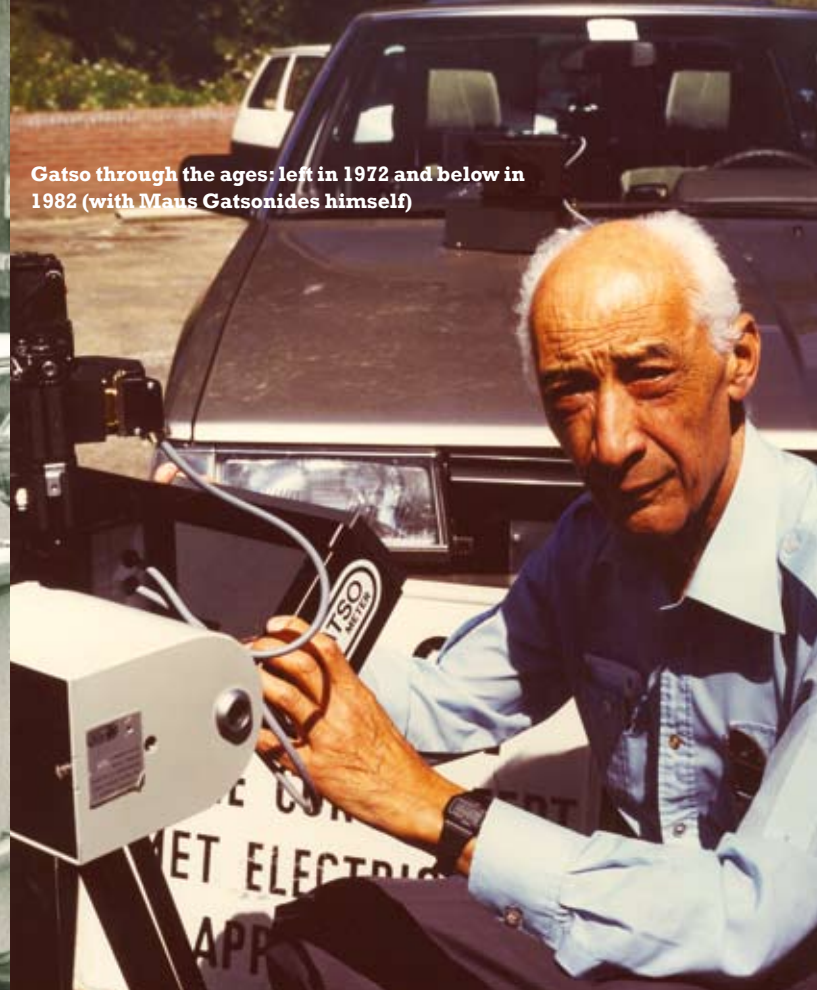
In 2008, 50 years after its formation, Gatsometer continues to be a ground-breaking company and market leader in digital photo enforcement for traffic safety applications, introducing such advanced systems as:

- The GTC-D digital traffic camera and GS11 the 11 Megapixel camera;
- The RS-GS11 Digital Radar Camera System for both portable and fixed applications;
- Non invasive detection with LTR Loopless Trigger Radar;
- Automatic License Plate Recognition (ALPR);
- Point-to-Point digital multi-camera system for time over distance speed enforcement.

The superior resolution of Gatsometer's digital traffic cameras clearly identifies vehicle licence plates over multiple lanes, with automatic number plate recognition if required. For simultaneous red light and speed monitoring of up to four lanes, Gatsometer's flexible 11 Megapixel, 12-bit digital multi-camera system combines optional video event recording to provide supporting evidence if required.

Gatsometer has also led the way in the development of detection technologies for traffic enforcement, with the introduction of Radar 24 radar detection and the reliable GLD4-2S loop detector. The versatile parabolic





Gatso through the ages: left in 1972 and below in 1982 (with Maus Gatsonides himself)

pencil-beam radar is designed for overhead gantry installation, while NID non-invasive detection is ideal for locations where traditional in-road sensors cannot be utilised.

Excess or inappropriate speed has been identified as contributing to a high proportion of the deaths and injuries that result from road crashes. In high-income countries, speed contributes to about 30 per cent of deaths on the road, while in some low-income and middle-income countries; speed is estimated to be the main contributory factor in about half of all road crashes. (World report on road traffic injury prevention, World Health Organisation, 2004.)

There is now a clear worldwide acceptance that effective photo enforcement plays a significant part in reducing accidents caused by speed and red light violations. Accident reductions of at least 30 per cent are achievable, which has a huge impact on the economy and a dramatic increase in road safety.

Enforcement in force

Gatsometer's "evidence value chain" contains the three elements that the company believes are essential to achieve the best possible enforcement:

- Detection
- Capture
- Evidence

The "evidence value chain" requires that the detection rate is more than 95 per cent accurate over all violations, image quality is of sufficient resolution to enable ANPR (Automatic Number Plate Recognition), and the photographic evidence, including real time violation data, is securely encrypted.

Gatso's wide range of digital photo enforcement

systems, detection technologies and sophisticated software already provides this reliability and accuracy for traffic management schemes such as:

- Red light and speed enforcement;
- Point to point or time over distance speed enforcement;
- Dedicated lanes, such as public transport or heavy goods vehicle lanes;
- Digital access control for residential areas or city centres;
- Ramp metering for motorway access control;
- Monitoring and enforcement of railway crossings;
- Over-height monitoring of tunnels and bridges;
- Traffic control.

The future

It is widely believed that changing driver attitudes to speeding and other traffic offences, coupled with effective speed limit enforcement, will lead to improvements in road safety. Indeed, worldwide studies demonstrate that there is no doubt that automatic traffic enforcement reduces accidents caused by speed and red light running.

Studies by the WHO have indicated that a 1 km/h decrease in travelling speed would lead to a 2-3 per cent reduction in road crashes; setting and enforcing speed limits are two of the most effective measures in reducing road traffic injuries.

By continually monitoring such studies, and carefully researching market demand, Gatsometer ensure they develop the reliable, quality systems that meet the road safety requirements of their current and future custom-



Bottom: Maus Gatsomides in 1953 with one of the numerous motor racing trophies he won. He may well have won many more had he invented the speed camera earlier...



ers worldwide. It is becoming increasingly clear that the future will demand smaller systems that are easy to install and maintain and are not only capable of red light and speed enforcement, separately or simultaneously, but also able to provide automatic number plate recognition, in a single high resolution camera.

Automatic download of violation images via wireless or secure telecommunications is already an essential requirement.

It also seems logical that authorities will begin to demand greater systems integration, where enforcement systems, access and intersection control are incorporated into one operational package, centrally managed by a single processing centre. With this in mind, Gatso's Site Management Software Tool has been specially developed to enable users to integrate Gatso digital cameras with their back office system, enabling easy download and viewing of offence images and remote configuration of camera systems.

Conclusion

A report by the European Transport Safety Council states that around 40,000 people die and many more or injured each year in Europe as a result of road crashes. The European Union has a target of halving the yearly number of road deaths between 2001 and 2010.

Gatsometer will continue to contribute to this aim; their digital enforcement equipment is already installed in many countries worldwide, including Europe, USA and Canada, Australia, South America, Hong Kong, Taiwan, and the Middle East, and the numbers are stead-

ily growing. Gatsometer's strength lies in their leading edge product development, quality products, professional advice, and comprehensive service, enabling them to offer technical, innovative solutions to traffic problems from a sophisticated product range.

Add to this their professional design and production capabilities, supported by strong installation, testing and maintenance services, advice on systems integration and comprehensive training and you have an unbeatable single source of traffic enforcement systems and services.

Traffic enforcement continues to prove effective, and Gatsometer will continue to provide the systems and services that meet the needs of their customers worldwide. **TH**

“There is now a clear worldwide acceptance that effective photo enforcement plays a significant part in reducing accidents”



50 years leading innovation



>> Meet us from April 1st till 4th 2008 at the Intertraffic in Amsterdam at stand 01.404
or from April 24th till 26th 2008 at the Intertraffic in Beijing at stand 2.092

Gatsometer supplies worldwide leading-edge red light and speed enforcement equipment, mobile digital cameras, accurate detection technologies and user-friendly software. In 2008 Gatsometer celebrates its 50th

anniversary as innovative and reliable partner in traffic enforcement solutions. The presented Gatso solutions at Intertraffic 2008 deliver highly reliable and cost-effective solutions for integrated traffic management projects.

Gatsometer B.V.
P.O. Box 4959
2003 EZ Haarlem
The Netherlands
Tel: +31 (0)23 525 50 50
Fax: +31 (0)23 527 69 61
sales@gatso.com
www.gatsometer.com



protecting people in motion

GATSOMETER B.V.