

## IPC global - The new Advanced Pavements Systems division of Controls Group

### Market Background, a growing demand for performance based testing

In recent decades, it has become evident that reliable testing of asphalt and bitumen are key factors for optimal design and construction of durable roads. Quality of asphalt mixes is crucial; poor mix quality or lack of effective characterisation can result in premature pavement failure involving enormous expenses due to highway maintenance costs, increases vehicle wear, reconstruction, traffic delays and increased traffic accidents.

Performance based testing has been identified as the most effective approach for measuring asphalt properties in modes that closely correlate with onsite performance. As a result, performance based tests have been gradually introduced in the reference Standards most countries. New methods are continuously proposed, evaluated and validated with the objective of predicting the real-life performance of pavements from the results of specimen tested in a laboratory.

The new Standards require new testing machines that utilise innovative new technologies that are most suitable for the performance-based approach.

Although asphalt laboratories are showing great interest in the new testing equipment suitable for performance based testing, at different level in different countries, the trend is definitely global. Similarly, the main engineering research universities are working on the continuous enhancement and refinement of the existing methods. It is a revolutionary and exciting process towards optimally designed high quality highways and permanent pavements.

### Controls and IPC global history in the industry

Within this exciting and changing market, Controls and IPC global have separately developed their respective products ranges for asphalt testing.

Controls, headquartered in Italy and in the UK and present in the world with their owned branches and a widespread distributors network, was historically present in the asphalt market for almost 50 years as leading supplier of the main machines needed in the industry (most popular was the Marshall testing approach). As soon as the new trends became evident, over 20 years ago, Controls started developing their own technologies focusing on specimen preparation and advanced performance-based static testing. Controls also included in their range the binder (bitumen) testing machines.

IPC global, present in the field for almost 25 years, focused their business instead on dynamic testing systems where a cyclic load is applied to variously shaped specimens reproducing predefined wave shapes. Dynamic testing is a key part of the performance based testing as it effectively simulates the vehicle traffic loading over the pavement surface. IPC global were true pioneers in the industry and contributed to the overall development with unique products, the most famous is the Simple Performance Tester (SPT) later called Asphalt Mixture Performance Tester (AMPT), that were introduced into the United States in the early 2000s.

The product ranges of Controls and IPC global, respectively advanced static and advanced dynamic, when combined, perfectly fit all the needs of a modern asphalt laboratory wanting to follow the performance based testing approach.

## Controls and IPC global together

Based on their natural synergies, Controls and IPC global have cooperated closely during the last 15 years, in fact Controls was the exclusive IPC global distributor from 2004 to 2010 in most countries. Eventually, after so many years of profitable side-by-side cooperation, Controls took over IPC global in April 2014 thus IPC global became a corner stone of the Controls Group, the global leader for testing equipment for construction materials.

After the take-over, the two companies have started a radical process of integration which, bringing together the individual competences and expertise under a unified strategy and coordination. This has boosted the development capacity and created the basis for many years of continuous innovation and growth. In particular, the various R&D teams of the Group, located in UK, Australia and Italy, all specialized and expert, can concentrate efforts in their respective areas of expertise and their outputs are eventually integrated by skilled multidisciplinary teams, creating a powerful R&D organization.

In 2015 Controls Group have opened a branch office in the US, a key country for IPC global after having helped the development of new testing technologies and relevant ASTM and AASHTO.

## The new Controls Group Asphalt Division

The final step of this exciting integration process of IPC global within the Controls Group is the full unification of the advanced static and advanced dynamic product ranges under a new Controls Group Asphalt division, branded IPC global – Controls Group Advanced Pavements testing systems.



It is a unique range of high value testing machines for asphalt and binder (bitumen), globally distributed by the CONTROLS Group and IPC global distributors network, known for their reliability and capacity to provide qualified onsite pre-sale and post-sale service.

The range comprehends static and dynamic testing machines covering all the applications needed by the most demanding laboratories.

Some machines are consolidated and continuously enhanced with new features and up to date technologies such as the AMPT Pro, the Gyrocomp and Servopac gyratory compactors, the high capacity hot asphalt mixer, the electro mechanic Slab Compactor and the automatic Autosaw II for specimen preparation, the Double Wheel Tracker for rutting, the superior Universal Testing Machines, with capacities from 16 to 250 kN and a complete selection of accessories, and many others

Others are completely new and extremely innovative such as the DynaQube, the AsphaltQube, the gyratory compactor based on the new advanced technology EmS – Electromechanic Servoactuated technology Galileo, the new range of binder testing instruments PAV, VDO, automatic penetrometer, plus others coming soon.

A new catalogue has been created to support the new division presenting the new range, with 128 pages and rich in product details and Standards information. It is a milestone for Controls Group and their customers, and candidate to become the new reference document in the asphalt industry; similar to the glorious 600 pages Controls Group General Catalogue, which can be found in nearly all testing laboratory around the world.

### **A brilliant future**

The efforts dedicated to the creation of the new IPC global division of Controls Group and the positive results already obtained, creates the basis for a brilliant future. Expectations are very high, it is fantastic having so many specialized resources extraordinarily brought together and the powerful financial capacity of the Group supports all the needs and is ready for the next steps.

The future for Controls Group and for their customers will be exciting, bringing a never ending flow of new products and continuous innovation.

### **The new division mission**

The new IPC global division of Controls Group will continue leading the industry as the only one-off supplier of all advanced static and dynamic asphalt/pavement testing systems conforming to the international standards and with the highest quality to price value for customers.

High business ethics, excellent reputation, transparency and loyalty are crucial to Controls Group, and contribute to explain the 50 years of successful presence in the business and trustful partnership with their customers. The new division has been built on the same solid base.