

INDUSTRIAL DIAPHRAGM METERS :

Fortune Strikes Again

A few years ago, industrial diaphragm meters G40 up to G100 seemed to be nothing but relics from the early days of gas metering.

It was the extension of the measuring range of rotary meters up to 1:160 in particular that led to users to forget the industrial diaphragm meters. However, for some time this trend has been reversed. This year, ELSTER-AMCO is experiencing renewed interest in industrial diaphragm meters. What are the reasons for this turnaround? There has definitely not been a sudden burst of nostalgia. There are two factors which explain the change in the diaphragm meter.



Industrial diaphragm meter (above) and rotary piston meter (left): Both are OK – in the right place!

Firstly, new developments are often well received with great enthusiasm compared to the “old”. However, they soon find out that what is new might not necessarily be the best for the application. The search then begins to find a happy medium or, in some extreme cases, the new is dropped in favour of the original. A good example from everyday life is the quartz watch. Millions of mechanical watches landed in the dustbin because they couldn’t compete with the accuracy of the quartz watch. But suddenly it wasn’t “coming up to eight o’clock”, it was 07:56:55 and nobody could see at a glance and from a distance what the approximate

time was. The logical consequence was the development of quartz watches with analogue displays. A similar thing has happened to diaphragm meters and rotary meters. At first all that was important with the rotary meter was its compact and light-weight design but it soon became apparent that it wasn't maintenance-free and that it still didn't reach the seemingly limitless measuring range of the diaphragm meter. On top of that, in cases where a diaphragm meter had been in use, it was only possible to install a rotary meter if you had a special adaptor.

Secondly, Elster has also done its best to strengthen the competitiveness of the industrial diaphragm meter. Elster's G40K and G65K have long been the world's most compact industrial diaphragm meters. Without publicising it too much, the weight of the G40K has gradually been reduced by around 25 % to 30 kg and is now only slightly heavier than a similar high-temperature version of a rotary meter. The move from G65 to G65K reduced the dimensions by 20 %, meaning 20 % less space is required for installation, and brought the weight down by 30 % to 44 kg. This went a long way to remove the dinosaur label from the diaphragm meter.

It is, however, not like Jurassic Park where the dinosaurs reappear only to be defeated by the film heroes. Both the industrial diaphragm meter and the rotary meter have a right to exist and have their own individual strengths and advantages. This means that they will both have a role to play in gas metering for some time to come. Elster will continue the further-development of both products and will do its best to ensure that both devices remain competitive in the future.

