



Motor Technology News July 2012

New compact servodrive is fully digital

New to our range this month is the very compact, fully digital servodrive from Axor Industries, the Mini Magnum. Measuring just 66 x 201 x 141mm and weighing 1.75kg, the new units operate on a power supply ranging from 110 – 480v AC suitable for driving AC brushless servomotors, with encoder or resolver feedback.

It comes complete with its own internal power supply, EMC filter, dumping circuit, detachable plug-in terminals for easy installation, and the power stage is made with latest generation of power IGBTs. There is a variety of operating modes available:

pulse/direction, ± 10 VDC velocity control, torque control, position control, encoder follower and PLC function integration.

Typical applications include conveyors, medical equipment, textiles, packaging and converting machinery, feeders and positioners. [Click here](#) for more information on the Mini Magnum or give us a call to discuss your requirements.



Free dictionary of electrical drive technology

In this month's edition of Motor Technology News we're offering readers a free dictionary of electrical drive technology, worth £14.99, with our compliments!

[Click here to learn more...](#)

Training at your place or ours

Our sales and technical staff can provide training either at your premises or here at Motec House on the edge of the Chadkirk Country Park in Romiley near Stockport, Manchester. Our training is tailored to meet your requirements and can include your specific application, products, software and firmware, application programming, maintenance and fault finding, as well as general servo and automation topics.



Training ensures that engineers have complete control over their application and that they are using systems and equipment that we have supplied to optimum efficiency. To find out more about our training services [click here](#) or call us to discuss your requirements in detail.

Torque about Horsepower

The term horsepower as a measurement of motor power was coined by James Watt as a way of convincing potential customers of the value of his steam engine. At the time horses provided most of the power that was required to drive or pull machinery, carriages and carts, and so comparing the power of an engine to horses was a simple way of measuring power output in a way that was easily understood.



Watt studied horses at work, probably in mines lifting coal, and he concluded that one horse could lift 550 pounds one foot per second. This being the case then it could lift 33,000 pounds one foot per minute and this became the unit of horsepower that has remained in use for over 200 years after Mr Watt invented his steam engine.

The SI unit 'watt' is now commonly used as a replacement for horsepower and following the EU directive 80/181/EEC in January 2010 horsepower is only permitted to be used as a supplementary unit. One horsepower is equal to 738 Watts.

Torque on the other hand is the force required to turn something and this remains a constant regardless of how fast it is being turned. It will require less horsepower to drive a shaft slowly and more horsepower to drive it quickly, but the turning force required to turn it at any speed is known as torque, and it remains a constant as long as the shaft is turned at a steady speed.



Supplier shut down news

Some of our suppliers operate a summer shut-down period. Others work on reduced staff levels. This can affect delivery times over the next month or two, so please be prepared.

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Sam Loyd's Great Picnic Puzzle

It was summer and time for the town's great annual picnic. Everyone in town went along and every wagon was needed to ferry all the people to and from the picnic.

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