SINGLE SOURCE SUPPLY CAN MASSIVELY REDUCE COSTS FOR MACHINE BUILDERS OF ANY SIZE

The automotive industry and other global manufacturing businesses have long espoused the mantra of a reduced supplier base in order to find assembly efficiencies and reduce costs. The real benefits are in a drastically reduced expenditure on development and a faster time-to-market for new products. The same benefits can be realised by machine builders of any size confirms Mitsubishi Electric.

Product compatibility and solution flexibility are the key to realising the benefits of a consolidated supply of automation equipment for machine builders. Typically the overall cost of design, programming, development, assembly and testing of a new machine far outweighs the purchase cost of the individual components. If the individual cost of the components is comparable across a range of different vendors, then the vendor that offers the greatest savings in terms of design, integration and assembly, also offers the greatest cost benefit to the machine builder.

Mitsubishi Electric provides a full solution of machine and production line automation technologies, each of which represents a huge investment for the company, the result however is guaranteed product performance and reliability. The benefits of this macro scale investment are effectively then transferred to any machine built using those components, especially when all the components are easy to integrate and work synchronously. Controlling machining, processing, packaging and pick-and-place tasks - while managing a complete assembly line, including safety systems and the interface between machines and operators - has never been more achievable from one source of supply.

How much of a saving does that represent? It would be fair to suggest that for a reasonably complex standalone machine, the cost of the automation components to control the machine are much smaller than the costs of engineering design, development, build and test. For the machine builder, reducing these costs is extremely attractive and reduction in engineering design and programming time is an area where significant savings can be made. Factors such as ease of automation equipment integration and a common programming environment, which saves the “double or treble input” of control tag data, can save hours of design time which not only reduces engineering costs but also the lead time to deliver the machine. Mitsubishi Electric is in the unique position of being able to deliver own manufactured inverters, servos, PLCs, motion, CNC controllers, HMIs and robot solutions that are totally integrated, this means that when used on a common automation platform they are to a great extent plug-and-play components. Programmed, commissioned and operated using the iQ-Works engineering software suite they offer huge benefits in terms of convenience and speed of set-up when applied together.

Mitsubishi Electric's integrated solution can deliver a combination of control, robotics and safety, all on a common PLC rack. Not only does this offer many technical advantages in terms of speed of data exchange between these various control aspects but also delivers additional hardware consolidation benefits, which means more savings.

The robot offering is a big differentiator for Mitsubishi Electric. The company has provided free seminars tailored to various industries such as Food & Beverage, Packaging, Automotive etc. for several years, designed to help engineers familiarise themselves with its highly competitive MELFA range of articulated arm and SCARA robots. Attendees are usually surprised by the low package cost, combined with ease of use and simple integration. This acceptance is driving significant sales growth, correspondingly this means industry usage is on the
rise. If the robots can be integrated quickly, using the 
iQ-Works software suite which is a common platform 
for programming and configuring all the machine 
control disciplines of PLC, HMI, inverter, servo and 
robots then the cost of integration is also coming 
down.

Chris Evans, Marketing and Operations Group 
Manager at Mitsubishi Electric – Automation Systems 
Division UK comments on the overall benefits of 
consolidating automation component supply for 
machine building, "From our perspective the benefits 
are clear, we offer a wide range of high precision 
automation equipment that is easy to integrate and 
therefore saves a huge amount of time in the design 
and commissioning phase.

"What many customers only see once they are using 
our equipment however is the unrivalled level of 
technical support we provide during the development 
cycle. Plus, there are end user benefits that can 
greatly reduce the total cost of ownership for 
machines supplied with Mitsubishi Electric automation 
control on board. Our products are backwards 
compatible far beyond most other vendors from both 
a hardware and software perspective, which means 
extending the asset life is much easier and cost 
effective, knowing that a migration path will exist in 
the future for the current technology to the future 
generations, without replacing the entire original 
equipment. Couple this to complementary 
technologies offered by our e-Facility Alliance 
partners and it is clear that a total plant end to end 
solution is available from Mitsubishi Electric.

"Delivering a more cost competitive machine benefits 
both the vendor in terms of being more competitive in 
the market, while taking care of improved overall 
equipment effectiveness for the end user. You simply 
can't deliver both without reliable products that are 
ultimately compatible and easy to integrate, hence 
why we have pursued the route of becoming a total 
solution provider."

Mitsubishi Electric is the world's largest supplier of 
PLCs by volume and also one of the world's largest 
suppliers of industrial robots with a payload of 15kg 
and under. Regular training is held at the company's 
HQ in Hatfield and other locations throughout the 
year, for more information click here.

About Mitsubishi Electric

With over 90 years of experience in providing reliable, 
high-quality products to both corporate clients and 
general consumers all over the world, Mitsubishi Electric 
Corporation is a recognized world leader in the 
manufacture, marketing and sales of electrical and 
electronic equipment used in information processing 
and communications, space development and satellite 
communications, consumer electronics, industrial 
technology, as well as in products for the energy sector, 
water and waste water, transportation and building 
equipment. With around 124,000 employees the 
company recorded consolidated group sales of 39.3 
billion US Dollar* in the fiscal year ended March 31, 
2014. Our sales offices, research & development 
centres and manufacturing plants are located in over 30 
countries Mitsubishi Electric Europe, Industrial 
Automation – UK Branch is located in Hatfield, United 
Kingdom. It is a part of the European Factory 
Automation Business Group based in Ratingen, 
Germany which in turn is part of Mitsubishi Electric 
Europe B.V., a wholly owned subsidiary of Mitsubishi 
Electric Corporation, Japan.

The role of Industrial Automation – UK Branch is to 
manage sales, service and support across its network of 
local branches and distributors throughout United 
Kingdom.

Further Information:

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