

**Move up to higher productivity**



**with Advant Controller 400 series**

# Get more done better with Advant Controller 400 series

StepUp is program of ABB's for upgrading older process control equipment to the latest Advant OCS solutions at particularly favorable terms. The theme of the program varies from time to time; this time the turn has come to users of MasterPiece 2001 controllers to upgrade to the latest Advant Controller 400 series process controllers, at substantially reduced prices.

You gain *performance*; Count on three to five times the speed of your current machine(s) (vs. Advant Controller 450) and multiple amounts of more memory.

Higher processing speed and more memory means more work done faster, as well as more space for trend data storage.

You gain *functionality*; Advant Controller 400 series offers a number of important functional improvements, e.g.:

- Support for a number of new, popular communication protocols, e.g. Advant Fieldbus 100, Profibus DP, LONWorks and Allen-Bradley's DF1.

These make your new controllers able to use ABB's new S800 I/O system and easily able to communicate, with other external controllers, with ABB's variable speed motor drives and with smart motor-control centers.

- More backup redundancy available, e.g.:
  - Smarter solution to CPU redundancy, eliminating critical, common, components,
  - Full dual redundancy, covering, media and communication in interfaces, for S100 I/O and Advant Fieldbus 100.
- A self-tuning, adaptive process controller (AC 450) that makes short work out of setting up control loops accurately and responsively, even in difficult applications.
- Fuzzy logic control, a control method based on degrees of truths as opposed





to conventional binary logic that only recognizes two states: true or false.

A control strategy that is often able to untangle elegantly control problems that are difficult to solve in other ways.

• Windows NT-based engineering tool, You *save money*; StepUp includes:

- attractive prices on controller cabinets with all the hardware and software required.
- further savings on future software upgrades by subscription to the ABB Software Advancement Program (described further on).

Left: Advant Controller 450 with local S100 I/O. The use of separate connection units for the process cabling simplifies cable marshalling and keeps destructive voltage spikes away from the central electronics

Right: The S800 I/O system communicates over Advant Fieldbus 100 or Profibus DP with its parent AC 400 series controller. The units of the system are small enough and rugged enough to be installed in the field.



## Upgrading: as easy as ABC

Advant Controller 400 series machines are 19" rack-based like its predecessors. They are also compatible with existing S100 local I/O and S400 remote I/O. And finally, they run AMPL programs just like their forerunners do, only better.

Consequently, the stage is set for the smoothest possible change-over. Simply, disconnect your existing controller from the surrounding world, remove the controller rack from the cabinet it is installed in, install the new controller, put all cables back on, upload your existing application software and switch on. From then on you are ready to start taking advantage of the additional functionality and processing power that Advant Controller 400 series offers.

So far, hundreds of step-ups to the AC 400 series have already been made, confirming this simplicity. Says Hans Nilsson, instru-

mentation and control manager at the LKAB Malmberget mining company in Northern Sweden in confirmation:

"Thanks to good planning we were able to complete the entire upgrade during our regular summer shutdown. In a single day, we were able to replace three controllers, *including* replacing controller cabinets *and* verifying the application software."

## StepUp, the easy way to get ahead

Exploring the StepUp offer in greater detail is easy; simply call your nearest ABB representative and let him/her know what your existing system looks like. Then allow a few days for a detailed offer. If you accept (which we are all but certain you will), then new control equipment will be ordered for you. When it arrives you have 60 days in which to phase it in and the existing controllers out. Then, and only then, are you obliged to return the old equipment.

Everything that can be done ahead of time to smoothen the transition will be done, but should you still want assistance during the switch for safety's sake, ABB will be there to give you a hand.

But don't mull on it for too long; the offer won't stand for ever!

## ABB Software Advancement Program, the easy way to stay ahead

ABB Software Advancement Program (ASAP) is a subscription scheme under which users obtain new versions of the software they are using as they become available. The program:

- Keeps your Advant OCS at the forefront of functionality and performance at all times.
- Contributes to getting the most out of your production plant.

- Keeps your system maintenance costs low and budgetable.

All with minimum effort on your part.

### A perfect win-win situation

As with every worth-while business deal StepUp makes both parties win. What you gain we have spent the better part of this paper describing. What we gain is market reputation, by having customers evaluating us and our products on the basis of our latest achievements, and simplified technical support of users. A perfect win-win situation and a perfect basis for cooperation, wouldn't you say?

**Act now!**  
There will never be a better time



To arrange a personal consultation, call ABB Automation at the office nearest you:

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