

ABSTRACT

PERFORMANCE PARAMETERIZATION OF PROCESS

EQUIPMENT AND SYSTEMS

- 5 Performance mapping of equipment performance parameters by capturing, mapping, and/or
structuralizing equipment performance data of a device for installation in a system. This
includes generating performance maps which outline the expected feature performance
parameter behavior of the equipment based on a set of operating parameters that capture the
operating conditions. Each performance parameter on the map is representative of an operating
10 point of specific operating conditions taken at a particular point in time. In one example, a
performance parameter can be defined by an individualized set of parameter coefficients which
in turn are dependent on instantaneous operating conditions. With the performance maps
determined individually for devices as part of the system, and stored along with a time of
testing, activities such as continuous commissioning, monitoring and verification, preventative
15 maintenance, fault detection and diagnostics, as well as energy performance benchmarking and
long term monitoring can be performed.

[FIG.1A]