.Solutions you need

Adenso

adControl

Cluster Control System

**Modular & stand-alone
central handling system,
with vacuum process control,
recipe management, visualisation,
scheduler and multi-admin.**

www.waferhandling.solutions

Adenso Robot.Platform with adControl: The new CLUSTER CONTROL SYSTEM

Adenso.Solution: adControl

Expandable modules, stand-alone, Hardware-independent, reliable.

Communication with the customer's process control system takes place securely via the Adenso.Interface.

This adControl setup is based on the Adenso waferhandling hardware platform and covers the necessary effort for setting up a fully operational stand-alone central handling unit.

The advantage of adControl:

This central system can be setup in parallel to the setting up and commissioning of the process modules – this saves time and guarantees smooth integration – a stable foundation for process commissioning by the customer.

**adControl screenshots:
The master interface!**

Configuration example

of a central handling module WHM
with a LoadLockModule LLM (blue)
and potential customer process modules PCS (red):

TASK A

CLUSTER CONTROL SYSTEM

adControl
• Stand-alone system
• Control hardware and software
• Scheduler (substrate tracking recipes)
• Operator administration
• Visualisation / multi-touch display
adVAC
covers vacuum components, pneumatic system, …
• WHM-VAC (wafer handling module)
• LLM-VAC (load lock module)
Process-independent commissioning

TASK B

PROCESS CONTROL SYSTEM P1 – PX
• PLC
• Process technology
• Ideally stand-alone solutions
• Ideally one PLC per process module
Handling-independent commissioning

TASK C

Process VISUALISATION
*Operated by customer as stand-alone version
or by Adenso as an option: Integrated into
adControl visualisation (customised solution)*

TASK D

INTERFACES
CLUSTER (general, substrates, safety, …)
VACUUM and VISUALISATION
*Basic commissioning together within a short
timeframe as a basis for process commissioning
by the customer.*

All the TASKS for Implementation and Production can be defined, commissioned and realised independently of each other and of the client's Process Control System
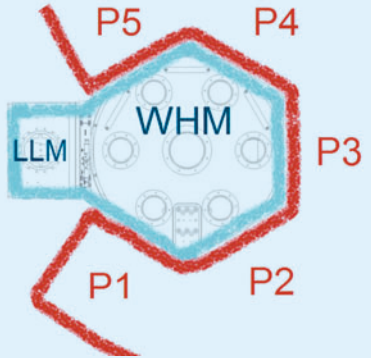
TASK A
CLUSTER CONTROL SYSTEM
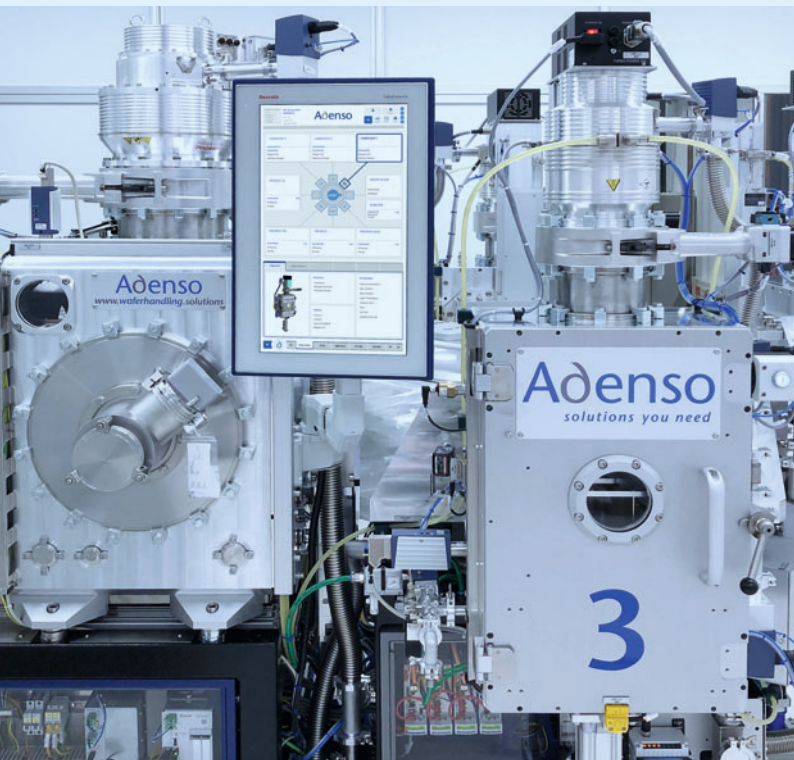
TASK B
PROCESS CONTROL SYSTEM P1 ... P5

TASK C
Process VISUALISATION

TASK D
INTERFACES
CLUSTER (general, substrates, safety, ...)
VACUUM
VISUALIZATION

P5   P4

WHM

LLM   P3

P1   P2

The basic commissioning of even extensive cluster systems generally takes place within just one day. The process can then be commissioned immediately.

adControl is a further typical Adenso.Solution!

We talked with Uwe Beier, managing director of Adenso

On which competences do our customers wish to focus?

Process technologies and nothing else! This means that our customers need central Robot.Modules to connect process modules in a cluster in order to handle substrates between the processes and to feed them in/out.

What does the ideal central handling module look like from the customer perspective?

It is a fully independent central Cluster.Module with an intuitively operated graphical user interface and all the necessary safety functions.

How can Adenso fulfil this customer requirement?

This is why we developed the modular Adenso Robot.Platform. The Robot.Modules are modularly configured in an application-specific manner – almost as easily as creating something with certain well-known toy bricks! The equally modular Cluster.Control system adControl is responsible for the entire control of the central handling module.

How is a Robot.Cluster for vacuum processes created?

The process provider has the technologies and devises a configuration for its customer. Adenso selects a suitable Robot.Platform and the necessary Robot.Modules and configures a Robot.Cluster together with the adControl.
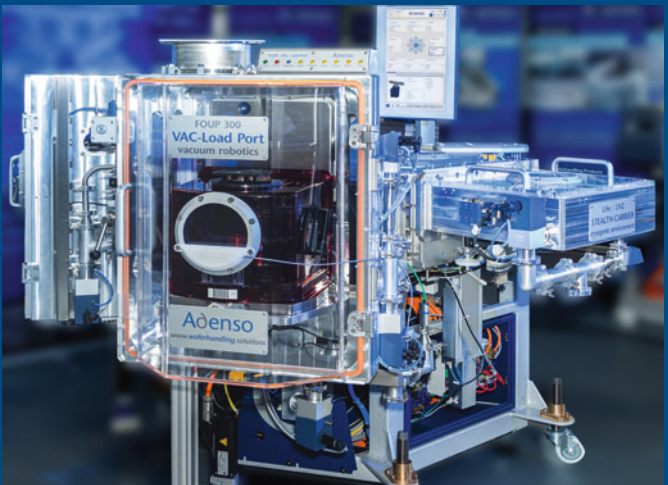The communication between the Handling.Robot and the Process.Modules takes place via the adControl.Interface and in a simple and equally modular manner.

How long does the basic commissioning of Handling.Robots and Process.Modules take?

Since all systems are commissioned in parallel and independently of one another and the interface can be tested in advance, the basic commissioning of even extensive cluster systems is generally completed within just one day. The process can then be commissioned immediately.

What is the sales concept behind adControl?

Since we use a licensing model for adControl, our customers don't need to pay for the entire software development for each project.
This means significant savings in terms of time (because it's a ready-made standard product) and costs (just the licence fee).

Adenso turns your demands into action

The Adenso modular world of Advanced Waferhandling.Solutions:

Basic layout + WHRobot + WHModule
+ Load Module + Specifications + adControl =

Results in a product with defined interfaces
that is ready for use and tailored to your needs.

**Wafers and large-area substrates,
load as you need,
longest reaches in the market.
With adControl HM interface and Tool.Cloud**

The holistic concept of creativity, customer focus,
process optimisation and the continuous
exchange of experiences constitute the
cornerstone of the Adenso corporate philosophy.

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