

FAST MOVING TECHNOLOGY

STÄUBLI

uniVAL plc

Robotics | Put your PLC in the driver seat

VAL
products

VAL
3

uni
VAL



uniVAL plc – robot control via function blocks in your PLC

The purpose of uniVAL plc is to drive Stäubli robots with industrial PLCs, connected to the robot controller via a standard fieldbus.

Generalities

- Driving a robot with a PLC
- The motion trajectories can be taught with the Stäubli teaching pendant
- The robot maintenance is still performed with the Stäubli maintenance tools
- Based on standard fieldbus communication



PLC



EtherCAT

ETHERNET POWERLINK

Modbus

EtherNet/IP

PROFI BUS

PROFI NET

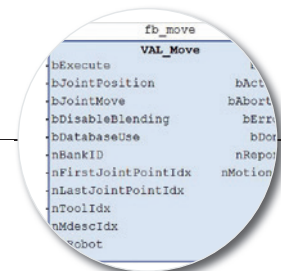
uniVAL plc
CLIENT

Available for:

- Beckhoff Twincat
- Siemens Simatic
- Rockwell Logix
- Codesys
- Etc ...

Principles

- Library of function blocks on the PLC side to perform motion trajectories and other operations (uniVAL plc client*)
- A database accessible and modifiable by uniVAL plc client is hosted on the robot (uniVAL plc server)
- The database can contain motion trajectories and other data
- The communication between uniVAL plc client and uniVAL plc server is performed over the fieldbus, based on a Stäubli-defined standard



* Provided by Stäubli or PLC manufacturer, consult us for more details



Main benefits

- **Reducing development and training costs**
The programming is done within the PLC environment
- **Reduced commissioning costs**
The communication is based on simple, easy to access I/Os
- **The motion trajectories can be stored on the PLC side**
The motion data used by uniVAL plc server can be accessed and modified by uniVAL plc client
- **Standardization over the entire production line**
Compatible with all the CS8 and CS9 generation Stäubli robots, even already installed systems
- **Open and adaptable system**
Development and customization of functions can be done by the end user

Controller



uniVAL plc
SERVER



Arm

TS series

TX series

FAST picker TP80 series

Commissioning

- uniVAL plc server is installed on the robot (done at the factory if the robot is ordered with the option)
- Installation of function blocks library in the PLC environment (uniVAL plc client)
- Configuration of the fieldbus on the PLC side
- Motion trajectories teaching
- Development of PLC program

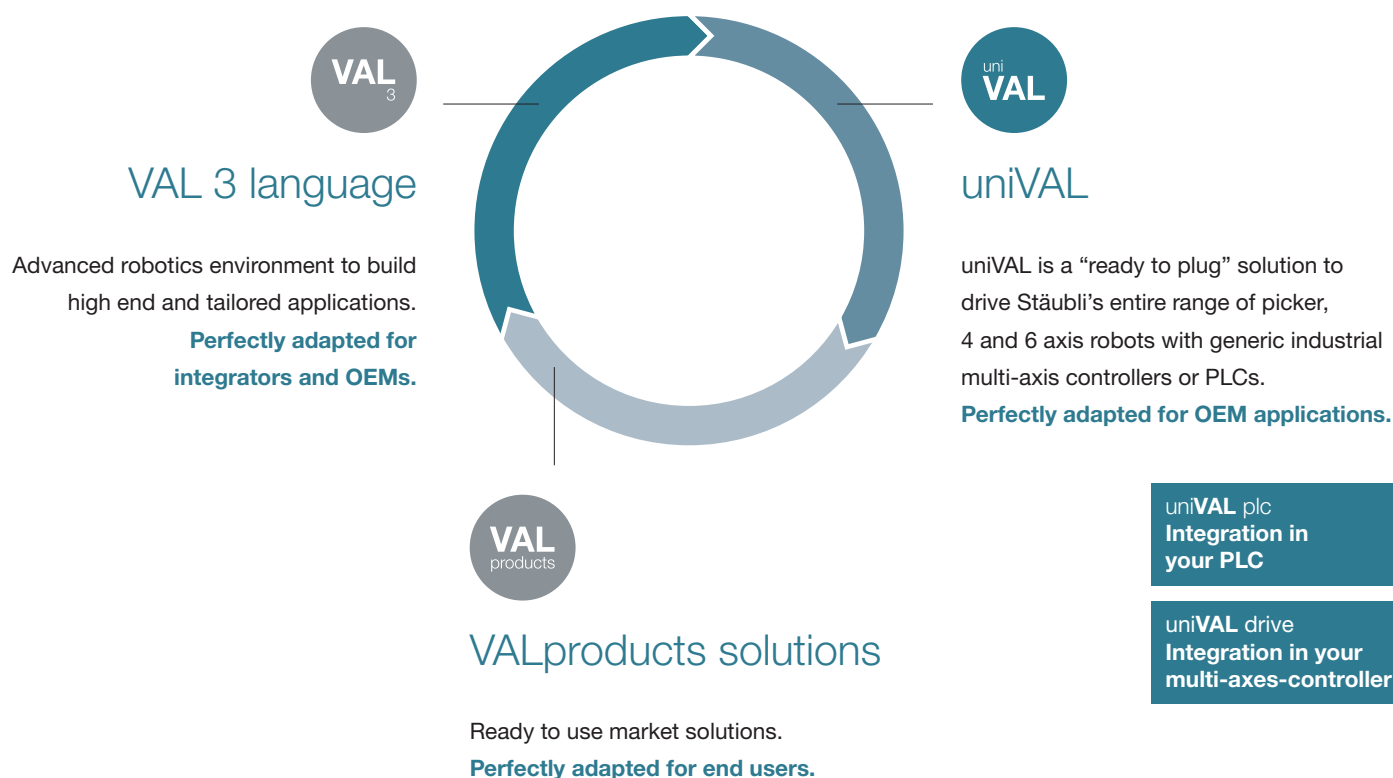
Options

- The motion teaching interface can be hosted on the PLC side (remote MCP Option)
- Stäubli assistance for customization of an existing uniVAL plc client (new function blocks, etc ...)
- Stäubli assistance for the development of a new uniVAL plc client for any PLC

Connected to your world

D181.656.04

A comprehensive set of user-friendly yet powerful software solutions perfectly adapted for all: end users, integrators, OEMs and machine builders.



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