



AIM PalletWare

Product Description

AIM PalletWare is a fully integrated software package designed for use with Adept robots and motion control products in automated palletizing applications. PalletWare simplifies the process of programming a robot in an application where gripper IO, model mix flexibility are critical to success of the application.

Developed around Adept's Assembly and Information Management (AIM) software system, PalletWare provides a set of utilities that makes the training of pallet patterns and multiple case pick and place patterns simple. Because PalletWare uses AIM, the package provides a menu based operator interface, a task-level language, status and control display screens, and interactive training and error recovery strategies - all of which facilitate the successful implementation of a palletizing workcell.

Coupled with an Adept robot or a motion control device, AIM PalletWare provides a unique solution to palletizing automation.

Features

Benefits

AIM integration

Reduces implementation time and simplifies daily operation.

Task-level programming

Programming is a simple process of teaching pallet patterns and locations and executing an AIM statement.

Model Selection

Model selection of pallet patterns is made easy by having a model database and selection screens.

High End Features

Handles high end features such as vision guidance & conveyor tracking.

Multiple Case Pick and Place

PalletWare allows programming of multiple case pickup and pallet placing

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Product Specifications

Configuration

Task Statements

STACK_CASE, STACK_LAYER, STACK_PALLET - These statements provide the flexibility to allow case stacking on a case by case or layer or pallet basis.

SET_GRIPPER - Allows the user to define the data structure for the gripper control. This also allows the flexibility of controlling one, two or three case pickups.

SET_STATION - Allows the user to define the data structure for the pickup and place stations.

MOVE_PATH - Allows the user to program motions along a path either using a specified height or a variable height for motion.

CHANGE_HAND - Allows the user to provide quick-change tooling.

AIM Utility Software - 20+
Additional statements to allow easy integration of AIM.

Databases

Unit Load - determines the pallet pack stacking order as well as the height of the final pallet.

Layer - Allows the user to program the palletizing layer patterns.

Many different layer patterns can be used in the Unit Load database.

Station - Allows the user to define the pickup and place stations. This allows the user to select the proper frame to define pickup and placement of cases.

Databases (cont.)

Case - Defines the dimensions and weight of the cases to be picked up.

Gripper - Defines the Tool offset and gripper IO to be used for operations. Additionally, the grippers can be defined as multiple pickup heads.

Part - Allows the user to define a model selection for a particular case pattern. The Unit Load, Station and Gripper databases are linked as well as a field for UPC codes.

Pallet Dimension - The database is used to enter in the pallet size.

Path - Defines general safe path locations for approach or depart paths. PalletWare provides the use of a variable height path to minimize Z heights during the operation.

User Interface

Standard AIM menus.

Graphical Layer display that shows actual pallet patterns and allows easy teaching of patterns.

Global editing of many Motion Parameters in the Layer database.

Status menu support that includes easy changing of the current placement of cases on the pallet.

Status data is also supplied.

Additional pause states are included for easy adjustment of cell parameters.

System Requirements

Software

- V+ version 11.3 or higher
- AIM MotionWare package
- AIM Software License

Hardware

- Adept MV controller
- Adept A-series or AdeptWindows option
- 8Mb 68030 / 68040 option

Compatibility

Compatible with all Adept robots and any Adept robot controller.

May be added to an existing system.