

AutoLoader

for 7100 Series *pro*- Model Dicing Systems

Retrofittable or factory-installed cassette-to-cassette automation for the 7100 Series' *proVectus* or *proFortis* models makes the AutoLoader option the industry's only automatic load and unload solution available for both 2" and 4" spindle dicing systems.



Wish You'd Purchased a Fully Automatic Dicing System? Actually...You Did.

The new AutoLoader brings affordable, automated 5" to 8" frame loading and unloading capability to ADT *proVectus* and *proFortis* Model Dicing Systems. Ideal for applications with short dicing cycle times, this option reduces operator intervention and allows extended, uninterrupted processing of multiple, frame-mounted workpieces. A two-stage, built-in drying system dries the top and bottom surfaces of the workpiece and frame as they are automatically unloaded from the chuck and returned to the cassette. Fully self-contained, the AutoLoader can be purchased as an accessory to new equipment and is also field-retrofittable.

Easy Implementation Also Means Easy Operation

AutoLoader installation and operation require no additional utility connections. After the *proVectus* or *proFortis* is switched on, the AutoLoader scans the cassette to insure that it has been properly loaded and to learn the location of each existing frame. AutoLoader control functions, status indicators and diagnostics are added to the 7100 user interface.

- Handles 5"- 8" frames
- Can be added to *proVectus* or *proFortis* systems
- Built-in, 2-stage dryer dries top and bottom of frame and workpiece prior to unloading
- Ideal for applications with short dicing cycle times
- Eliminates continuous operator intervention
- Operation and control through 7100 user interface

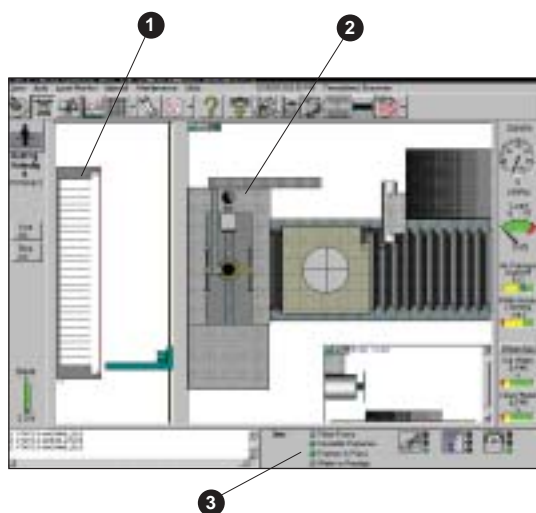
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AutoLoader Specifications*

Compatibility:	2" spindle <i>proVectus</i> or 4" spindle <i>proFortis</i> systems
Dimensions*:	1600 x 1370 x 1300 mm
Weight*:	1180 Kg
Voltage:	Powered through 7100 internal power
Air Supply:	730 L/min @ 5.5 bar
Cassette Size:	All 5" to 6" or 5" to 8" cassettes
Frame Type:	Stainless steel or other reflective material

* Specifications provided are for AutoLoader and *proVectus* or *proFortis* combined



When the AutoLoader option is added, the 7100 graphical user interface includes a representation of the elevator and cassette compartment status **1**, a top view of the loading area **2**, and an AutoLoader status indicator **3**.

AutoLoader Operational Description

When the system is switched on, power is supplied to the AutoLoader and it begins its initialization sequence. After the AutoLoader has homed properly, the following operations are performed when the user touches the **RUN** button on the 7100 main screen:

- 1** The system scans each slot of the cassette to determine which slots contain frames and to verify that the frames are properly positioned in the slots.
- 2** The elevator moves to the lowest occupied slot of the loaded cassette and a mechanical gripper pulls the frame out of the cassette and positions the frame on the load/unload station.
- 3** A vacuum pickup then lifts the frame from the load/unload station and moves it to the cutting chuck.
- 4** A shield is then raised to prevent cooling water from entering the AutoLoader before dicing commences.
- 5** When dicing is complete, the shield is lowered and, as the vacuum pickup moves into position, the upper drying system dries the top surface of the frame and workpiece.
- 6** The vacuum pickup then grabs the frame from the dicing chuck. As the frame and workpiece are moved across the shield opening, the lower drying system dries the bottom surface.
- 7** After the frame is returned to the load/unload station, the gripper returns the frame to the empty slot of the cassette and the elevator moves to the next slot.
- 8** The cycle, requiring no operator intervention, repeats until all frames are processed.

For sales, service and manufacturing locations, visit:

www.adt-co.com

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