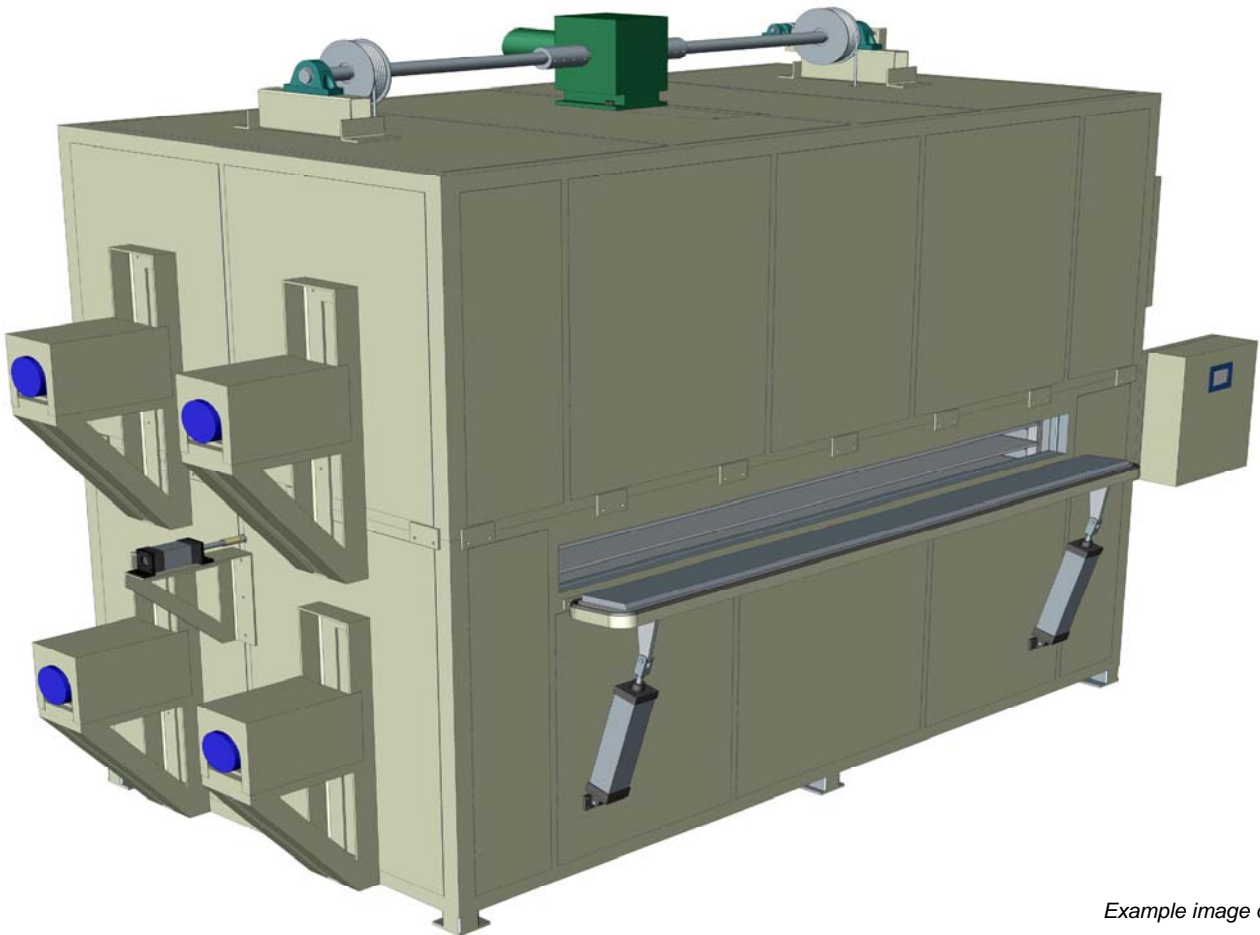




ARMOUR

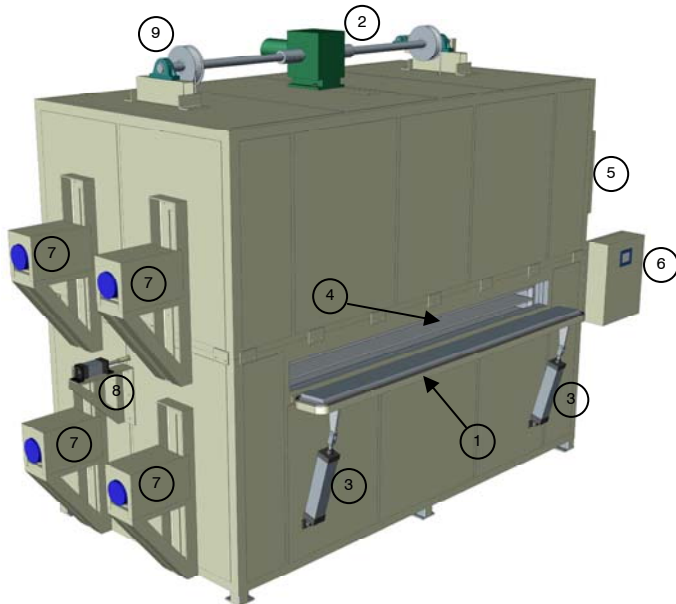
~ engineering for plastics

**IO-12-06
INDEXING OVEN**



Example image only

The IO Indexing Oven is built for heating acrylic sheet for vacuum forming applications. By indexing the shelves up and down to the single pneumatic door, the Operators work is simplified. With the addition of Teflon coated shelves other materials can also be heated, including ABS & HIPS. The design provides superior heat insulation and near perfect heat distribution for economical, high quality production.



1. Load/unload door
2. Motor/Gearbox
3. Door cylinders
4. Sheet shelves
5. Heating element cover
6. Control panel
7. Circulation fans
8. Failsafe shelf lock
9. Shelf raise/lower mechanism

The oven heating can be specified as either electrical elements (5) or indirect gas burner. The air circulation is by motor driven fan (7). The PLC control system (6) incorporates a timer so that operating temperature is achieved in readiness for the start of the working day. The single door is opened and closed by pneumatic cylinders (3) to provide a reliable seal. The Operator actuates the cylinders with a foot switch. This ensures that hands are kept free to load/unload the plastic sheets from the aluminium shelves (4).

Temperature is set by the operator and is constantly monitored & controlled for accuracy. A timer with alarm notifies the Operator when the sheet is ready for removal from the oven and the correct shelf is presented to the door. The shelves can only be raised or lowered by the motor/gearbox (2) with the door closed. With the door open the failsafe shelf lock (8) ensures that no movement can take place and Operator safety is ensured.

Armour Indexing Ovens are available in many size and specification configurations.

MACHINE SPECIFICATION

ELEMENT	SPECIFICATION	
Machine Capabilities	Maximum sheet size: Number of shelves:	3000 x 2000mm 12
Machine Construction	Main frame: Casing: Size: Paint finish:	Rolled steel sections – BS EN 10025 material Sheet steel – BS EN 10025 material Width 5.4m – Depth 2.6m – Height 4.1m External textured powder coating Internal high temperature aluminium
Shelves	Size: Material:	3050 x 2000mm Aluminium
	Removable for cleaning. Teflon coating optional.	
Lifting Cage	Lift motor/gearbox power: Cage support mechanism: Position control:	0.75kW Wire ropes on steel drum Encoder feedback
Doors	Pneumatically operated via footswitch. 1 door, opening to 2 shelves.	

Heating	Finned heating elements. Quantity: 28 Heating power: 3kW each
Control System	PLC controlled sequence with touch screen interface. Electronic temperature controller. Sheet timers with audible alarm. Normal service temperature: 180°C Maximum temperature: 250°C Control accuracy: ±2%
Air circulation	Four fans Fan motor power: 2.2kW Speed: 1420 rpm
Compressed Air	Minimum pressure: 5.5 Bar Maximum flow required: 840 litres/min Air consumption per cycle: 70 litres Required air supply quality: Dried and filtered
Electricity	3 Phase supply + Neutral + Earth: 380/415V @ 50Hz Maximum power consumption: 100kW
<i>example specification only - specification may be subject to change without notice</i>	

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