# Palmer A-Frame Knock-Out Decoring Machines Manual & Automatic



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## **MANUAL Knock-Out Decoring Machines**

Palmer Manufacturing designs and supplies core knock-out equipment for virtually any casting. Palmer's experience in vibration tooling design allows us to manufacture decoring equipment for virtually any casting or sand process type. From simple A-Frame decoring units to the complete fully automatic units, Palmer is here to serve.

#### **Benefits**

- · High productivity with simplicity
- Minimal moving and wear parts

### **Machine Description**

The mechanical assembly consists of:

- A-Frame mounting system
- · High impact pneumatic hammer
- Foot pedal for clamping and vibration

#### **The Palmer Process**

- · Operator lifts or holds casting in place
- Operator engages foot pedal to begin operation
- Air hammer extends, clamps part, and begins vibration
- · Operator runs air hammer until decoring is complete

#### **Hammer Details**

- · Greater impact force than others
- Fewer moving parts mean lower maintenance and refurbishing costs
- Operates in any attitude
- · Totally sealed mechanism means longer life
- · Exhaust can be vented outside of work area for noise reduction
- Hammer model DTA was specifically designed to replace hammers from others' machines

#### **Model Description**

· Hammering begins immediately when anvil meets the part

# **Available Hammers (sold separately)**

Models	DTE 2231 EP	DTE 2634 EP	DTE 2638 EP
Maximum Stroke	3.375"	5.75"	5.1"
Recommended Working Stroke	1.5"	2.75"	4"
Strokes Per Minute	1700	1200	1200
Air Consumption (CFM)	14	14	13
Overall Length - Cylinder In (With tool retainer but without anvil and air nipple)	15.75"	19.5"	19"
Overall Length - Cylinder Out (With tool retainer but without anvil and air nipple)	19"	25"	24"
Weight Without Anvil (Pounds)	38	49	48.5
Maximum Air Pressure (PSI)	90	90	90
Hose Size (Inches)	3/8"	3/8"	1/2" Hammering Hose

# **AUTOMATIC Knock-Out Decoring Machines**

## **Benefits**

- · High productivity with simplicity
- · Minimal moving and wear parts
- · Can be custom designed for virtually any casting
- Fully programmable cycle allows the end user to match the machine's operation to the core extraction requirements

## **Machine Description**

The mechanical assembly consists of:

- A vibrating frame with vibrating motors, positioning tooling, and casting clamping system
- A suspension by 4 elastic isolators
- A static frame supporting the vibrating jaw and the pneumatic hammers

Our Customers are Decoring... engine supports, manifolds, engine blocks, cylinder heads, engine cradles, and many more items.









