The IK-54D is a precision, quality constructed, hard-working gas shape cutter built for high production. Compact and simple to operate, this machine excels at repetitive work, continuously producing accurate flame cuts by following a steel template. A powerful magnetic roller smoothly guides the cutting torch around any shape, cutting steel plate up to 4 inches thick. The Koike IK-54D offers all the convenient features of more expensive models with all the dependability and efficiency needed for your applications.

**Features & Benefits**

- **Oxy-fuel Pattern Cutter**
  Shape cut steel parts.

- **Ball Transfer Base**
  Allows easy positioning of the unit on the plate.

- **Auto Start Cutting Oxy Valve**
  Start or stop machine motion with cutting oxygen valve.

- **3-Part Body Construction**
  Body consists of the pantograph, jaw and magnetic tracing system mounted on upper jaw with torch mounted on lower jaw; template fitting arm assembly and stand complete the construction.

- **Magnetic Roller**
  \( \frac{25}{64} \) in (10mm) diameter standard roller follows shape of steel template fixed to template holder and accurately guides torch; 6, 8, 15 and 20 mm available and allows various cut sizes with same template.

- **Stable Cutting Speed**
  PWM control system ensures stable cutting speeds.

- **Circle Cutting Option**
  Cut circles without a template 2.4 - 16 in (60-400mm) diameter.

- **Cut Around Base of Machine**
  For larger part cutting.

- **Light Weight**
  72.5 lb (33 kg), easy enough to carry just about anywhere.

- **High Quality Tips**
  Koike’s superior design Series 100 torch tips are included to ensure fast, smooth cuts.
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting Range</td>
<td>1½ - 27½ in ø (30-70mm ø)</td>
</tr>
<tr>
<td>Standard Circle Diameter</td>
<td>24-67 in ø (600-1700mm ø)</td>
</tr>
<tr>
<td>Using Attachment</td>
<td>1½ - 27½ in ø (30-70mm ø)</td>
</tr>
<tr>
<td>Square Side</td>
<td>20-48 in (500-1200mm)</td>
</tr>
<tr>
<td>Using Attachment</td>
<td></td>
</tr>
<tr>
<td>Cutting Thickness</td>
<td>½ - 4 in (3-100mm)</td>
</tr>
<tr>
<td>Cutting Speed</td>
<td>4-39½ in/min (100-1000mm/min)</td>
</tr>
<tr>
<td>Cutting Accuracy</td>
<td>±0.02 in (0.5mm) over 19½ in ø (500 mm ø) cutting</td>
</tr>
<tr>
<td>Speed Control</td>
<td>PWM control system</td>
</tr>
<tr>
<td>Motor</td>
<td>DC Shunt motor 5W</td>
</tr>
<tr>
<td>Power Source</td>
<td>100V, 200V, [50, 60 cycles]</td>
</tr>
<tr>
<td>Weight</td>
<td>72.5 lb (33kg)</td>
</tr>
<tr>
<td>Magnetic Roller Diameter</td>
<td>½ in ø (10mm ø)</td>
</tr>
</tbody>
</table>

**Operations**

Template manufacturing is a simple process and as shown in the diagrams below, allowance is easily made for the diameter of the tracing roller as well as for kerf, with both external and internal templates. Once constructed, the template is quickly attached to the holder with a suitable size tip. The direction changeover switch is then flipped to either right or left handed rotation. Power travels to the magnetic roller motor where speed can be adjusted from 4 to 39½ in/min (100 to 1,000mm/min).

**MODEL DESCRIPTIONS**

- **IK-54D Kit for Acetylene**
  - Includes:
    - (1) IK-54D Machine Unit (110V) ZA4101005
    - (1) Stand ZA4101006
    - (1) Counterweight ZM4101007
    - (1) Oxy-fuel Torch
    - (3) Cutting Tips; 102 for Acetylene Sizes 0, 1, & 2
    - (1) Safety-Z Coupling Set ZA3232260
  - **PART #** IK54D102

- **IK-54D Kit for LPG**
  - Includes:
    - (1) IK-54D Machine Unit (110V) ZA4101005
    - (1) Stand ZA4101006
    - (1) Counterweight ZM4101007
    - (1) Oxy-fuel Torch
    - (3) Cutting Tips; 106 for LPG Sizes 0, 1, & 2
    - (1) Safety-Z Coupling Set ZA3232260
  - **PART #** IK54D106

- **IK-54D Machine (220V)**
  - **PART #** ZA4101004

**OPTIONAL EQUIPMENT**

<table>
<thead>
<tr>
<th>Description</th>
<th>PART #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle Cutting Attachment with Motor - Max 67 in Diameter</td>
<td>ZS30825</td>
</tr>
<tr>
<td>Large Template Adapter - Max 55 in Diameter</td>
<td>ZS30799</td>
</tr>
</tbody>
</table>

**IK-54D Features**

1. Arm
2. Template Holder
3. Template
4. Magnet Roller
5. Magnet Head
6. Motor
7. Speed Control Dial
8. Power Switch (Counter-clockwise-Stop-Clockwise)
9. Auto Switch (Off-On)
10. Torch

**IK-54D w/ Circle Cutting Attachment**

1. Motor
2. Clutch Lever
3. Speed Reduction Unit
4. Rotator
5. Slide Bar (w/ graduated pipe)
6. Rotator Holder
7. Rotation Spindle
8. Stop
9. Circle Diameter Adjustment Handle
10. Circle Cutting Socket