Progressive Die & Punching Die

Introduction

Tungsten carbide material is widely used in area where high wear resistance is required, for example in drawing die, to draw copper, steel, aluminum or other metals, or progressive die in semiconductor circuit manufacture industry.

Semiconductor is indispensable in modern technology, the main trend to process the electronic circuits on is the punching technology on hard metal (cemented carbide) die. The manufacture of motor cores which represented by various base boards and silicon steel sheets also needs hard metal mould. Cemented tungsten carbide has the characters that super high wear resistance and strength, so it is very suitable for high precision manufacturing.

Carbide lathe tools is a kind of widely used cutting tools, which is installed on lathe to cut metal material. In fact, carbide lathe tools can be used on all kinds of lathe to process cylindrical, inner hole, end face, thread, lathe Groove and so on. What’s more, carbide lathe tools are also the base to learn and study all kinds of cutting tools. Toonney carbide lathe tools plant pays more attention to improve the carbide lathe tools and reduce the cost of carbide lathe tools for customers so that customers can get high quality carbide lathe tools with a competitive price. In addition to carbide lathe
tools, Toonney carbide lathe tools factory can manufacture punching die, forging die and progressive die.

Punching die is indispensable technological equipment in stamping producing. A good mold structure is the reliable guarantee to realize procession. The quality and precision of stamping parts mainly depend on the quality and precision of punching die. The structure of punching die should be reasonable and advanced, which directly affects the production efficiency, security, and the service life of punching die itself. Of course, because the shape, size, precision, production batch and production conditions are different, the type of punching die structure are also different. Toonney punching die factory can offer all kinds of punching die for different working situation.

Forging die is a tool of heating die forging. Forgings die is made corresponding shape of concave and convex opposite for the required forging, and there will be an appropriate classification of forgings die. When billet of forging die is heated to the temperature on which the metal can recrystallize, the forging billet can be forged into forgings with minimal flash or flash. According to different usage of equipment, the forging die can be divided into hammer forging die, mechanical press forging die, screw press forging die upset forging die and so on. When forging die processes the metal under high temperature, the working condition of forging die is bad. Forging die need to bear alternative role between cold and hot and repeated impact load. So there is a high stress for forging die. What’s more, when the metal flows, there is friction effect. Thus forging die should have high strength, good hardness, wonderful wear resistance, excellent toughness, outstanding oxidation resistance, high thermal conductivity and good thermal cracking resistance.

Progressive die is composed of multiple stations. Each station of progressive die completes different processing in sequence. The biggest characteristic of progressive die is that in a press trip progressive die can complete a series of different stamping processing. After the completion of a trip, punching machine feeder moves forward with metal material by a fixed step. Thus a pair of mold can complete multiple processes, such as punching, blanking, bending, trimming, drawing and so on. Toonney progressive die plant can offer high quality progressive die.

Samples Matters: Progressive die, punching die and forging die which can be available from our common regular inventory, can be offered as samples for free. For some progressive die, punching die and forging die with irregular customer special required, will be charged. Of course, customers need to pay for the shipping fee. Usually, the lead time of the samples will be within 7 working days.
Minimum Order Quantity: There is no minimum order quantity of progressive die, punching die and forging die for the first trial order. But on the second order, the total amount of progressive die, punching die and forging die should be not less than 1000USD.

Delivery Time: 7-15 working days

**Specification**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Density (g/cm³)</th>
<th>Hardness (HRA)</th>
<th>Hardness (HV)</th>
<th>TRS</th>
<th>Compression strength (MPA)</th>
<th>KIC (MPA.m¹/²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVA90</td>
<td>13.39</td>
<td>82.5</td>
<td>756</td>
<td>2350</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>RVA95</td>
<td>13.10</td>
<td>81.5</td>
<td>709</td>
<td>2100</td>
<td>2.8</td>
<td>28</td>
</tr>
<tr>
<td>RST7</td>
<td>13.40</td>
<td>84.8</td>
<td>886</td>
<td>2640</td>
<td>3.3</td>
<td>24</td>
</tr>
<tr>
<td>RST8</td>
<td>13.30</td>
<td>83.5</td>
<td>806</td>
<td>2640</td>
<td>3.1</td>
<td>27</td>
</tr>
</tbody>
</table>

Toonney progressive die factory can accept customized tungsten products.

**Feature**

Product name: Punching die/ forging die/ progressive die  
Place of Origin: Fujian, China (Mainland)  
Brand Name: Toonney  
Model Number: PD  
Type: Punching die/ forging die/ progressive die  
Material: Tungsten carbide  
Tolerance: As required.  
Grade: RVA90, RVA95, RST7, RST8  
Size: As required  
Port: Xiamen  
Payment terms: FOB Xiamen

**Application**

1. RVA90(With density 13.39, hardness 82.5HRA) is for screw head shape mould, nut die, high pressure stamping die.  
2. RVA95(With density 13.10, hardness 81.5HRA) is for nut die, flower shaped screw die, hot extruding die, super heavy stamping die.  
3. RST7(With density 13.40, hardness 85HRA) applied to stainless steel screw die, impact resistant stamping die, screw die.
4. RST8 (With density 13.30, hardness 84HRA) applied to raised head screw die, impact resistant stamping die, double horn shape screw die, screw die, rivet die.

**Advantage**

1. Toonney carbide lathe tools manufacturer uses 100% virgin material.

2. Toonney punching die manufacturer has more than 10 years production experience.

3. Toonney progressive die manufacturer imports advanced equipment and develop their own professional team for designing and producing.

4. Toonney forging die manufacturer can give the promise that all forging die will have an inspection during producing and final inspection after producing.

5. Toonney progressive die factory can accept customized order of progressive die, punching die and forging die.