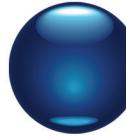


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**Simplified Table**



**Products**

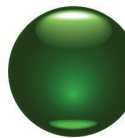
**3mm Shank Drills**

**Straight Shank Drills**

**Guide Hole Drills**

**Sweep Cut Drills**

**Custom Tools**



**Drilling Conditions**



**Technical Data**

## ***Company Introduction***

ATOM Precision of America, Inc. (ATOM) is a leading manufacturer of micro drills. Since its founding in 1934, ATOM has continuously developed high-quality micro drills, alongside advancements in the manufacturing industry. Today, ATOM has a global reputation as one of the world's most reliable brands, indispensable for use in a variety of industries, including medical, aerospace, automotive, electronics, and mold manufacturing.



**Tomejiro Saito, Founder of ATOM**

ATOM offers over 4,700 micro drills with a wide variety of diameters and flute lengths. Our extensive product line makes it possible to serve customers quickly. ATOM can provide micro drills with diameters starting from 0.02mm (ø0.0008"), with larger sizes available in 0.01mm (0.0004") increments. With different flute lengths and drills with specialized coatings, ATOM has responded to the ever-changing needs of manufacturers in the micro-precision machining arena.

## ***Mission Statement***

ATOM strives to contribute to the society in which it operates through the philosophy of "Made in Japan" quality. For ATOM, this takes the form of utilizing micro-precision grinding technology in the development, manufacturing, and sales of high-quality micro drills and related services. ATOM is determined to grow by devoting all our energy to the advancement of manufacturing industries worldwide. Through continuous research and development, ATOM aims to provide its users with innovative micro-drilling solutions as well as the peace of mind that comes with knowing they are using quality ATOM micro drills in their machining processes.

### **"We value for all through creativity"**

ATOM has pursued this core philosophy since its establishment in 1934. It is intended to guide the company's interactions not only with the customers and their experience in mind but also with the company's employees, their families, suppliers, distributors, and the community at large.





## 1934

- Began manufacturing and sales of hand hacksaw in Tokyo, Japan

## 1954

- Began manufacturing and sales of carbide bites

## 1955

- Began manufacturing and sales of carbide end mills, reamers, and custom cutting tools

## 1964

- Established Tokyo factory

## 1974

- Increased capital to 20 million yen

## 1976

- Began manufacturing and sales of standard straight shank drills

## 1978

- Established Kakuda factory in Miyagi, Japan

## 1982

- Increased capital to 40 million yen

## 1984

- Expanded Kakuda factory

## 1989

- First overseas subsidiary, ATOM Precision of America, Inc. opened in the USA
- Rebuilt Kakuda factory

## 1994

- Began manufacturing and sales of standard 3mm shank drills

## 2007























- Expanded Kakuda factory

## 2019

- Expanded Kakuda factory



New Kakuda factory in Miyagi, Japan

| Model                        | Appearance  | Description                                    | Coating | Diameter mm       | Page  |  |
|------------------------------|---|--|---------|-------------------|-------|--|
| <b>3mm Shank Drills</b>      |   |  |         |                   |       |  |
| ADRS                         |    | Short, Uncoated, For Non-Ferrous               |         | ø0.1~<br>ø3       | p.40  |  |
| ADR                          |    | Regular, Uncoated, For Non-Ferrous             |         | ø0.02~<br>ø3      | p.44  |  |
| ADRSL                        |    | Semi Long, uncoated, For Non-Ferrous           |         | ø0.03~<br>ø3      | p.48  |  |
| ADRL                         |    | Long, Uncoated, For Non-Ferrous                |         | ø0.03~<br>ø3      | p.52  |  |
| ADR-SP                       |    | Super Precision, Uncoated, For Non-Ferrous     |         | ø0.015~<br>ø1.995 | p.54  |  |
| ADRS-SV                      |    | Short, FCS Coated, For Steels                  | FCS     | ø0.1~<br>ø3       | p.58  |  |
| ADR-SV                       |    | Regular, FCS Coated, For Steels                | FCS     | ø0.02~<br>ø3      | p.62  |  |
| ADRSL-SV                     |    | Semi Long, FCS Coated, For Steels              | FCS     | ø0.03~<br>ø3      | p.66  |  |
| ADRL-SV                      |    | Long, FCS Coated, For Steels                   | FCS     | ø0.03~<br>ø3      | p.68  |  |
| ADR-SUS                      |    | Regular, FCS Coated, For Hard-to-Cut Materials | FCS     | ø0.1~<br>ø3       | p.72  |  |
| ADRL-SUS                     |    | Long, FCS Coated, For Hard-to-Cut Materials    | FCS     | ø0.1~<br>ø3       | p.76  |  |
| ADR-DLC                      |    | Regular, DLC Coated, For Non-Ferrous           | DLC     | ø0.1~<br>ø1       | p.80  |  |
| ADRL-DLC                     |    | Long, DLC Coated, For Non-Ferrous              | DLC     | ø0.1~<br>ø1       | p.82  |  |
| <b>Straight Shank Drills</b> |   |  |         |                   |       |  |
| ADS                          |   | Regular, Uncoated, For Non-Ferrous             |         | ø0.3~<br>ø13      | p.84  |  |
| V-ADS                        |  | Regular, TiAlN Coated, For General Purpose     | TiAlN   | ø0.3~<br>ø6       | p.94  |  |
| ADSL                         |  | Semi Long, Uncoated, For Non-Ferrous           |         | ø0.3~<br>ø13      | p.98  |  |
| ADL                          |  | Long, Uncoated, For Deep Drilling              |         | ø0.3~<br>ø13      | p.100 |  |
| ADLL                         |  | Extra Long, Uncoated, For Deep Drilling        |         | ø0.3~<br>ø13      | p.102 |  |
| <b>Guide Hole Drills</b>     |   |  |         |                   |       |  |
| ADPF30                       |  | Guide Hole Drill, For Ferrous                  |         | ø0.02~<br>ø3      | p.104 |  |
| ADPN30                       |  | Guide Hole Drill, For Non-Ferrous              |         | ø0.02~<br>ø3      | p.105 |  |
| <b>Sweep Cut Drills</b>      |   |  |         |                   |       |  |
| ASWR                         |  | Sweep Cut Drill, 3mm Shank                     |         | ø0.1~<br>ø3       | p.106 |  |
| ASWD                         |  | Sweep Cut Drill, Straight Shank                |         | ø1~<br>ø6         | p.107 |  |

|  | Carbon Steels | Alloy Steels | Prehardened Steels<br>Tool Steels<br>Die Steels<br>30~38 HRC | Stainless Steels | Cast Iron | Aluminum Alloys | Copper Alloys | Nickel Alloys | Titanium Alloys | Hardened Steels<br>~50 HRC | Resin |
|--|---------------|--------------|--|------------------|-----------|-----------------|---------------|---------------|-----------------|----------------------------|-------|
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | ⊙             | ⊙            | ⊙  | ⊙                | ⊙         |                 |               | ○             | ⊙               | ⊙                          |       |
|  | ⊙             | ⊙            | ⊙  | ⊙                | ⊙         |                 |               | ○             | ⊙               | ⊙                          |       |
|  | ⊙             | ⊙            | ⊙  | ⊙                | ⊙         |                 |               | ○             | ⊙               | ⊙                          |       |
|  | ⊙             | ⊙            | ⊙  | ⊙                | ⊙         |                 |               | ○             | ⊙               | ⊙                          |       |
|  | ○             | ○            | ○  | ○                | ○         |                 |               | ⊙             | ○               | ⊙                          |       |
|  | ○             | ○            | ○  | ○                | ○         |                 |               | ⊙             | ○               | ⊙                          |       |
|  |               |              |  |                  |           | ⊙               | ⊙             |               |                 |                            | ○     |
|  |               |              |  |                  |           | ⊙               | ⊙             |               |                 |                            | ○     |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | ○             | ○            | ○  | ○                | ○         |                 |               |               | ○               | ○                          |       |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | △             | △            | △  | △                | △         | ⊙               | ⊙             |               | △               | △                          | ⊙     |
|  | ⊙             | ⊙            | ⊙  | ⊙                | ⊙         |                 |               |               | ⊙               | ⊙                          |       |
|  |               |              |  |                  |           | ⊙               | ⊙             |               |                 |                            | ⊙     |
|  |               |              |  |                  |           | ⊙               | ⊙             |               |                 |                            | ⊙     |
|  |               |              |  |                  |           | ⊙               | ⊙             |               |                 |                            | ⊙     |