



# ***SARAN CORPORATION., LTD.***

Worldwide Exporters of New / Used Machineries  
*Authorized Dealers for OTANI FORGING HAMMERS in India*





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**SARAN** 株式会社は、2005 年の創立以来、日本とインド、中東、東南アジア間の中古産業機械市場の橋渡し役を担って参りました。今後も長年に渡り蓄積された経験と知識そして広範に張り巡らされた販売網をベースに、サプライヤーとエンドユーザー相互のニーズを的確に把握し最適なソリューションのスピーディーな提供に努めて参ります。

## 【会社概要】

- ・社名 : **SARAN** 株式会社
- ・設立 : 2005 年 8 月
- ・代表者 : Palaniyandi Sharavanan (パラニヤンディ サラバナン)
- ・資本金 : 1,500 万円
- ・売上 : 10 億円 (12 期計画)
- ・従業員数 : 18 名 (日本本社 8 名)
- ・東京本社 : 〒 136-0072 東京都江東区大島3-32-12 東栄ビル 2 階  
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Email: saranco@sarancorporation.co.jp URL: www.sarancorporation.co.jp
- ・インド事務所 : No.111, Sidco Aiema Tower, 1st Main Road,  
Ambattur Industrial Estate, Chennai - 600058, Tamilnadu, India.  
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## 【事業内容】

- ・大谷機械製エアハンマーのインド向け販売
- ・中古産業機械の輸出版売
- ・スローブ・ローラー・コンパクターの輸入販売
- ・中古トラックの輸出版売
- ・産業機械の修理、オーバーホール
- ・ツーリング・工具の輸出版売
- ・マサラチキン輸入販売
- ・ココナツオイル、コブラミールの輸入販売

## 【取扱商品】

### ■大谷機械（インド向け販売代理店）

- ・エアーハンマー（新機）
- ・キーハンマー



### ■中古工作機械・工具

- ・NC工作機械
- ・工作機械工具



### ■中古大型プレス

- ・熱間、冷間鍛造プレス
- ・自動鍛造プレス



### ■中古建設機械

- ・ショベルカー、ブルドーザー
- ・フォークリフト



### ■スロープ・ローラー・コンパクター

- ・インド製コンパクター
- ・輸入販売



### ■中古大型トラック

- ・ダンプカー
- ・セルフローダー



### ■マサラチキン

- ・マサラ粉（インド産）
- ・鶏肩肉（タイ産）



### ■ココナツオイル・コブラミール

- ・未精製ココナツオイル
- ・コブラミール



**SARAN CORPORATION., LTD. JAPAN**, established in 2005, is one of the worldwide leading exporters of all kinds of "Used / New Machinery" ranging from **Used:** Machine tools/Industrial machinery / Plant and Machinery / Tooling / Construction Machinery / Mining Machinery / Trucks & **New:** Otani's Air Stamp Hammer / Air Hammer / Key Hammer / Forging Press Automation Equipment sourcing from Japan, the market place of quality machines.

We believe in long term business relationship and our professionally trained team of staff provides prompt response and quick service that enables the customers to take right decisions at the right time. Places we have marketed -- Ludhiana, Pune, Bangalore, Chennai, etc.,

**Mr. Sharavanan**, the Founder President of Saran Corporation., Ltd. Japan who resides there over the 20 years, a dynamic businessman, enjoys a close relationship with the leading buyers in the World because of his excellent knowledge about the territory of availability of products in Japan, ethical business qualities, transparent approach and committed services.

We are proud to introduce ourselves as the **Sole dealer and distributor for OTANI'S forging Hammer products** in India.

**OTANI's precision-forging** hammers deliver an exceptionally large striking force due to its large-sized configuration. It's safe, trouble-free operation makes it suitable for processing a variety of products.

Otani provide not only machinery, but also provide the software which fully improves the ability of performance, and further more they guarantee the quality of service system with great satisfaction anywhere in the world.

**Machine Tools:** The CNC machines tools comprises of the computer in which sequential instructions or coded commands that direct the specific machine functions as per the requirements. In India, there is a huge demand for Japanese used machine tools because of its uncompromised quality, life of machines, accuracy, so we provide products range that includes machine tools, fabrication machinery, forging presses, sheet metal machinery, Sheet metal presses, Tool room machinery, etc. We also marketed CNC Machines to Automobile / Aero Space / Dies & Moulds, Casting industries.

**Forging press Automation Equipment:** DONGSAN Industrial Co., Ltd is a specialized manufacturer of automation systems designed for Cold and Hot forging. The concept of the Forging press Automation are for advanced handling, rapid tooling-change, flexibility, smart metrology, advanced sensing and intelligent gripping techniques. We can automate your forming lines with intelligence and an eye to practical utility to boost the performance of your production efficiently and economically. Some of our products are Servo Transfer Press, Servo Arm Loader, Servo Billet Loader, Unloader, Lubrication Device, Forging Roll Servo Manipulator, Lubrication spray nozzles in the finger beam & Die set and Forging Presses with built in Transfer Systems.

**Tooling:** Tooling, also known as machine tooling, is the process of acquiring the manufacturing components and machines needed for production. Having the right kind of tooling in place is extremely important for manufacturers. Proper tooling directly affects the output capacity as well as product total life cycle, quality and pricing.

**Construction Machinery:** Construction machinery are specially designed for executing construction tasks, most frequently involving earthwork operations. The product range includes Excavator, Bulldozer, Wheel loader, Motor grader, All types of cranes, Dump truck, Off road dump trucks, etc.

**Our Specialized Team & Facilities:** We have trained professionals for Sourcing, Sales & Marketing, Service, Commissioning & Erection, Spares support and Technical Team. We have our own transportation facility, Crane, Dismantling and loading facilities.

COMPANY NAME : Saran Corporation.,Ltd.  
 PRESIDENT : Palaniyandi Sharavanan  
 ESTABLISHMENT DATE : August 29, 2005  
 CAPITAL : JP Yen 15,000,000  
 ANNUAL TURNOVER : US\$ 15Million  
 DEALS IN : **Used:** Machine Tools/Industrial Machinery/Plant and Machinery/Construction Machinery/ Mining Machinery/Trucks  
**New:** OTANI's (JAPAN) Air Stamp Hammer/ Single frame Hammer/Air Hammer/Key Hammer/Forging Press Automation Equipments.  
**New & Used:** Tooling for Machine Tools.  
**Marketing only in JAPAN:** Saran Masala chicken 65/ Crude Coconut oil/ Copra Meal/ Slope Vibratory Compactor  
 JAPAN OFFICE : 3-32-12 Ojima, Koto-ku, Tokyo, 136-0072, Japan  
 TOUEI BLDG 2F-202  
 Tel: +81-358-75-2548 Fax: +81-358-75-2549  
 E-mail : saranco@sarancorporation.co.jp  
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 CHENNAI OFFICE (INDIA) : No.111, Sidco Aiema Tower, 1st Main Road,  
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 Tel: +91-44-4863 2548 Fax: +91-44-4863 2549  
 Mobile : +91 99621 42548, +91 85266 14246  
 E-mail : sales@sarancorporation.co.jp  
 URL : www.sarancorporation.co.jp  
 NUMBER OF EMPLOYEES: 18  
 OPENING SHORTLY : Chennai, Bangalore, Pune.  
 BANKER'S NAME : BANK OF TOKYO-MITSUBISHI UFJ LTD, TOKYO MAIN BRANCH (001)  
 7 -1, MARUNOUCHI 2-CHOMECHIYODA-KU, TOKYO, JAPAN  
 REGISTERED MEMBER : JAPAN CHAMBER OF COMMERCE, JETRO  
 LICENSE NUMBER : 307721507680



## AVAILABLE TYPES & MAKES : MACHINING CENTERS

**Vertical/ Horizontal Machining Centers:** Komatsu, Mori Seiki, Makino, Okuma & Howa, Fuji Seiki, Kuraki, Tecno Wasino, Hamai, Matsuura, Toyo Seiki, Hitachi Seiki, Ohtori, Yamazaki Mazak, Yasuda, OKK, Toshiba, Niigata, Mitsubishi, Okuma

**Double Column & 5 Axis Machining Centers:** Fuji Seiki, Kuraki, Ohtori, Shin Nippon, Hitachi Seiki, Matsuura, OKK, Toshiba, Homma, Mitsubishi Heavy, Okuma, Toyoda, Kitamura, Mori Seiki, Yamazaki Mazak, Komatsu NTC, Niigata, Mitsui Seiki, Shin Nippon Koki





CNC工作機械

CNC MACHINE TOOLS

## AVAILABLE TYPES & MAKES:

### CNC GRINDING MACHINES

**Cylindrical Grinding Machines:** JTEKT, Koyo, Mitsubishi Heavy, Okamoto, Okuma, Shigiya, Sumitomo Heavy, Taiyo Koki, Tokyo Seiki, Toyo Advanced, Tsugami

**Surface Grinding Machines: (Reciprocating Type):** Amada Holdings, Ichikawa, Iwashita, Kuroda, Mitsui High-Tec, Okamoto, O-M, Sumitomo Heavy

**(Rotary Table Type):** Ichikawa, Komatsu NTC, Koyo, Nachi-Fujikoshi, Okamoto, Sumitomo Heavy, Tokyo Seiki, Okamoto

**Centerless Grinding Machines:** Komatsu NTC, Koyo, Nihon Seiki, Nissin, Ohmiya, Shigiya

**Profile Grinding Machines:** Amada Holdings, Mitsui High-Tec, Taiyo Koki, Toyo Advanced, Waida

**Tapping Machines:** JTEKT, Toyo Seiki, Amada, Brother Homma, Toyo Seiki

**CNC BORING MACHINES:** Horizontal Boring Machines(Table Type):Ikegai, Kuraki, Mitsubishi Heavy, Niigata, Nomura Machine, Toshiba Machine

**(Floor Type):** Ikegai, Kuraki, Mitsubishi Heavy, Nomura Machine,Toshiba Machine, Toyo Seiki

Vertical Boring Machines: Toyo Seiki, Kitamura, Mitsui Seiki, Yasuda



## CNC LATHE

**Lathes:** Hitachi Seiki, Mori Seiki, Toshiba, Homma, Kitagawa, Okuma & Howa, Yamazaki Mazak, Ikegai, Mitsubishi Heavy, Miyano.

**Multi-Spindle Automatic Lathes:** Citizen, Tsugami, Mitsubishi Heavy, Miyano, Murata

**Single Spindle Automatic Lathes:** Citizen, Shimamoto, Miyano, Star, Murata, Takamatsu, Nomura Automatic, Tsugami, Fuji Machine.

**Turning Centers:** Dainichi, Ikegai, Mori Seiki, Takahashi, Tsugami, Komatsu, OKUMA, Yamazaki Mazak, Hitachi Seiki, Mitsubishi Heavy, Okuma & Howa, Tecno Wasino, Homma, Miyano, Toshiba

**Vertical Turret Lathes:** OM, Toshiba, Hitachi, Okuma, Miyano, Tecno Wasino, Murata, Tsugami, Takahashi, Yamazaki Mazak, Takamatsu



## AVAILABLE TYPES & MAKES:

### ELECTRICAL DISCHARGE MACHINES

Die Sinking EDMs: Makino, Mitsubishi Electric, Sodick, Fanuc.

Wire Cut: FANUC, Makino, Mitsubishi Electric, Seibu, Sodick

High Precision Small Hole EDMs: Elenix, Mitsubishi Electric, Sodick

### GEAR CUTTING & FINISHING MACHINES:

Gear Cutting Machines: Toshiba Machine, Kashifuji, Mitsubishi Heavy

Gear Hobbing Machines: Hamai, Karats, Kashifuji, Mitsubishi Heavy, Seiwa

Gear Shaping & Honning Machines: Kanzak, Mitsubishi Heavy, Toyo





CNC工作機械

CNC MACHINE TOOLS

## AVAILABLE TYPES & MAKES:

**Fabrication Bending & Cutting Machines:** Dmg Mori, Eguro, Enshu Horkos, Howa, JTEK, Kitamura, Komatsu, NTC, Makino, Mitsubishi Heavy, Mitsui Seiki, Nachi-Fujikoshi, Niigata, Nishida, OKK, Okuma, Shin Nippon, Toyo advanced, Toyo Seiki, Yamazaki Mazak, Yasda

**Fabrication Processing Machine:** Enshu, Homma, Horkos, Howa, JTEK, Kiri Kitamura, Komatsu, NTC, Kyowa, Matsuura, Mitsubishi Heavy, Nachi-Fujikoshi, Nishida, Nomura Machine, OKK, Sakurai, Shin Nippon, Toyo Seiki, Okuma howa





鋼材加工機械

FABRICATION MACHINERY

## AVAILABLE TYPES & MAKES:

**Sheet Metal Shearing Machines:** Kansai Tetsukosho, Amada, Matsuno machine, AizawaTetsukosho, Iwata, Toyo

**Laser Cutting Machines:** Mazak, Mitsubishi, Komatsu, Toyo machinery, NCC, Trumpf, NTC, Yamashina, Meiwa Kiko, Fujimura Tetsukosho, Mitsubishi Electric Corporation, Hitachi Koki.

**CNC Turret Punch Press:** Komatsu, Amada, Fuji Kiko, Nisshinbo, Murata Machinery, Toyo Machinery, Kansai Tetsukosho

**Press Brake:** Toyokoki, Komatsu, Amada, Mazak, Komatsu, Toyo machinery, Yamashina, Meiwa Kiko, Fujimura Tetsukosho, Mitsubishi Electric Corporation, Hitachi Koki, Yodogawa Press Plant, POWER-TECH (ITA), Kawai Works, Ikuno machine





板金加工機械

SHEET METAL MACHINERY

## AVAILABLE TYPES & MAKES:

**C- Type Press:** Amada, Aida, Komatsu, Washino, Uchida, Shinohara.

**H- Frame Press:** Amada, Aida, Komatsu, Washino, Kawasaki, OKK, Kawasaki, Kubota Iron Works

**High Speed Press:** Aida, Komatsu, Kubota Iron Works, Yamada Dobby, Kyori.

**Fine Blanking Press:** Kawasaki, Kitamura

**Hydraulic Press:** Amada, Aida, Komatsu, Washino, Kawasaki, Kubota Iron Works , Fuji, Kanto, Fukui

**Servo Press:** Amada, Aida, Komatsu, Enomoto

**Trimming Press:** Amada, Aida, Komatsu, Washino, Kawasaki, Kubota Iron Works, Fuji

**Leveler & Feeder:** ORII, Amada, Datec, Aida





型押しプレス

STAMPING PRESSES

## HOT FORGING PRESSES

### AVAILABLE TYPES & MAKES:

Hot Forging Presses: Komatsu, Kurimoto, Smeral, Fukui, Fuji, Aida, Amada, Kawamura, Sueco, TMP

Hot Forging Hydraulic Press: Komatsu, Kurimoto, Fukui, Fuji, Aida, Amada

Hot Forging Trimming Press: Baba, Komatsu, Kurimoto, Fukui, Fuji, Aida, Amada

Hot Forging Billet Shearing: Manyo, Kurimoto

Hot forging Hammer: Otani, Nittan



# AVAILABLE TYPES & MAKES:

**Cold Forging Presses:** Komatsu, Amada, Aida, Kurimoto, Kojima, TMP, Sumitomo, Kawamura, Kawasaki

**Cold Forging Hydraulic Press:** Komatsu, Amada, Aida, Kurimoto, Kojima, TMP, Sumitomo, Kawasaki

**Knuckle Joint Press:** Komatsu, Amada, Aida

**Cold Extrusion Press:** Komatsu, Amada, Aida, Kawamura, Fukui

**Cold Hobbing Press:** Komatsu, Amada, Aida, Kawamura, Fukui, Sumitomo

**Cold Forging Billet Shearing:** Manyo, Kurimoto, Sato-Tekko



(熱間/冷間) 鍛造プレス

FORGING PRESSES

## AVAILABLE TYPES & MAKES:

**CNC Lathe:** Hitachi Seiki, Mori Seiki, Toshiba, Homma, Kitagawa, Okuma & Howa, Yamazaki Mazak, Ikegai, Mitsubishi Heavy

**Floor Boring Machinery:** Ikegai, Kuraki, Mitsubishi Heavy, Nomura Machine, Toshiba Machine, Toyo Seiki, Yamazaki Giken

**Machining Center:** Komatsu, Okuma & Howa, Fuji Seiki, Kuraki, Tecno Wasino, Hamai, Matsuura, Toyo Seiki, Hitachi Seiki, Ohtori, Yamazaki Mazak

**Fabrication Machinery:** Dmg Mori, Eguro, Enshu Horkos, Howa, JTEK, Kitamura, Komatsu, NTC, Makino, Mitsubishi Heavy, Mitsui Seiki, Nachi-Fujikoshi, Niigata, Nishida, OKK, Okuma, Shin Nippon, Toyo advanced, Toyo Seiki, Yamazaki Mazak, Yasda





ツールルーム門型機械

TOOL ROOM HEAVY MACHINERY

## AVAILABLE MAKES & TYPES:

**CNC 3-D Measuring Machine:** Mitutoyo, Tokyo Seimitsu, Amada, Nikon Corporation

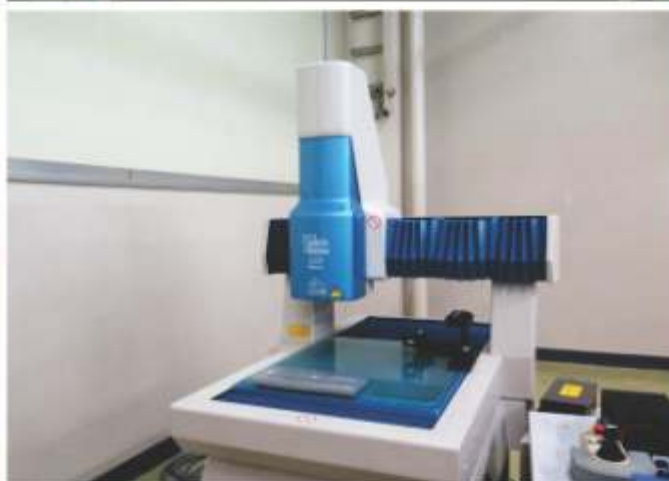
**Non-contact 3-D CNC Image Measuring Instrument:** Mitutoyo, Tokyo Seimitsu

**5-Axis CNC CMM:** Mitutoyo

**Inline - Compatible Horizontal CNC CMM:** Mitutoyo

**Ultra High Accuracy CNC CMM:** Mitutoyo





測定器・試験機

MEASURING INSTRUMENTS

## USED TOOLINGS

### AVAILABLE TYPES:

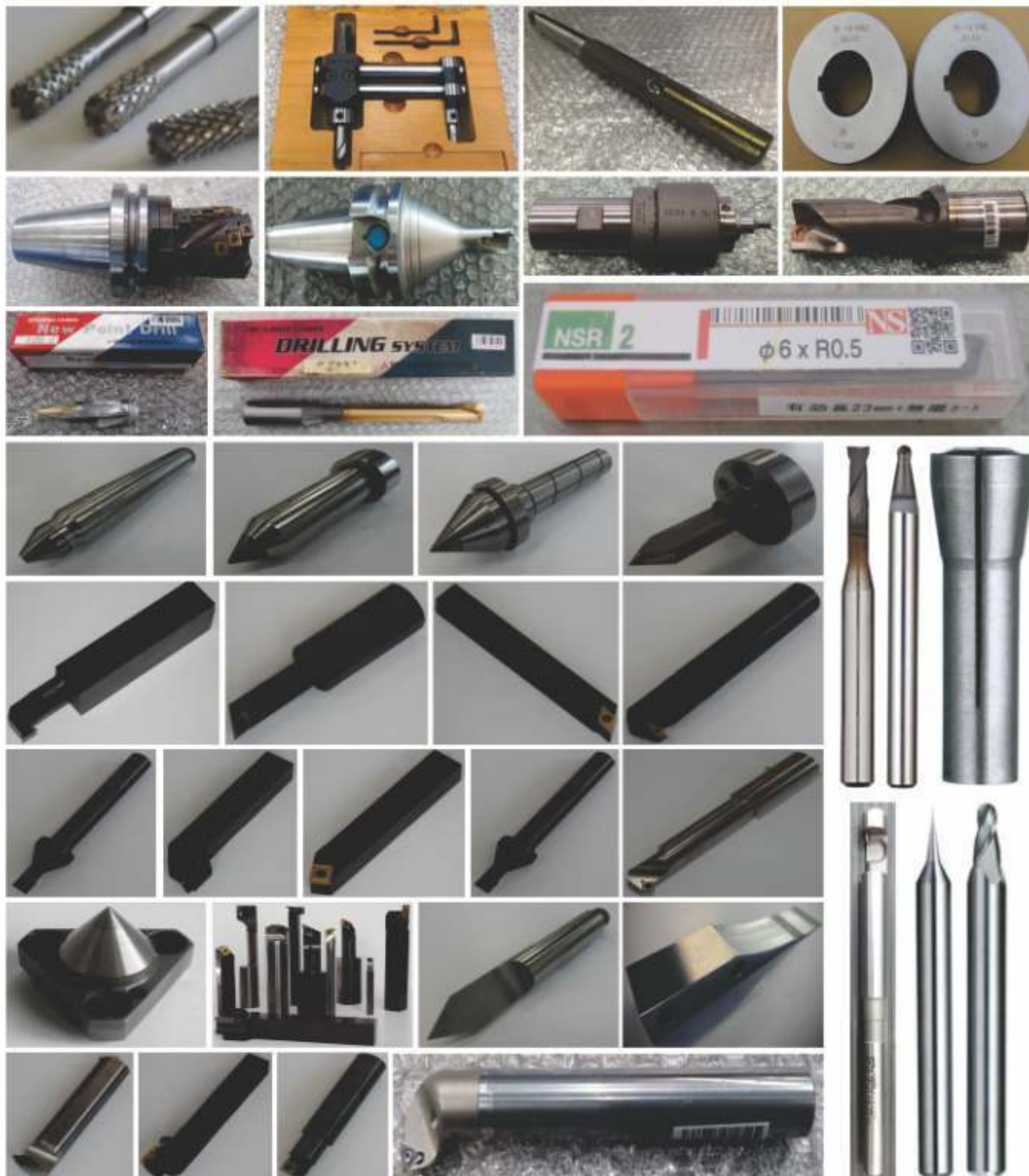
**End mills:** Chip replaceable End mill, Ball End Mill, face mill, 4 Flute End mill, Rough end Mill, Square End Mill, Taper Ball End Mill

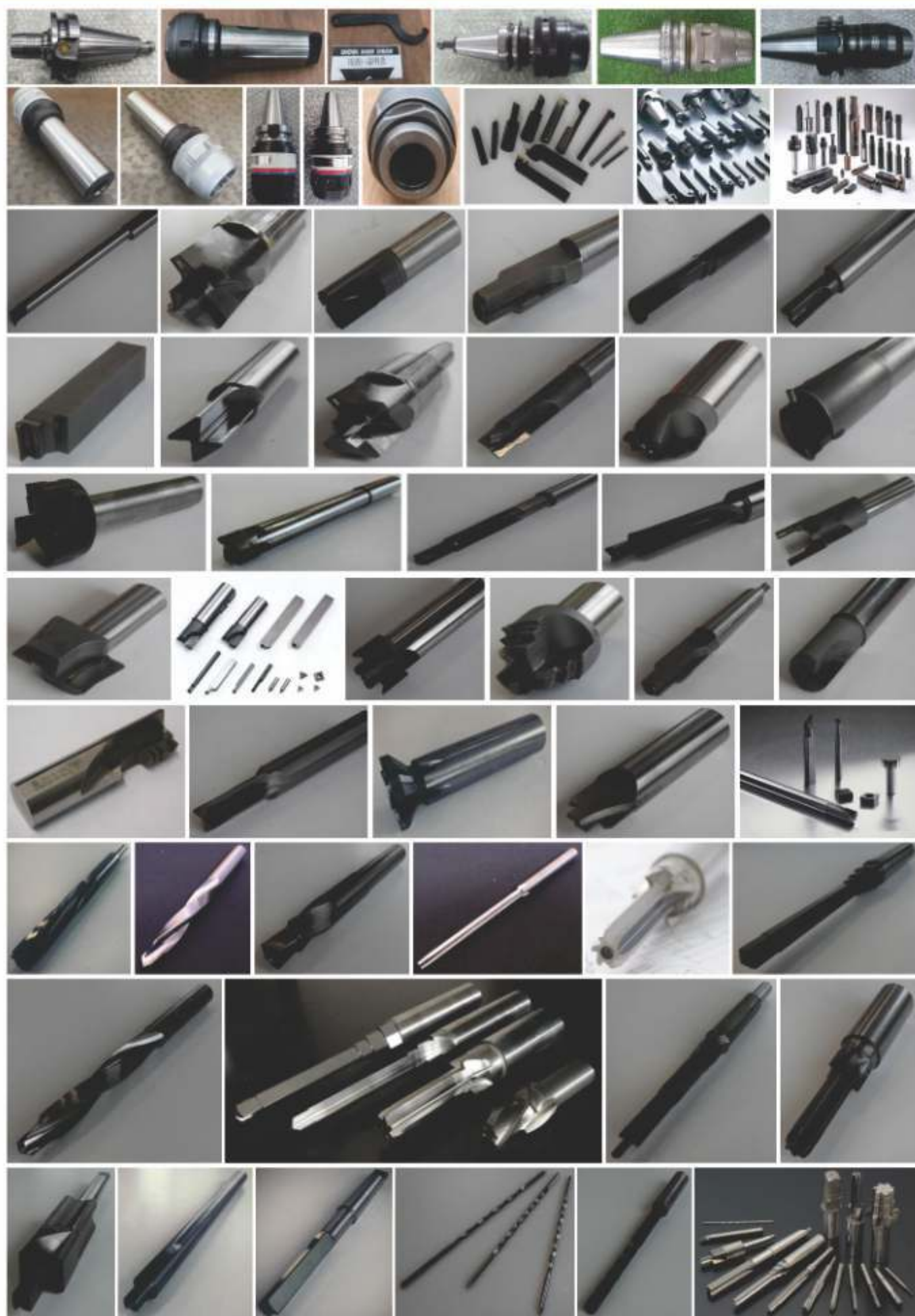
**Chuck:** Micron chuck

**Drill:** Gun drill, Key point Drill, Straight drill, Throw away drill, Taper drill, Micro Drill

**Cutting Tools:** Cutter Series for Copper Electrode, Aluminum & Plastic, Cylindrical cutter, Lightweight break cutter

**Form cutting and forming tools:** Jigs





ツール・加工

TOOLINGS

## AVAILABLE TYPES & MAKES:

Battery Forklifts: TCM, Sumitomo, Toyota, Komatsu, Nichiyu

Reach Forklifts: TCM, Sumitomo, Toyota, Komatsu, Sinko.





産業用フォークリフト

INDUSTRIAL FORKLIFT

# SARAN

産業用フォークリフト

INDUSTRIAL FORKLIFT





産業用フォークリフト

INDUSTRIAL FORKLIFT

## New Hammer Products:

OTANI MACHINERY CO.,LTD. was established at Japan in 1946, has been producing safe security parts and forging products to support the strength and reliability of automobiles, construction machineries, railway, aircrafts, and bridges for a long time. As a result, Japanese forging technology has reached the top in the world because of their effective contribution.

We provide not only machinery, but also provide the software which fully improves the ability of performance, and further more we guarantee the quality of service system with great satisfaction anywhere in the world.

## Air Stamp Hammer:

OTANI's Die-Max series. It's the right investment in precision-forging where various kinds of small components are produced in large quantities is of vital importance.



**Features:**

- ◆ The Die-Max series can handle a wide variety of products because of its large striking force.
- ◆ A split type ram guide is used so that the ram can be dismantled from either side in vertical direction.
- ◆ The ram safety catch lock prevents the ram from accidentally dropping due to power failure or any other reason.
- ◆ Pressurizing upper piston head by means of compressed air produce large blow energy.
- ◆ Controlling compressed air enables quick movement of the ram in the vertical direction.

**Additional features:**

1. The blow force - the life of a hammer – is exceptionally high as it is developed by the component forces of the weight of the dropping element, the pressure of the compressed air acting upon the top face of the rammer, and the re-expansion of the air cushion developed at the bottom of the rammer (inside rammer guide).
2. The rational valve devices eliminate the waste of power yet enable the air hammer to provide the highest capacity.
3. The air cushion formed in the upstroke of the ram prevents the ram from hitting the cylinder cover thus insuring safety of the machine.
4. The large space between the rammer guide and the anvil makes the job easier.
5. A special air regulator is provided to allow easy and desired adjustment of the intensity of blow.

**SPECIFICATION LISTS OF HAMMER PRODUCTS / OTANI MACHINERY MFG.****Product Type: DIE-MAX Series**

| DESCRIPTION                                      | DIE-MAX<br>30E     | DIE-MAX<br>45E     | DIE-MAX<br>70E     | DIE-MAX<br>100E    | DIE-<br>MAX150E    | DIE-MAX<br>180E    | DIE-MAX<br>220E    | DIE-MAX<br>260E    | DIE-MAX<br>450E     |
|--------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| Average of Dropping<br>Section Weight (Kg)       | 740                | 1220               | 1920               | 2570               | 3825               | 4745               | 5840               | 6370               | 12500               |
| Average of Upper<br>Die Wight (Kg)               | 230                | 300                | 450                | 600                | 900                | 1200               | 1500               | 1800               | 3000                |
| Max. Stroke (mm)                                 | 1050               | 1050               | 1150               | 1200               | 1200               | 1250               | 1250               | 1300               | 1500                |
| Blow Energy (Kg - m)                             | 2820               | 4370               | 7055               | 9900               | 14585              | 17085              | 21540              | 25250              | 53025               |
| Floor to Machine<br>Top (mm)                     | 4410               | 4745               | 5110               | 5435               | 5900               | 6205               | 6305               | 6575               | 7470                |
| Min. Die Thickness<br>(mm)                       | 280                | 320                | 370                | 380                | 500                | 600                | 700                | 800                | 550                 |
| Size of Machine<br>(H x W x L) mm                | 4960x<br>2100x1000 | 5445x<br>2400x1300 | 6025x<br>2700x1500 | 6445x<br>3000x1600 | 7075x<br>3500x1800 | 7605x<br>3800x2000 | 8055x<br>4000x2100 | 8475x<br>4200x2200 | 10470x<br>4800x2700 |
| Guide Distance (mm)                              | 420                | 480                | 590                | 630                | 710                | 740                | 800                | 820                | 1050                |
| Required Air<br>Compressor<br>Capacity (min. kw) | 55                 | 75                 | 110                | 150                | 220                | 300                | 450                | 450                | 750                 |
| Mount Space<br>(WxL) mm                          | 400x380            | 460x500            | 570x580            | 610x710            | 690 x 700          | 720x730            | 780x750            | 800 x 850          | 980 x 1000          |
| Number of Blow<br>(per / min)                    | 59                 | 60                 | 54                 | 54                 | 53                 | 40                 | 38                 | 40                 | 30                  |
| Total Wight (t)                                  | 25                 | 38                 | 65                 | 76                 |                    | 150                | 190                |                    |                     |

## Air Hammer:

With a built-in compressed air piston, the Otani Air Hammer is power-operated double-acting Air Hammer for general free forging. The power transmitted by means of V-belts from the motor at the rear of the head, drives the crankshaft in the compressing unit to compress air.

The compressed air is let to act directly upon the top and bottom of the ram head within the rammer cylinder to give blows to the work. Special valves are used in combination with the above mechanisms to allow assured and easy controls of operations such as strong and weak blows, slow and quick blows, single and continuous blows and dwell.

These air hammers are more economical than steam hammers or hammers directly driven by compressed air.



**Features:**

- ◆ The blow force is exceptionally high as it is developed by the component forces of the weight of the dropping element, the pressure of the compressed air acting upon the top face of the rammer, and the re-expansion of the air cushion developed at the bottom of the rammer (inside rammer guide).
- ◆ The rational valve devices eliminate the waste of power yet enable the air hammer to provide the highest capacity.
- ◆ The air cushion formed in the upstroke of the ram prevents the ram from hitting the cylinder cover thus insuring safety of the machine.
- ◆ The large space between the rammer guide and the anvil makes the job easier.
- ◆ A special air regulator is provided to allow easy and desired adjustment of the intensity of blow.

**Product Type. OT (Air Hammer)**

| DESCRIPTION                    | OT12             | OT25               | OT50               |
|--------------------------------|------------------|--------------------|--------------------|
| Nominal Capacity (t)           | 1/8              | 1/4                | 1/2                |
| Max. Stroke (mm)               | 460              | 610                | 785                |
| Blow Energy (Kg-m)             | -                | -                  | -                  |
| Floor to Machine Top (mm)      | 2000             | 2565               | 3100               |
| Motor Output (kw/ps)           | 11               | 22                 | 37                 |
| Size of Machine (H x W x L) mm | 200x2096<br>x800 | 2565x2668<br>x1118 | 3100x3200<br>x1327 |
| Number of Blow (per / min)     | 180              | 140                | 110                |
| Total Weight (t)               | 5.5              | 11.5               | 22.5               |

| DESCRIPTION                    | OT75               | OT100              |
|--------------------------------|--------------------|--------------------|
| Nominal Capacity (t)           | 3/4                | 1                  |
| Max. Stroke (mm)               | 840                | 960                |
| Blow Energy (Kg-m)             | -                  | -                  |
| Floor to Machine Top (mm)      | 3560               | 4080               |
| Motor Output (kw/ps)           | 55                 | 75                 |
| Size of Machine (H x W x L) mm | 3560x4050<br>x1800 | 4800x4755<br>x1900 |
| Number of Blow (per / min)     | 100                | 90                 |
| Total Weight (t)               | 32                 | 45                 |

**SMALL SIZE HAMMERS (BELOW 1/20 TON) - LOW CAPACITY HAMMER (1/20 TON)**

The specifications of low capacity hammers are as shown in the table. The size of cylinder is same as that of medium capacity and high capacity hammers. The low capacity hammers are suited for extended forging in the field of agricultural machinery, laboratories and government offices.

## Single Frame OSF Forging Hammer

In case of Single frame forging hammer (OSF) and double frame forging hammer (ODF), the pressurized upper part is operated by compressed air power, supplied from the outside and hence called as Compressed Air Hammer; the effective pressure is higher in Compressed Air Hammer than the self-contained type of air hammer; forging capacity is larger, striking force can be adjusted by adjusting the amount of air, and handling is easy. Single frame forging hammer can be used in general free forging such as high thermal deformation resistance value material particularly, and ingot cogging or temper forging for large products, which cannot be forged by air hammer.



### Comparison of Double Frame forging Hammer and Single Frame Forging Hammer

Compared to double frame hammer, single frame forging hammer can use the wide working space widely because of C-shaped frame. However, there is no guide ram. Single frame forging hammer is smaller (1/2t ~3t) compared to double frame forging hammer (1t~10t). In case of large shaped double frame hammer, the wide work space is transformed as bridge type.

### Specific Feature

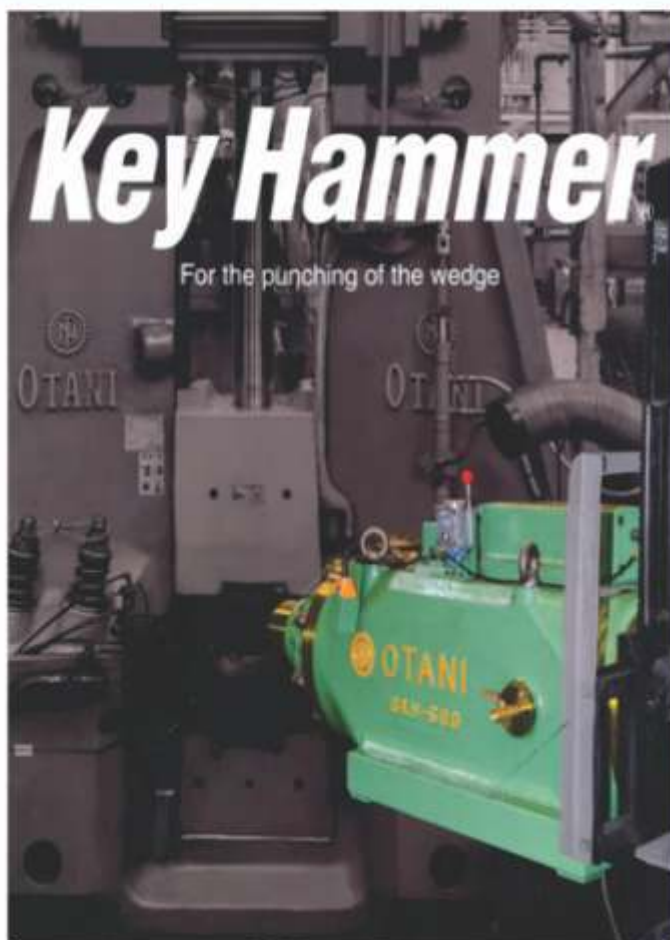
- ◆ Anvil is made of cast steel in such a way that anvil ratio is more than 20 times. As a result, it reduces the vibration, and improves the forging effects.
- ◆ Mounting space of the bed is designed as wide as possible and the frame is fastened firmly to the mounting space with bolts and wedges to withstand the vibration at the time of hitting
- ◆ Since the mounting part of the frame and the cylinder is tightened firmly, there is no rebound and no reduction in accuracy which is caused by long vibration at the time of hitting.
- ◆ The overall weight of the machine is more, and the design enhances the strength to provide sufficient safety.
- ◆ Our design enables stability and safety of the machine; in addition, the wide space helps to lower the center of gravity and allows the operator to work efficiently.

| ProductType                                | OSF200             |
|--------------------------------------------|--------------------|
| Average of Dropping Section Weight (Kg)    | 2000               |
| Average of Upper Die Wight (Kg)            | 400                |
| Max. Stroke (mm)                           | 1300               |
| Blow Energy (Kg-m)                         | 13925              |
| Floor to Machine $\phi$ P (mm)             | 5690               |
| Min. Die Thickness (mm)                    | 2300 x 4500 x 5970 |
| Size of Machine (L x W x H) mm             | 370                |
| Guide Distance (mm)                        | -                  |
| Required Air Compressor Capacity (min. kw) | 75                 |
| Mount Space (LxW) mm                       | 450 x 440          |
| Number of Blow (per / min)                 | 68                 |
| Total Wight (t)                            | 36                 |

| ProductType                                | OSF250             |
|--------------------------------------------|--------------------|
| Average of Dropping Section Weight (Kg)    | 2500               |
| Average of Upper Die Wight (Kg)            | 500                |
| Max. Stroke (mm)                           | 1350               |
| Blow Energy (Kg-m)                         | 17400              |
| Floor to Machine $\phi$ P (mm)             | 5880               |
| Min. Die Thickness (mm)                    | 2500 x 5000 x 6160 |
| Size of Machine (L x W x H) mm             | 450                |
| Guide Distance (mm)                        | -                  |
| Required Air Compressor Capacity (min. kw) | 110                |
| Mount Space (LxW) mm                       | 550 x 510          |
| Number of Blow (per / min)                 | 63                 |
| Total Wight (t)                            | 50                 |

## Key Hammer:

The Key Hammer attracts attention as the latest power-saving machine which overcomes instability and issues normally encountered. It is a big contribution to labour saving and effective improvement for your forging work.



## Otani Key Hammer is developed as Friendly Key Hammer as well as Otani Forging machines

The Key Hammer attracts attention as the latest power-saving machine which overcomes incorrectness and instability of conventional weak point.

### ● Short die replacement time

Putting a Key Hammer on the forklift and setting the main body on the front of the wedge. Will largely shorten the working operations you cannot use the rear, please use only the one side of both wedges method.

### ● Easy and accurate operation

Stroke of the wedge and strength is adjustable by the simple switch operation. Therefore there is no possibility of a fault/damage.

### ● Incredible stroke power

A Key Hammer is made by cast steel (SC46), unified with a forklift mount; and designed in the inside cavity part as a pressure tank. Therefore the stroke power is big even though the diameter of the aeration pipe is small.

### ● Perfect Safety

Inserting a claw of forklift prevents the main body of Key Hammer to move to forward/backward, right/left and vertical. Even if the blank stroke has happened before the setting, the air system will cushion the ram and punching.

### ● wide range of application

It is capable of using other punching works, and also highly durable and semi-permanently useable.



Choose the **Key Hammer**® to meet your condition.



● Fork type

**OKH-100**  
**OKH-200**  
**OKH-300**  
**OKH-600**

When choosing the Key Hammer, please consider by quantity, size of machines, and a layout of work-space. If there are various condition, we recommend to choose all big size or each different size.

#### Technical Notes

Wedge and the punching lot at the tip of the Key Hammer should be firmly fitted by pushing every time. Do not drive blank-stroke even though it has blank drive preventing function with an air-cushion at the tip of the Key Hammer.

Keep out between the wedge and the Key Hammer after connecting with air. Danger!



● Dual Fork-and-Crane type

**OKS-30W**  
**OKS-75W**

#### Specifications

● Fork type AC100V

A custom-made Key Hammer is available to meet your needs.

| Item                    | Model                  | OKH-100  | OKH-200  | OKH-300  | OKH-600  |
|-------------------------|------------------------|----------|----------|----------|----------|
| Ram weight              | (kg)                   | 100      | 195      | 270      | 575      |
| Gross weight            | (kg)                   | 980      | 1370     | 1570     | 2740     |
| Overall length          | (mm)                   | 1120     | 1490     | 1540     | 1980     |
| Overall height          | (mm)                   | 635      | 685      | 740      | 865      |
| Min. Work height        | (mm)                   | 270      | 280      | 300      | 350      |
| Ram stroke              | (mm)                   | 265      | 350      | 380      | 445      |
| Punching lot stroke     | (mm)                   | 55       | 70       | 80       | 95       |
| Blow energy             | (kg-m)                 | 240      | 410      | 635      | 1100     |
| Max. Operating pressure | (kgf/cm <sup>2</sup> ) | 7        | 7        | 7        | 7        |
| Aeration pipe/Coupler   | (inch)                 | 3/4      | 3/4      | 3/4      | 3/4      |
| Remarks                 |                        | under 1t | under 2t | under 4t | above 4t |

● Dual Fork-and-Crane type

| Item                    | Model                  | OKS-30W  | OKS-75W  | OKS-75W (L) |
|-------------------------|------------------------|----------|----------|-------------|
| Ram weight              | (kg)                   | 30       | 75       | 110         |
| Gross weight            | (kg)                   | 250      | 500      | 540         |
| Overall length          | (mm)                   | 1400     | 1700     | 1900        |
| Overall height          | (mm)                   | 780      | 920      | 920         |
| Min. Work height        | (mm)                   | 280      | 360      | 360         |
| Ram stroke              | (mm)                   | 400      | 600      | 600         |
| Punching lot stroke     | (mm)                   | 50       | 60       | 60          |
| Blow energy             | (kg-m)                 | 200      | 400      | 560         |
| Max. Operating pressure | (kgf/cm <sup>2</sup> ) | 7        | 7        | 7           |
| Aeration pipe/Coupler   | (inch)                 | 3/4      | 3/4      | 3/4         |
| Remarks                 |                        | under 1t | under 2t | under 3t    |

## Forging Automation Equipment

自動鍛造プレス

FORGING PRESS AUTOMATION EQUIPMENT



Located in Changwon, South Korea, DONGSAN has been working on developing forging press automation equipment for about 30 years.

DONGSAN has installed more than 350 automation equipment on more than 60 kinds of 150-ton to 6,300-ton forging presses and has manufactured approximately 1,200 kinds of products using its automation equipment.

Thanks to patented machinery, equipment, and lubrication spraying system, production automation is realized.



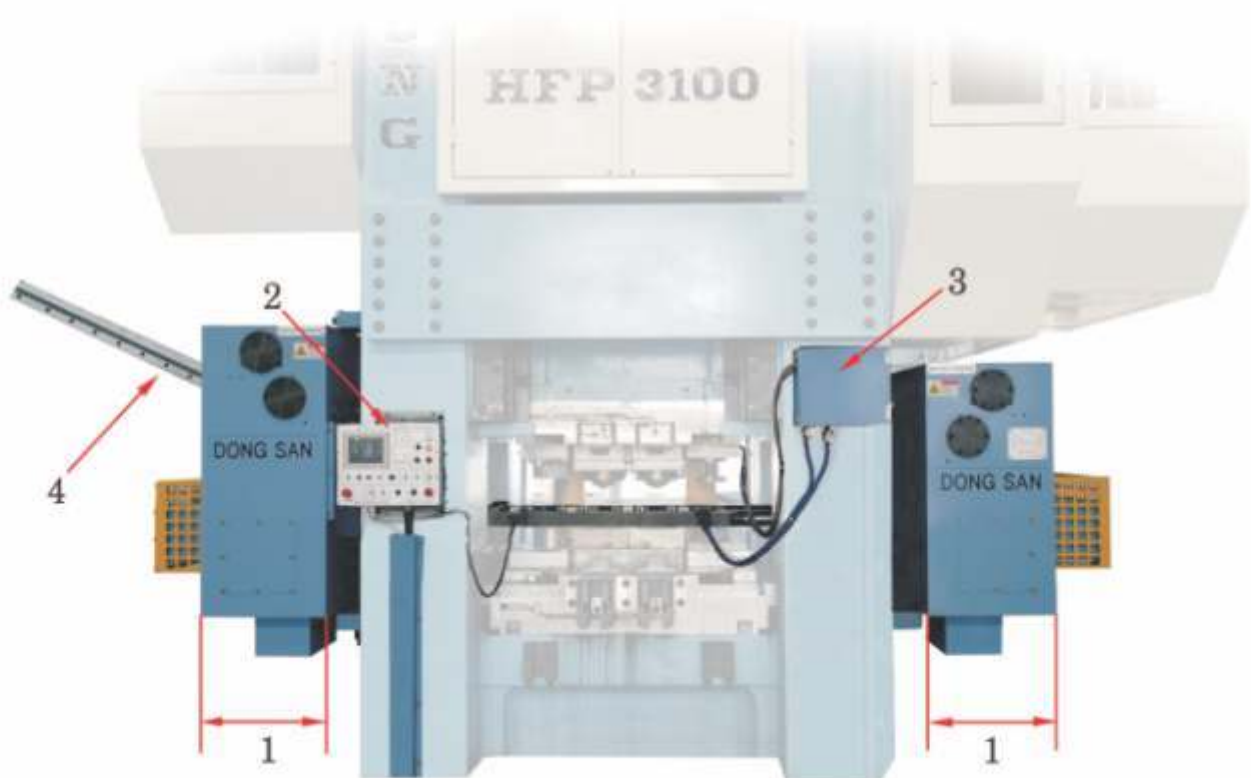
2000 Ton Vertical Forging 15~17 SPM



2000 Ton horizontal Forging 17~18 SPM

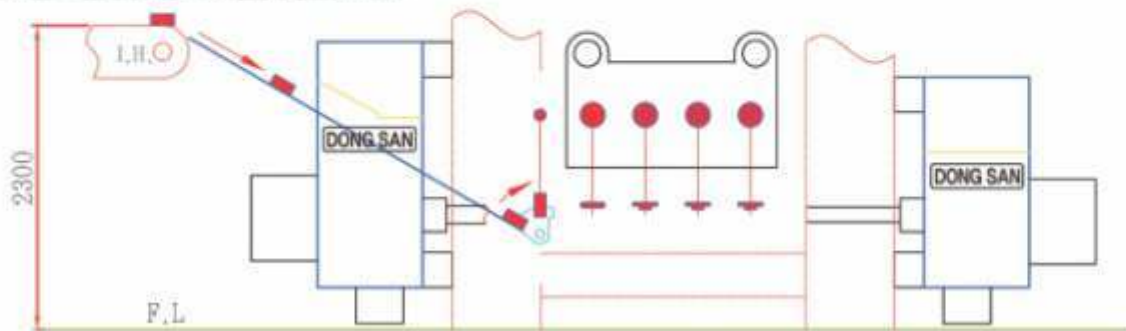
## What is so special about the Servo transfer of Dongsan

1. Minimum installation space
2. Simple operation
3. A lubrication valve set with minimum space and a set of nozzles fixed on the feed beam connected with a small number of lubrication pipes.
4. Chute can be mounted and removed easily. Three kinds of material supply are available.



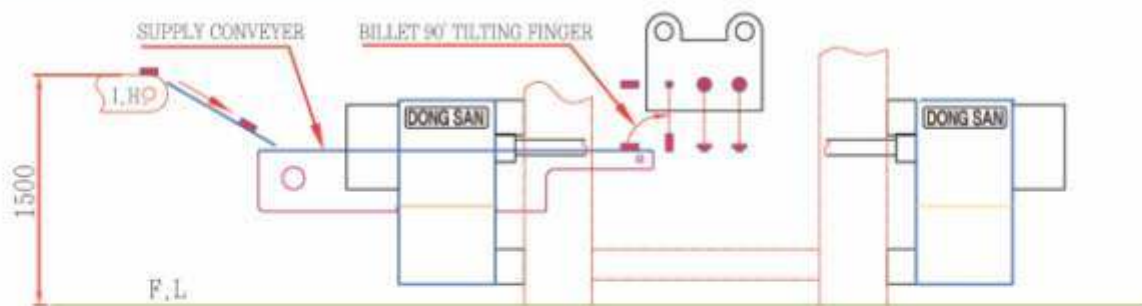
### A. Cup tilting loader

Suitable for vertical forging products.



### B. In conveyor + finger tilting

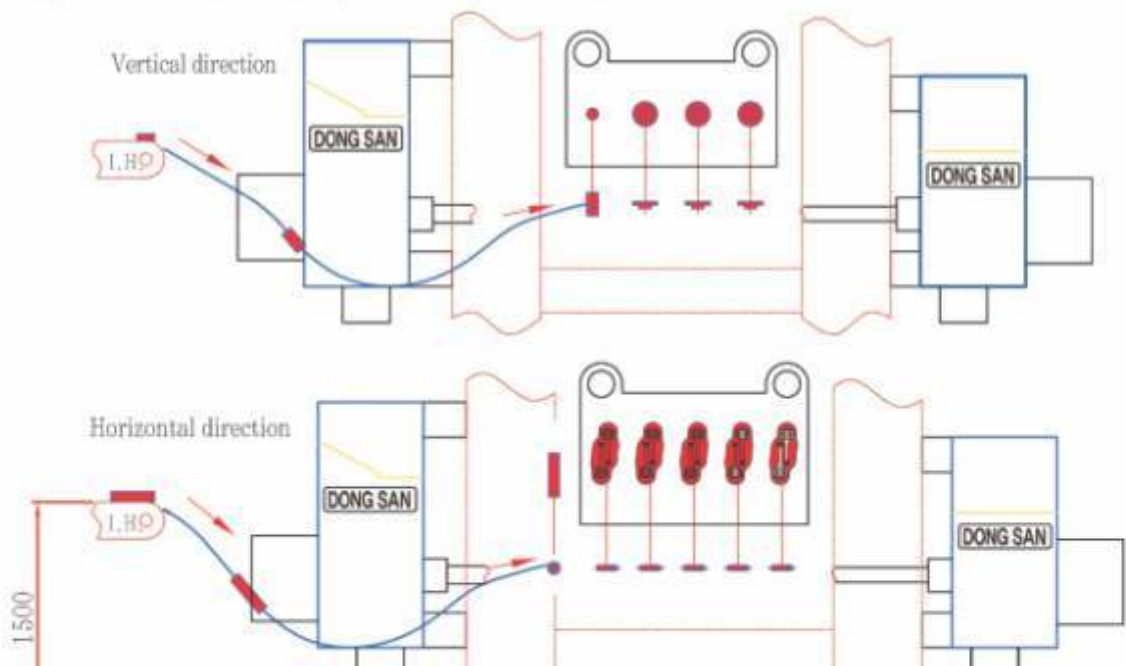
First finger rotates the billet to the vertical position.



### C. Dual mode loader

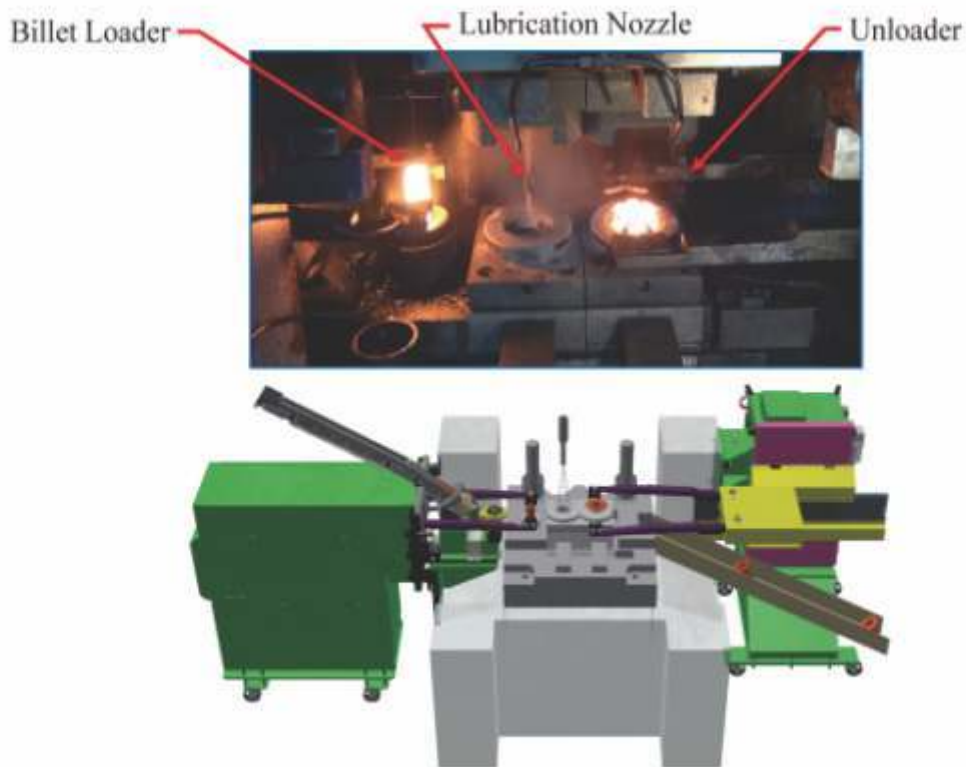
Billet supply device for both vertical and horizontal use.

1. Lower level of heater.
2. Supply time saving.
3. Finger 1 set saved.
4. Finger beam 1 pitch saved.



## Servo Billet Loader, Unloader, Lubrication Equipment

Automatic press is made by installing a loader, an unloader and a Lubrication applicator on a press for which transfer cannot be used as a result of the narrow side opening or overall product characteristics. It is suitable for 3 stage forging presses.



## Servo Manipulator (Forging roll)

Automatic forging roll is made by installing a servo manipulator on a manually-operated forging roll.



## Forging presses with Dongsan transfer installed



自動鍛造プレス

FORGING PRESS AUTOMATION EQUIPMENT

## Forging presses with Dongsan transfer installed



## Lubrication nozzles fixed on the finger-beam and the dieset



自動鍛造プレス

## Products from Dong San automated manufacturing system



■ Business item : Cold and hot forging press automation equipment

DONGSAN Industrial Co., Ltd founded in 1983, is a specialized manufacturer of automation systems designed for cold and hot forging. The achievements include the automation of about 60 types of presses with capacities ranging from 150 to 6,300 tons.

Some of our products are Servo Transfer Press, Servo Arm Loader, Servo Billet Loader, Unloader, Lubrication Device, Forging Roll Servo Manipulator, Lubrication spray nozzles in the finger beam & Die set and Forging Presses with built in Transfer Systems.

FORGING PRESS AUTOMATION EQUIPMENT

解体と積み込み

DISMANTLING & LOADING

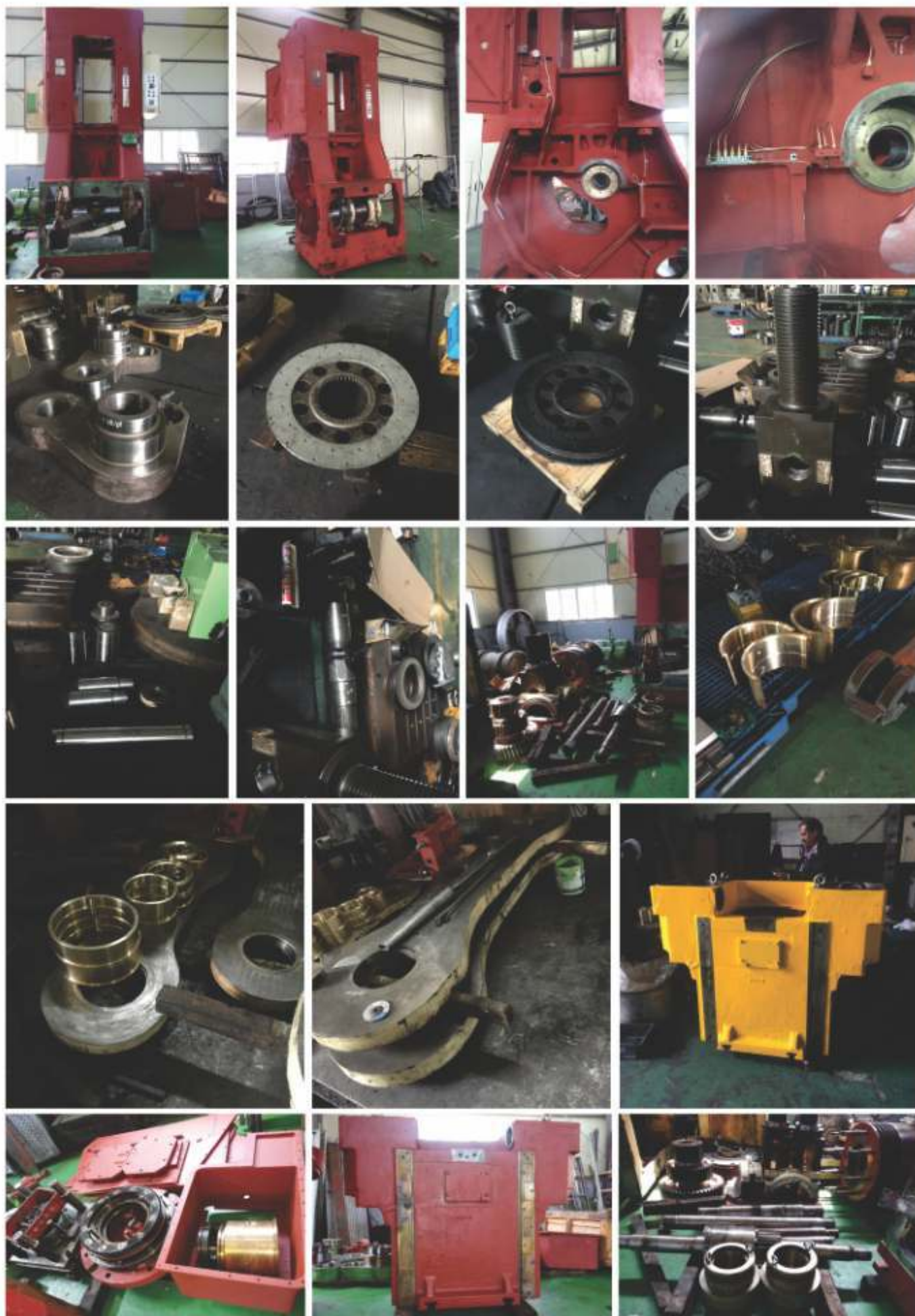




解体と積み込み

DISMANTLING & LOADING





オーバーホール

RE-CONDITIONING PROCEDURE





オーバーホール

RE-CONDITIONING PROCEDURE

## IMTEX 2016:

IMTEX FORMING 2016 is an event for the Indian Metal Forming Industry that attracts visitors from a wide spectrum of manufacturing and ancillary industries.

We are pleased to inform you that we, Saran Corporation., Ltd. along with M/s OTANI Machinery Mfg. Co., Ltd. Japan, participated in IMTEX Forming 2016 at BIEC, Bengaluru, where we presented our range of forging hammer products.

## FOODEX 2016:

We participated in the 41st International Food and Beverage Exhibition at Japan to promote our Saran Masala Chicken 65.

## ACMEE 2016:

We, Saran Corporation., Ltd. participating in ACMEE 2016 which is to be held at Chennai Trade Center, Nandhambakkam from 16th June to 20th June 2016, along with our counterpart OTANI Machinery Mfg Co. Ltd. Japan.

## UMEX 2016:

The 10th edition of UMEX 2016 is scheduled for 11-13 November 2016 at Chennai Trade Centre, Chennai, India. UMEX is Asia's most trusted and exclusive business exhibition that focuses on showcasing Pre-owned machineries.

We are glad to inform that we are participating in UMEX 2016 to promote our Used machinery in Indian market.



DISPLAY & I



### Air Hammers

SARAN CORPORATION Ltd. is displaying OTANI's Air Hammers at IMTEX FORMING 2016. OTANI is a pioneer in forging industry has been producing Air Hammers with latest forging technology to make safe security parts and forging products to support the strength and reliability of automobiles, construction machinery, railways, aircrafts, bridges and many more. The machine offers features such as high-stroke speed, accuracy & high-strength. The company not only provides machinery but also offers the software, which improves the ability of performance of the Air Hammer.

► SARAN CORPORATION LTD  
Hd: 3A / Stall P104

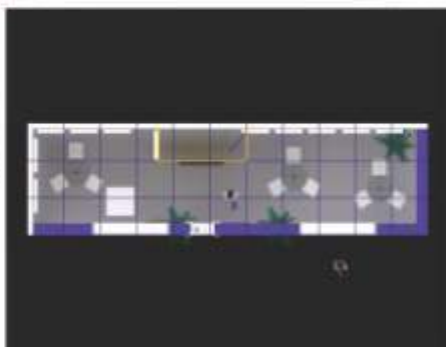


### Key Hammer

OTANI is showcasing its key hammer at IMTEX FORMING 2016. It is an energy-efficient machine that is capable of overcoming inaccuracies and instability of conventional tools. The other advantages of the machine comprises short die replacement time, safe, easy and accurate operations, incredible stroke power. This key hammer also offers zero permanent and a wide range of applications for the metal forming sector.

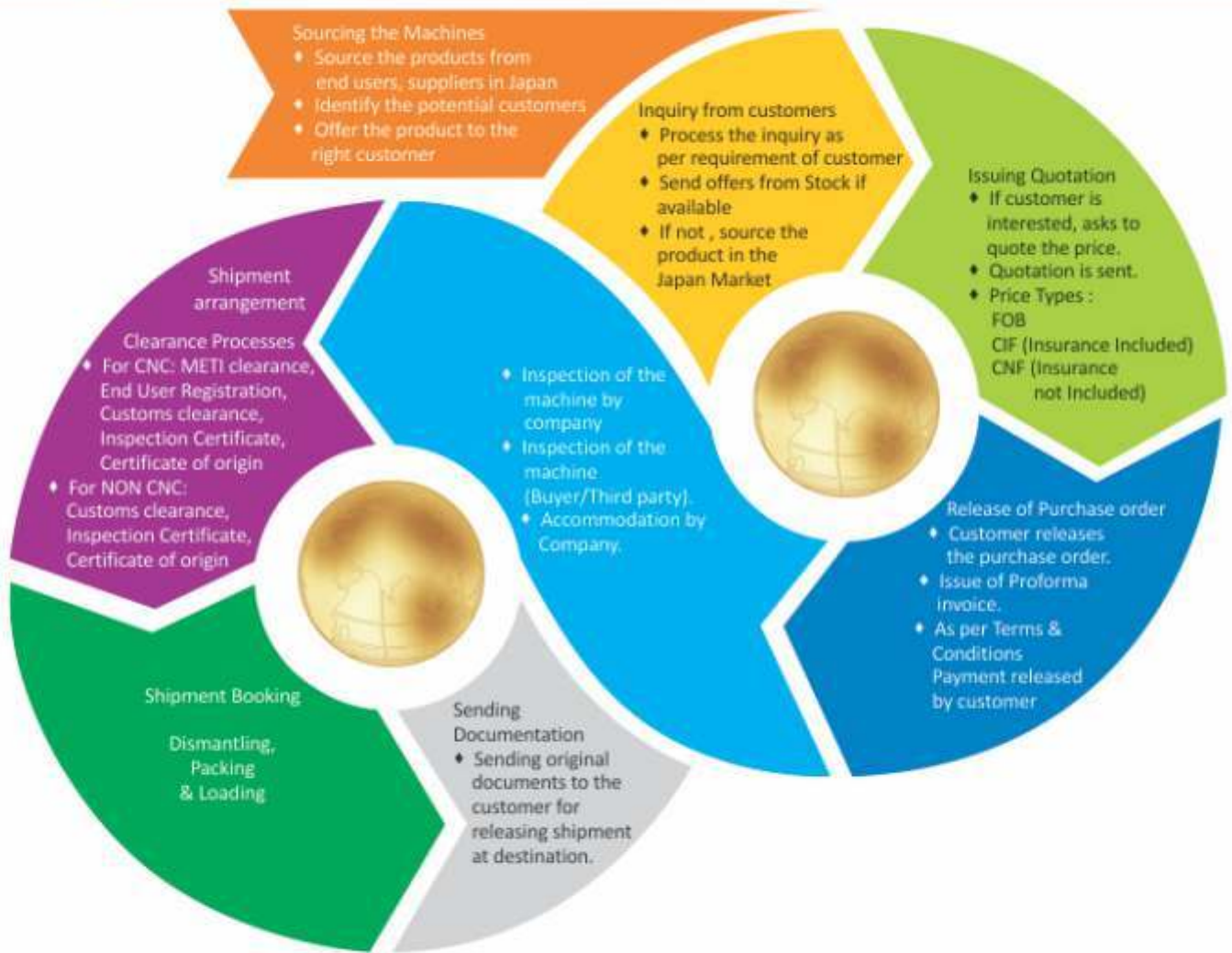
► OTANI Machinery Mfg Co Ltd  
Hd: 3A / Stall P104



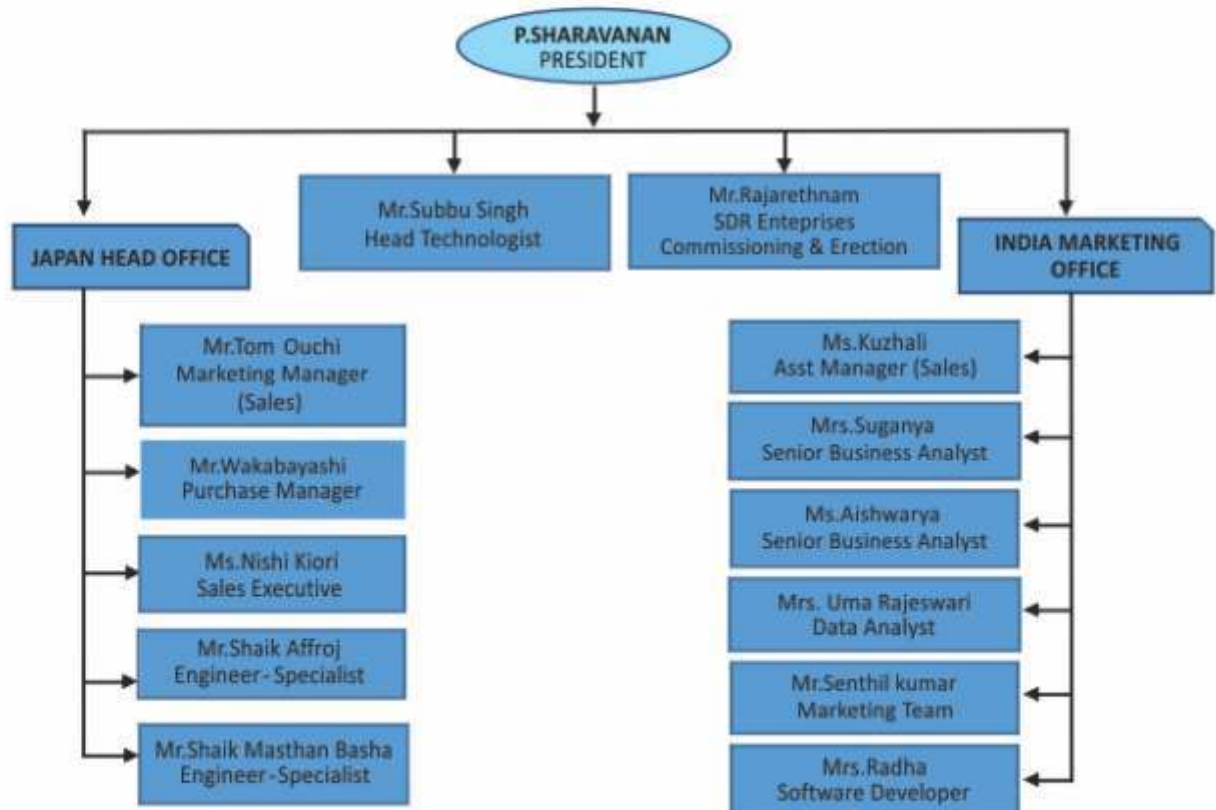


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**Worldwide Exporter of New / Used Machineries**



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