

MECHANICAL & HYDRAULIC POWDER COMPACTING PRESS

# **DAEWHA PRESS**







Daewha Press co., LTD. has over 32 years of knowhow in the development and manufacturing of powder compacting presses. With steadfast efforts in research and development, we have been able to supply over 1,100 units to both the domestic and overseas markets including over 20 countries. We are proud to say that we have grown into a global manufacturer of powder compacting presses.





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# COMPANY

## History

Since our founding in 1988 and the first time in Korea, we have succeeded in manufacturing mechanical powder compacting presses utilizing our own specialized techniques. By maintaining our lead in research and development, we will continue to be Korea's No.1 press manufacturer in the global market. And as we expand into the automation sector, we will remain fully committed to doing our best in providing complete satisfaction to all our customers.

1988	Ŷ	Established Daewha Machinery
1989	¢	Developed mechanical powder compacting presses in(20 ton, 40 ton, and 60 ton)
1990	¢	Incorporated Daewha Press Co., Ltd.
1991	þ	Received a government award (Domestic manufacturing, Korea Ceramic Association)
1993	þ	Started the exporting business (20ton to Thailand)
1994	¢	Developed Die set with speed controller for 20 ton press (Recognized by the Korea Institute of Industrial Technology)
1995	<b>¢</b>	Relocated the head office and factory
1996	þ	Developed 100 ton powder compacting press for the first time in Korea
2000	¢	Developed 200 ton powder compacting press for the first time in Korea
		Received state government award (Outstanding business, Gyeonggi-do Province)
2002	¢	Obtained ISO 9001:2000 certification (CCAS, UK)
2003	¢	Developed 250 ton powder compacting press for the first time in Korea
2004	¢	Received exemplary taxpayer's award (National Tax Service)
2005	¢	Received award (NTS Jungbu Regional Office)
2006	¢	Received excellence in capital goods award (Ministry of Trade, Industry and Energy)
		Developed 400 ton powder compacting press for the first time in Korea
2007	þ	Received technique award (The Korean Ceramic Society)
2008	þ	Established Corporate Research Institute (Korea Industrial Technology Association)
		Obtained ISO 14001 certification (Korea Int'k Standards Certification)
		Obtained CE MARK certification (Korea Testing Laboratory)
2011	¢	Received Million Dollar Export Tower award
2012	þ	Incorporated into Changsung Corporation
2014	þ	Selected as an outstanding company for job creation (Gyeonggi-do Province)
2016	þ	Received technical excellence award
2019	þ	Selected as a promising exporting business (Ministry of SMEs and Startups)
2020	6	Exported to 20 countries, including the U.S., Japan, China, and India

### **Products**

We supply various types of mechanical powder compacting presses, sizing presses, and hydraulic powder compacting presses as well as customized automation systems to meet our customers' satisfaction.

#### MECHANICAL SIZING PRESS

10 ton, 20 ton, 30 ton, 60 ton, 100 ton, 200 ton, 300 ton, 350 ton



MECHANIC POWDER COMPACTING PRESS 3 ton, 5 ton, 10 ton, 20 ton, 30 ton, 40 ton,

60 ton, 100 ton, 150 ton, 200 ton, 250 ton, 400 ton

DIE SET



#### HYDRAULIC POWDER COMPACTING PRESS

20 ton, 30 ton, 40 ton, 60 ton, 100 ton, 200 ton, 300 ton, 500 ton, 600 ton, 800 ton, 1000 ton, 1500 ton, 1600 ton





#### AUTOMATION SYSTEM

- Loading and arraying automation system
- Acoustic resonance
  non-destructive tester
- Vision inspection system
- Automatic vertical extrusion molding machine

## **MECHANICAL POWDER** COMPACTING PRESS

### **Products**

Driving system	Specifications (ton)
Cam Type	3 / 5
Knuckle Type	10 / 20 / 30 / 40 / 60
Crank 2P Type	60 / 100 / 150
Crank Type	20 / 40 / 60 / 100 / 200 / 250 / 400



▲ Crank Type 40 Ton



Cam Type 5 Ton



Knuckle Type 60 Ton

Knuckle Type 10 Ton



Crank Type 60 Ton











Crank Type 200 Ton Crank Type 250 Ton



### **Products**

Driving system	Specifications (ton)		
Crank Type	10 / 20 / 30 / 100 / 200 / 300 / 350		
Cam Type	60 / 100		

### **Options**

- Simulator
- Die set replacing device
- Conveyor
- Product movement device
- Turn table
- Product supply device







Crank Type 10 Ton Cam Type 60 Ton Cam Type 100 Ton





Simulator

Conveyor

Knuckle Type 30 Ton Crank 2P Type 60 Ton





▲ Crank Type 200 Ton







Crank Type 300 Ton



Crank Type 350 Ton



Turn table

## **HYDRAULIC POWDER COMPACTING** PRESS

### **Products**

#### Specifications (ton)

20/30/40/60/100/200/300/ 500 / 600 / 800 / 1000 / 1500 / 1600





Hydraulic Type 20 Ton

Hydraulic Type 30 Ton





Hydraulic Type 60 Ton



1000

0

Ö



▲ Hydraulic Type 600 Ton

#### Hydraulic Type 100 Ton Hydraulic Type 1600 Ton

# **AUTOMATION SYSTEM**

#### Loading and arraying automation system

A system that removes the compacted parts, transfers, places and aligns on trays, and then loads them on carts, using a conveyor, robot, and vision system.



#### Acoustic resonance non-destructive tester

Creates acoustic vibration with an impact hammer and analyzes the sound to sort out defective products with cracks, heterogeneous mixing, or heat treatment, welding or hardness defects.

### **Vision inspection** system

Sorts out any damage, air bubbles, foreign substances, etc. in the products compacted by the press using the vision system.





#### Servo press & automatic transfer system

Consists of a press with a servo motor and an automatic transfer device.

3-axis(X, Y, Z) interlocking work and load control by load cell are also possible.



# **DIE SETS**

Our Die sets are designed to seamlessly fit the shape of your products making it easier to remove the molds and operate the equipment. The basic Die sets are classified into three categories as shown on the right.

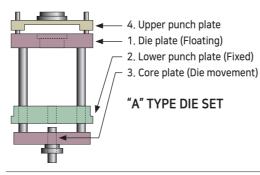
If there are any issues with your current die sets, please contact us. Our die sets will help you produce perfect shapes to meet your demands.



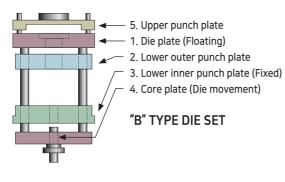
#### Press time cycle diagram

- 1 Powder filling position
- 2 Pressing starts
- 3 Die moving starts
- 4 Die moves
- 56 Part is fully compacted
- $\overline{O}$ Ejection starts
- 8 Fully ejected

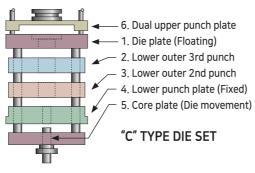
#### **One-layer parts**

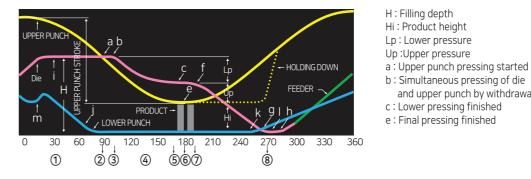


#### **Two-layer parts**

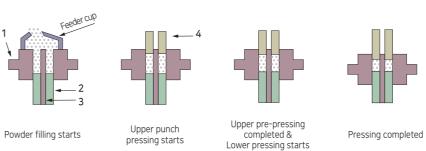


#### **Three-layer parts**

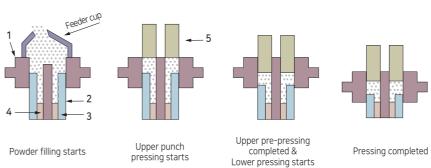




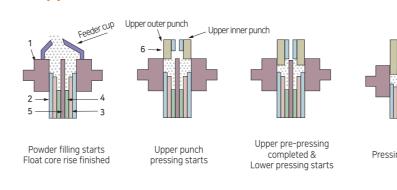
#### Upper 1, Lower 1



### Upper 1, Lower 2



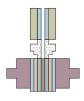
### Upper 2, Lower 3







Ejection starts



Fully ejected Float core down finished



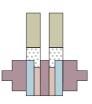
m : Product ejection completed c : Lower pressing finished e : Final pressing finished and powder filling in progress j: Powder feeder retraction completed

and upper punch by withdrawal

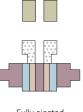


Fully ejected

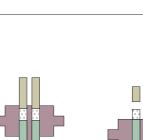
Ejection starts

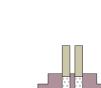


Ejection starts



Fully ejected







f : Ejection starts

g : Ejection completed h : Filling starts

movement starts

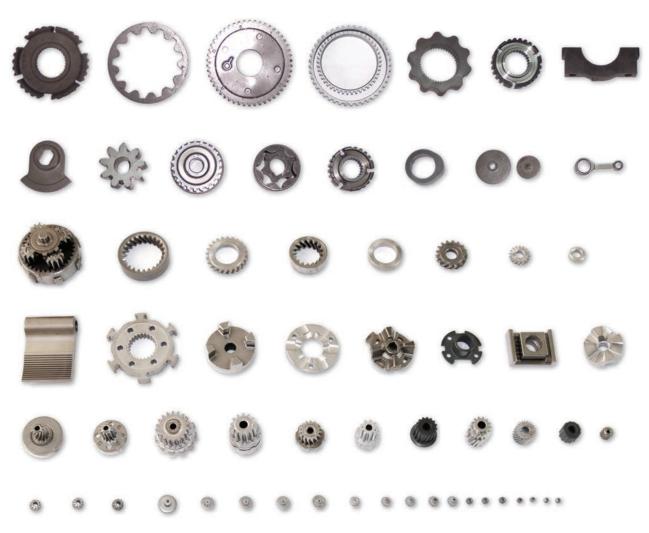
I : Product ejection starts

i : Filling and rising completed

k : Powder feeding device forward

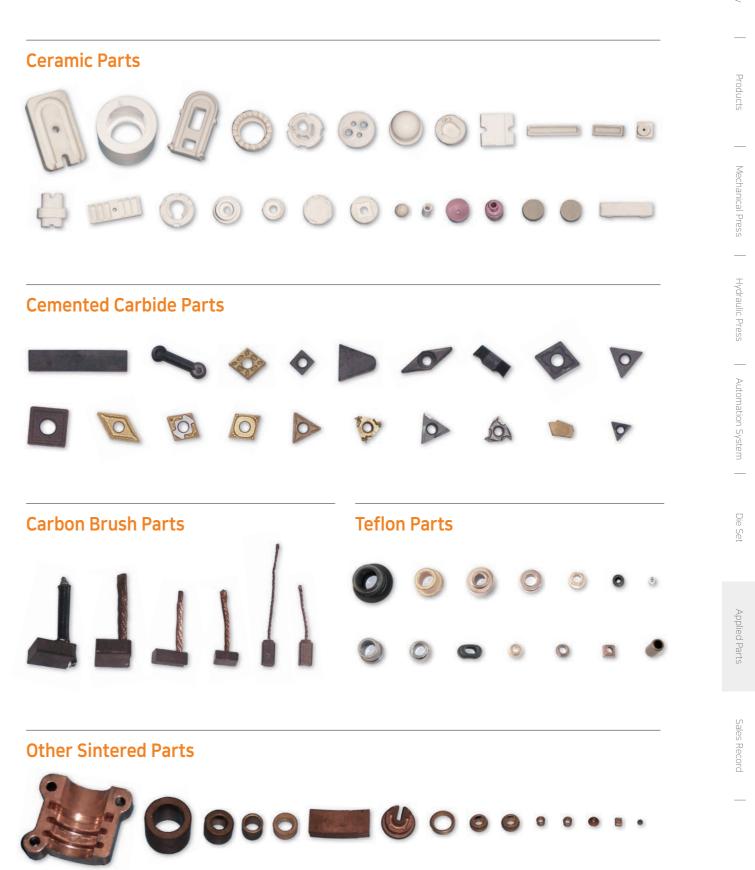
# **APPLIED PARTS**

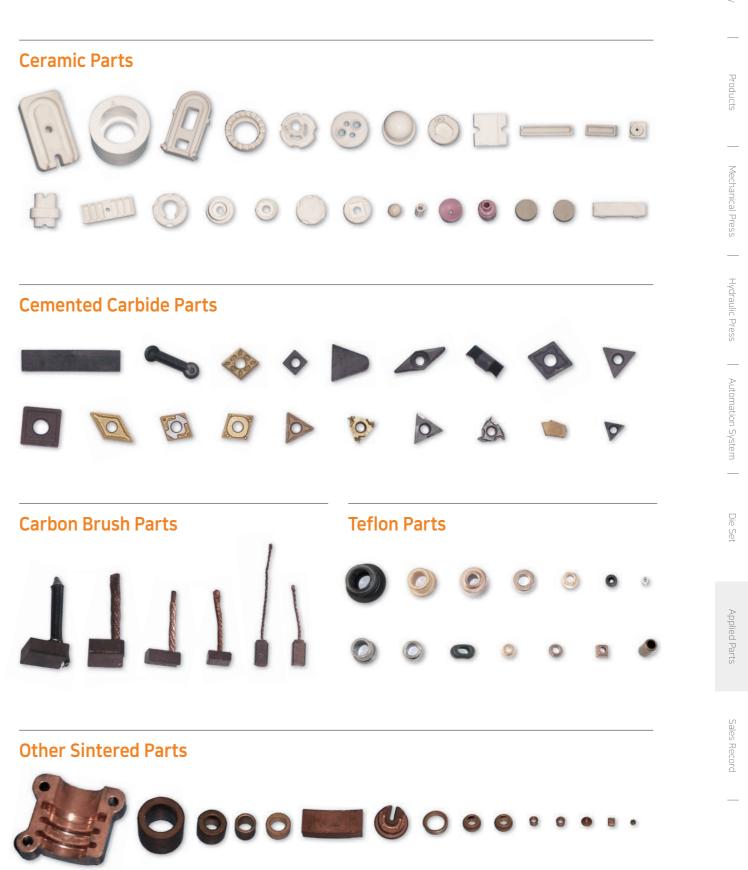




**Ferrite Parts** 







Compan

# **OVERSEAS SALES RECORD**

We supply presses to leading companies around the world, including Japan, China, USA, Indonesia, Mexico, Thailand, India, Hong Kong, Malaysia, Taiwan, Iran, Kazakhstan, Myanmar, Brazil, Egypt, etc.



ASIA					
Korea	2 ~ 600 Ton	755 units	Hong Kong	3 ~ 20 Ton	17 units
Japan	3 ~ 350 Ton	97 units	Iran	20 ~ 60 Ton	2 units
China	3 ~ 1600 Ton	152 units	Thailand	5 ~ 200 Ton	23 units
Myanmar	20 Ton	1 unit	Indonesia	20 ~ 300 Ton	25 units
India	30 ~ 250 Ton	14 units	Malaysia	20 ~ 200 Ton	11 units
Kazakhstan	10 Ton	1 unit	Taiwan	3 Ton	5 units

North America					
USA Mexico	20 ~ 200 Ton 200 Ton	12 units 7 units			
South America					
Brazil	60 ~ 250 Ton	2 units			

# **POWDER COMPACTING DAEWHA PRESS**



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