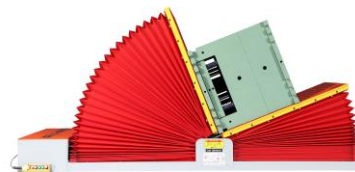


# DENSON

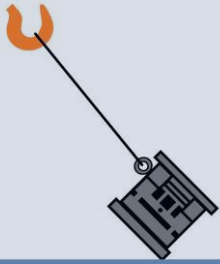
## G T series



For 8 ~ 150 tons

# Mold Flipper

# Comparison of mainstream inversion methods



## Crane flipping

Required Skills  
**advanced**

Reversal Risk  
**high**

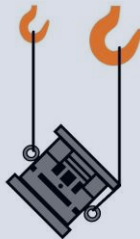
Forcibly flipping a heavy object.

Accidents are likely to occur the moment the load is transferred.

Crane manufacturers prohibit diagonal pulling due to the excessive risk.

When operating a wired crane, the control unit is often close to the object to be flipped.

There have been cases of fatal accidents where the object has been caught in the air while swinging.



## Twin hoist flipping

Required Skills  
**advanced**

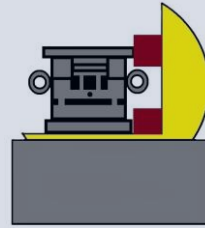
Reversal Risk  
**high**

After lifting it with one end, you have to crawl inside and attach the other end.

Operation Occurs above eye level. If wire breaks mold will fall.

There are many possible fall patterns when it flips in mid-air.

Many factories have exceeded the capacity of their sub-hoists.



## 90° Mold rotator pac-man type

Required Skills  
**intermediate**

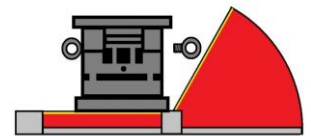
Reversal Risk  
**middle**

The position must be shifted to avoid the sling by inserting sleepers.

The center of gravity is far away, the inversion according to the catalog value cannot be achieved, and a larger device than expected is required.

The inversion occurs above eye level, which can be harmful for the operator.

Because it is driven by a motor with a reduction gear, the rotational force increases due to its own weight when it exceeds 45°, and it may overrun and fall.



## Mold Flipper Flat type

Required Skills  
**beginner**

Reversal Risk  
**low**

The angle can be changed before and after inversion, so inversion can be performed with minimal effort.

After inversion, the wall can be made horizontal, so it is possible to attach a lifting device immediately, maximizing work efficiency compared to other inversion methods.

In addition, inversion can be performed at a position lower than eye level, providing a sense of security.

Inversions that exceed the capacity will not operate.

**As long as you are flipping heavy objects,  
there is always the "risk" of a flipping accident.**

**How many years will dangerous flipping work continue in your workplace?**

**At Denson, we manufacture "turnover machines" that anyone can  
use safely, easily and quickly.**

# benefits of introducing the DENSON GT series

## If you have not installed

## If you are using DENSON GTseries

A reversal accident may occur today → **"Avoid accidents caused by reversing"**

Overwhelming safety reduces  
all risks to nearly zero

Employees in danger when reversing → **"Protect employees from danger"**

Eliminate employee danger

Dangerous work becomes the norm → **"Psychological safety level will improve significantly."**

Workers have adapted within the environment

An aversion to risk

Reversing work requires an experienced worker → **"Even beginners can easily perform inversion work."**

Hydraulic control makes it powerful and easy to operate

Spacers required when inverting → **"No more buffer material or spacers"**

Safe and efficient inversion work

Must turn with high center of gravity → **"It allows for a low center of gravity and small force to turn the wheel."**

Compared to other methods, it is possible to  
flip at the most advantageous center of gravity

The inversion equipment is large  
and cannot be embedded. → **"Level to floor & low floor applications"**

Space can be saved

The product is damaged after the inversion process → **"Your precious inverted items will not be damaged."**

Almost no shock occurs when inverting

The crane is occupied for a long time → **"Reduce the time the crane is occupied"**

Product lead times are reduced

The crane equipment must be strengthened  
to turn the mold around. → **"2 cranes are not necessary to flip the mold."**

The entire facility can be downsized.

Qualifications and experience are  
required to perform inversion work. → **"No qualifications or experience  
are required for inversion work."**

Even beginners can perform inversion work safely.

Inverter not compatible → **"Can be replaced with generic products"**

When replacing, you can install it in the same place

Concerns about the durability of the inversion equipment → **"High durability and cost-effectiveness"**

Get incredible cost-effectiveness

# Ultra low floor Mold Flipper DENSON GTseries

## Used for

### Injection Mold

For mold maintenance

### Machine frame

For turning over workpieces during machining

### Marine engines

For processing and assembling diesel engines.

### Large Structures

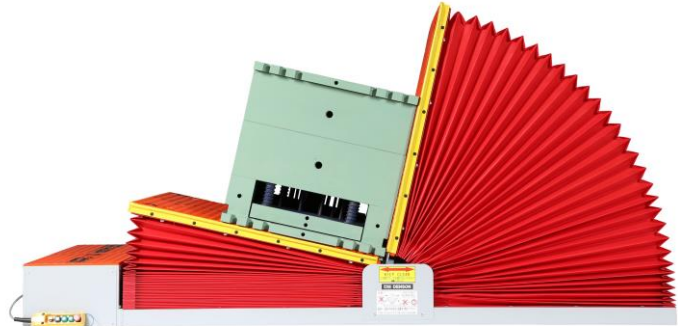
For manufacturing various building structures.

### Roll material

When manufacturing press parts

### Large materials

When manufacturing or transporting large materials.



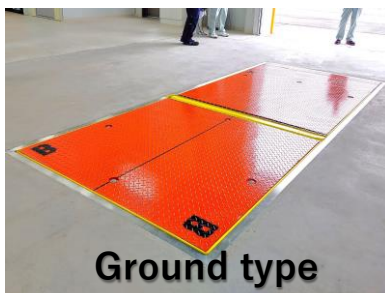
This is the most widely used tipping machine in Japan.

Anyone can flip heavy objects 90 degrees with amazing ease and extreme safety.

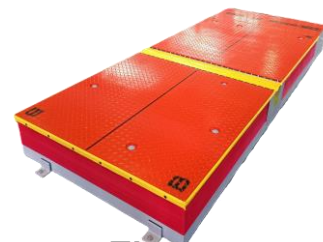
Floor level application can be used where forklifts can go on top of flipper.

The GT series has been repeatedly upgraded for over 40 years, and is the optimal solution for tipping heavy objects that have been thoroughly thought out.

## Choose from two types

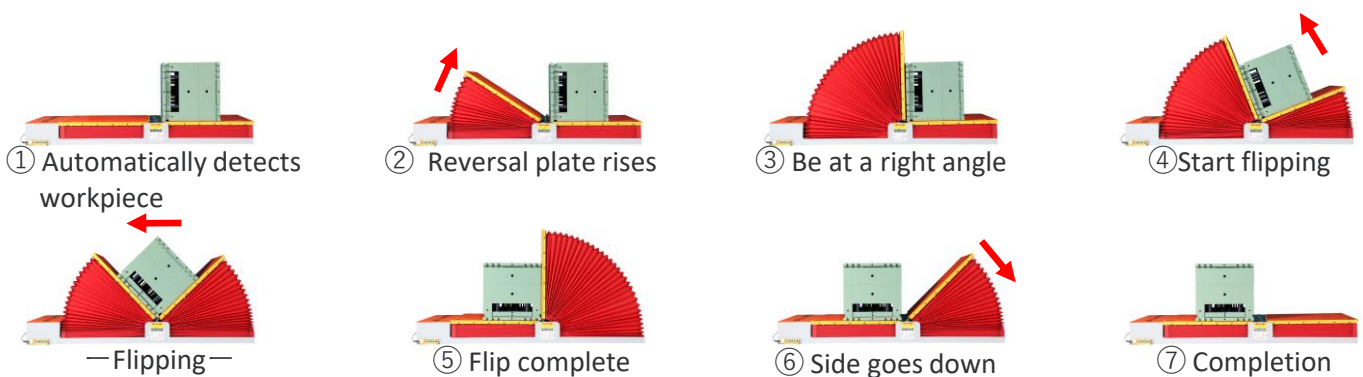


Vehicles can drive over the machine, and it can also be installed in the aisle.



No need for large-scale construction work, easy relocation

## Operational flow

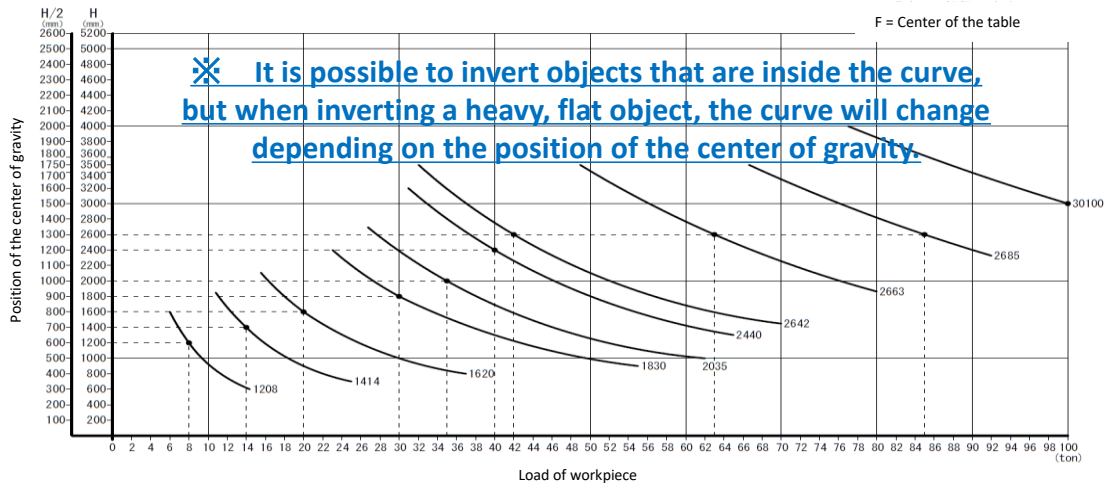


# How to operate the Mold Flipper

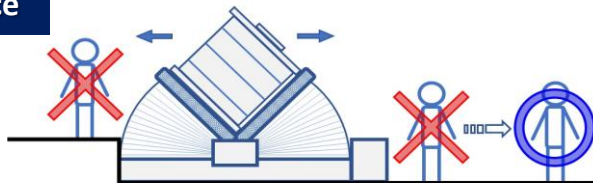
## ① Check if it can be reversed

### Load Curve Table

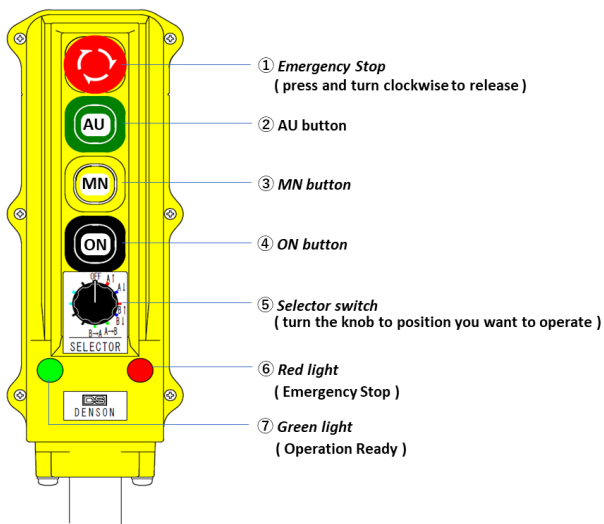
Please calculate the reversal of objects larger or smaller than the reversal plate dimensions using the curve below. In the case of flat dies, the calculation is 90% or less.



## ② Move away to a safe distance



## ③ Operate with a controller



### 1 Turn the select switch to OFF



### 2 Press and hold button **ON**

(After 2 seconds, the green light will turn on and the device will be ready to operate.)



### 3 Press and hold **ON** + **AU** at the same time.

(Semi-automatic operation until the reversing operation is completed)

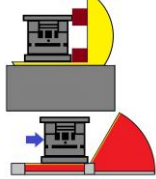
Manual operation is also possible by Pressing selector switch + **ON** + **MN** at the same time.



If you release either button, the Mold Flipper will automatically stop working.

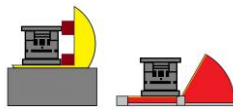
# Features and Functions of DENSON GT series

## Center of gravity shift



Flip with favorable center of gravity

## Ultra-low center of gravity inversion



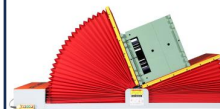
Safe low-position reversal

## Triple safety features



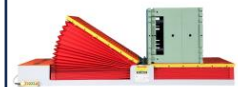
Light and sound alerts  
+  
Restrictions on operation area

## Semi-automatic



One-push operation from start to finish

## Human error prevention function A and B



A Detects the side with the load  
B Continues operation during automatic operation

## One-handed driving prevention function



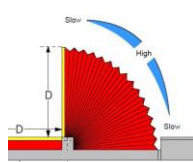
Two buttons must be operated simultaneously

## Emergency stop function



The operation can be disabled

## Safe Speed Control Function



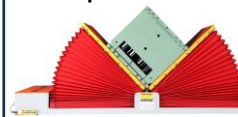
Safely speed controlled

## Prevents dust from entering



Bellows protection

## Power failure protection function. Brake when not in operation



Hydraulic circuit complete lock

## Collision protection function



Protect the surrounding area with cushioning material

## Interlock Function



can be controlled in conjunction with the guard fence.

## \* Wireless operation function



Wireless control of the Mold Flipper  
\*Optional

## Manual Operation Function



Two-way operation: semi-automatic and manual

## \* Oil cooler for hydraulic system cooling



To prevent oil temperature from rising during frequent reversals.\*Optional

## External oil supply function for sliding parts



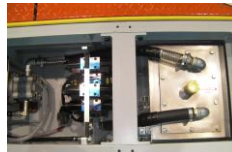
Grease can be supplied from outside the machine.

## Easy Access



Oil can be changed from outside the machine

## Oil temperature monitoring function



Built-in oil thermo sensor

## Motor temperature monitoring function



Equipped with a motor with built-in temperature sensor

## Power cutoff function



Automatically cuts off power in the event of an abnormality

## \*Can be painted in a specified color



Can be changed to the color specified by each company.\*Optional

## Machine long life function



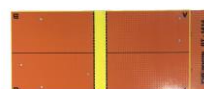
Power control by hydraulic unloading system

## Function to warn of regular inspection



Automatic warnings when certain conditions occur

## Weight protection function



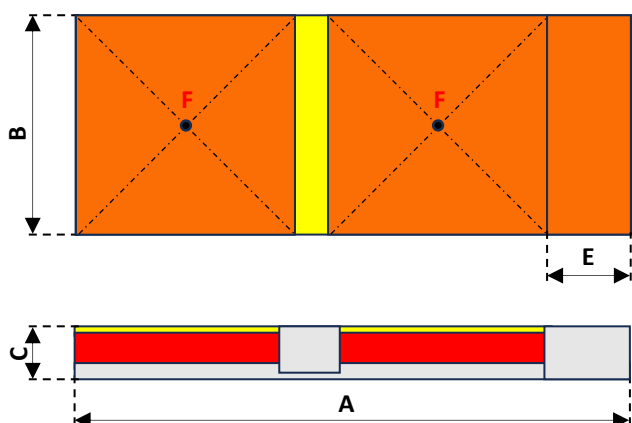
High strength design allows it to run over machines

## Horizontal installation of the reversal plate



Leveling work using a laser measuring device

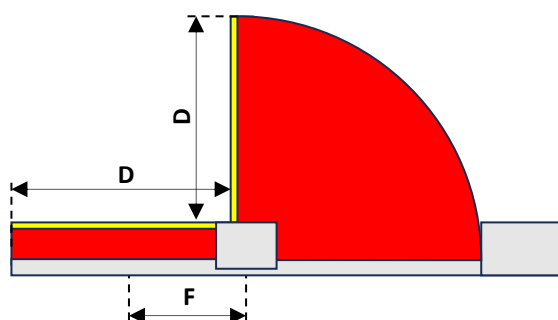
# GTseries Dimensions



Power system : hydraulic

Power-supply voltage :

Depends on country



## Standard Model

| Model     | External dimensions ( mm ) |       |     |      |      |        | Maximum Reversal Load ( ton / F ) | Motor Capacity ( kw ) | Machine Weight ( ton ) | Oil quantity ( ℓ ) |
|-----------|----------------------------|-------|-----|------|------|--------|-----------------------------------|-----------------------|------------------------|--------------------|
|           | A                          | B     | C   | D    | E    | F      |                                   |                       |                        |                    |
| GT - 1208 | 3010                       | 1200  | 300 | 1215 | 450  | 672.5  | 8                                 | 3.7                   | 1.8                    | 10                 |
| GT - 1414 | 3440                       | 1400  | 350 | 1400 | 450  | 795    | 14                                | 5.5                   | 2.7                    | 20                 |
| GT - 1620 | 3810                       | 1600  | 350 | 1615 | 450  | 872.5  | 20                                | 7.5                   | 3.3                    | 20                 |
| GT - 1830 | 4240                       | 1800  | 400 | 1800 | 450  | 995    | 30                                | 11                    | 5                      | 40                 |
| GT - 2035 | 4640                       | 2000  | 450 | 2000 | 450  | 1095   | 35                                | 11                    | 6                      | 40                 |
| GT - 2440 | 5560                       | ※2200 | 520 | 2400 | 570  | 1295   | 40                                | 15                    | 8                      | 85                 |
| GT - 2642 | 5970                       | 2600  | 570 | 2605 | 570  | 1397.5 | 42                                | 15                    | 11                     | 85                 |
| GT - 2663 | 5970                       | 2600  | 570 | 2605 | 570  | 1397.5 | 63                                | 18.5                  | 14                     | 120                |
| GT-30100  | 7416                       | 3000  | 650 | 3000 | 1216 | 1625   | 100                               | 22                    | 20                     | 180                |
| GT-30150  | 7416                       | 3000  | 650 | 3000 | 1216 | 1625   | 150                               | 37                    | 25                     | 250                |

## Model Description

※Sea container size available B≠D

GT-1208 is not available for export to Canada or the United States.

**GT**

Series Model

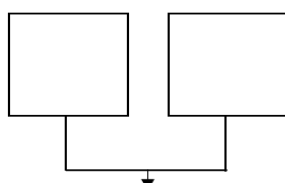
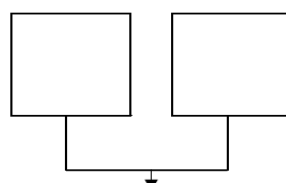


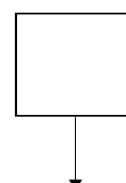
Table dimension D

12 → 1215mm  
14 → 1400mm  
16 → 1615mm  
.  
.  
26 → 2605mm



Maximum Reversal Load

08 → 8ton / F  
14 → 14ton / F  
20 → 20ton / F  
.  
.  
85 → 85ton / F



S : Special  
W : Wide  
L : Long

※ Please note that the values in this catalog may change without notice due to ongoing research and improvements.

"Reduce the number of inversion accidents in the world to '0'."

That is our company's mission.



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