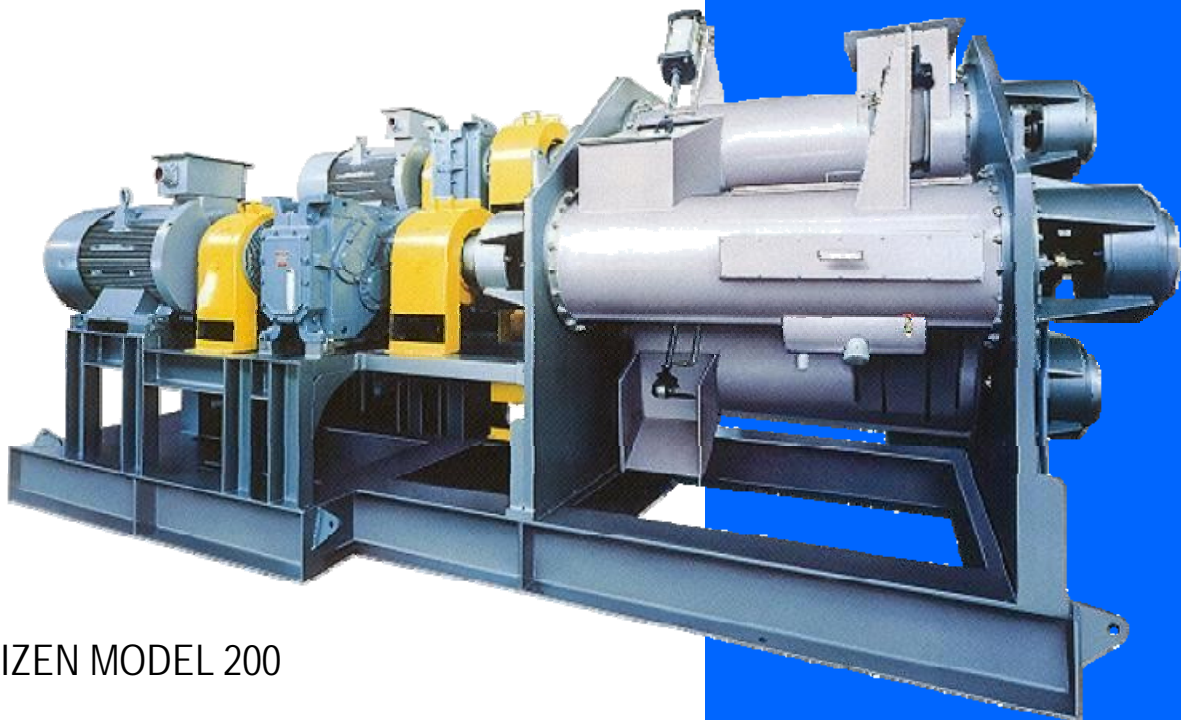


# TAIZEN

# NEW TAIZEN

**PATENTED IN JAPAN  
AND USA**

## STUFF REGULATING MACHINE



NEW TAIZEN MODEL 200

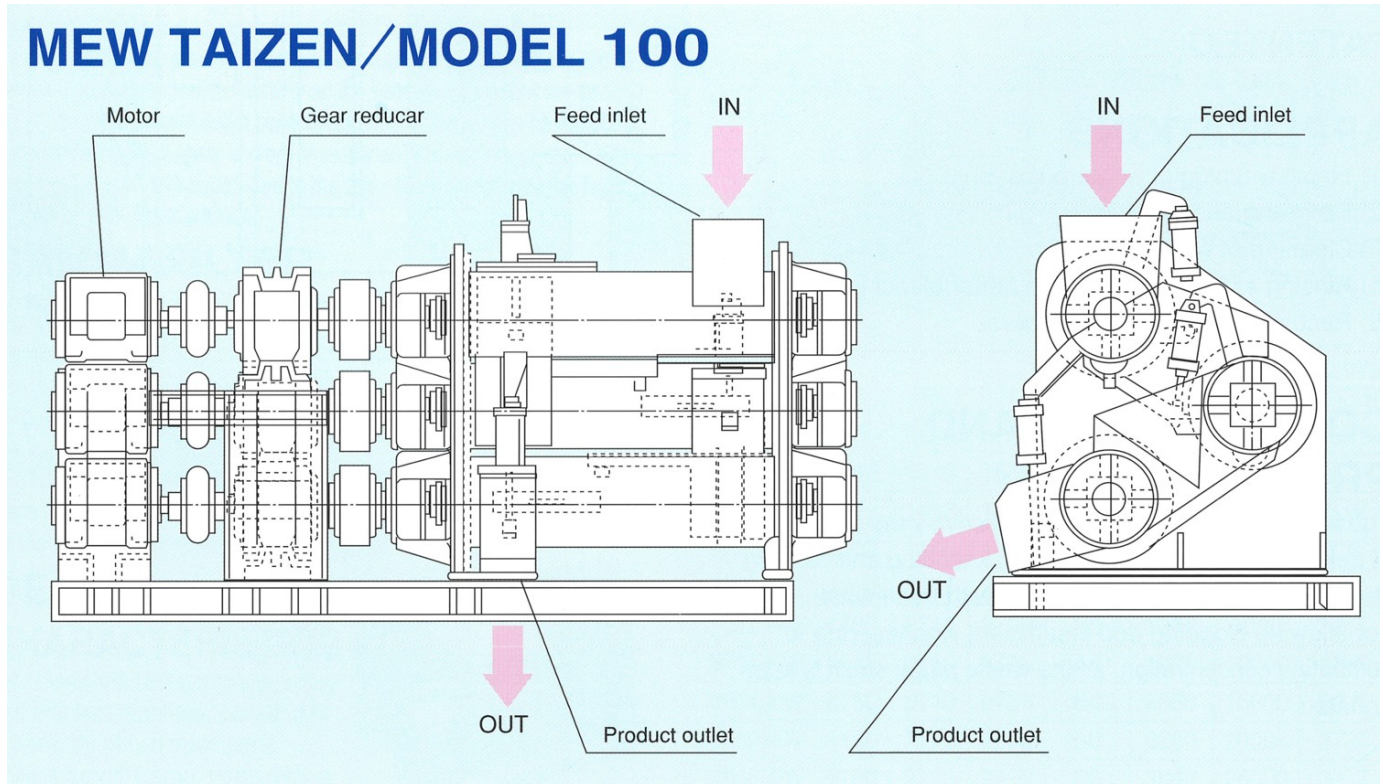
### **HIGH EFFICIENCY**

- ◆ 1992 : Awarded for Promotion of Science and Technology and Excellent inventor by Governor of Shizuoka Pref.
- ◆ 1993 : Awarded for Best Machine by Paper-Pulp Engineering Society.



**TAIZEN CO., LTD.**  
TAIZEN TECHNICAL R&D LAB INC.

# Higher quality by mechanical processing with the less use of chemicals.



## An Indispensable Machine in Saving Cost

Chemicals, Steam, Electricity, Materials, Maintenance, Yield Rate, etc.

To cope with the increasing demand for waste paper stock in the paper manufacturing industry, the waste paper stock preparation machines have been developed. Under such a circumstance, it was found that the kneading process is important. Compared to the conventional kneaders, " NEW TAIZEN " (Paper Stock Preparation Machine developed, designed and fabricated by Taizen Corporation, Tetsuo Ide President ) has brought about excellent results and won the highest praise. With our original know-how and recognized engineering technique, we would like to serve you as an adviser in improving your stock preparation and taking a new look at your production flow.

# Better De-inking Against Inferior Waste Paper!!

## FEATURES

### (1) Better De-inking Quality

"Color spots" which have been difficult to remove, can easily be taken off or dispersed. The higher quality waste paper stock is produced by our highly efficient mechanism : "Transferring — Compressing — Squeezing — Kneading — Twisting — Heating"

### (2) Disintegration

Waste paper can be disintegrated with the superior kneading force, which contributes to higher yield rate.

### (3) Removal of Wax, Hot-melts

Wax is separated or dispersed and then removed by the subsequent washer. Hot-melts are rounded then screened off with ease.

### (4) Less Consumption of Chemicals

Chemicals can be added at the third cylinder. A higher concentration mixing results in a uniform mixture of the stock and a heat-generation as high as 30-80°C caused by the fiber-friction, thus effecting a less chemical consumption due to a good penetration and a reduction of effluent.

### (5) Higher Productivity

As no fiber-cut occurs, the freeness of the stock is kept almost as it was at the feeding. A better fiber-bonding caused by a higher-concentration mixing results in an increase of paper strength, a reduction of paper braking on machine and an increase of productivity.

### (6) Less Running Cost

Compared to alternative machine, the running cost is lower because the steam isn't used. Since the machine structure is simple, you have less trouble and much longer life of parts (such as kneader blades and so on.).

### (7) Easy Operation

Since three cylinders are independent for the control, the optimum condition can be set by each cylinder as you like. The damper air pressure can be adjusted by the accurate reducing valve at each cylinder.

### (8) Compact Design

Thanks to the compact design, the machine occupies less space and doesn't demand any special skill for operation.

### (9) Dewatering Zone of Higher Function

The dewatering zone is prepared between the first and the second cylinder to increase the kneading effect. If you install, upon your option, a larger dewatering zone (option), the paper stock of lower concentration can be kneaded completely.

### (10) Flexible Service

You can optionally select the specifications of blades, for instance, to meet your raw materials and a targeted quality of the products.

## STRUCTURE AND PRINCIPLE

The machine consists of three cylinders, in which the waste paper stock is mixed at higher concentration, and kneaded and dispersed respectively. The paper being transferred, compressed and mixed intermittently, with dewatering and heat generating, the fibers are disintegrated, color spots are separated/dispersed and hot-melts are rounded for easy separation at subsequent stages.

The machine plays several roles; First cylinder (Forward) → Second (Backward to knead) → Third (Backward to re-knead) + (Addition and penetration of chemicals). Each cylinder is directly driven by the motor. Moreover, the bearings are housed to make efficient use of the motor power.

Since three cylinders are independent each other, each cylinder is designed to cope with different materials flexibly.

The kneading blades can be changed for better kneading effect according to purposes and materials.

## SAMPLE

Waste Paper: Mixture of Magazine 50%, Cardboard 20%, Newspaper 20% and Flyers 10%

Materials not processed by New Taizen ①



Screen Process ②



Materials processed by New Taizen ③



Screen Process ④



※ Screen : Flat Screen, 8 cut (O. 20mm)

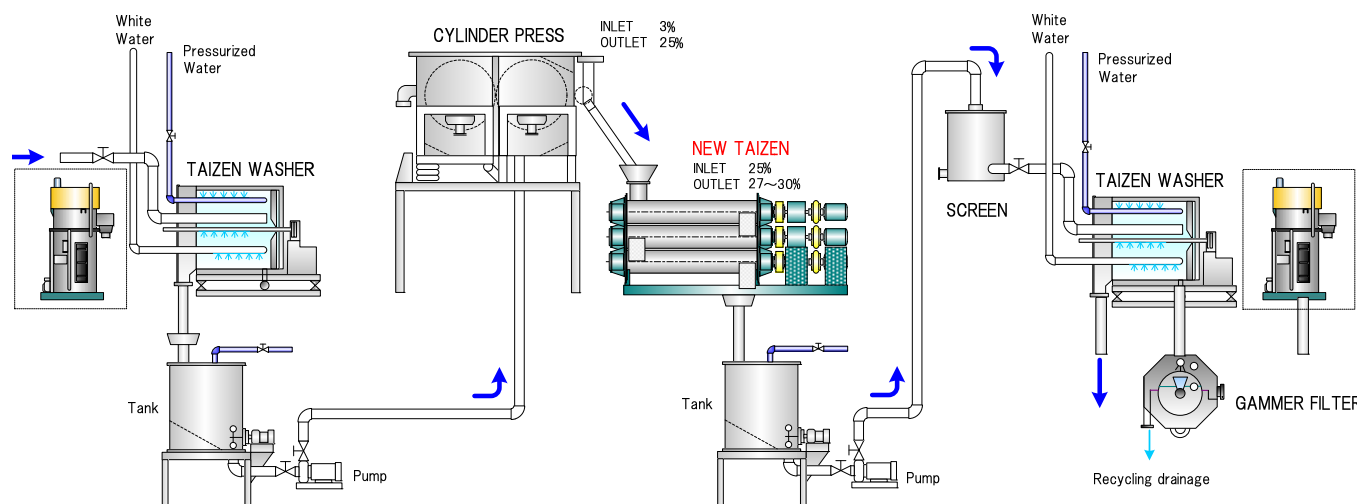
The Photo of sample sheet shows there are a lot of dirt included that are not sufficiently disintegrated or resulted from hot-melts. →See Photo (1). New Taizen accelerates the disintegration, rounds the plastic polymers and disperses the colored spots. →See Photo (3). An accelerated better disintegration brings about a higher pulp yield, as well as the rounded plastic polymers can be easily removed through the subsequent screening. →See Photo (4). Photo (2) Shows there remain the plastic polymers and the colored spots due to no treatment through New Taizen practiced.

## SPECIFICATIONS

NEW TAIZEN	CAPACITY (t/d)	POWER (kW)	DIMENTION W*D*H(mm)	WEIGHT (kg)
MODEL 25	10~30	15~22	3800*1100*1500	4000
MODEL 30	30~50	30~45	4000*1350*1600	5000
MODEL 35	50~70	55~75	4250*1600*1800	8500
MODEL 40	80~100	90~110	4850*1900*2000	10000
MODEL 45	120~150	110~150	5050*2200*2500	18000
MODEL 50	150~200	220~250	6200*2700*2800	30000
MODEL 65	250~300	250~300	6200*3000*2800	42000
MODEL 70	300~350	300~350	6500*3200*3000	48000

We are ready to make the other type than those described above upon your order.

## RECOMMENDABLE PROCESS FLOW



A more efficient kneading is attainable by washing away clays and excess chemicals in the stock through the washer and by dewatering through the cylinder press prior to the New Taizen.

An excellent quality is attained by screening and washing.

The washer washes away dispersed and separated ink.

Especially, the paper stock is kneaded and de-inked more effectively by being dewatered to higher concentration before it is fed to the kneader. This system is patented.



**TAIZEN CO., LTD.**  
TAIZEN TECHNICAL R&D LAB INC.

496-1 DENBO FUJI-CITY SHIZUOKA-PREF  
417-0061 JAPAN

PHONE 0545(22)5955

FAX 0545(22)5956

e-mail : [info@taizen-co.jp](mailto:info@taizen-co.jp)

URL : <http://www.taizen-co.jp>