



Tablet Press

# P2020

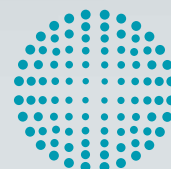
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TECHNOLOGY



COMPETENCE

SERVICE



**FETTE  
COMPACTING**  
be efficient

# Fette Compacting – be efficient!



## **Tradition and knowledge**

Fette Compacting, founded in 1908, is the world's leading provider of integrated solutions for industrial tablet production and capsule filling. The company specializes in high-performance machines for the pharmaceutical, nutraceutical, and chemical industry. The company's head office and global control centre is in Schwarzenbek near Hamburg (Germany). Fette Compacting is represented across the globe in more than 50 countries.

Fette Compacting is the only manufacturer of tablet presses and capsule filling machines to operate its own global network with five fully-equipped and digitally-connected Competence Centers in Germany (Schwarzenbek), Brazil (Campinas), China (Nanjing), India (Goa), and the US (Rockaway, New Jersey). They are offering basic and product trials, training units, courses and a wide range of consulting services to impart practice-oriented know-how for more production safety and efficiency to customer employees.

Fette Compacting is a member of the LMT Group – a medium-sized, family-owned group of companies. The Group also includes LMT Tools, a leading manufacturer of precision tools for industrial processing of construction materials.



**TECHNOLOGY** stands for everything we offer in production technology – from tablet presses and capsule filling machines through Process Equipment to tableting tools and format parts.

**SERVICE** covers all the services related to machines, Process Equipment and installations such as spare parts supply, plant modernization and technical field service department.

**COMPETENCE** is the overarching idea behind all our process-related services. This includes training, product trials, application and Performance Consulting as well as engineering.

Fette Compacting recognized the opportunities for internationalization at an early stage. The company has been represented by its own subsidiary company in China since 2004.

All the machines are made in accordance with German standards, and satisfy the specifications of the American FDA (Food and Drug Administration) regulation authority, as well as the requirements of the international cGMP (Current Good Manufacturing Practices). Fette Compacting delivers installations with computer-supported controller that meet the requirements of Title 21 CFR Part 11 (Code of Federal Regulations of the FDA) for electronic documentation.

**Complete solution for your tablet production**

We are specialized in high-performance machines for the pharmaceutical industry. Our range of products and services includes tablet presses, from laboratory to small, medium and large batches. Furthermore Fette Compacting offers mono-, bi- and triple-layer tablet presses. For high potent application we also have Containment and WIP machines in our product portfolio.

We are also offering tableting tools and process equipment as well as maintenance, training and consulting.

Our global service network are close to our customers. And our experienced international service team are able to offering various services to meeting the different requirements from our customers. During the start up phase, we offer installation, commissioning service, operation and maintenance training. During the production phase, we offer the calibration, maintenance, repair and spare parts service.

+ Format flexibility



**SERVICE**

- + Start up phase**
  - Installation service
  - Commissioning service
  - Operation and maintenance training
- + Production phase**
  - Calibration service
  - Maintenance
  - Repair service
  - Spare parts
- + Highlights**
  - Global service network, close service to customer
  - Rich experienced international service team
  - Provide customer preventive services guide

The P2020 – high quality  
for middle batches





**The P2020 – with comparatively low investment costs it produces reliable large amounts in a known quality.**

Production concentrated on fundamental economic principles, where complex technology is unnecessary, is the focus of an increasing number of products and manufacturing situations. Such conditions require – and allow – production machines to be completely cost-oriented.

The P2020 is a direct implementation of this approach. At Fette Compacting we have been ruthless in designing a tablet press which satisfies one point: 100 % economic viability. In spite of this basic requirement, it is Fette Compacting’s goal to maintain our unmatched standards for productivity, precision and operating security – in short, reliability.

**Support for your tablet production**

We are always present where our customers are, and where they need our support.

We have five Competence Centers in Germany, India, China, Brazil and the USA, and these allow us to make comprehensive consultation, training and product trials possible.

Here again, we are starting with ourselves, and orienting ourselves around international standards. This begins with the guidelines for Good Manufacturing Practice (GMP), and extends through to standards for Technical Safety Management (TSM) or those of the European Union (EU). In fact our product tools even surpass these.

This is a central topic, and one for which we have achieved a lot through the development of the Competence Centers. For example, we can now offer a wide range of training courses, and these are almost identical in different parts of the world.

In other words, a pharmaceutical concern that produces globally can train its machine operatives everywhere, and knows that every worker has the same know-how.

Our service consultants actively approach customers, working together with them to see how they can optimize production.

Fette Compacting has several thousand contacts with customers globally every day in the support context alone. Each of these contacts is important to us!

**Continuous improvement**

Fette Compacting always pays attention to the latest developments in the pharmaceutical industry and customer needs, constantly upgrades and optimizes our P Series, provides customers with higher quality products and services.

FEATURES	BENEFITS
+ VME-bus controlled, user-friendly, high-performance rotary press	+ Excellent price/performance ratio
+ Exchangeable turrets	+ Rapid format changeover results in high annual yields
+ Productive, precise, safe and robust	+ Continuous use
+ Pressure and filling depth adjusted by servo motor	+ Outstanding format and production flexibility
+ Wide range of accessories and process equipment	+ Can be adapted for a wide range of production requirements
+ Perfect overall design of machine and terminal	+ Easy to handle and operate
+ High-quality standard Fette Compacting components	+ Conform to GMP and FDA
+ Optional online weight measure equipment	+ High automation level reduce man-power and increase tablets quality



Performance  
and quality





### Upgrade Features

- + Design & functionality
- + Full stainless steel terminal, easy to clean
- + Optimized dust collection system
- + Metal handle for easy cleaning and durability
- + System integration of deduster and in process control
- + On-line tablet weight monitor & control function
- + MES system support

### Structure

- + Modular design with enclosed compression area to avoid the risk of cross-contamination, in compliance with cGMP regulations
- + High operating safety
- + Robust design ensure consistent accuracy even over long periods of high pressure
- + Quick-connect for easy disassembly of components, easy for maintenance and repair
- + Full accessibility to the compression zone – double layer window flaps on all four sides

### Exchangeable Turret

- + Turret is made in Germany, super precision
- + High level of format flexibility
- + High output by selecting the suitable turrets according to different product size
- + Unique turrets can be interchanged with cams and tools
- + Significant reduction of down-time by using extra turret complete with cams and toolings
- + Rich options for turret changing are available

### Fill-O-Matic

- + Unique three chamber filling system, more than 40 years experience on it
- + Metering wheels can increase powder flowability and uniform density
- + Filling wheels and dosing wheels can precisely fill and dose powder
- + Different options for products with poor flowability, and reduce the product loss

### Compression station

- + Main compression roller and pre-compression roller are same size (250 mm, exchangeable)
- + All compression roller are independent mounted, each can offer no more than 100 KN force
- + Roller is made in Germany with special material and technology, longer lifetime

### Tablet discharge

- + Each discharge chute includes good tablet channel and reject tablet channel
- + Optional air sorting system, reject single tablet precisely, reduce the product loss
- + Optional sampling gate, easy to take sample and check tablet quality

### Electronic control

- + Equipped with advanced VME-bus control system and top class electrical parts, faster and more stable
- + Professional software developed by Fette Compacting, verified by a lot of customers including many MNCs
- + Ergonomical HMI consisting of a large touch screen, screen-guided interface simplify the operation
- + Structured diagnostic messages for troubleshooting
- + Support FDA 21 CFR Part 11







# Optional accessories and process equipment



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COMPACTING



The quality requirements for tablet production are constantly increasing. Process equipment from Fette Compacting ensures that your production fully complies with the applicable regulations and effectively reduces the workload of your staff. Extensive automation of all process steps reduces manual intervention and provides for excellent tablet quality.

**Your advantages:** more reliability, high quality and efficiency in tablet production.

## **Weightmaster 6.2P**

- + Fully automatic measurement of tablet weight
- + Automatic feedback to Fette Compacting tablet press with stop function
- + Precise monitoring of tablet weight within freely adjustable stop limits
- + Documented tablet inspection results in your batch report
- + 21 CFR Part 11 compliant operation via the operator and password management on the Fette Compacting HMI (Human Machine Interface)
- + GMP-compliant design



Handling system



Deduster stand-alone or with metal detector

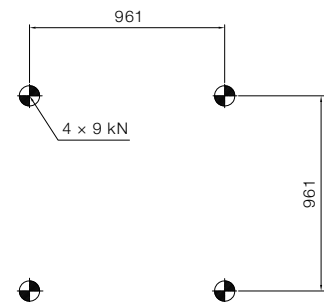
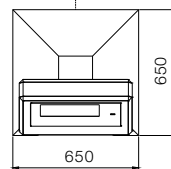
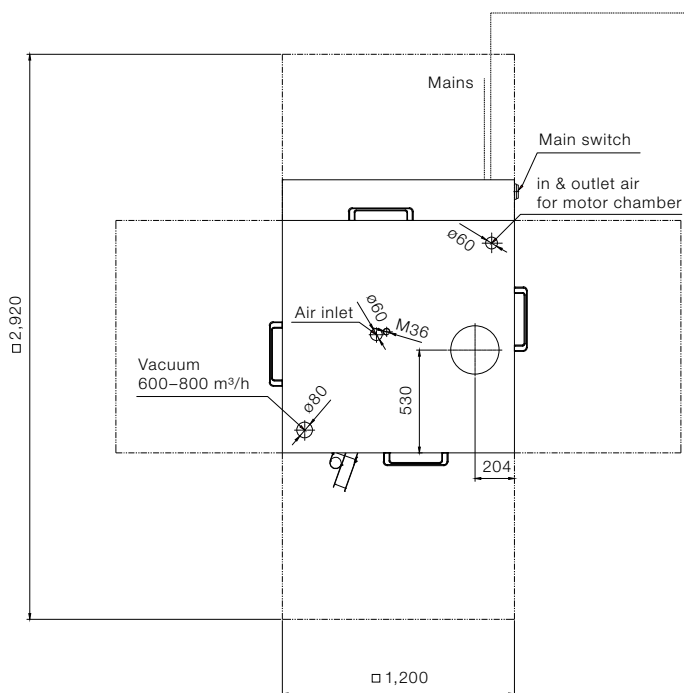
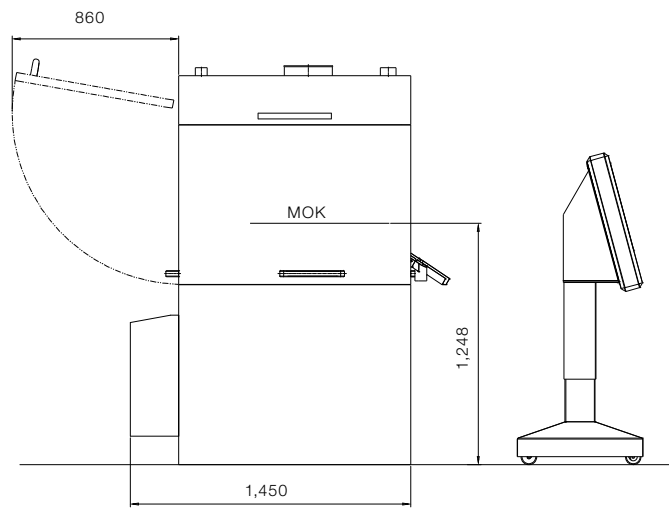
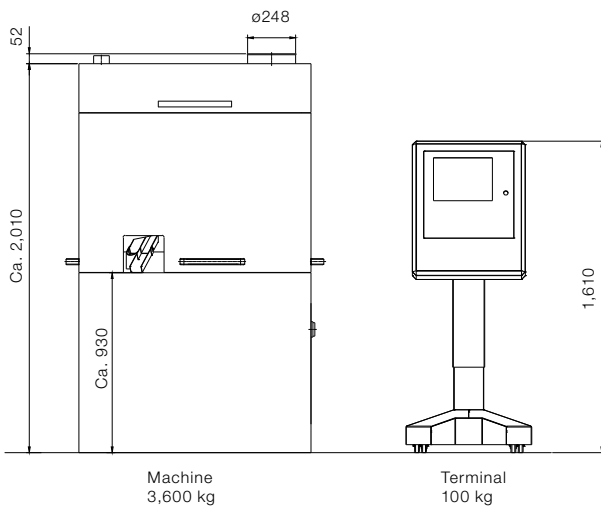


PKB-II



Tableting Tools

# Dimensions



Foundation loading

Main  
380-520 V ~50-60 Hz

Connection  
4 x 6 mm<sup>2</sup> - on floor  
4 x 10 mm<sup>2</sup> - cable conduit

<b>Die (D)</b>		D	D	D	D
<b>Number of punch stations</b>		47	43	36	30
<b>Punch type</b>		EU19 FS/EU19 BBS	EU19 FS/EU19 TSM 19 BB	EU19 FS/EU19 TSM 19 B	EU1"/EU1"-441 TSM 1" D
<b>Tablet output/h</b>	min.	42,300	38,700	32,400	27,000
	max.	338,400	309,600	259,200	180,000
<b>Max. compression force</b>	kN	100*	100	100	100
<b>Max. pre-compr. force</b>	kN	100*	100	100	100
<b>Max. tablet diameter</b>	mm	11	13	16	25
<b>Max. filling depth</b>	mm	18	18	18	18**
<b>Max. tablet thickness</b>	mm	8.5	8.5	8.5	8.5
<b>Pitch circle diameter</b>	mm	410	410	410	410
<b>Die table rotation speed</b>	min <sup>-1</sup> min.	15	15	15	15
	min <sup>-1</sup> max.	120	120	120	100
<b>Die diameter</b>	mm	22	24	30.16	38.1
<b>Die height</b>	mm	22.22	22.22	22.22	23.8
<b>Punch shaft diameter</b>	mm	19	19	19	25.35
<b>Punch length</b> Upper/lower punch	mm	133.6	133.6 (133.35)	133.6 (133.35)	133.6 (133.35)
<b>Upper punch insertion depth</b>	mm	1–4	1–4	1–4	1–4
<b>Dimensions</b>	mm	1,200 × 1,450 × 2,010			
<b>Weight</b>		Tablet press approx. 3,600 kg, operating terminal 100 kg			
<b>Electrical supply parameters</b>		Operating voltage 380–520 V, 50/60 Hz, power consumption 13 kW			

Theoretical values or technical limits: These can vary in practice, according to product and application.

Tablet thickness is a size dependent on product and can strongly vary.

\* Limited by punch properties up to 70 kN

\*\* Special filling depth available on request

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**Fette Compacting GmbH**

Grabauer Strasse 24  
21493 Schwarzenbek, Germany  
Phone +49 4151 12-0  
Fax +49 4151 3797  
tablet@fette-compacting.com

**Fette Compacting America, Inc.**

400 Forge Way  
Rockaway N.J. 07866, USA  
Phone +1 973 5868722  
Fax +1 973 5860450  
sales@fetteamerica.com

**Fette Compacting  
America Latina Ltda.**

Av. Cambacica, 1200 módulo 10  
Parque Imperador  
CEP 13097-160  
Campinas / SP, Brazil  
Phone / Fax +55 19 37969910  
contato@fette-compacting.com.br

**Fette Compacting Mexico,  
SA de CV**

Adolfo Prieto No. 1638  
Colonia Del Valle Sur  
03100 Mexico, DF, Mexico  
Phone +52 55 40000653  
tablet@fette-compacting.com

**Fette Compacting (China) Co., Ltd.**

No. 9 Shengtong Road, Moling Sub-District,  
Jiangning Development Zone,  
211111 Nanjing  
Jiangsu Province, P.R.C., China  
Phone +86 25 52121818  
Fax +86 25 52129951  
fcn@fette-compacting.com

**Fette Compacting Machinery India  
Private Limited**

A - 406 /407, 4th floor, Atrium 215,  
Next to Hotel Courtyard Marriott,  
Near J. B. Nagar Metro station,  
Andheri – Kurla Road, J. B. Nagar,  
Andheri (East)  
400 093 Mumbai, India  
Phone +91 22 62763399  
sales@fette-compacting.com

Competence Centre  
Plot No S 115, Phase III B  
Verna Industrial Estate  
Verna, Goa 403 722, India  
Phone +91 22 62763356

**Fette Compacting  
Asia Pacific Pte Ltd.**

107 Eunos Avenue 3, #01-01  
Singapore 409837, Singapore  
Phone +65 659 25654  
Fax +65 654 71939  
infoasiapacific@fette-compacting.com

**Fette Compacting Ibérica SL**

Avenida Labradores, 1  
2ª Planta, Oficina 3  
28760 Tres Cantos, Spain  
Phone +34 91 8039689  
Fax +34 91 3483052  
fcib@fette-compacting.com

**Fette Compacting et  
Uhlmann France**

1, Rue du Centre  
93160 Noisy Le Grand, France  
Phone +33 155 812121  
Fax +33 155 812120  
contact@fette-uhlmann.fr

**Fette Compacting Belgium BVBA**

Schaliënhoevedreef 1b  
2800 Mechelen, Belgium  
Phone +32 15 684260  
Fax +32 15 684269  
fcbe@fette-compacting.com

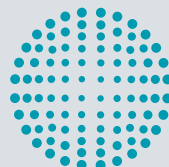
**EuroPharma Machinery Ltd**

Unit 12 Highview  
Bordon, Hampshire, GU35 0AX  
United Kingdom  
Phone +44 1420 473344  
Fax +44 1420 488030  
admin@europharma.co.uk

**Fette Compacting Middle East FZE**

Jebel Ali Free Zone, Jafza  
Lobby 14, Office 308, Dubai  
United Arab Emirates  
Phone +971 4 8808226  
dubai@fette-compacting.com

[www.fette-compacting.com](http://www.fette-compacting.com)



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