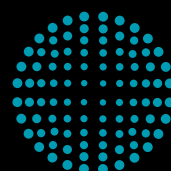


**F<sub>20P</sub>**

Next-Generation  
in standard tableting  
technology



**FETTE**  
COMPACTING

# Fette Compacting



## **Tradition and knowledge**

Fette Compacting, founded in 1908, is the world's leading provider of integrated solutions for industrial tablet production, with more than 6,000 machines installed globally. For over 75 years, the company has specialized in high-performance machines for the pharmaceutical, nutraceutical, and chemical industries, continuously setting new standards for quality, innovation, and efficiency. The headquarter is in Schwarzenbek near Hamburg (Germany). With 12 subsidiaries, as well as representatives in more than 50 other countries we make our extensive, oral solid dosage-related expertise available to customers all over the world.

As the only manufacturer of tablet presses with a truly global network, the company operates five interconnected Competence Centers in Germany (Schwarzenbek), China (Nanjing), the US (Rockaway), India (Goa) and Brazil (Campinas).

At the core of the company is the commitment to improving the quality of life for people worldwide through innovative product developments and services. This is encompassed by the company philosophy, 'Together – for quality of life'.

Fette Compacting Nanjing as subsidiary with own production site represents Fette Compacting since 2004.

All the machines and components 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 all installations with computer-supported controllers that meet the requirements of Title 21 CFR Part 11 (Code of Federal Regulations of the FDA) for electronic documentation.

### **Service**

Efficient machines alone are not enough. Equally important are diverse service offerings. This does not just include maintenance and repair, but also consultancy – especially in performance and operation.

If you are facing challenges in your tablet production, our application specialists are available for you, all over the world. We arrange the perfect solution to minimize machine downtime and to keep your production output up.

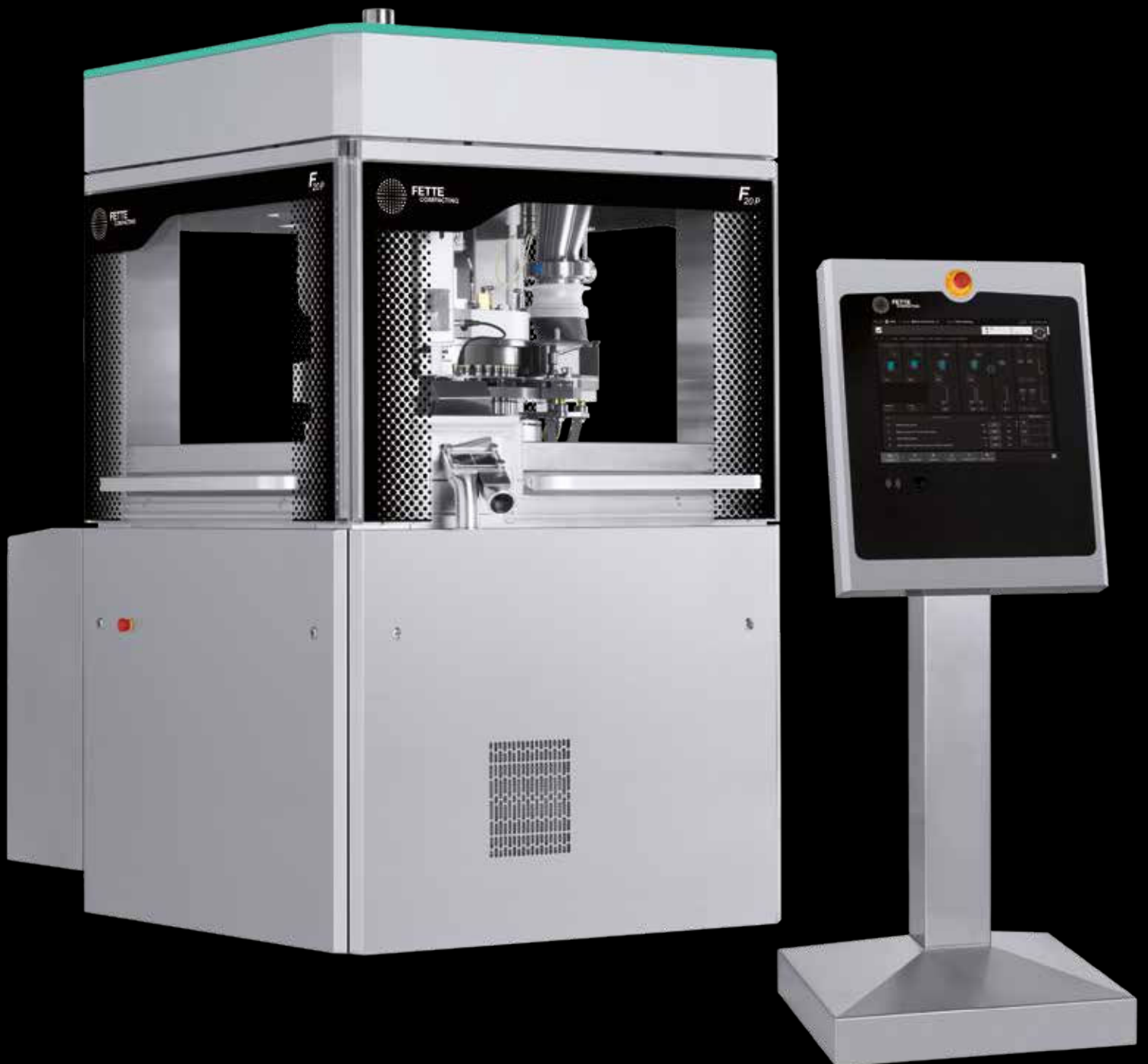
### **Basic Design**

The new p Series is distinguished by its cross-generation system compatibility, consistently designed in accordance with the principle of process and system compatibility. For this reason, process-related assemblies are largely unchanged. Accordingly, the p Series retains all features which have made it so valuable for our customers.

### **F20p single rotary tablet press – remarkable flexibility**

With the innovative platform the F20p demonstrate the flexible and efficient concept of modern manufacturing. It is suitable for a wide range of products and batch sizes and thus enables maximum flexibility in your production.

**PURE**  
tableting



# PURE – the most important features of the new p Series at a glance

**Being PURE – the base for a strategic partnership in operations**

## **Productive**

- + High output in standard operations
- + Boosting tableting production capacity and driving operational excellence

## **Universal**

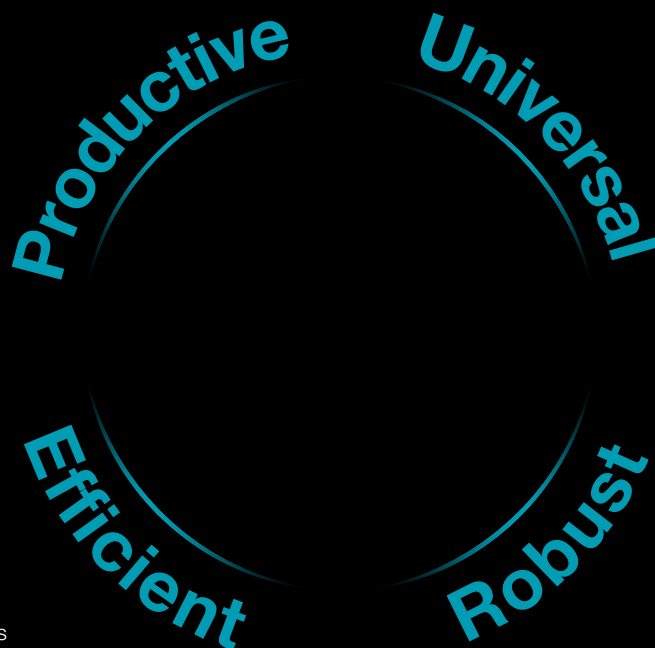
- + Compatibility and innovation well balanced
- + Minimized re-validation effort
- + Ease of use: managing and operating formulations

## **Efficient**

- + Upgraded energy saving technology – up to 40 %
- + Optimized integration of process equipment and improved intuitive user experience
- + Enhanced cost efficiency

## **Robust**

- + Optimized design for intensive utilization and high yields
- + Outstanding lifetime in standard tablet productions





### Rapid and simple product changeover

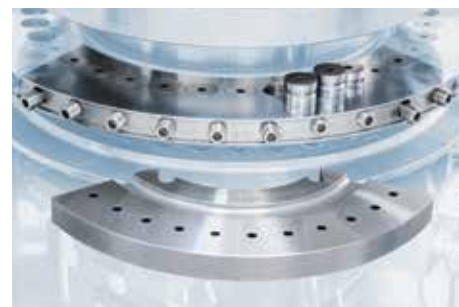
- + Faster, easier turret changeover including cams and punches
- + Flexible use also of segment or die turrets
- + Flexible compression stations for fast format and product changeover

### Operator and cleaning-friendly compression chamber

- + Strict separation of drive elements and measuring points
- + Maximum conformity with GMP guidelines and Easy-to-clean concepts
- + Tool-free design for disassembly of parts
- + Perfect access from all four sides
- + Geometrically optimized surfaces for the easiest possible handling and fast cleaning
- + e-SOP function: Recipe-specific reproducible soft-hardware settings
- + Driving Operational Excellence in standard operations

### Segment Technology

- + Up to 25% increase in output
- + 50% reduction of product loss (max.)
- + 88% reduction in manual operations for refitting
- + 100% dimensional accuracy compared to dies











### Cross-generation compatibility

The F20p is distinguished by its cross-generation system compatibility, consistently designed in accordance with the principle of process. All process-related components are identical in the previous p Series. This system-compatible design significantly minimizes the efforts associated with machine validation and qualification.

Not only by design, but also related to operating modes – an easy transfer of existing products from the previous p Series to the new F20p is enabled.

E.g. Even critical parameters of product recipes can be transferred from previous p Series models directly to the new F20p with minimal modification and validation.

With slight modifications, existing die turrets can be adopted from the tablet presses of the previous p Series models.

### Experience applied to basic design

Fette Compacting has accumulated experience from over 75 years and more than 6,000 installed tablet presses to develop the new generation technological platform on which the electronics and mechanical components are based.

### Basic modules optimized based on application experience

Reduce the intermediate interval

E.g. new feed hopper has optimized dimensions and curvature for broader material diversity coverage.

### Multiple configurations widely adapted to materials

Validated configuration packages are available as options.

E.g. Kits for: MUPS, thermolabile products, effervescent tablet, chewing gum, ...



**PURE**  
tableting





#### **Integrated electrical cabinet**

- + IP54 certified
- + Improved dust-tightness: Double-layer cabinet housing with completely sealed internal coverage
- + Less maintenance requirements
- + Dual cooling circuits effectively control internal temperature, even during long term and high-load operation



#### **Dust extraction system**

- + Reduced dust exposure
- + Aerodynamically designed dust extraction system with improved efficiency even at low vacuum utilization
- + Easy and fast cleaning through stainless steel parts
- + Preventing cross-contamination



#### **Dust-tight tablet chute with peripheral**

- + Easy cleaning, reducing noise levels and dust exposure
- + Clamp connection as standard for optimized connection to peripheral
- + Plug-and-Play design
- + Poka Yoke principle and geometrical similarity of components

# PURE

tableting



## Dust-tight tablet chute

- + Innovative dust-tight tablet chute ensures a safe production environment

## Energy saving by torque drive

- + Efficient torque drive enhances equipment efficiency and durability
- + Up to 40% power saving compared to previous model





#### Minimum footprint

- + With IP54 certified integrated electrical cabinet

#### Unified process equipment via Ethernet connection

- + Automation and control of all process devices
- + Easy monitoring and steering of process equipment

#### Intuitive user Interface

- + Enables intuitive operations, quality parameter settings and efficient acquisition of real-time data
- + 21 CFR Part 11 compliant
- + Optional: RFID operator login and customized authority management

#### Digital Ready

- + Compatible across systems, prepared for MES & IoT
- + Real-time data integrity by SQL server database
- + Error-free implementation of standard operating procedures (SOPs)

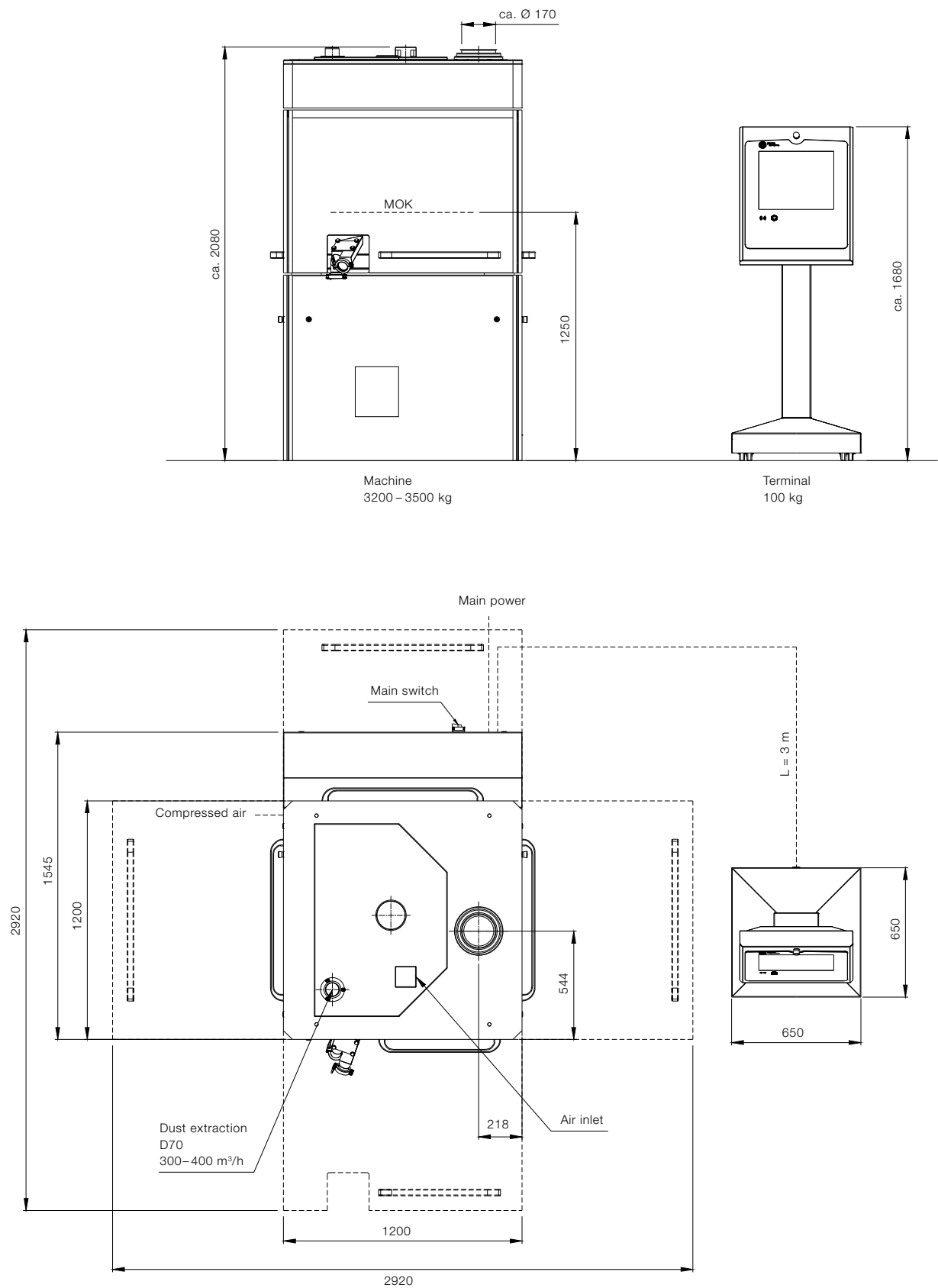
#### SmartInterface

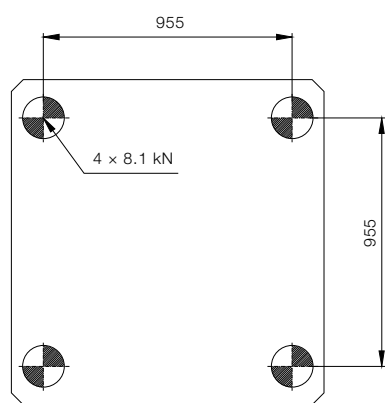
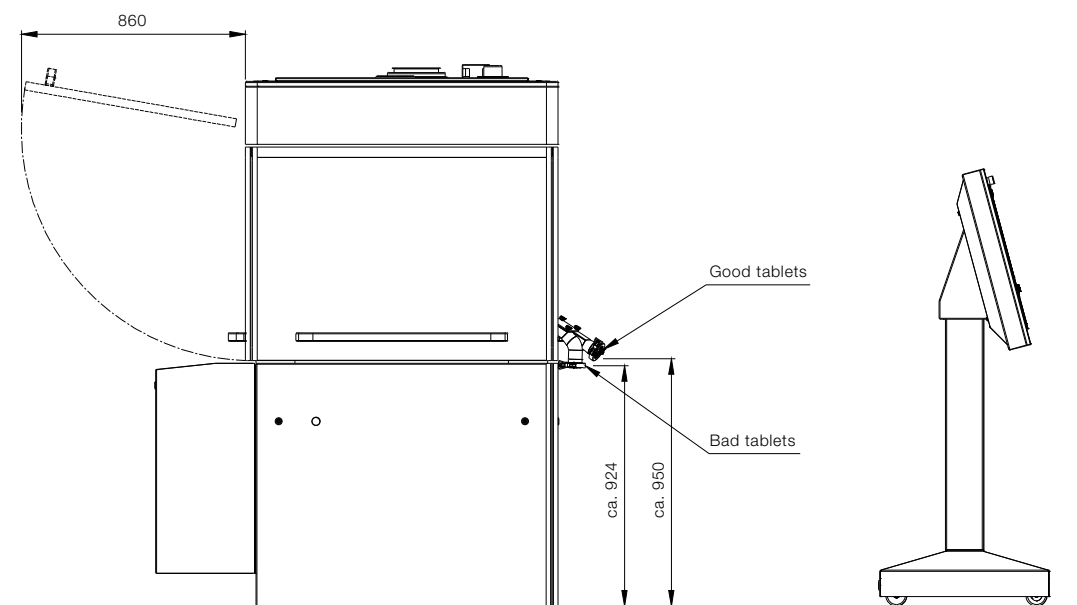
by Fette Compacting

- + 24/7 access to data, documentation and machine real-time monitoring by mobile devices
- + Digital value-added function for easier handling and process acceleration
- + Key performance indicator (KPI) dashboard

# Dimensions

## Standard floor plan



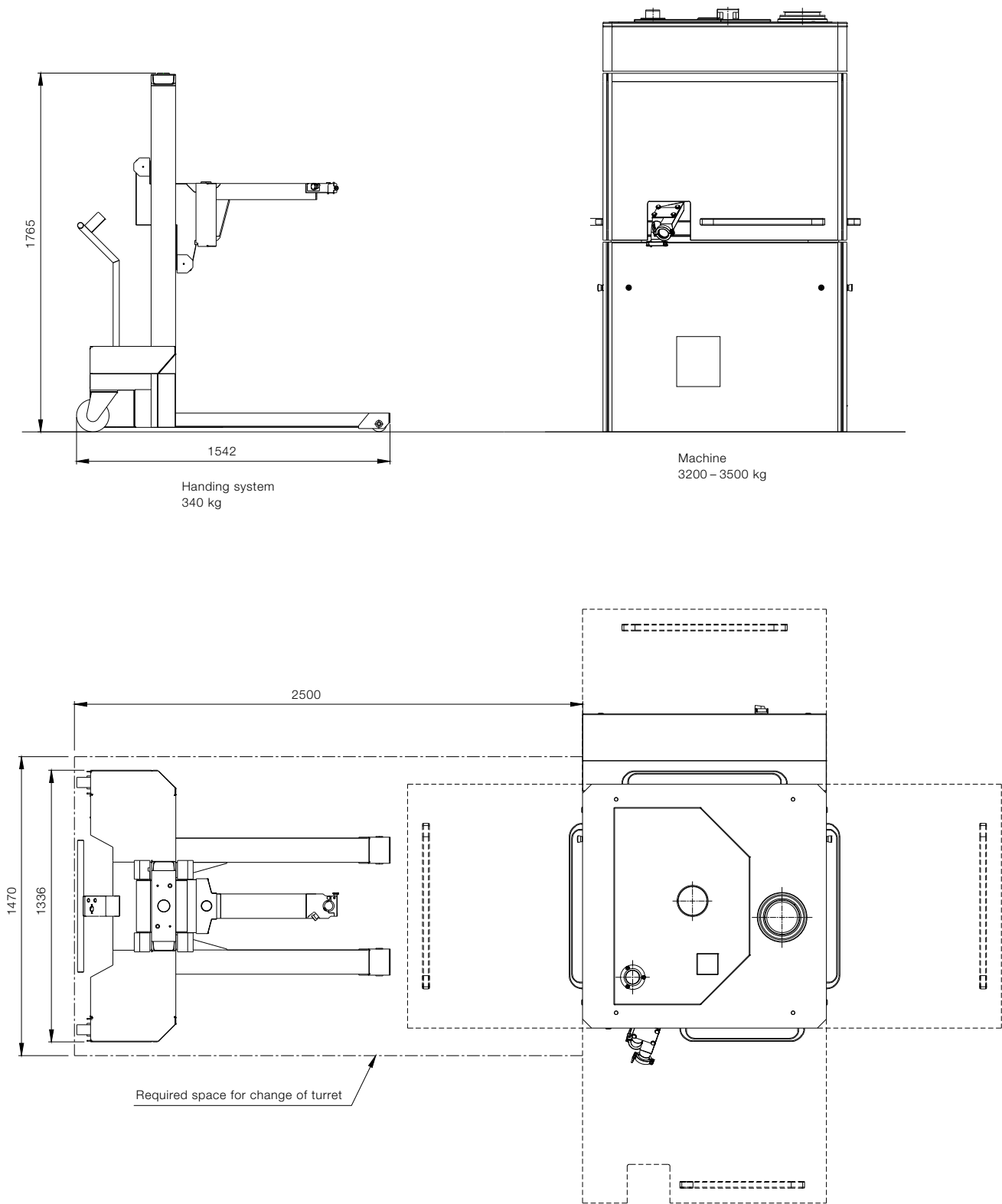


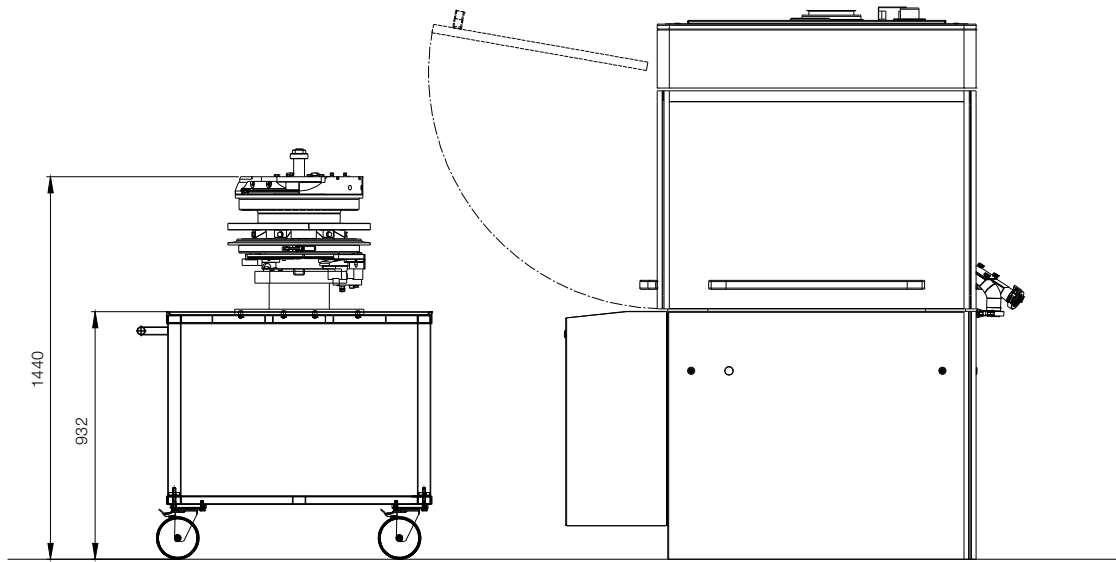
Foundation loading



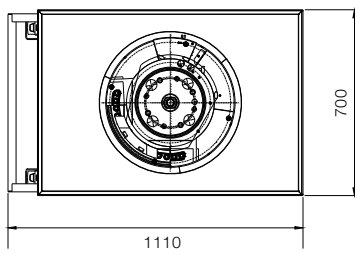
# Dimensions

## Turret exchange floor plan





Service cart  
120 kg



# Technical Data

Dies (D) / Segments (S)		D	D	D	D
Number of punch stations		47	43	36	30
Punch type		FS19® EU19 FS® EU19  BBS	FS19® EU19 FS® EU19 TSM19 BB	FS19® EU19 FS® EU19 TSM19 B	EU1" EU1"-441 TSM1" D
Tablet output units/h	min.	42,300	38,700	32,400	27,000
	max.	338,400	309,600	259,200	180,000
Max. compression force 1*	kN	100	100	100	100
Max. compression force 2*	kN	100	100	100	100
Max. tablet diameter	mm	11	13	18	25
Max. filling depth**	mm	18	18	18	22
Pitch circle diameter	mm	410	410	410	410
Turret rotation speed min.	min <sup>-1</sup>	15	15	15	15
	max.	120	120	120	100
Die diameter	mm	22	24	30,16	38,1
Die-/segment height	mm	22.225	22.225	22.225	23.8
Punch shaft diameter	mm	19	19	19	25.35
Punch length Upper/lower punch	mm	133.6	133.6 (133.35)	133.6 (133.35)	133.6 (133.35)
Upper punch insertion depth	mm	1 – 4	1 – 4	1 – 4	1 – 4
Dimensions L × W × H	mm	1,200 × 1,545 × 2,080			
Weight		Tablet press approx. 3,200–3,500 kg, operating terminal 100 kg			
Electrical supply parameters		Operating voltage 380–480 V, 50/60 Hz, power consumption 12.5 kW ***			

Theoretical values or technical limits: These can vary in practice, according to product and application.  
Tablet thickness is a parameter depending on product and can strongly vary.

\* limited by punch properties

\*\* special filling depth available on request

\*\*\* 17 kW Maximum power consumption with integrated process equipment

S	S	S
45	36	33
FS19® EU19 FS® EU19 TSM19	EU1" TSM1"	EU1"-441
40,500	32,400	29,700
324,000	216,000	198,000
100	100	100
100	100	100
18	25	25
20	20	20
410	410	410
15	15	15
120	100	100
–	–	–
25	25	25
19	25.35	25.35
133.6 (133.35)	133.6 (133.35)	133.6
1–4	1–4	1–4

**Disclaims:**  
Some features, described in this brochure are optional,  
subject to individual machine configuration on demand.

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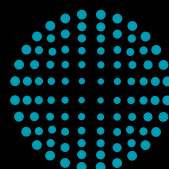
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