



FETTE
COMPACTING

F
E55

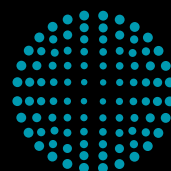


reddot design award
winner 2012

Next Generation Tableting Technology

FE55

www.fette-compacting.com



**FETTE
COMPACTING**
be efficient



What would you do ...

... if you had the possibility to plan tablet production in the green field? Or put in a different way: how would you define maximum performance?

The pharmaceutical industry is faced with a wide variety of challenges. To succeed among international competitors, companies are obliged to produce more, in a more flexible manner, faster and above all less expensively than before – in other words: more efficiently.

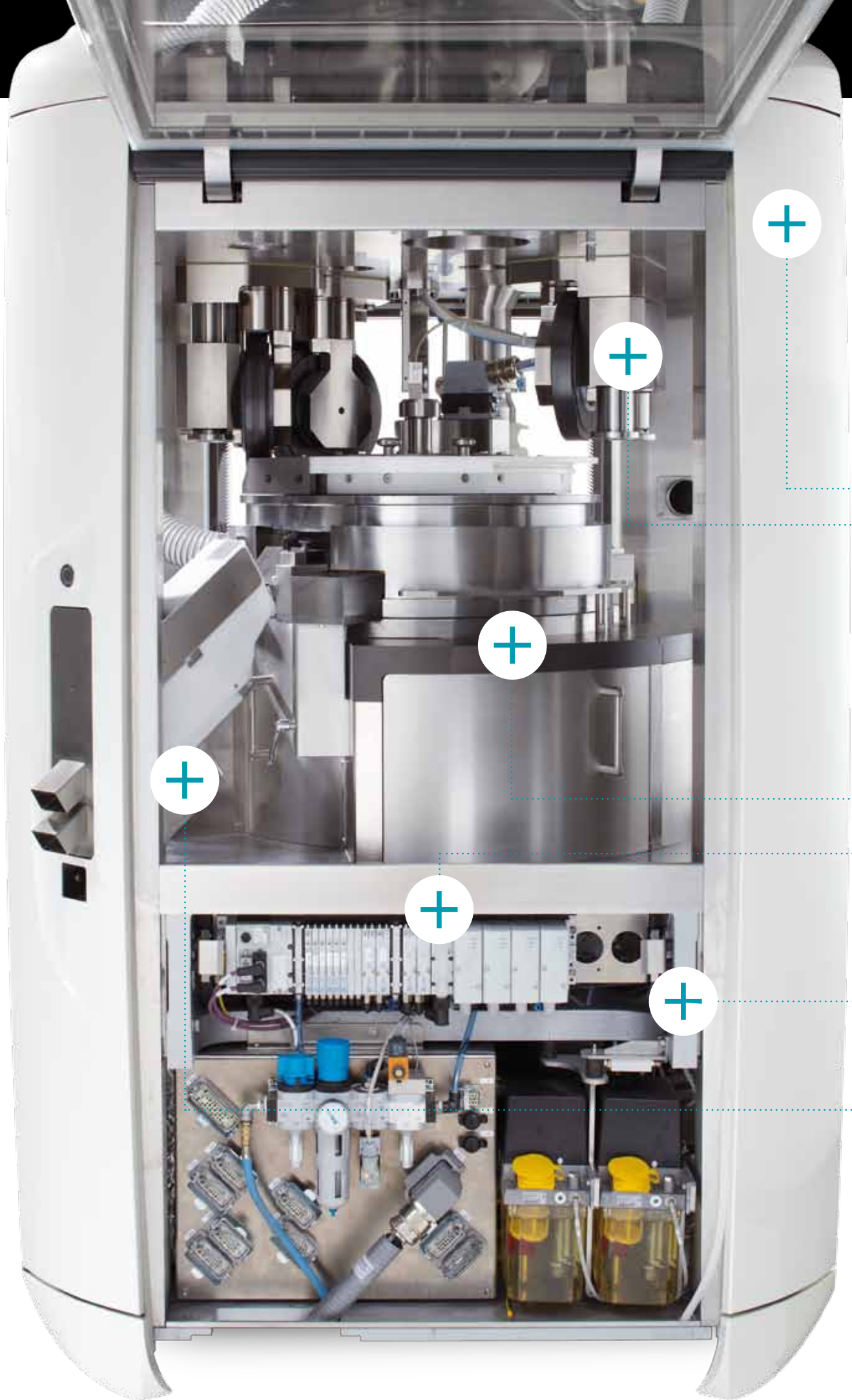
The FE55 is our answer to these requirements. Discover the next generation of tableting technology.

Fette Compacting FE55 – The new standard for efficiency in tableting

Three factors are decisive for efficiency in tablet production: productivity, flexibility and availability. The FE55 sets new standards in each of these areas:

- innovative filling system for easy and safe feeding of even complex product mixtures
- up to 50 percent higher production output thanks to unique ratio of punch stations to footprint (up to 87 punch stations on 1.6 m²)
- the only machine of this size for the production of single- and double-layer tablets as well as offering the possibility of direct pressing
- unique, patented system for first layer sampling during production
- innovative internal tablet discharge for guaranteed smooth production





FE55 – Innovations for your productivity

New compression stations

- + Maximum flexibility
- + Mono tablet production
- + Direct compressing using a third compression roller
- + 50 % longer compression dwell time
- + Double-layer tableting with identical compression rollers and filling devices
- + Downward-compatible Fill-O-Matic
- + Mono, direct compression and double-layer tableting (monitored via a coding ring and recognized by machine controls)

Machine design

- + Housing made of FDA-certified high-performance polymer
- + Optimal geometric surfaces for easy handling and fast cleaning
- + All components with product contact made of stainless steel
- + 360° access
- + Window flaps can be opened even when peripheral equipment is connected

New turret

- + New smooth-running pressure rollers for easy handling
- + Compression rollers can be driven into parking position for easy turret change
- + Easy turret exchange with cams and segments
- + Fast format changeover thanks to segments
- + Coded tablet scraper
- + Turret featuring coding ring for avoiding assembly errors
- + One central multi-functional plug for oil, air and power

New Torque drive

- + High-performance torque direct drive
- + Maintenance-free and energy-efficient
- + External or internal switch cabinet for maximum flexibility
- + Power and control sections are separate
- + Power cabinet with innovative cooling concept
- + All peripheral equipment and machine connections on a single panel

- + Dust-proof and hermetically-sealed switch cabinet

New innovative tablet discharge

- + Easy operation
- + Significantly less floorspace thanks to innovative tablet discharge through the column
- + 360° access
- + Compact unit for swift and fast cleaning
- + Dust-proof
- + Innovative and safe tablet sorting and sampling for maximum product security
- + Compact unit without cables or hoses
- + All parts with product contact made of stainless steel



TRI.EASY Design – Simplicity as a key to efficiency

Fette Compacting TRI.EASY Design makes its début with the FE55. The idea behind it: Technology can only be efficient if it is equally easy in the three dimensions of operation, changeover and maintenance. The TRI.EASY design therefore puts its central emphasis on the user. That is how it provides easy, reliable operation anywhere in the world, regardless of the operator's qualification level.

Features

- + Plug & Play design
- + Dismantling and assembly without tools
- + Machine controller detects the turret configuration

Benefits

- + Very easy handling since adjustments are no longer necessary
- + Fast, easy exchange and cleaning
- + Parameters are configured automatically





Maintenance-friendly

- + Identical compression rollers for all stations
- + Load cells can be change without removing the gear box
- + High-resolution load cell can be easily installed for special aaplications

Product flow

- + New filling devices for maximum productivity
- + Easy to clean thanks to small components
- + No tools required for assembly or dismantling
- + Downward-compatible three-chamber FOM
- + Height adjustment via a central slide ensuring absolute repeatability
- + Height-adjustable in steps of 30 μm

Features

- + Tablet sample of the first layer can be taken in less than 5 seconds during production

Benefits

- + Extremely reduced product loss



INNOVATIVE FEATURES

- + 360° access
- + FOM – Support in steps of 30 μm
- + Smooth-running compression rollers ideally suitable even for lower compression forces
- + Pneumatically-adjustable compression rollers for first-layer sampling
- + Fette Compacting patented first-layer sampling
- + 250 mm compression rollers for maximum compression dwell time
- + Control components are separate from power components
- + Fewer plug-in connections mean easier setup
- + Dust-proof and hermetically-sealed switch cabinet
- + Turret with coding ring; controls recognize the configuration



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Fette Compacting HMI – for guaranteed easy and safe operation

The entirely new-developed FE55 HMI (Human Machine Interface) means you can see all of the press parameters at a glance. Easy and intuitive operation guarantees maximum efficiency and security.

- + 19" touch-screen for maximum overview
- + Easy operation thanks to full keyboard
- + Dust-protected USB connection
- + No mechanical drives
- + Win7® embedded operating system
- + Visual operating software from Fette Compacting
- + SQL server database
- + Swift access to key functions via 12 pictogram buttons
- + All surfaces are easy to clean
- + No ventilation slots or openings
- + Ergonomic operating height



Access to the main turret functions

- + Missing punches and punches that need to be rejected can easily be selected with a touch
- + Ready-grouped parameters for easy operation
- + Hot keys for quick adjustment of the most important parameters
- + Drag and drop parameter lists for an individual view
- + Search function within the parameter list
- + Different input dialogs for particular parameters
- + A comment line can be used for each individual parameter
- + Critical parameters can only be changed working together with another operator (as a second set of eyes)

FEATURES

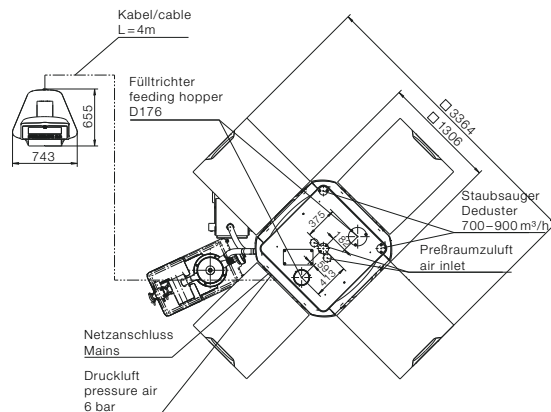
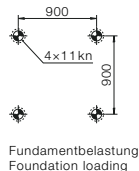
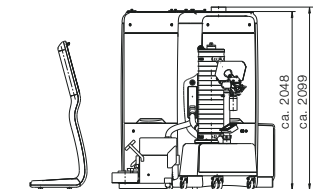
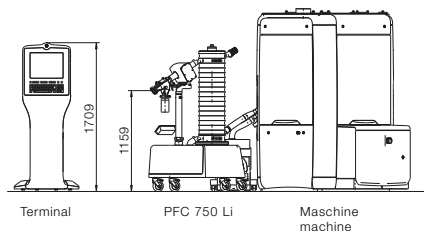
- + Comprehensive process graphics with all requisite parameters.
- + Downward-compatible hotkeys for machine operation
- + Parameter lists can be configured individually
- + Swift access to the 12 most important functions with pictogram buttons
- + Terminal made of FDA-certified high-performance polymer

BENEFITS

- + Easy and intuitive operation thanks to self-explanatory pictograms
- + Familiar operation of Fette Compacting presses
- + Easy and fast machine operation
- + Direct access to main functions
- + Smooth, easy-to-clean surfaces



Dimensions

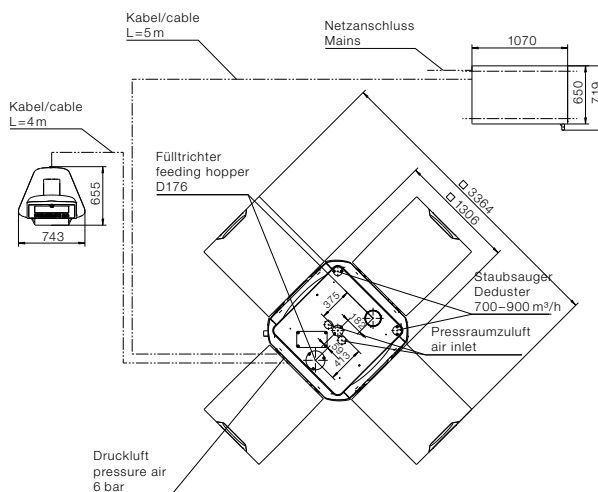
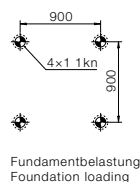
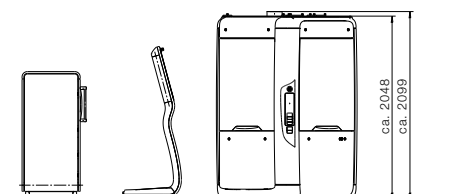
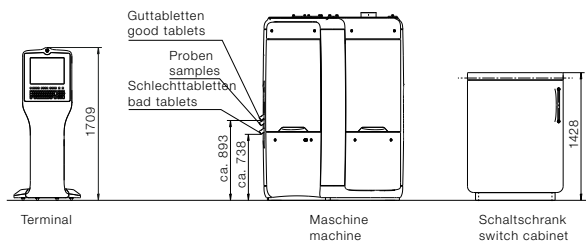


Druckluft min. 6 bar
für Rotorspannsystem
+ Dosierung
+ Option: Luftausortierung

pressure air min 6 bar for
Rotofixingsystem
+ Dosagehead
+ Option: air rejectsystem

Betriebsspannung/Main
400/440/480 V – 50–60 Hz

Anschluss/Connection
4x10mm²



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Technical Data

Number of punch stations		87	60	45	45
Punch type		FS12	EU19 (IPT/TSM 19)	EU 1" (IPT/TSM 1")	EU 1" -441
Tablet output units/h	min.	78,300	54,000	40,500	40,500
	max.	626,400	432,000	243,000	243,000
Max. compression force 1	kN	100**	100*	100	100
Max. compression force 2	kN	100**	100*	100	100
Max. compression force 1	kN	100**	100*	100	100
Max. tablet diameter	mm	11	18	25	25
Max. filling depth 1st layer	mm	18	18	18	18
Max. filling depth 2nd layer	mm	8	8	8	8
Max. tablet thickness	mm	10	10	10	10
Max. tablet thickness 2nd layer	mm	12.5	12.5	12.5	12.5
Pitch circle diameter	mm	550	550	550	550
Turret revolutions per minute	mm ⁻¹	15 – 120	15 – 120	15 – 90	15 – 90
Punch shaft diameter	mm	12	19	25.35	25.35
Punch length	mm	133.6	133.6 (133.35)	133.6 (133.35)	133.6
Upper punch insertion depth	mm	1– 4 (8)	1– 4 (8)	1– 4 (8)	1– 4 (8)
Dimensions	mm	1270 x 1254 x 2040			
Weights	kg	Tablet press 3900 kg – operating terminal approx. 100 kg			
Electrical supply parameters	kW	Operating voltage 400 – 480 V, 3 phase, 50/60 Hz, power consumption 16 kW			

* Tools only permit up to 70 kN

** FS12 punches only permit up to 25 kN

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