

# Top products for mattress and fashion markets





# Top seller product OVJA 2.4EM

# Mattress ticking



11.2020 H.Maier



#### Statistic - world sales of electronic machines

Sales figures of each world region according ITMF statistics

Year/ Regions	2010- 2019	2016	2017	2018	2019
Africa	175	34	8	11	14
Americas	649	90	98	44	34
Asia	2.944	1.369	281	132	146
Europe	2.552	396	234	214	72
Total world	6.022	1.821	621	401	266



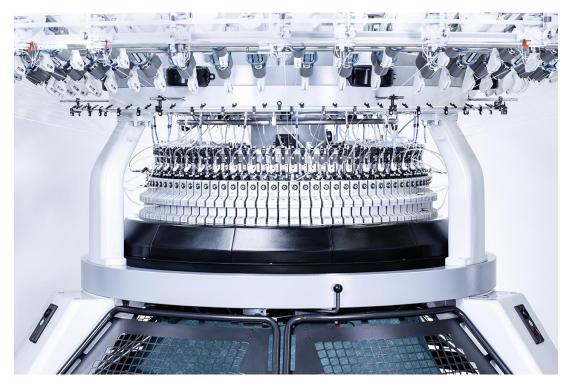
## Tendencies of mattress machine specification

Specification	Tendency
Gauges	Gauge E20 remains
Diameters	Dia. 38 inch takes about 85% of the market
Number of feeders	Strong increase to high production machines > 1,6 feeder/ inch
Product lines	Fabric weights below 300 gr/m <sup>2</sup>

OVJA 2.4 EM



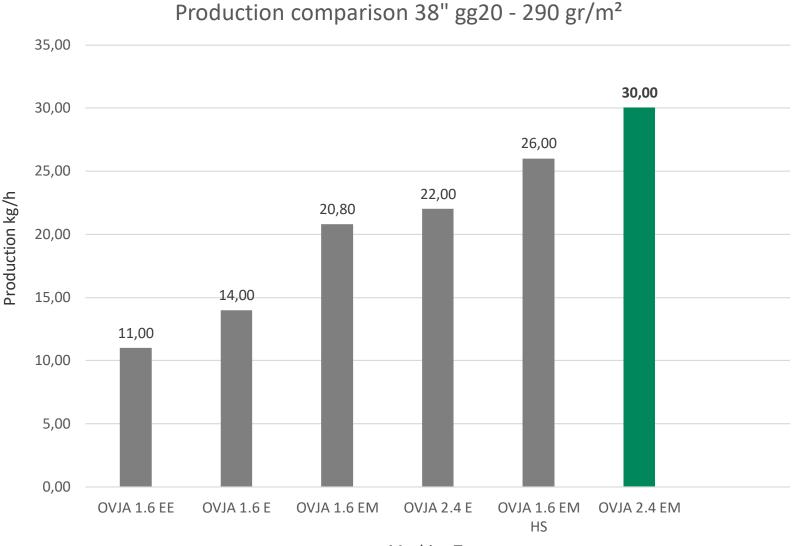
# Most Productive Mattress Machine in the World





	OVJA 1.6 E 38" gg 20	OVJA 1.6 EM 38" gg 20	OVJA 1.6 EM HS 38" gg20	OVJA 1.6 EE 38" gg 20	OVJA 2.4 E 38" gg 20	OVJA 2.4 EM 38" gg 20
feeders	60	60	60	60	92	92
speed	18 with HS	24	30	16	18 with HS	25
Dia (inch)	26,30,34,36,3 8,42,48	38,42,48	38, 42	30,34, 36,38,42,48	30, 34, 38	38, 42
gauge	E 14-E32 26"-36" E 26 42"-48" E26 + E28	E 18, E 20	E 18, E 20	E18, E 20, E 22, E 24, E 26, E28	E18, E 20, E 22, E 24, E 26, E 28	E 18, E 20
dial cam box	Slider cam box, option exchange cams	exchange cams, option slider cam box	exchange cams, option slider cam box	2-way with magnet	exchange cams, option slider cam box	exchange cams, option slider cam box
Applications	mattress spacer elastomer	mattress	mattress	high end mattress	mattress spacer elastomer	Mattress
Production: 290 gr/m <sup>2</sup>	14 kg/h	20,8 kg/h	26 kg/h	11 kg/h	22 kg/h	30 kg/h





Machine Type



#### Production factor according to specific machine specifications

	Fukuhara M-LEC7BSH	Fukuhara M-LEC8BSH	Terrot UCC572-M	Terrot UCC594-M	OVJA 1.6 E HS 38" gg 20	OVJA 2.4 EM 38″ gg 20
Diameter	38	38	38	38	38	38
feeders	84	108	90	120	60	92
Speed RPM	22	20	20	19	30	25
Efficiency rate in %	85	80	85	75	90	85
Production Factor	1.570	1.728	1.530	1.710	1.620	1.955

OVJA 2.4EM Production factor: No. of feeders X RPM x Efficiency rate	е
92 x 25 x 0,85 = 1.955	

#### **OVJA 2.4 EM – characteristics**



	Our feature	Our advantage	Your benefit	Photo/ graphic
1	Optimized cylinder and dial cam design	<ul> <li>High speed up to 25 rpm possible</li> </ul>	<ul> <li>High production</li> </ul>	
2	Horizontal mounted lay in yarn guide on top of cylinder segment	<ul> <li>Stable and easy handling</li> <li>No readjustment in case of dial height changes necessary</li> <li>Additional push down function for long floating of the basic yarn</li> </ul>	<ul> <li>Fast adjustment</li> <li>Running safety</li> </ul>	
3	Thread fluctuation control system on every second feeder (knitting dial – cylinder together)	<ul> <li>Enables constant yarn tension especially at high rpm</li> <li>avoids thread loops</li> </ul>	<ul> <li>Reduced drop stitches</li> </ul>	
4	Optimized yarn feeding	<ul> <li>Reduced vibrations of the yarn due to shortened distance between Jacquard Feeders and yarn guide</li> </ul>	Reduced drop stitches	



### **Control** sinker and selection magnet



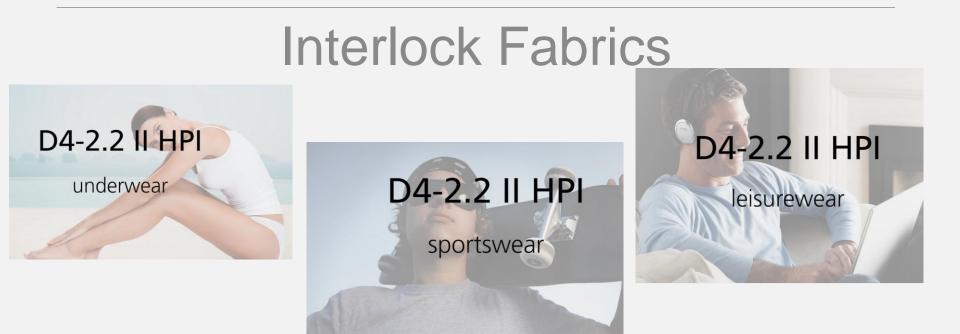




- weight reduction of 20% achieved by three cut-outs
- less energy consumption and thus lower heat generation
- optimized vibration behavior due to lower mass
- enables speed of 25 rpm with save selection
- optimized selection magnets for save selection



# Top seller product D4-2.2HPI with 4.4 feeder/inch



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#### Statistic - world sales of double mechanic machines

Sales figures of each world region according ITMF statistics

Year/ Regions	2010- 2019	2016	2017	2018	2019
Africa	3.286	417	401	643	618
Americas	4.267	405	617	550	615
Asia	135.239	14.811	15.517	14.839	16.020
Europe	8.474	987	1.452	1.308	798
Total world	151.324	16.620	16.535	17.340	18.051



# Tendencies of double mechanic machines

Specification	Tendency
Gauges	Certain trend to finer gauges E28, E32
Diameters	Dia. 30 and 34 are dominating
Number of feeders	Strong increase to high production machines > 3.2 feeder/ inch
Product lines	Rib low level, 8-lock stable, Interlock takes more than 50% of market share

D4-2.2HPI



#### Most productive Interlock Machine in the world



Perfect for plain Interlock without Lycra for gauges from E20 up to E32 in PES or Cotton



# **Comparison Interlock and 8-lock machines**

	D 4 – 3.2 II	D4-2.2 II / D4-2.2 X	D4-2.2 II / D4-2.2 X HPI	OV 3.2 QC	IG 3.2 QC	Inovit 4- 2.0 QC
Syst. per inch (30")	3.2 (96)	2.2 (64)	4.4 (132)	3.2 (96)	3.2 (96)	2.0 (62)
Speed factor rpm x diam. (30")	<mark>35</mark> x 30 = <u>1.050</u>	<mark>37</mark> x 30 = <u>1.110</u>	<mark>34</mark> x 30 = <u>1.020</u>	<mark>35</mark> x 30 = <u>1.050</u>	<mark>35</mark> x 30 = <u>1.050</u>	<mark>35</mark> x 30 = <u>1.050</u>
Needle tracks	2 tracks in dial, 4 tracks in cylinder	2 tracks in dial, 4 tracks in cylinder	2 tracks in dial, 2 tracks in cylinder	2 tracks in dial, 4 tracks in cylinder	2 tracks in dial, 2 tracks in cylinder	2 tracks in dial, 4 tracks in cylinder
Delayed timing	3,0 mm	4,5 mm	2,6 mm	3,0 mm	4,0 mm	5,0 mm

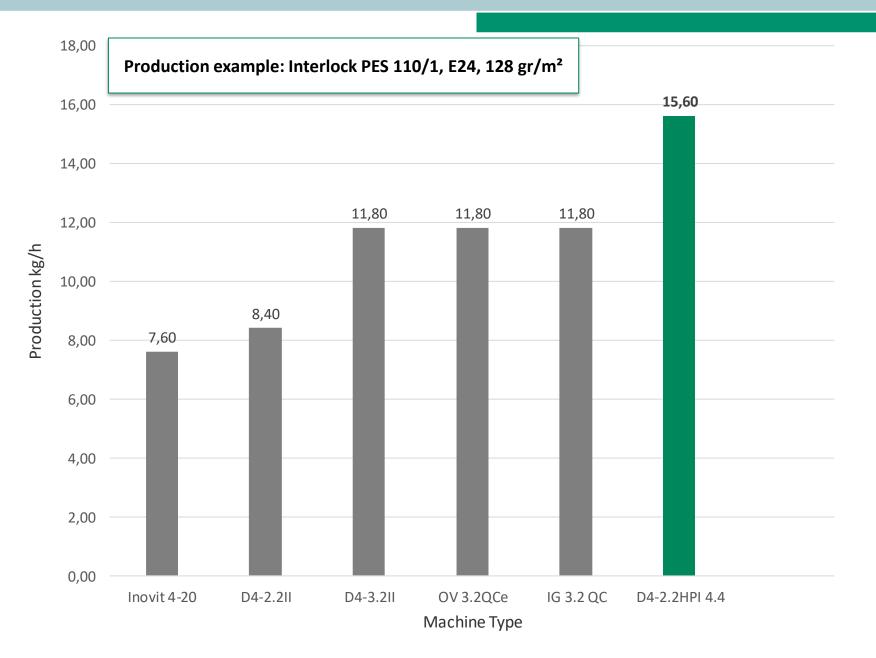


# **Comparison Interlock and 8-lock machines**

	D 4 – 3.2 II	D 4 – 2.2 II	D4-2.2 II / D4-2.2 X HPI	OV 3.2 QC	IG 3.2 QC	Inovit 4-2.0 QCe
Structures	8-lock structures, Interlock	8- lock structures, Interlock, Rib	Interlock plain No elast. plating	8- lock structures, Interlock	Interlock plain	8- lock structures, Interlock, Rib
Production Interlock PES 110/1 128gr. gg24	11,8kg/h	8,4 kg/h	15,6kg/h	11,8 kg/h	11,8kg/h	7,6kg/h
Roll Size Std. frame	480 mm	480 mm	480 mm	520 mm	520 mm	520 mm

#### **Production comparison Mayer Interlock machines**







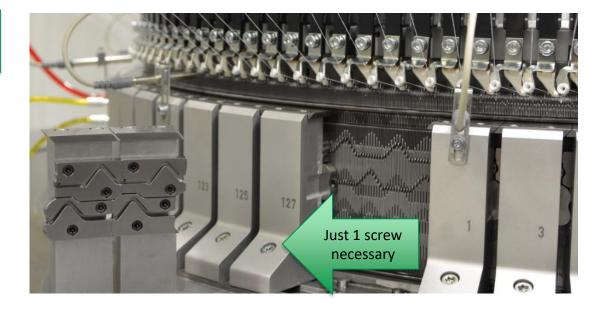
Production factor according to specific machine specifications

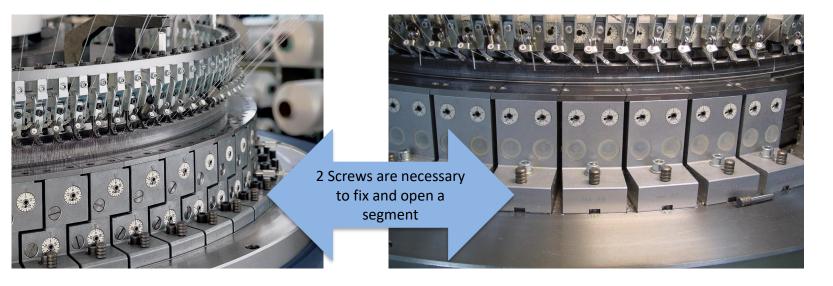
	Fukuhara M-9ME	Fukuhara MC-4.0MI	Terrot I3P-196	Terrot I-2108	OV3.2QCe	D4-2.2HPI
Diameter	30	30	30	30	30	30
feeders	96	120	96	108	96	132
speed	35	34	35	33	35	34
Efficiency rate in %	80	75	80	75	85	84
Production Factor	2.688	3.060	2.688	2.673	2.856	3.779
Comment	3 Systems per segment	No gauge 20 or 32				Also available in E20 + E32

D4-2.2HPI Production factor: No. of feeders X RPM x Efficiency rate 132 x 34 x 0,80 = 3.779



#### **Example of efficiency**







#### **D4-2.2HPI** characteristics

Our feature	Our advantage	Your benefit	Photo/graphic
4.4 feeders per inch	Highest production	Less machine number needed to reach requested production	
Production factor of 3.779 in dia. 30	High speed in combination with high number of feeders + Efficiency	Maximum output	6 1 1 5 4 4 5 95 8 5 95
Ceramic yarn carriers	No wear and tear	Maximum life time of yarn carriers	
Conversion kit into 2.2 feeder / inch for Rib, Structures and Spacer	Two machine types in one	Less investment Versatile Higher utilization	



# Thank you for your kind attention