m-touch pro

SP5000

MACHINES
ENGLISH

INNOVATION. QUALITY. RELIABILITY.
SINCE 1980

PERFECTION IN SCREEN PRINTING

THE PRINCIPLES OF MHM

The world of MHM
Principles, which go further than textile printing

The world of MHM, from past to future consists on three important pillars and principles. These principles are decisive from our history of success and they highlight the values we stand for on the market - for more than 40 years.

INNOVATION
We are known as the pioneer in the textile printing branch for years. We owe this reputation to the outsanding developments which emerged from the cooperation with our partners worldwide. We are working on including the wishes and needs of our customers into our machines with total commitment. By that, we continously define the state of the art in a new way.

QUALITY
Our quality standards are applied within the entire company. The high quality standards of raw materials, continous optimization of internal processes and the high quality of our service leads to efficient and reliable machines.

RELIABILITY
More than 15,000 professional textile printers put their entire trust to the brand MHM. This trust is based on the reliability and the unique quality of our machines. With this foundation, we will keep on shaping the textile industry essentially and we are looking forward to maintan a trustworthy and successful relationship with you, also in the future.

Pioneers in textile printing
MHM as innovative vanguard since more than 40 years

With the foundation of our company in the year 1980, our highest goal was to become one of the leading global companies in the screen printing sector for textile by taking the way of innovation. And we are taking this way now as ever.

A solid company strategy is needed to fulfill and exceed the requirements of the international market as well as the respective national markets. This basis is the cornerstone of our reputation as one of the most innovative manufacturers of screen printing machines.

Today, this strategy is carried on by the management under Ulrich Loser - CEO L'fficiency Holding and owner of Machines Highest Mechatronic GmbH.

Our management team is strenghened by our professional employees. Combined with our mission statement, which follows our core values *Innovation*, *Quality* and *Reliability*, it creates a unwavering base for the future growth and the success of MHM on the textile printing market.

YOUR MHM BENEFIT

SPEED UP YOUR PRODUCTION TIME!

DTS Direct to Screen
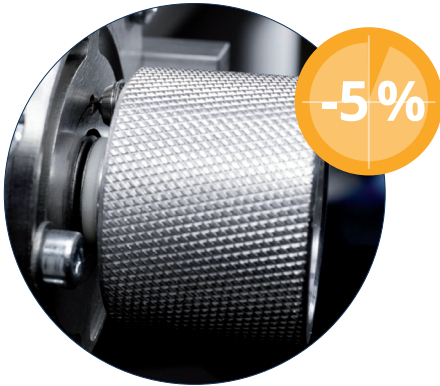including MHM pin system

Pallet change

flash time 50 %

MHM carbon lamps
flash cure

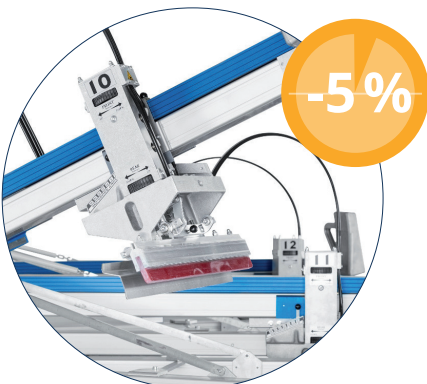MHM Pro Iron
for better surface

-5 %

Super precise zero
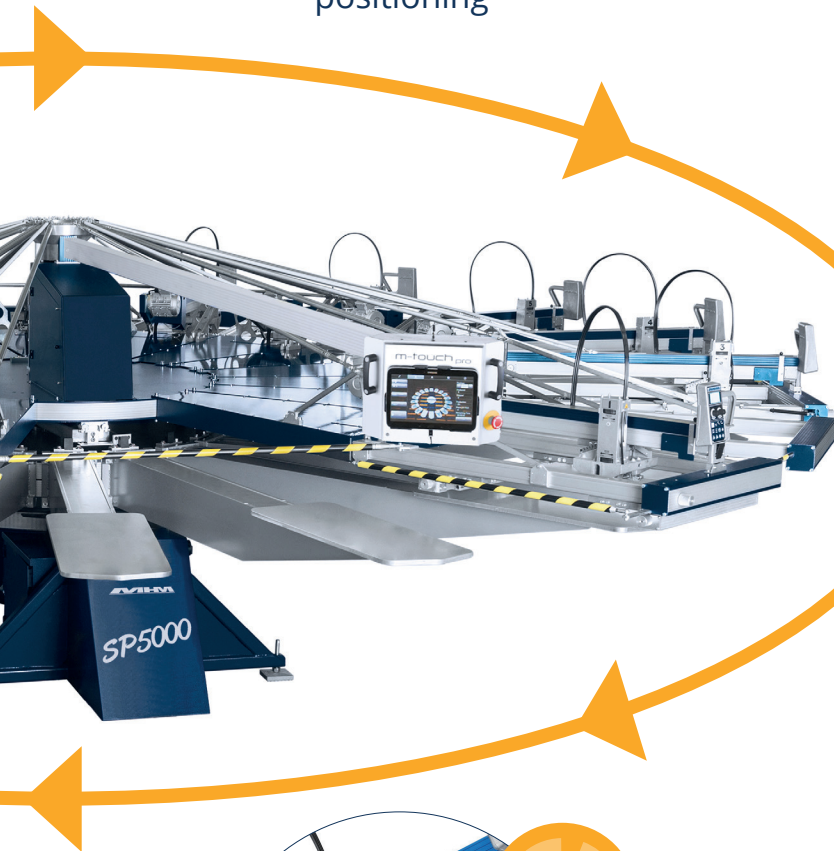positioning

REDUCE SET-UP TIME
BY UP TO **-25 %!**

-5 %

MHM pin holding
system

-10 %

Auto screen option

-5 %

MHM squeegee carriage
with simple setting

SCREEN PRINTING
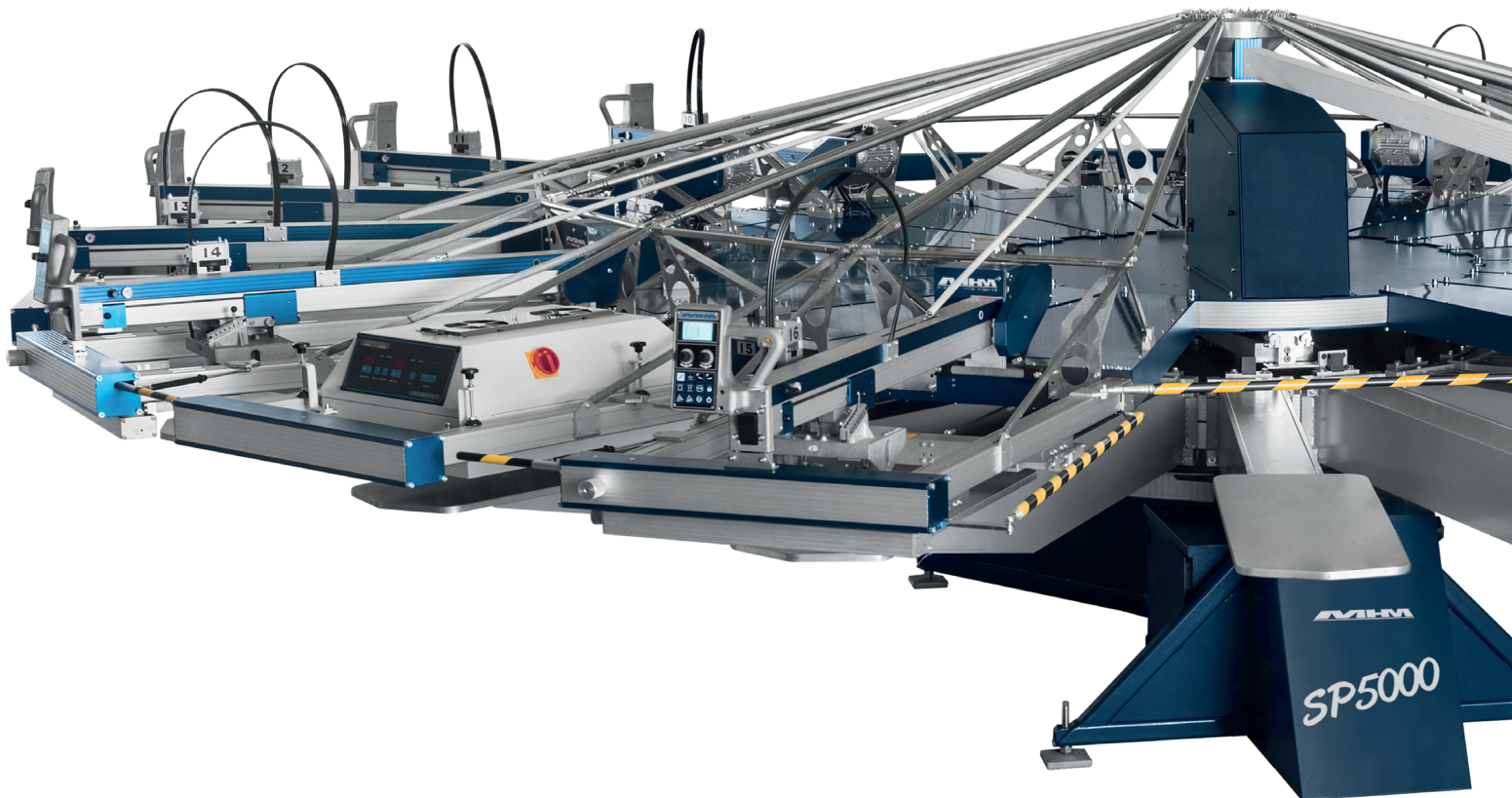
YOUR PRACTICAL ADVANTAGE

Our screen printing machines provide you with a whole lot outstanding features. Here you can find an extract of those which are included in all our machines.

Individual adjustment-possibilities
Pressure controller on all stations and complete X-Y micro registration

Squeegee arm lift
Easy access for set-up, cleaning and ink-refill

Squeegee- & flood bar-angle
Tool-free adjustment in clearly defined steps

Easy handling
Of the individual printing stations

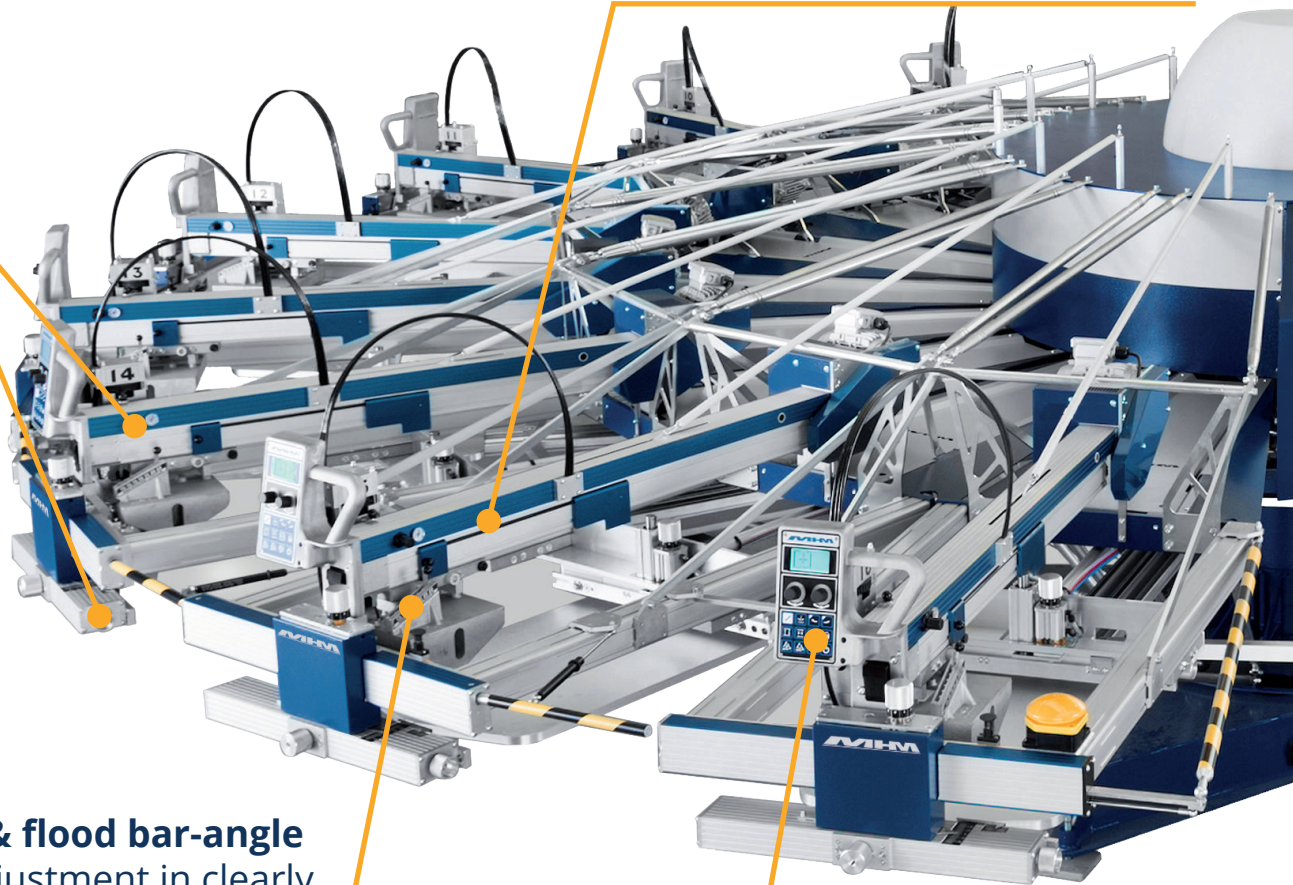**Touchscreen-control**
User-friendly and
multilingual

**Squeegee & flood bar
stroke length**
Tool-free and easy adjustment

AC-Servo index
For maximum production
speed

Resilient tables
Produced from a stable,
one-piece aluminium profile

X-TYPE PLUS

THE PERFECT MIDDLE-CLASS-COMPLEMENT FOR YOUR MACHINERY

TO WEBSITE

Minor need of space
> Perfect for smaller production halls as a result of her small diameter

Adjustable screen holders for various frame sizes
> Simple usage of different screen lock systems

Adjustable index speed control (optional)
> Perfectly adaptable for every job speed

MHM Rollerframe screen holding system
> High resiliency leads to a very good printing result

Individual off-contact adjustment on all stations
> Off-contact can be set seperately for each station > maximum flexibility

Multiprint-function (optional)
> Maximum printing flexibility

CAROUSEL SCREEN PRINTING MACHINE

Specifications (all models)

Machine height	180 cm / 71 "
Max. print area	43 x 50 cm / 16 x 19 "
Min. air pressure	7 bar / 101,5 psi (filtered, dry air supply only)
Drive system	AC inverter indexer motor / electrical squeegee drive
Electrical supply	1 ph ~200 - 240 V, 50 / 60 Hz (+/- 5 %)
Electrical requirement (indexer)	1,6 kW
Electrical requirement (per print station)	0,4 kW
Registration accuracy	+/- 0,02 mm / +/- 0.00079 "
Rec. frame profile	4 x 4 cm / 1.57 x 1.57 "
Max. frame size	60 x 84 cm / 23,6 x 33,1 "
Max. production capacity	1.000 - 1.200 pcs. / h (according to model)

Specifications (per model)

	SPXC 08	SPXC 10
Number of pallets	8	10
Max. number of print stations	6	8
Max. diameter	370 cm / 146 "	410 cm / 162 "
Machine weight (kg / lbs)	1.100 / 2,425	1.270 / 2,800
Average air consumption	220 l / min (7.8 cfm)	280 l / min (9.9 cfm)
Rec. air supply	350 l / min	400 l / min

S-TYPE XTREME

BRING YOUR PRODUCTIVITY TO THE NEXT LEVEL!

TO WEBSITE

+ **Squeegee arm lift for increased visibility**
  > Simple screen adjustment and -cleaning, increased productivity

+ **Independent flood / print speed controls**
  > Simple, specific setting for every print job

+ **Flash cure adjustments from main control unit**
  > Simple control via a centralised control point

+ **Squeegee pressure regulator on every station**
  > Specific adjustments for all print jobs

+ **Tool-free front / rear stroke length adjustment**
  > Fast and time-saving adjustments

+ **Full micro-registration with zero starting position**
  > Time-saving during print preparation

CAROUSEL SCREEN PRINTING MACHINE

Specifications (all models)	
Machine height	175 cm / 68.9 "
Min. air pressure	7 bar / 101.5 psi (filtered, dry air supply only)
Drive system	AC-Servo drive indexer / electrical squeegee drive
Electrical supply	1 ph ~200 - 240 V, 50 / 60 Hz (+/- 5 %)
Electrical requirement (indexer)	2 kW
Electrical requirement (per print station)	0.4 kW
Registration accuracy	+/- 0,02 mm / +/- 0.00079 "
Rec. frame profile	4 x 4 cm / 1.57 x 1.57 "
Max. frame size 43 x 50 cm	
Max. frame size 45 x 55 cm	
Max. frame size 45 x 70 cm	
Max. frame size 50 x 70 cm	
Max. production capacity (pieces / h)	1.100 - 1.400 / 1,100 - 1,400 (acc. to model)

Specifications (per model)						
	SPSX-08	SPSX-10	SPSX-12	SPSX-14	SPSX-16	SPSX-18
Number of pallets	8	10	12	14	16	18
Max. number of print stations	6	8	10	12	14	16
Max. diameter 43 x 50 cm / 16.9 x 19.7 "	385 cm / 152 "	420 cm / 165 "	450 cm / 177 "	490 cm / 193 "	528 cm / 208 "	570 cm / 224 "
Max. diameter 45 x 55 cm / 17.7 x 25.6 "	415 cm / 163 "	455 cm / 179 "	500 cm / 197 "	542 cm / 213 "	584 cm / 230 "	625 cm / 246 "
Max. diameter 45 x 70 cm / 17.7 x 27.6 "	n/A	n/A	n/A	n/A	614 cm / 241 "	n/A
Max. diameter 50 x 70 cm / 19.7 x 31.5 "	460 cm / 181 "	505 cm / 199 "	550 cm / 217 "	595 cm / 234 "	n/A	n/A
Machine weight (kg / lbs)	1,450 / 3,200	1,680 / 3,700	1,900 / 4,190	2,100 / 4,630	2,650 / 5,840	2,870 / 6,330
Average air consumption (l/min)	220 (7.8 cfm)	280 (9.9 cfm)	340 (12.0 cfm)	400 (14.1 cfm)	460 (16.2 cfm)	520 (18.4 cfm)
Rec. air supply (l/min)	350 (12.4 cfm)	400 (14.1 cfm)	450 (15.9 cfm)	500 (17.7 cfm)	600 (21.2 cfm)	650 (23 cfm)

SYNCHROPRINT 5000

YOUR ULTIMATE CHOICE AS PROFESSIONAL SCREEN PRINTER!
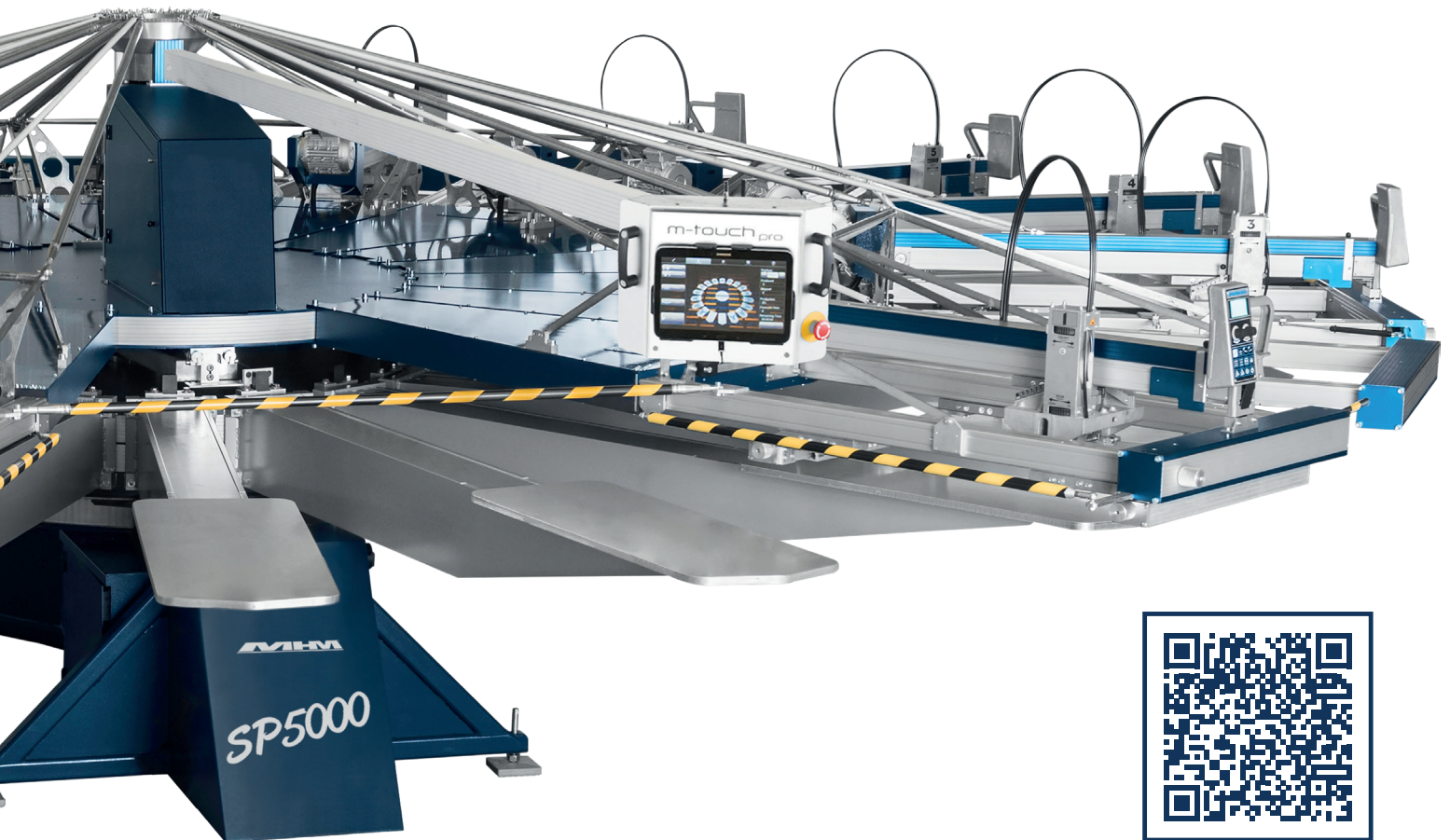
TO WEBSITE

+ **Adjustable screen holders for various frame sizes**
> Simple use of different screen lock systems

+ **Vacuum-pallet-system (optional)**
> Perfect for graphic-, foil- and paper printing

+ **Super-rigid pallet support arms**
> Zero deflection and thereby a very good print result

+ **Individual off-contact adjustment on all stations**
> Off-contact can be set seperately for each station > maximum flexibility

+ **Centralised off-contact adjustment**
> Easy control via tablet

+ **Automatic 'GOTO' registration system with job memory (optional)**
> Shorter setup-times

Specifications (all models)	
Air pressure (minimum)	8 bar / 116 psi (filtered, dry air supply only)
Drive system	AC-Servo drive indexer / electrical squeegee drive
Electrical supply	3 ph ~210 / 400 V, 50 / 60 Hz (+/- 5 %)
Electrical requirement (indexer)	2.5 kW
Electrical requirement (per print station)	0.4 kW (manual) / 0.6 kW (GoTo)
Registration accuracy	+/- 0.02 mm / +/- 0.00079"
Rec. frame profile	4 x 4 cm / 1.57 x 1.57"
Max. frame size 50 x 70 cm / 19.7 x 27.6"	75 x 112 cm / 29.5 x 44.1"
Max. frame size 70 x 100 cm / 27.6 x 39.4"	91 x 144 cm / 35.8 x 56.7"
Max. frame size 80 x 110 cm / 31.5 x 43.3"	105 x 154 cm / 41.3 x 60.6"
Max. production capacity	900 - 1,400 pcs/h (acc. to model)

| Specifications (per model)	SP5000-08	SP5000-10	SP5000-12	SP5000-14	SP5000-16	SP5000-18	SP5000-20
Number of pallets	8	10	12	14	16	18	20
Max. number of print stations	6	8	10	12	14	16	18
Max. diameter 50 x 70 cm / 19.7 x 27.6"	505 cm / 199 "	505 cm / 199 "	555 cm / 219 "	600 cm / 236 "	640 cm / 252 "	690 cm / 272 "	735 cm / 289 "
Max. diameter 70 x 100 cm / 27.6 x 39.4"	575 cm / 226 "	625 cm / 246 "	685 cm / 270 "	735 cm / 289 "	n/A	n/A	n/A
Max. diameter 80 x 110 cm / 31.5 x 43.3"	635 cm / 250 "	675 cm / 266 "	740 cm / 291 "	n/A	n/A	n/A	n/A
Machine height	187 cm / 73.5 "						205 cm / 80.7 "
Machine weight (kg / lbs)	2.100 / 4,630	2.300 / 5,070	2.550 / 5,620	2.740 / 6,040	3.150 / 6,950	3.640 / 8,030	3.890 / 8,580
Average air consumption (l/min)	190 (6.7 cfm)	220 (7.7 cfm)	250 (8.8 cfm)	280 (9.9 cfm)	310 (10.9 cfm)	340 (12.0 cfm)	370 (13.1 cfm)
Rec. capacity of air supply (l/min)	500 (17.7 cfm)	550 (19.4 cfm)		600 (21.2 cfm)	650 (23 cfm)		700 (24.7 cfm)

IQ OVAL IDS

THE REVOLUTION IN SCREEN PRINTING PROVIDES EFFICIENCY AND SAFETY IN A SINGLE MACHINE!
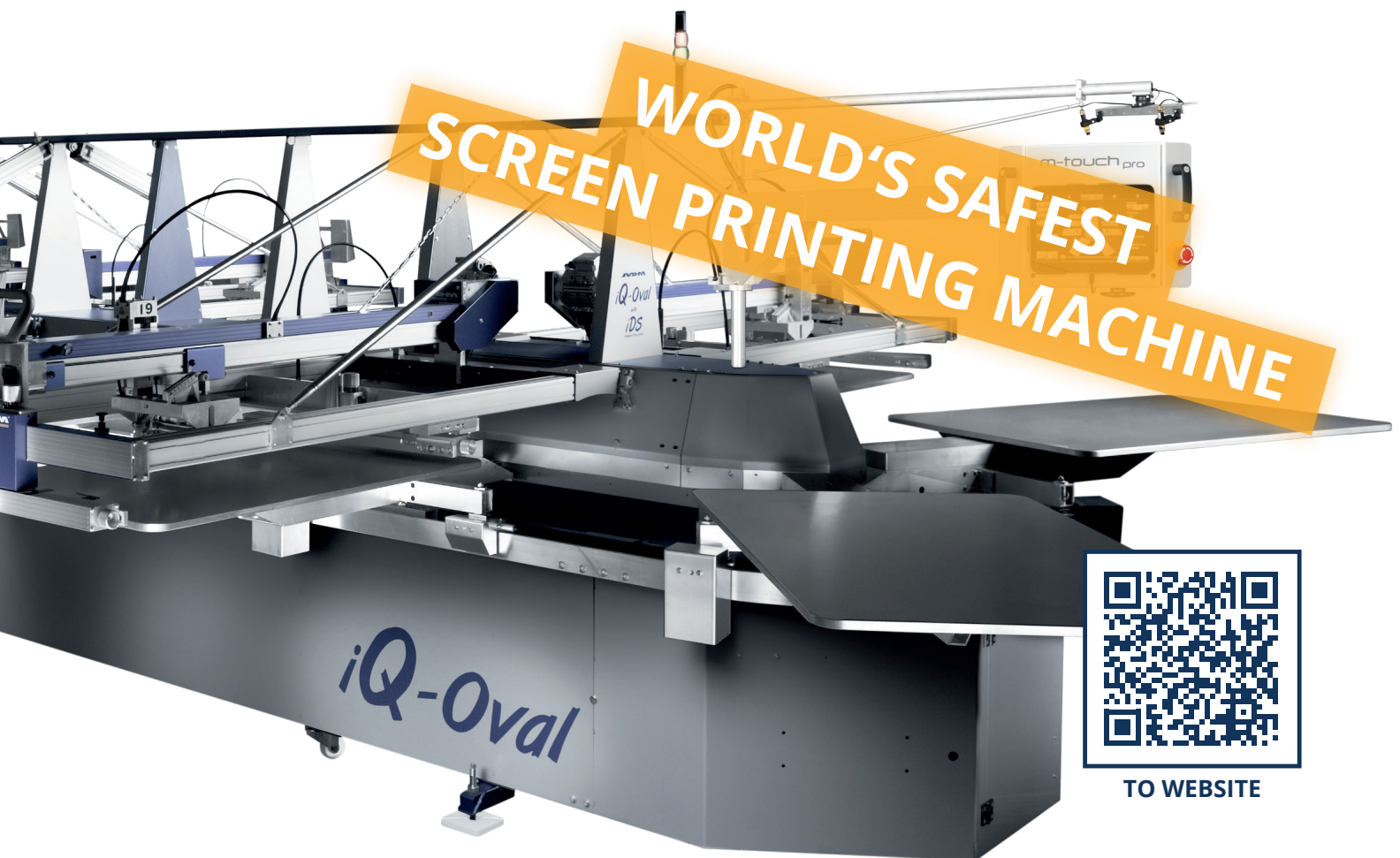
WORLD'S SAFEST SCREEN PRINTING MACHINE

TO WEBSITE

+ Tablet main control unit with WIFI connectivity
> Android-tablet, easy to replace in case of damages

+ Control keyboard on every print station
> All functions adjustable directly on station

+ Adjustable index speed control (optional)
> Easy adjustment of speed according to pallet size and goods to be printed

+ Revolutionary intelligent index drive system
> No need for safety barriers, open access to the machine

+ 2-job-mode (optional)
> Increased efficiency by 2 jobs on 1 machine

+ High-lift stations (optional)
> Entire station is liftable, which creates place for individual accessories

OVAL-SCREEN PRINTING MACHINE INTELLIGENT DRIVE SYSTEM
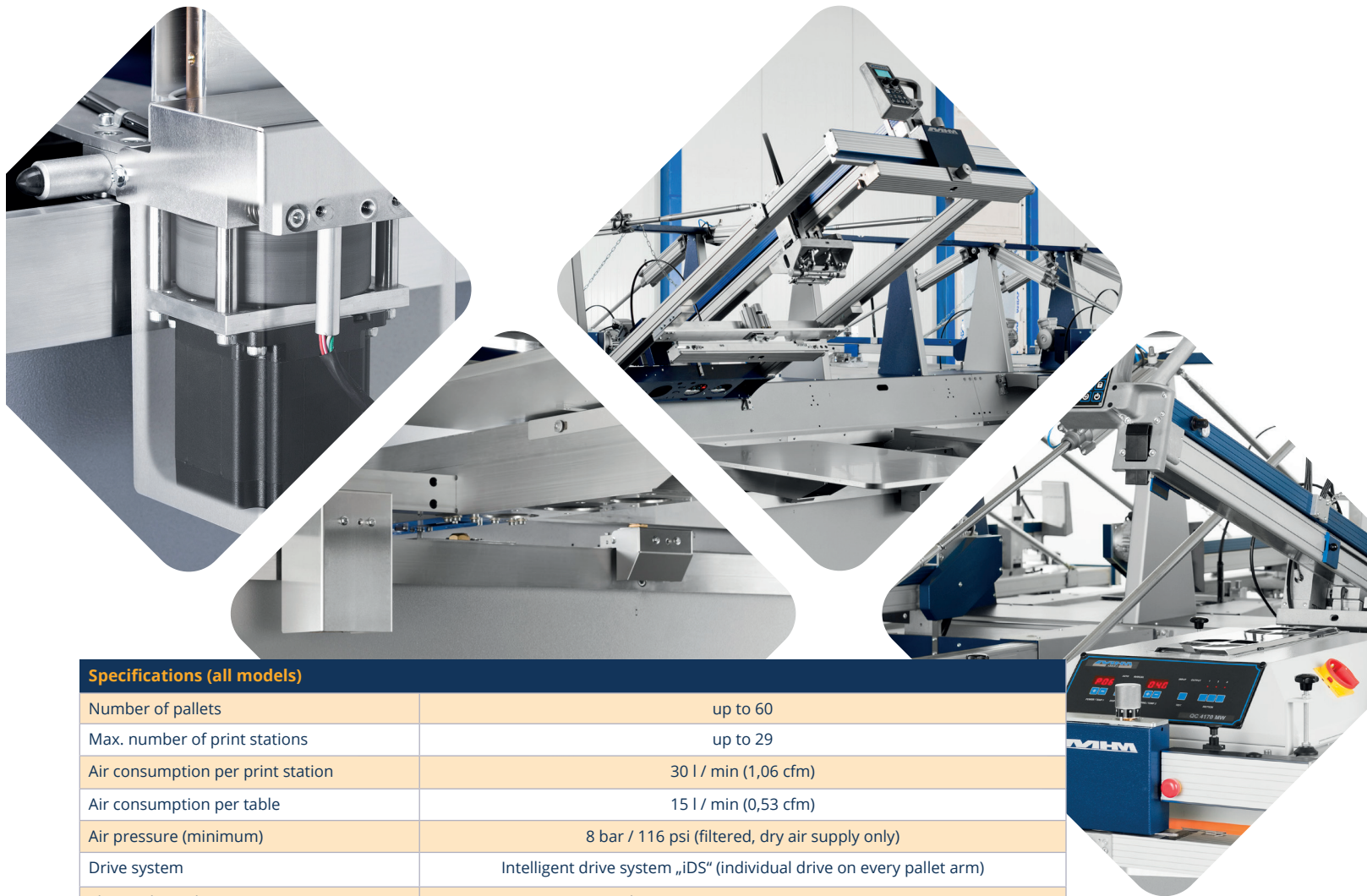
Specifications (all models)	
Number of pallets	up to 60
Max. number of print stations	up to 29
Air consumption per print station	30 l / min (1,06 cfm)
Air consumption per table	15 l / min (0,53 cfm)
Air pressure (minimum)	8 bar / 116 psi (filtered, dry air supply only)
Drive system	Intelligent drive system „iDS" (individual drive on every pallet arm)
Electrical supply	3 ph ~210 / 400 V, 50 / 60 Hz (+/- 5 %)
Electrical requirement (per print station)	0,4 kW manual / 0,6 kW automatic
Electrical requirement (per pallet)	0,11 kW
Registration accuracy	+/- 0,02 mm / +/- 0.00079 "
Rec. frame profile	4 cm x 4 cm / 1.57 " x 1.57 "
Max. production capacity	**1.200 - 1.800 pcs/h (according to model / 2-job-mode)**

Specifications (per model)				
	45 x 55 cm	**50 x 70 cm**	**70 x 100 cm**	**80 x 110 cm**
Max. print area	45 x 55 cm / 17 x 21 "	50 x 70 cm / 19 x 27 "	70 x 100 cm / 27 x 39 "	80 x 110 cm / 31 x 43 "
Width of machine	370 cm / 146 "	400 cm / 158 "	420 cm / 166 "	440 cm / 174 "
Length of basic element	640 cm / 252 "	730 cm / 288 "	790 cm / 311 "	810 cm / 319 "
Length of 2-step-section	190 cm / 75 "		260 cm / 103 "	
Length of 3-step-section	285 cm / 113 "		390 cm / 154 "	
Weight of basic element	1.190 kg / 2,620 lbs	1.345 kg / 2,970 lbs	1.390 kg / 3,060 lbs	1.420 kg / 3,130 lbs
Weight of 2-step-section	500 kg / 1,100 lbs	595 kg / 1,300 lbs	615 kg / 1,360 lbs	630 kg / 1,390 lbs
Weight of 3-step-section	750 kg / 1,650 lbs	890 kg / 1,960 lbs	920 kg / 2,030 lbs	940 kg / 2,070 lbs
Weight of station	90 kg / 199 lbs	100 kg / 221 lbs	100 kg / 221 lbs	110 kg / 243 lbs
Max. frame size	66 x 100 cm / 26 x 39 "	105 x 115 cm / 41 x 45 "	105 x 144 cm / 41 x 56 "	105 x 154 cm / 41 x 60 "

SAFETY FIRST

THE REVOLUTIONARY SAFETY SYSTEM

The main feature of the iQ Oval iDS - Oval screen printing machine is its **intelligent drive system**. It's independently moving tables are the basis for the **revolutionary safety system** on printing machines.

The integrated safety system recognizes resistances and stops the machine immediately. Thereby, the **hazard potential lowers extremely** since people are exposed only to the power of a single drive.
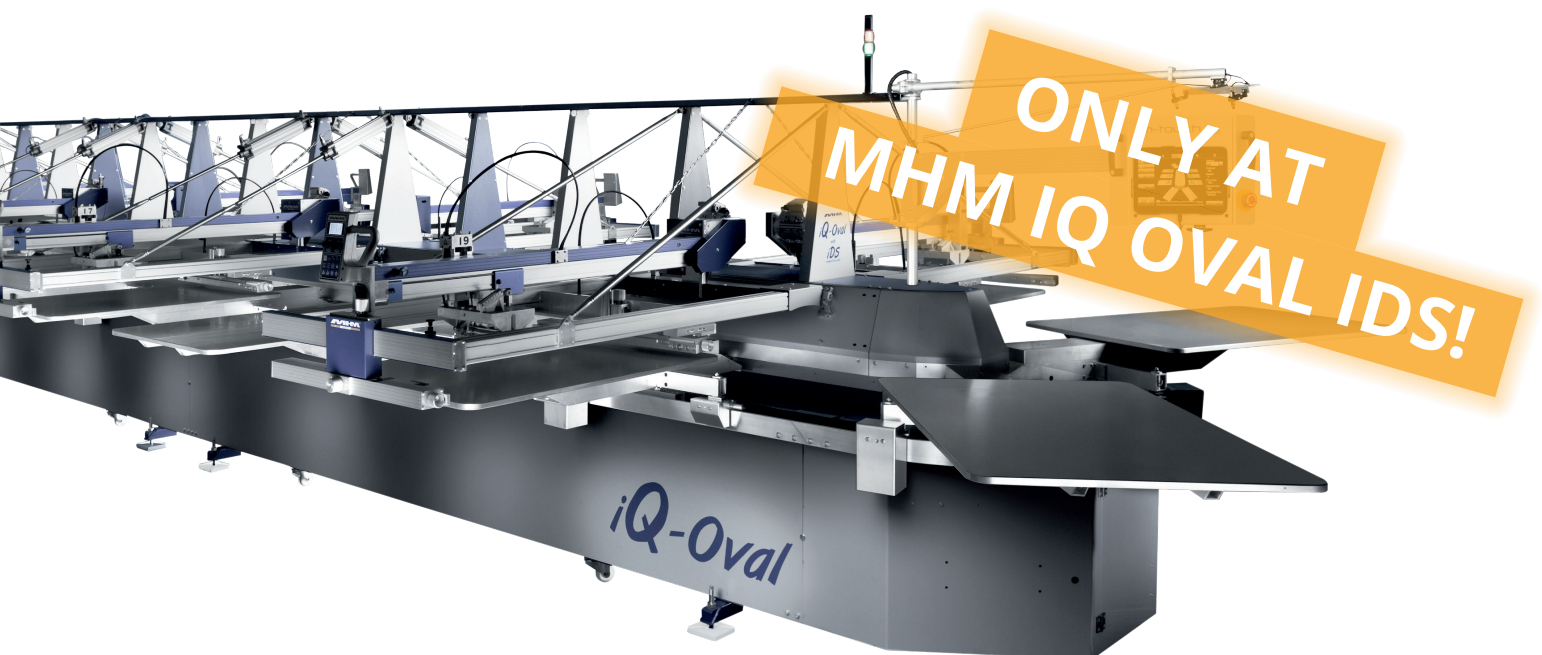
MINIMUM RISK OF INJURY

INTEGRATED SAFETY SYSTEM

SEPARATE POWER SUPPLY FOR EACH INDIVIDUAL TABLE

INDIVIDUALLY DRIVEN TABLES

ONLY AT MHM IQ OVAL IDS!

iQ-Oval

OVAL-SCREEN PRINTING MACHINE INTELLIGENT DRIVE SYSTEM

FUNCTIONALITY

The turntables are mounted on the machine individually and are supplied completely independent with power by a circular rail, which embraces the entire machine.


Close-up picture of the single drive system

The drive unit receives its power supply and the engine via the drive wheel, which moves the tables from printing station to printing station via the rail.

In case of collision with an object or a person, the resistance is recognised by the intelligent drive system and the machine is being stopped immediately. As a result, the hazard potential decreases tremendously, since people and things are only exposed to the power of a single drive instead of the entire central drive, which is conceived to move several tons of weight.

The entire unit (as can be seen on the right side) may be removed from the machine easily in case of maintenance scenarios. Since there is no central drive, which might be endangered, the machine is also fully functional with less than the ideal table mounting.

Is the iQ Oval iDS operated in a situation like that, the automatic skip mode of the machine is activated, which skips printing at empty stations.
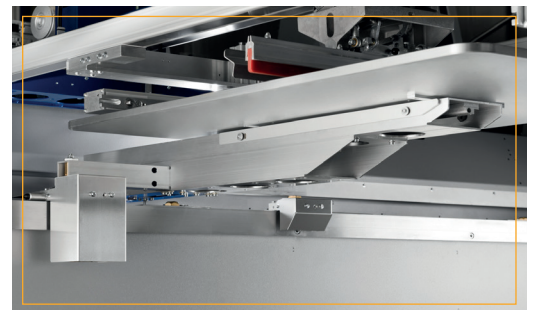
On machine mounted table (drive on left bottom)

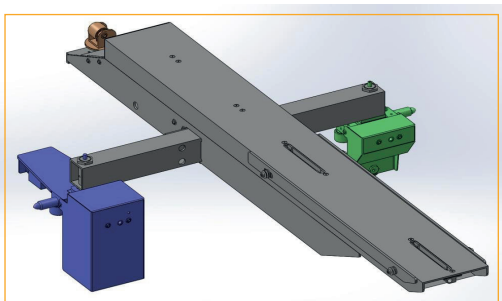**NO TABLE** ⇒ **NO PRINT** ⇒ **INTELLIGENT SKIPPING OF EMPTY STATIONS**

Table with contraptions (Grey: table, blue: drive unit, green: support unit, orange: counter roll unit)

After removing a table, the drive unit can be dismantled easily and in a very short time for the respective service. There is no need for special tools to do so.

Attention: All attempts to open or provide a service at a drive unit by non-authorized personnal lead to an instan expiring of the warranty.

IQ OVAL CDS

THE MACHINE FOR THE BEST COMBINATION OF EFFICIENCY AND FLEXIBILITY

TO WEBSITE

+ Tablet main control unit with WIFI connectivity
> Android-tablet, easy to replace in case of damages

+ Control keyboard on every print station
> All functions adjustable directly on station

+ MHM 'pin-lock' screen holding system
> Uncomparable accuracy & stability at screen positioning

+ Central drive system with belt drive
> low-maintenance and reliable

+ 2-job-mode (optional)
> Increased efficiency by printing 2 jobs on one machine

+ Push button super-fast pallet changeover
> Change 2 pallets with one single button, huge time saving

OVAL SCREEN PRINTING MACHINE CENTRAL DRIVE

Specifications (all models)	
Number of pallets	up to 60
Max. number of print stations	up to 29
Air consumption per print station	30 l / min (1,06 cfm)
Air consumption per table	5 l / min (0,18 cfm)
Air pressure (minimum)	8 bar / 116 psi (filtered, dry air supply only)
Drive system	Central drive system
Electrical supply	3 ph ~210 / 400 V, 50 / 60 Hz (+/- 5 %)
Electrical requirement per print station	0,4 kW
Electrical requirement main drive	3,0 kW
Registration accuracy	+/- 0,02 mm / +/- 0.00079 "
Rec. frame profile	4 cm x 4 cm / 1.57 " x 1.57 "
Max production capacity	**900 - 1.600 pcs/h (according to model / 2-job-mode)**

Specifications (per model)	50 x 70 cm	70 x 100 cm	80 x 110 cm
Max print area	50 x 70 cm / 19 x 27 "	70 x 100 cm / 27 x 39 "	80 x 110 cm / 31 x 43 "
Width of machine	390 cm / 154 "	430 cm / 170 "	450 cm / 178 "
Length of 10-table-machine	670 cm / 264 "	770 cm / 304 "	790 cm / 311 "
Additional length per 2 tables	110 cm / 44 "	130 cm / 52 "	
Weight of 10-table-machine*	1.625 kg / 3,583 lbs	1.780 kg / 3,925 lbs	1.800 kg / 3,969 lbs
Additional weight of 2-step-section*	275 kg / 607 lbs	310 kg / 684 lbs	315 kg / 695 lbs
Max. frame size	105 x 115 cm / 41 x 45 "	105 x 144 cm / 41 x 56 "	105 x 154 cm / 41 x 60 "

*Numbers excluding print stations.

SINGLE PRINT

THE FIRST CHOICE FOR HIGH QUALITY AT SMALL QUANTITIES

TO WEBSITE

+ Squeegee arm lift for increased visibility
> Simple screen adjustment and -cleaning, increased productivity

+ Independent flood / print speed controls
> Simple, specific setting for every print job

+ Tool-free front / rear stroke length adjustment
> Fast and time-saving adjustments

+ Squeegee pressure regulator on station
> Specific adjustments for all print jobs

+ Quick release squeegee & floodbar
> Fast and easy setup and squeegee change

+ Full micro-registration with zero starting position
> Time-saving during print preparation

| Specifications (all models)	
Machine height	175 cm / 68.9"
Max. print area	50 x 70 cm / 19.7 x 27.6" **or** 70 x 100 cm / 27.6 x 39.4" special size on request
Air consumption	20 l / min.
Min. Air pressure	6 bar
Electrical supply	230 V, 50 / 60 Hz
Electrical consumption	0,5 kW (2,0 kW for vacuum-version)
Max. frame size	75 x 115 cm / 29.5 x 45.3" **or** 91 x 144 cm / 35.8 x 56.7"

Specifications (per model)		
	Single Print	Single Print Double Pallet
Number of pallets	1	2
Machine weight	275 kg	310 kg

YOUR PROFESSIONAL PARTNER

MHM is the high-class partner for professional printers and print shops all around the world:
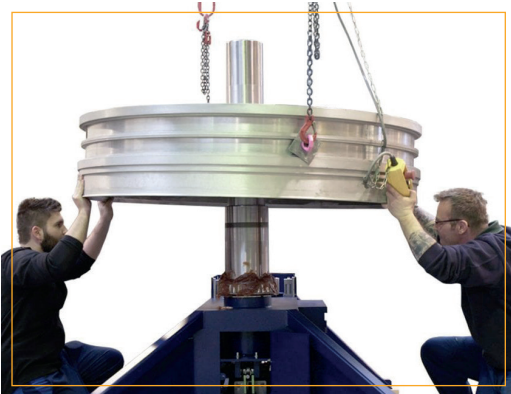
SERVICE BASED ON EXPERIENCE AND KNOW-HOW

Exceptional know-how in the sector of design and an eye for the detail are our main traits which allow us to ensure the high quality of our machines.
We produce more than 90 % of our used **mechanical parts** and **electrical components by ourselves** in our headquarter in Erl, Austria.

This enables us to give our service technicians and -consultants the maximum know-how and the respective experience in handling our components and machines to advice and support you in all of your concerns at the highest level.

EXPERIENCED PROFESSIONALS FOR HIGHEST QUALITY

The MHM has around 70 motivated employees and workers with highly diverse expertises in the textile printing industry. Together, we create revolutionary designs that are highly respected by experts and manifest the requirements and wishes of the market and customers.
Thus we build our **machines highly efficient** and **user friendly** at the same time, to essentially **increase** the **quality and productivitiy** of our customers.

OPTIMIZED METHODS FOR YOUR ADDITIONAL VALUE

Your additional value with our innovations.
The perfect example for this scenario is the **automatic ‚GOTO' registration system with job memory** of our Synchroprint 5000. A design change is made three times a day on average and takes around 75 minutes with conventional machines - that's about 300 hours a year:

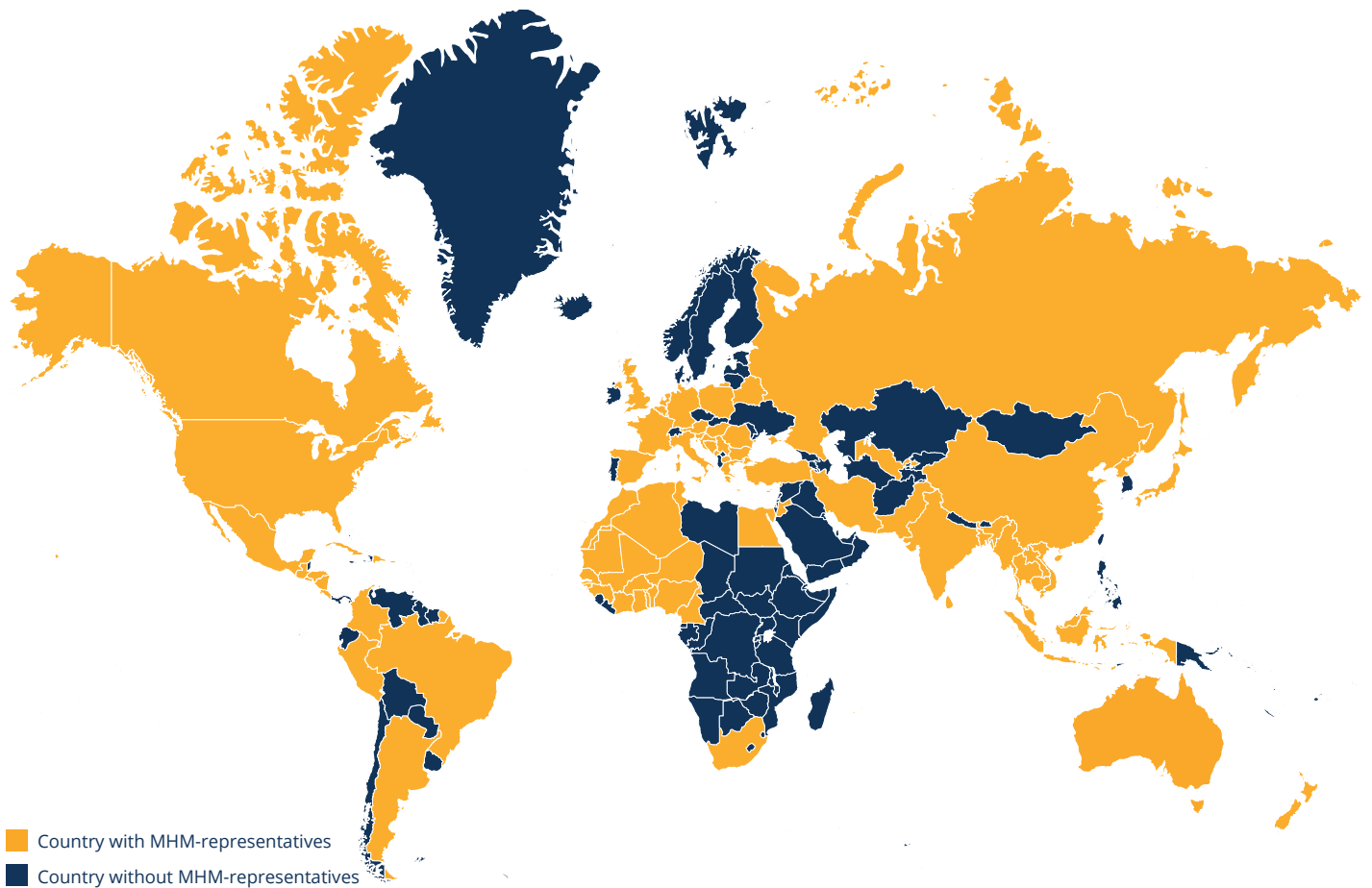### REDUCTION OF SET-UP TIME
from 300 to 25 hrs / year

ADDITIONAL PRINTING CAPACITY
600 pcs. / h or 160,000 pcs. / year

MAXIMUM FLEXIBILITY
easy fulfilling of different (customer-)requirements

MAXIMUM EFFICIENCY
fastest set-up in the entire industry

Country with MHM-representatives
Country without MHM-representatives

A GLOBAL NETWORK FOR SERVICE ON-SITE

MHM is your professional partner in textile printing. In this position, it is our obligation and our concern to provide you with the best service worldwide!

Our **global sales and service network** consists of technicians, salesmen and service employees of MHM and our partners in **more than 70 countries worldwide**! With this prerequisite, we are never far from you away when you need us. This applies to the maintenance and repair of machines as well as to the quotation for the replacement of machines, an expansion of your production facilities or as a new customer.

Find the right MHM specialist for your region and get in touch with us!

Find your contact!

JOIN THE WORLD OF MHM

BECOME PART OF MHM'S WORLD

The world of MHM gives a ton of unique insights into the screen printing sector. This applies to impressions from MHM as manufacturer and employer as well as to impressions from installations and service calls of our colleagues at our customers' worldwide.

We present you a part of these informations of our world in pictures at the respective fitting networks. Become a part of the world of MHM and follow us in our social networks!
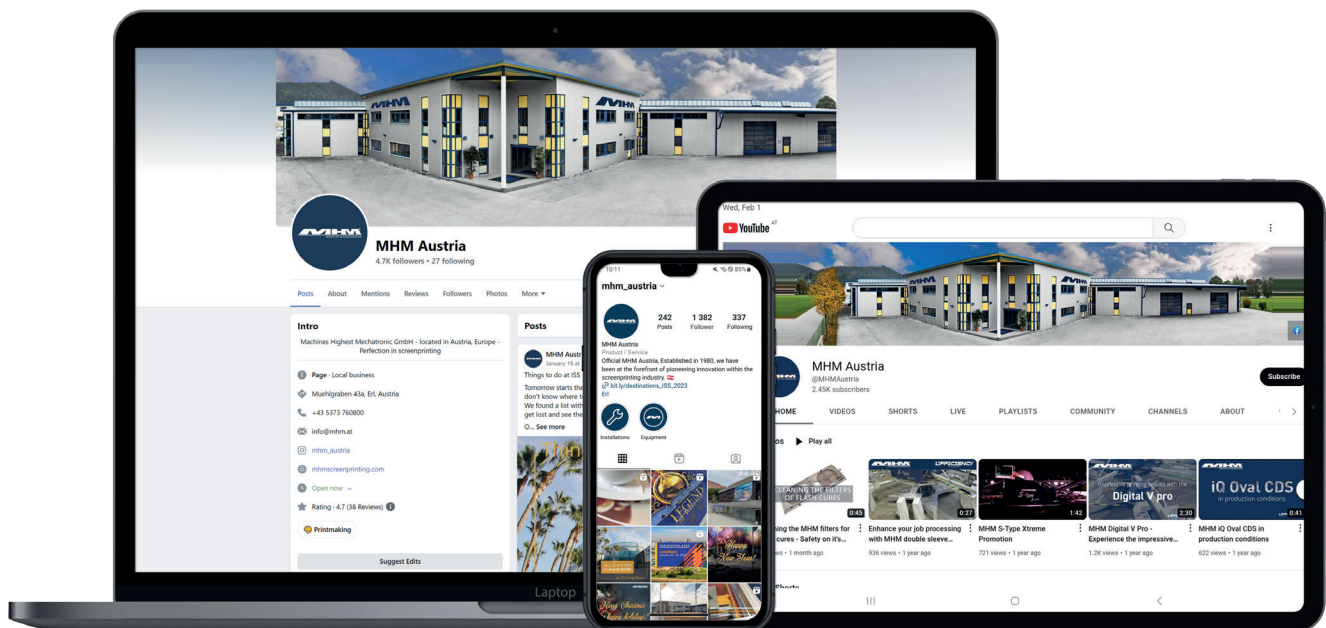
MHM.Austria

MHMAustria

mhm_austria

company/mhmaustria

MHM & L'FFICIENCY HOLDING

THE L'FFICIENCY HOLDING

The LFFICIENCY Holding GmbH is a group of growth-focused companies, which complement themselves usefully in their alignment and technology oriented portfolio.

MHM is proud to be a member of this holding and therefore to be able to operate stronger at the market. As a result, we can offer a better service and technological possibilities to our customers.
In addition to us as the youngest member of the holding (since 2018), the following companies are also part of L'fficiency:

» the LoFer GmbH as merchant of fertilizers and fertilizer resources
» the Loser Chemie GmbH as chemical company
» the LoComp GmbH as developer of intelligent composite fiber material

CEO Ulrich Loser

LoFer GmbH

L'FFICIENCY

LoComp GmbH

Loser Chemie
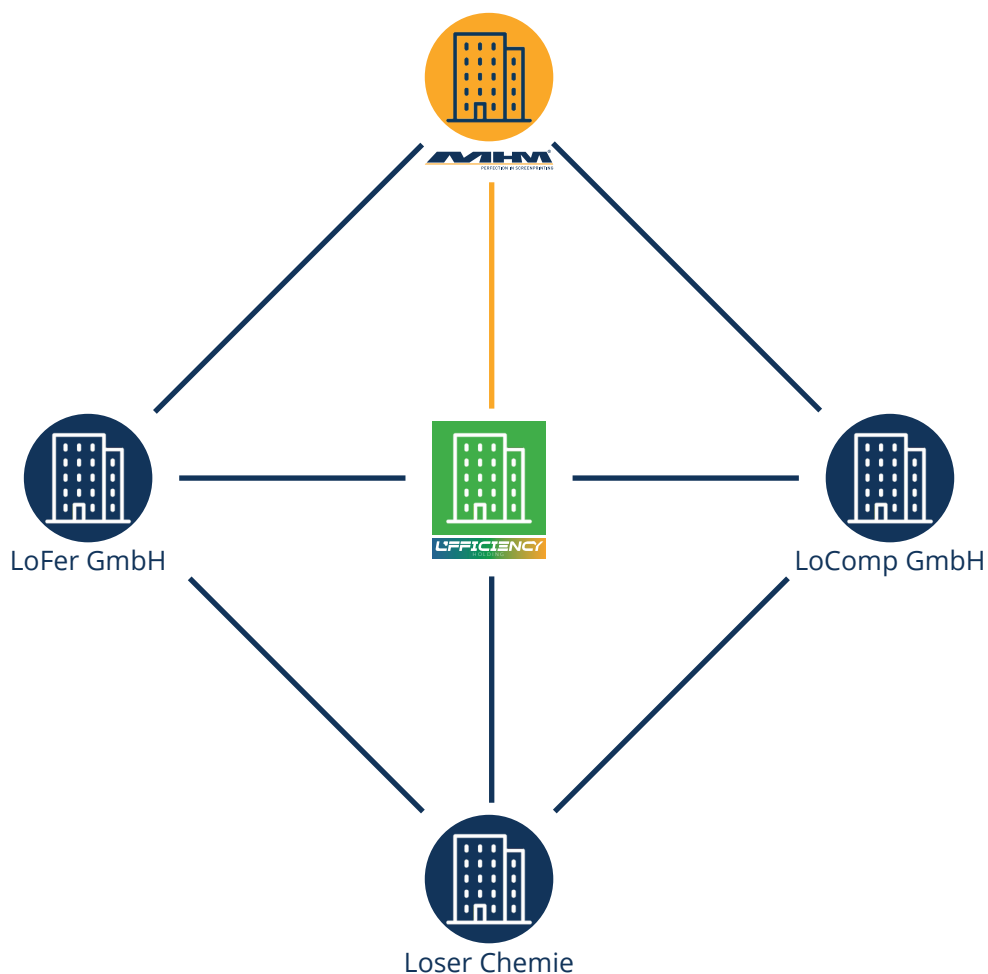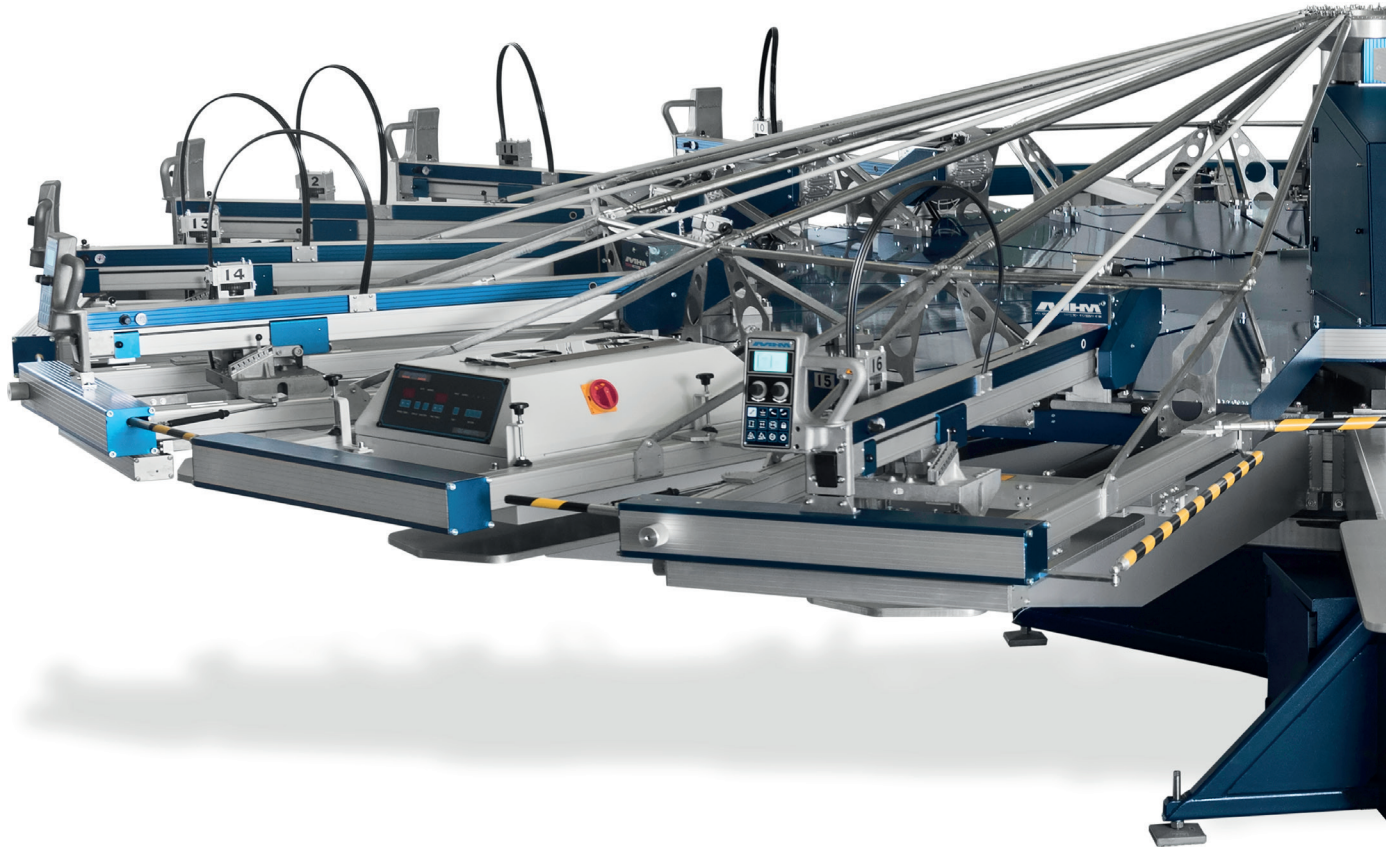
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member of
L'FFICIENCY
HOLDING

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www.mhmscreenprinting.com