# ZSK



Revolutionize your embroidery experience with ZSK's groundbreaking new R Head, a pioneering innovation in the embroidery sector. Crafted with meticulous precision, the R Head offers the unrivaled speed of 2,020 RPM.

The R Head is not just about speed, though. It represents a quantum leap in embroidery quality and reliability. Expect a massive reduction in noise levels, providing a more serene working environment.

This new technology brings superior embroidery quality, making intricate and detailed designs a breeze.

What's more, we've designed the R Head with service convenience in mind.

The R Head can be easily and quickly exchanged, a substantial service benefit that saves time and reduces potential headaches.

It's no surprise that this cutting-edge technology bagged the esteemed Texprocess Innovation Award in 2022.

This prestigious recognition underlines the R Head's position as the new standard-bearer in embroidery technology, further cementing ZSK's reputation as a leader in the industry.



ZSK STICKMASCHINEN, a renowned German brand for embroidery solutions, is globally recognized for its quality, precision, and longevity.

ZSK STICKMASCHINEN's rich heritage is dating back to 1875, when Hermann Schroers founded a company to produce weaving looms and other textile machinery, that later become one of the leading textile machinery brands in the 20th century, ZANGS AG.

ZSK STICKMASCHINEN is known for providing top-quality industrial embroidery equipment, since the 1950s tailored solutions, and customerspecific services.

With a team of skilled engineers in Krefeld, Germany, we thrive on conquering new challenges.

ZSK STICKMASCHINEN develops cutting-edge digitizing software and implements Industry 4.0 and Process Automation Solutions.

If you have a unique embroidery challenge, ZSK eagerly awaits collaboration, offering expertise to bring your vision to life and exceed expectations.

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# KEY FEATURES

#### OF ZSK EMBROIDERY MACHINES

#### Slimmest Tubular Arm

The slim tubular arm measures 44,3 by 43mm. The tubular arm works without a visible picker.



#### **T8 Control Unit**

The control unit is used on all ZSK embroidery machines. The T8 control unit can be retro fitted on ZSK machines since 1998.



#### **Network Ready**

The T8 control unit offers three USB ports and a LAN port. No additional licenses are required for networking.



#### **Automatic Head Selection**

A standard feature in all flat machines and most of the RACER Series. When a head is switched off, the take up lever is not moving.

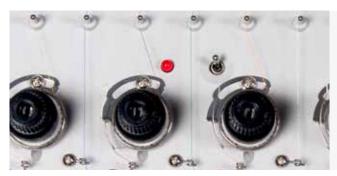


#### Height Adjustable Presser Foot

The presser foot can be adjusted to 4 height positions. An ideal feature for sensitive materials and 3D embroidery







#### Maintenance Lamp

The lamp lights up when an abnormality occurs and guides the operator to the affected head.



#### Thread Break Detection

The machine detects upper and lower thread breakages. The sensitivity of the sensor can be adjusted in the control



#### Take Up Lever Guard

The covers avoid thread from cross tangling and present a safety feature.



#### **Barcode Ready**

A barcode reader can be connected directly via USB to the T8. Barcodes can be used to load designs and to operate machine features



#### **Designed IN GERMANY**

All ZSK machines since the 1950's are designed in Germany. ZSK operates assembly factories in Krefeld and Remscheid.





#### THE POPULAR SINGLE-HEAD EMBROIDERY MACHINES

Introducing SPRINT—renowned worldwide for its unique blend of technology, efficiency, and remarkable embroidery results.

With 12 and 18 needle models seamlessly transitioning between tubular, cap, and flat embroidery modes, SPRINT offers versatility to suit your creative needs.

Each SPRINT model possesses individual qualities that meet your requirements, while sharing the brand's exceptional advantages.

Experience SPRINT — where technology, efficiency, and impeccable embroidery converge, unlocking endless creative possibilities.





#### KEY FEATURES OF ZSK'S SPRINT SERIES

# up to 18

#### **NEEDLES / COLOURS**

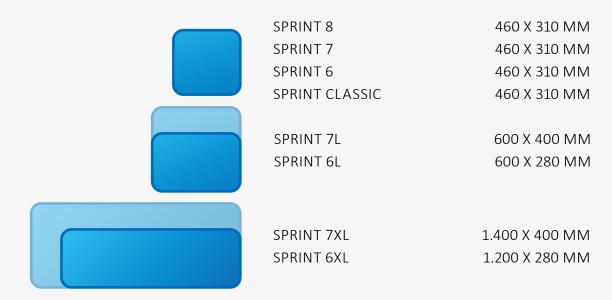
ZSK offers models with different numbers of needles.

While the models SPRINT Classic, SPRINT 6, 6L and 6XL have 12 needles, the models SPRINT 7 and SPRINT 8 have 18 needles.

# >0,5m<sup>2</sup>

#### POSSIBLE EMBROIDERY FIELD SIZE

The repertoire of ZSK Sprint machines ranges from the smallest machine with an embroidery field of  $460 \times 310$ mm to the largest of  $1.400 \times 400$ mm.





# max. 1.200

#### STITCHES PER MINUTE

# up to -65%

#### LESS TIME FOR COLOUR CHANGE

ZSK continuously optimizes the efficiency of the machines. Impressive examples are the fast colour change, the reduced catcher times and the increased speed in relation to the stitch length in SPRINT 8.



#### **QR CODE**

Scan the QR code and and view a comparison of all SPRINT models as PDF.

#### SPRINT CLASSIC



## THE STRENGTH OF SIMPLICITY

Introducing the SPRINT CLASSIC, your trusted partner for all embroidery tasks.

This honest and reliable workhorse is designed to get the job done without compromising on quality.

With its straightforward functionality and nofrills approach, the SPRINT CLASSIC is perfect for those seeking a solid and dependable embroidery experience.

Its focus on core functionality ensures reliable performance and exceptional results.

The robust construction ensures durability, while the user-friendly interface allows for effortless operation.

Whether you are working 24/7 or just starting out, the SPRINT CLASSIC is the ideal choice for delivering professional results.

SPRINT CLASSIC - invest in this no-nonsense powerhouse and let your creativity shine.

#### **KEY FEATURES**

- 12 Needles / Colours
- Embroidery Field 460 x 310mm
- Wide tubular arm
- Optional Sewing Thread Setup
- Expandable with many devices

- Network compatible
- Designed in Germany
- Assembled in Czech Republic



## UNLEASH YOUR CREATIVITY

#### Elevate your embroidery projects to new heights with the remarkable SPRINT 6.

This exceptional lineup offers three versions to cater to your specific needs.

The SPRINT 6 provides a versatile embroidery experience, while the SPRINT 6L features an expanded embroidery area for larger designs.

For those seeking an extra-wide embroidery field, the SPRINT 6XL is the perfect choice.

With their cutting-edge features, precise stitching, and user-friendly interfaces, these machines empower you to bring your imagination to life.

Elevate your craftsmanship and unlock endless creative possibilities with the SPRINT 6 series.





#### **KEY FEATURES**

- 12 Needles / Colours
- Embroidery Field
   460 x 310mm / 600 x 280mm / 1.200 x 280mm
- Slim tubular arm
- Optional Roll2Basket

- Expandable with many devices
- Network compatible
- Made in Germany

#### SPRINT 7



# EMBROIDERY EXCELLENCE

Embark on an embroidery journey like never before with the remarkable SPRINT 7 models.

Designed to exceed your highest expectations, this lineup offers three versions tailored to suit your specific requirements.

The SPRINT 7 delivers exceptional embroidery performance, while the SPRINT 7L features an expanded embroidery field, allowing you to explore larger designs with ease.

For those seeking an extra-wide embroidery field, the SPRINT 7XL is the ultimate choice.

With their advanced technology and intuitive interfaces, these machines empower you to bring your creative vision to life with breathtaking precision.

Let your imagination run wild as you embellish garments, accessories, and more with intricate designs that captivate attention.

Experience the pinnacle of embroidery excellence with the SPRINT 7 series and unleash your economical potential.

#### **KEY FEATURES**

- 18 Needles / Colours
- Embroidery Field
   460 x 310mm / 600 x 400mm / 1.400 x 400mm
- Slim tubular arm
- Servo Drives

- Network compatible
- Advanced efficiency and usability
- Expandable with optional devices
- Made in Germany



# NEXT-LEVEL PERFORMANCE

#### Embrace the epitome of versatility and efficiency with the exceptional SPRINT 8.

This powerhouse of an embroidery machine offers ZSK's leading-edge features to enhance quality and usability. It is the ultimate choice for constantly changing embroidery jobs with varying machine setup requirements.

Experience the seamless transition between applications, allowing you to effortlessly switch from one project to another without missing a beat.

With its unparalleled adaptability and quick change capabilities, the SPRINT 8 ensures maximum productivity and minimal downtime.

Its intuitive interface and advanced technology empower you to tackle any embroidery task with precision and ease.

#### **KEY FEATURES**

- 18 Needles / Colours
- Embroidery Field 460 x 310mm
- Slim tubular arm
- Reinforced Steelframe
- Longer Take-Up Lever
- Reduced noise level in operation
- New Quick-Change system
- Quick Colour Change system
- Improved thread tension

- 3D / Puffy Specialist
- Not for additional devices
- Servo drives
- Network compatible
- Leading technology for efficiency, quality and usability
- Made in Germany

#### COMPARISON BY BASIC CONFIGURATION

FEATURE	FUNCTION	SPRINT CLASSIC	SPRINT 6
Fast Colour Change	(Efficiency)		
Fast Thread Trimmer / Catcher	(Efficiency)		
Slim Tubular Arm	(Flexibility)		0
Higher Max. Stitch Length	(Efficiency)		
Improved Thread Tension	(Quality)		
Thread Break Detection	(Efficiency)	<b>Ø</b>	<b>Ø</b>
Height Adjustable Presser Foot	(Quality)	<b>Ø</b>	<b>Ø</b>
Quick Change System	(Efficiency / Usability)		
Extra strong Springs	(Flexibility)		
Longer Take-Up Lever	(Quality)		
Network Capability	(Efficiency)	<b>Ø</b>	<b>Ø</b>
Noise Reduction	(Usability)		
Servo Motors	(Efficiency)		
Adjustable Frame Limit	(Efficiency)		
Monitoring Pantograph Movement	(Usability)		
Pattern Rotation in the Machine	(Usability)		
Home Function (Return to Centre)	(Usability)		
Save of Design Starting Point	(Usability)		
Optimized for Wide Products	(Flexibility)		
Spiral Hoses	(Quality)		
Optimized Access to Yarn Cones	(Usability)		
Connection of Additional Devices	(Flexibility)	<b>Ø</b>	<b>②</b>
Sewing Thread Setup	(Flexibility)	Optional	
Extended Table Roll2Basket	(Flexibility)		Optional
Made in Germany	(Quality)	CZ	<b>Ø</b>



SPRINT 6L	SPRINT 6XL	SPRINT 7	SPRINT 7L	SPRINT 7XL	SPRINT 8
					0
					<b>Ø</b>
0	0	0	0	0	<b>Ø</b>
		<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>
					<b>Ø</b>
<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>
<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>
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0	<b>Ø</b>	0	0	<b>Ø</b>	<b>Ø</b>
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		0	0	0	<b>Ø</b>
		0	0	<b>Ø</b>	<b>Ø</b>
		0	0	<b>Ø</b>	<b>Ø</b>
		<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>
		0	0	0	<b>Ø</b>
		<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>
			0	0	
					<b>Ø</b>
					<b>Ø</b>
•	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	
		Optional			
<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>

#### COMPARISON BY TECHNICAL DATA

	SPRINT CLASSIC	SPRINT 6	SPRINT 6L
Needles	12	12	12
Stitches Tubular / Flat max. (per minute)	1.200	1.200	1.200
Stitches Cap max. (per minute)	1.000	1.000	1.000
Embroidery Field [WxD] max. (mm)	460 x 310	460 x 310	600 x 280
Border Frame [WxD] max. (mm)	460 x 310	460 x 310	600 x 280
Tubular Frame [WxD] max. (mm)	400 x 300	400 x 300	400 x 280
Cap 360 [WxD] max. (mm)	360 x 70   360 x 90*	360 x 70   360 x 90*	360 x 70   360 x 90*
Shoes [WxD] max. (mm)	124 x 175	124 x 175	124 x 175
Machine Size [WxDxH] max. (mm)	1.160 x 943 x 875	1.160 x 943 x 875	1.340 x 985 x 875
Power Supply (V)	230	230	230
Weight (Kg)	130   90**	130   90**	140   100**



SPRINT 6XL	SPRINT 7	SPRINT 7L	SPRINT 7XL	SPRINT 8
12	18	18	18	18
850 / 1.000	1.200	1.200	1.000	1.200
900	1.000	1.000	1.000	1.000
1.200 x 280	460 x 310	600 x 400	1.400 x 400	460 x 310
1.200 x 280	460 x 310	600 x 400	1.400 x 400	460 x 310
400 x 280	400 x 300	400 x 300	400 x 300	400 x 300
360 x 70   360 x 90*	360 x 70   360 x 90*	360 x 70   360 x 90*	360 x 70   360 x 90*	360 x 70   360 x 90*
124 x 175	124 x 175	124 x 175	124 x 175	124 x 175
2.580 x 985 x 1.595	1.260 x 940 x 875	1.410 x 1.215 x 1.650	2.925 x 1.215 x 1.650	1.250 x 960 x 980
230	230	230	230	230
180	140   100**	225	270	190   130**

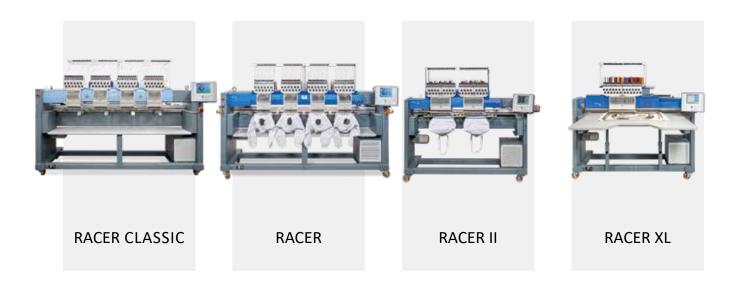




#### THE SINGLE- AND MULTI-HEAD EMBROIDERY MACHINES

For large quantity orders, quickly changing motives and special requirements, ZSK STICKMASCHINEN multi-head embroidery machines are the perfect solution.

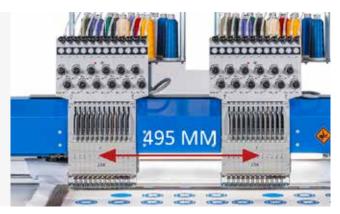
In the areas of promotion and advertising, corporate fashion, clubwear and the individualization of textiles, the RACER leave nothing to be desired.



#### FFATURES OF SERIES RACER

#### STANDARD VS. WIDE

ZSK offers the RACER Series with S (400mm) and W (495mm) head distance. The head distance describes the distance between the centre of two adjacent heads. The wide (495mm) head spacing is ideal for bulky products and large designs. Certain models are offered as L (large) models. These models offer a 700mm embroidery field depth when operating in the border frame mode.



#### Tubular, Cap and Border Frame

The RACER Series is always equipped for Tubular embroidery, the accessories for Cap and Border Frame embroidery are optional features. The RACER 6W and 8S are equipped with hydraulic lifting for the table plates when equipped with the border frame. The machines can be equipped with a Quick Change system that allows changing of operation modes without tools.



#### Machine Height

Machine height can be increased by 120mm or 200mm. Ideal when machine is mainly used for cap embroidery.



#### **Barcode Operation**

A barcode reader can be connected via USB to the T8 control unit. The reader can be used to scan barcodes and to load designs. A new feature allows the operation of T8 features via barcodes. A design can be loaded, turned by 180° etc. without pressing a single button. Only for starting the embroidery process, pressing of the green button is required.







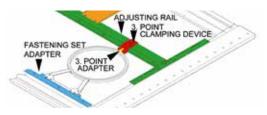
#### **Cross Laser Positioning**

For easy positioning of the design starting point and to trace the embroidery design size.



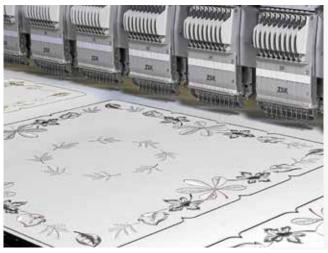
#### **Strong Springs**

When working with heavy materials like leather this feature avoids missing stitches.



#### **Z-200 Connection**

When using wooden hoops in the border frame, Z-200 connectors have to be used.



#### **Head Selection**

The automatic Head Selection is a standard feature of series RACER (excl. CLASSIC).

This feature is of use when stitching very large designs like flags, bed sheets of table clothes.

The digitizing software is used to assign each head different parts of the design or in case of borders to operate all heads at the same time.

The system allows automatic control of which head is sewing which design feature and switches heads on and off automatically.



#### QR Code

Scan the QR code and and view a comparison of all RACER models as PDF.

#### THE RACER CLASSIC

#### TIMELESS CLASSICS

Introducing the ZSK's RACER CLASSIC Series: Unleash Your Creative Potential with this classic multihead embroidery machines.

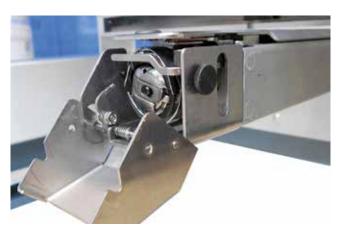
The RACER CLASSIC offers machines with 4, 6 and 8 embroidery heads for exceptional performance with 12 needles per head.

Switch effortlessly between tubular, cap, and border frame operation modes. Enjoy the spacious embroidery field depth of 500mm and a 400mm head distance for precise stitching.

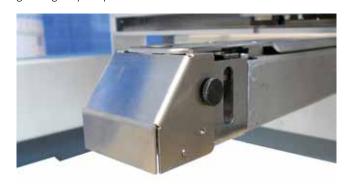
Seamlessly control your machine with the intuitive T8-2 controller unit. Stay connected with network compatibility, enabling efficient data transfer and design sharing.

Designed in Germany and assembled in the Czech Republic, the RACER CLASSIC series is a piece of premium craftsmanship.

Elevate your embroidery game and create with confidence. Discover the power of RACER CLASSIC today.



The wide tubular arm offers a protective flap, that no material will get caught by the picker.



The protective flap closed.

#### **KEY FEATURES**

- 12 Needles / Colours
- Available with 4, 6 and 8 heads
- Head distance of 405mm only
- Embroidery field depth of max. 500mm
- Wide tubular arm with protective cover
- For tubular, cap and flat operations
- Expandable with optional devices
- T8 controller unit
- Network compatible
- Designed in Germany
- Assembled in Czech Republic

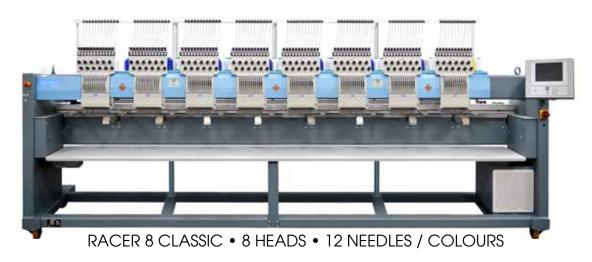




RACER 4 CLASSIC • 4 HEADS • 12 NEEDLES / COLOURS



RACER 6 CLASSIC • 6 HEADS • 12 NEEDLES / COLOURS



#### THE ORIGINAL RACER

#### DO YOU WANT TO GET BETTER?

Welcome to the original RACER series, featuring models RACER 1, RACER 2, RACER 4, RACER 6, RACER 8, and RACER 12.

This powerful series of workhorses is designed to maximize efficiency and precision, allowing you to complete projects in record time.

ZSK's RACER concept guarantees the shortest return of investment thanks to the highest embroidery speed.

With 12 needles per head and the industry's slimmest tubular arm, they ensure precise and easy embroidery in even the tightest spots.

Choose a model to suit your needs: The series offer head distances of 400mm (S) and 495mm (W) and embroidery field depths of 500mm and 700mm (L).

Use standards like the automatic head selection and the license free network possibilities for your workflow. Enhance your creativity with a multitude of optional accessories like sequin devices.

Experience the thrill of accelerated embroidery with the RACER and take your craftsmanship to new heights.



RACER 1W | Racer 1WL



RACER 4S | RACER 4W | RACER 4WL



RACER 2W | RACER 2WL



RACER 6S | RACER 6SL | RACER 6W



#### **KEY FEATURES**

- 12 Needles / Colours
- Available with 1, 2, 4, 6, 8 and 12 heads
- Head distance of 405 / 495mm
- Embr. field depth of max. 500 / 700mm
- Slim tubular arm
- For tubular, cap and flat operations
- Servo Drives

- Infinite creativity with a multitude of accessories
- Automatic Head Selection
- T8 controller unit
- Network compatible
- Built for 24/7 365 days a year
- Made in Germany



**RACER 8S** 



RACER 12S

#### THE RACER II

#### DO NOT WASTE TIME

Discover the extraordinary ZSK RACER II, a groundbreaking series of embroidery machines.

With 18 needles per embroidery head, it offers unparalleled design possibilities.

Benefit of time-saving developments from ZSK's CHALLENGER flat system flagship series, including the Quick Color Change and Quick Catcher.

Create vibrant designs without wasting precious time. Switch between needles and colours quickly with the Quick Color Change feature, reducing operation time and maximizing productivity.

The RACER II maintains the industry's slimmest tubular arm and includes automatic thread cutter, upper and lower thread control, automatic backstitch function, adjustable presser foot, and more.

Unlock your creativity and economic success with the RACER II series, where efficiency, precision, and limitless possibilities converge.

Experience embroidery innovation at its finest.









#### **KEY FEATURES**

- 18 Needles / Colours
- Available with 1, 2, 4, 6 and 8 heads
- Head distance of 495mm only
- Embroidery field depth of max. 500 / 700mm
- Slim tubular arm
- Servo Drives
- For tubular, cap and flat operations

- Quick Color Change and Fast Catcher
- High performance even on colorful designs
- Automatic Head Selection
- Network compatible
- Built for 24/7 365 days a year
- Made in Germany





RACER 8WL II

#### THE RACER XI

#### EMBROIDERY FIELD TOO SMALL?

#### Unleash the true potential of your embroidery projects with the extraordinary Series RACER XL.

Engineered for unrivaled efficiency and precision, this series offers two remarkable models: RACER 1XL and RACER 2XL.

Featuring impressive 24 needles per embroidery head, the RACER XL empowers you to unleash a mesmerizing array of colors, allowing your imagination to run wild.

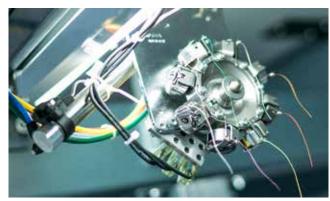
Seamlessly switch between different yarns and keep frequently used ones in stock, effortlessly bringing your vision to life.

But that's not all—the RACER XL boasts an expansive embroidery field of 700mm x 700mm per head, inviting you to embroider on larger-than-life canvases with captivating detail and vibrant hues. Get ready to make a statement with your unique creations!

Elevate your craft and set new standards in the world of embroidery with the ZSK RACER XL series. Let your creativity soar and unlock endless possibilities today!



RACR XL- 24 needles for colourful designs



Optional Auto Select Bobin Changer- Software-controlled use of the appropriate bobbin thread; e.g. by colour, conductivity or material.

#### **KEY FEATURES**

- 24 Needles / Colours
- Available with 1 and 2 heads
- Head distance of 700mm only
- Embroidery field depth of max. 700mm
- Automatic Head Selection

- Optional ZSK Vision System
   For advanced embroidery precision on leather
- Network compatible
- Built for 24/7 365 days a year
- Made in Germany





RACER 1XL / RACER 0124 • 1 HEAD • 24 NEEDLES



#### COMPARISON BY BASIC CONFIGURATION

		CLASSIC			RACER							
		4S	6S	85	1W	1WL	2W	2WL	4S	4W	4WL	6S
Fast Colour Change	(Efficiency)								0	0	0	0
Fast Catcher	(Efficiency)				<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>②</b>	<b>②</b>	<b>Ø</b>	0
Slim Tubular Arm	(Flexible)				0	0	0	0	0	0	0	0
Improved Thread Tension	(Quality)											
Thread Break Detection	(Efficiency)	0	0	0	0	0	0	0	0	0	0	0
Height Adjustable Presser Foot	(Quality)	<b>②</b>										
Extra strong Springs	(Flexible)				opt.							
Bobbin Changer	(Efficiency)									opt.		opt.
Network Capability	(Efficiency)	0	0	<b>②</b>	0	0	0	0	0	0	0	0
Servo Motors	(Efficiency)				<b>Ø</b>	0	0	0	0	<b>②</b>	0	<b>②</b>
Adjustable Frame Limit	(Efficiency)				0	0	0	0	0	0	0	0
XLarge Embroidery Field	(Flexible)											
Head Selection	(Usability / Efficiency)						0	0	0	0	0	0
Monitoring Pantograph Movement	(Usability)				<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	0	<b>②</b>	<b>②</b>
Pattern Rotation in the Machine	(Usability)				0	0	0	0	0	0	0	0
Home Function (Return to Centre)	(Usability)				•	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	•	<b>②</b>
Save of Design Starting Point	(Usability)				0	0	0	0	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>
Spiral Hoses	(Quality)	<b>②</b>										
Connection of Additional Devices	(Flexible)	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	0	0	0	<b>Ø</b>	<b>Ø</b>	0	0
Sewing Thread Setup	(Flexible)				opt.							
Made in Germany	(Quality)	CZ	CZ	CZ	0	0	0	0	0	<b>Ø</b>	0	0



	RA	CER				RAC	ER II			Х	(L		RAC	ER SF	PECIAL	
6SL	6W	8S	12S	1WL II	2W II	4W II	4WL II	6W II	8WL II	1XL	2XL	0124	0218	0224	H 0118	H 0309
0	0	0	0	0	0	0	0	0	0						<b>Ø</b>	•
	<b>②</b>															
•	0	0	0	0	0	0	0	0	0	0	0	0			0	
				<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>						<b>②</b>	
•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>Ø</b>	0
<b>②</b>																
opt.	<b>②</b>	0	opt.	opt.	opt.	opt.	opt.									
										opt.	opt.	opt.	<b>②</b>	<b>②</b>		
<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	9	<b>②</b>	<b>Ø</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>Ø</b>	<b>②</b>	<b>②</b>	<b>Ø</b>	0	0
<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>9</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>Ø</b>
<b>②</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
										<b>Ø</b>	<b>②</b>	<b>Ø</b>	<b>②</b>	<b>Ø</b>		
0	0	0	0		0	0	0	0	0		0		0	0	9	•
<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>②</b>	<b>Ø</b>	<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>						
<b>②</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>Ø</b>	<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>②</b>	<b>②</b>	<b>②</b>	•
<b>②</b>	0	0	0	0	0	<b>Ø</b>	0	0	0	0	0	0	0	0	<b>Ø</b>	<b>Ø</b>
<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>						<b>Ø</b>						<b>Ø</b>	
<b>②</b>	0	0	0	0	0	<b>Ø</b>	0	0	0	0	0	0	0	<b>Ø</b>	<b>Ø</b>	•
opt.	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>	<b>②</b>											
<b>②</b>	0	0	0	0	0	<b>Ø</b>	<b>Ø</b>	0	0	<b>②</b>	0	0	0	<b>Ø</b>	<b>②</b>	0



#### COMPARISON BY TECHNICAL DATA

MACHINE	HEADS	NEEDLES	HEAD		EM	BROID	ERY FIELD DIMEN	ISIONS [MM]			
			DISTANCE [MM]	WIDTH		PTH 700	BORDER FRAME	TUBULAR	CAP		
					500 19,7"	700 27,5"					
RACER CLASSIC											
RACER 4S Classic	4	12	400	400	<b>Ø</b>		1.600 x 500	405 x 300	70 x 360		
RACER 6S Classic	6	12	400	400	0		2.400 x 500	405 x 300	70 x 360		
RACER 8S Classic	8	12	400	400	•		3.200 x 500	405 x 300	70 x 360		
RACER											
RACER 1W	1	12	500	500	<b>②</b>		500 x 500	405 x 395	70 x 360		
RACER 1WL	1	12	500	500		0	500 x 700	405 x 395	70 x 360		
RACER 2W	2	12	495	495	<b>Ø</b>		990 x 500	405 x 395	70 x 360		
RACER 2WL	2	12	495	495		0	990 x 700	405 x 395	70 x 360		
RACER 4S	4	12	400	400	<b>Ø</b>		1.600 x 500	405 x 300	70 x 360		
RACER 4W	4	12	495	495	0		1.980 x 500	405 x 395	70 x 360		
RACER 4WL	4	12	495	495		<b>Ø</b>	1.980 x 700	405 x 395	70 x 360		
RACER 6S	6	12	400	400	<b>Ø</b>		2.400 x 500	405 x 300	70 x 360		
RACER 6SL	6	12	400	400		<b>Ø</b>	2.400 x 700	405 x 300	70 x 360		
RACER 6W	6	12	495	495	0		2.970 x 500	405 x 395	70 x 360		
RACER 8S	8	12	400	400	<b>Ø</b>		3.200 x 500	405 x 300	70 x 360		
RACER 12S	12	12	400	400	<b>Ø</b>		-	405 x 300	70 x 360		



EMBROIDERY SPEED min <sup>-1</sup>	MAC	NET MASS [KG]		
TUBULAR / FLAT / CAP	LENGTH [MAX. / MIN ]	DEPTH [MAX./MIN]	HEIGHT	
1.000 / 1.100 / 1.000	2.580 / 2.470	1.330 / 830	1.720 / 1.490	700
1.000 / 1.100 / 1.000	3.380 / 3.270	1.330 / 830	1.720 / 1.490	850
1.000 / 1.100 / 1.000	4.360 / 4.250	1.640 / 1.170	1.680 / 1.430	1.310
		'		
1.000 / 1.100 / 1.000	1.550 / 1.430	1.330 / 830	1.750 / 1.490	400
1.000 / 1.100 / 1.000	1.550 / 1.430	1.825 / 1.080	1.750 / 1.490	430
1.000 / 1.100 / 1.000	1.960 / 1.840	1.330 / 830	1.750 / 1.490	490
1.000 / 1.100 / 1.000	1.960 / 1.840	1.825 / 1.080	1.750 / 1.490	550
1.000 / 1.100 / 1.000	2.580 / 2.470	1.330 / 830	1.720 / 1.490	700
1.000 / 1.100 / 1.000	3.380 / 3.270	1.330 / 830	1.720 / 1.490	850
1.000 / 1.100 / 1.000	3.380 / 3.270	1.840 / 1.080	1.720 / 1.490	920
1.000 / 1.100 / 1.000	3.380 / 3.270	1.330 / 830	1.720 / 1.490	850
1.000 / 1.100 / 1.000	3.380 / 3.270	1.840 / 1.080	1.720 / 1.490	950
1.000 / 1.100 / 1.000	4.360 / 4.250	1.640 / 1.170	1.680 / 1.490	1.260
1.000 / 1.100 / 1.000	4.360 / 4.250	1.640 / 1.170	1.680 / 1.430	1.310
1.000 /- / 1.000	6.015 / 5.900	1.150	1.760 / 1.450	2.250



#### COMPARISON BY TECHNICAL DATA

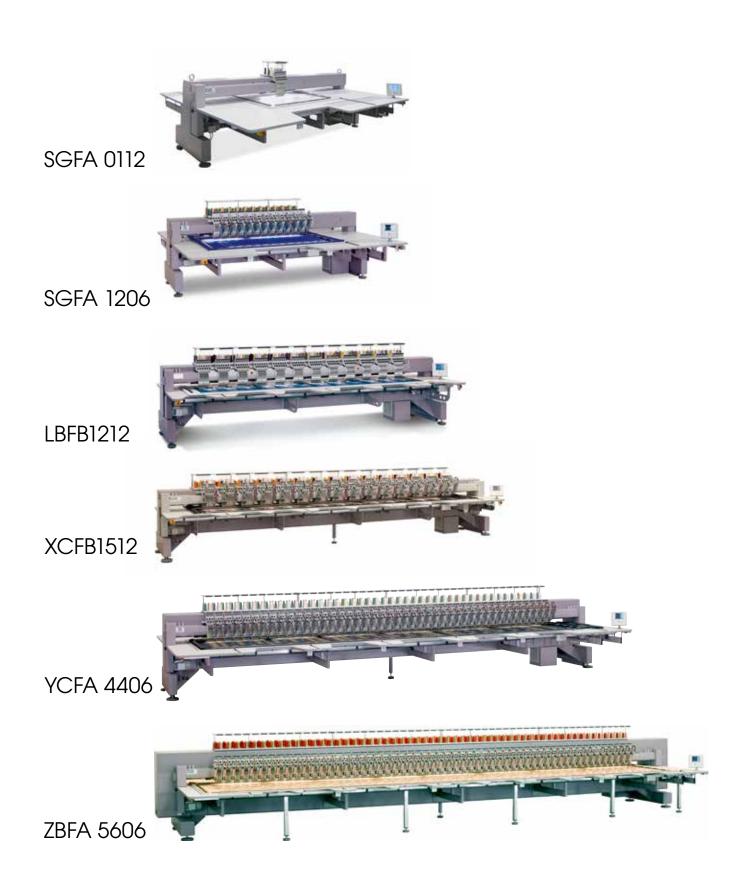
MACHINE	HEADS	NEEDLES	HEAD DISTANCE		EM	BROID	ERY FIELD DIMEN	ISIONS [MM]		
			[MM]	WIDTH	DEF 500 19,7"	700 27,5"	BORDER FRAME	TUBULAR	CAP	
RACER II										
RACER 1 WL II	1	18	-	500		<b>Ø</b>	990 x 500	405 x 395	70 x 360	
RACER 2W II	2	18	495	495	0		1.980 x 500	405 x 395	70 x 360	
RACER 4W II	4	18	495	495	<b>Ø</b>		1.980 x 700	405 x 395	70 x 360	
RACER 4WL II	4	18	495	495		0	2.970 x 500	405 x 395	70 x 360	
RACER 6W II	6	18	495	495	<b>Ø</b>		3.960 x 700	405 x 395	70 x 360	
RACER 8WL II	8	18	495	495		0	3.960 x 700	405 x 395	70 x 360	
RACER XL										
RACER 1XL	1	24	-	700		0	700 x 700	-	-	
RACER 2XL	2	24	700	700		<b>Ø</b>	1.400 x 700	-	-	
RACER Special										
RACER 0124	1	24	-	1000		<b>Ø</b>	1.000 x 700	405 x 395	70 x 360	
RACER 0218	2	18	550	550		0	1.100 x 700	405 x 395	70 x 360	
RACER 0224	2	24	700	700		<b>Ø</b>	1.400 x 700	405 x 395	70 x 360	



EMBROIDERY SPEED min <sup>-1</sup>	MAC	MACHINE DIMENSIONS [MM]							
TUBULAR / FLAT / CAP	LENGTH [MAX. / MIN ]	DEPTH [MAX./MIN]	HEIGHT						
1.100 / 1.000 / 1.000	1.960 / 1.840	1.330 / 830	1.720 / 1.500						
1.100 / 1.000 / 1.000	3.380 / 3.270	1.330 / 830	1.720 / 1.500	850					
1.100 / 1.000 / 1.000	3.380 / 3.270	1.840 / 1.080	1.720 / 1.500	920					
1.100 / 1.000 / 1.000	4.360 / 4.250	1.640 / 1.170	1.720 / 1.500	1.260					
1.100 / 1.000 / 1.000	6.015 / 5.900	2.050 / 1.350	1.760 / 1.450						
1.100 / 1.000 / 1.000	6.015 / 5.895	2.050 / 1.350	1.760						
1.000 /- /-	1.960 / 1.850	1.825 / 1.080	1.790 / 1.490	505					
1.000 /- /-	2.580 / 2.470	1.840	1.760 / 1.490	792					
1.000 / 1.000 / 1.000	2.580 / 2.470	1.840 / 1.080	1.790 / 1.490	400					
1.000 / 1.000 / 1.000	3.380 / 3.270	1.840	1.760 / 1.490	430					
1.000 / 1.000 / 1.000	3.380 / 3.270	1.840	1.760 / 1.490	490					

# FLATSYSTEM

S, M, L, X, Y, Z SINGLE- & MULTIHEAD EMBROIDERY





#### **Head Distances**

ZSK offers a wide range of head distances for flat system embroidery machines. The range includes true Schiffli repeats of 24/4 and 48/4 for 12, 18, 22, 28, 44 and 56 head machines. Typical head distances offered by ZSK include 200, 240, 300, 350, 400, 480, 600 and 800mm. A number of machines are equipped with D (double) and T (triple) pantograph drives.

#### **Field Depths**

Flat system machines are offered with field depths of 500, 700, 1.000, 1.200, 1.400 and 1.500mm. For special applications field depths of up to 2.000mm can be offered. The embroidery field can be reduced in depth by using an adjusting rail and the width can be reduced with intermediate tensioner.

#### **Head Selection**

Flat system machines are always equipped with head selection. This feature is of use when stitching very large designs like flags, bed sheets or table clothes. The digitizing software is used to assign each head different parts of the design or in case of borders to operate all heads at the same time. The system allows automatic control of which head is sewing which design feature and switches heads on and off automatically. When a head is switched off, the take up lever is not moving. An ideal feature to make very efficient use of machines with small head distances.



#### Flexibility

All flat machines with head spacing greater 24/4 can be equipped with two devices per head (left and right side). Machines can be equipped with Cording, Hot Air Cutting, Sequins or Bead Devices to enhance the embroidery design. ZSK offers a unique range of devices for the flat system series that are all connected directly to the embroidery machine, no external power or compressed air supply is required. All devices are supported by GiS BasePac and EPCwin.

#### Clamping

ZSK is of renown to offer the strongest border frame clips that remain in place even with largest designs. ZSK offers three types of border frame clips in bronze with interlocking (extremely strong), bronze (very strong) and silver (weaker). When using thicker materials it is recommended to use silver clamping clips to allow easy clamping.

#### Industry 4.0

Via the T8 control unit the machine can be connected to My.ZSK to collect production data of the machine and its operator. The solution is offered as a Cloud and On Site solution. The system supports the OPC UA standard and allows data analysis in external systems.



## **FLATSYSTEM**

#### **CHALLENGER**



### CHALLENGER SERIES

#### Servo Drives:

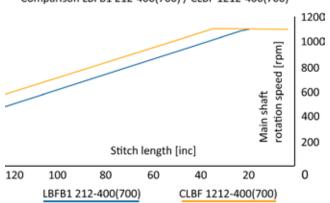
The major advantage of the Challenger Series is the usage of Servo Motors instead of Stepper Motors to move the pantograph. The Servo Motors generate more and constant torque and this leads to an increased performance, efficiency and stitch quality. The Servo Motor lead to a reduced noise when moving the pantograph and a much smoother movement of the same.

Figure 1 shows a comparison between a LBFB 1212-400 (700) and a Challenger CLBF 1212-400 (700). The Challenger Series runs the maximum speed of 1.100 RPM up to 3.5mm stitches, where the LBFB 1212 reduces the speed at 1.9mm stitches. Considering an average design with a reasonable number of longer stitches, the Challenger Series offers an increased performance of ca. 10%.

#### **Energy Efficiency:**

All Challenger machines are equipped with LED lightning. Comparing a CXCF 1512 with a XCFB 1512 this will lead to an energy saving of approx. 750kWh (24/5 operation, 50 weeks a year) in the Challenger machine.

Figure 1 Comparison LBFB1 212-400(700) / CLBF 1212-400(700)







From beginning of 2019 the Challenger Series offers a new and optional colour change that reduces the colour change time by up to 75%. The standard Challenger Series already offers an improved colour change timing by about 2 seconds per process compared to a standard ZSK flat machine. The Challenger Series is equipped with a quicker catcher motor and the speed of the last stitches prior to a colour change, as well as the first stitches after a colour change have been improved.

#### Table Design:

All Challenger Series machines with an embroidery field of 1.000mm or more are equipped with 600mm table cuts to offer an improved access for the operator to the embroidery head. Other table designs can be offered upon request.

#### Support Design:

The design of the support rods below the table plates has been changed. The new design allows more space to move for the operator freely below the machine and to be quicker when changing bobbins.

#### MCP 35:

Challenger machines are equipped with MCP 35 electronic boards. This allows regular T8-2 software upgrades with the latest features.

## FLATSYSTEM

### COMPARISON BY TECHNICAL DATA

#### SERIES S,M,L,X,Y,Z

TYPE	HEADS	COLOURS	EMBROIDERY FIELD WIDTH MM	BORDER FRAME WIDTH MM
SGFA 0112- 1300	1	12	1.300	1.300
SGFA 0412- 480	4	12	480	1.920
SGFA 0609-300 D	6	9	300	1.800
SGFA 0609-300 D- IT	6	9	300	1.800
SGFA 1206-24/4 Q	12	6	162,42	1.950
SGFA 1206-24/4 Q	12	6	162,42	1.950
MCFB 0612- 600	6	12	600	3.600
MCFB 0812- 480	8	12	480	3.840
MCFB 1012- 400	10	12	400	4.000
MCFB 1212- 350	12	12	350	4.200
LBFB 1012- 480	10	12	480	4.800
LBFB 1209- 400	12	9	400	4.800
LBFB 1212- 400	12	12	400	4.800
XGFA 1012- 600	10	12	600	6.000
XCFB 1212- 480	12	12	480	5.760
XCFB 1509- 400	15	9	400	6.000
XCFB 1512- 400	15	12	400	6.000
XCFA 1812- 350	18	12	350	6.300
XGFA 1809-48/4 D	18	9	324,84	5.848
XGFA 1812-330 D	18	12	330	5.940
YCFA 1012-600 D	10	12	600	6.000
YCFA 1812- 400	18	12	400	7.200
YGFA 0912-800	9	12	800	7.200
YGFA 1406-480 D	14	6	480	6.720
YGFA 1412-480 D	14	12	480	6.720



ТҮРЕ	HEADS	COLOURS	EMBROIDERY FIELD WIDTH MM	BORDER FRAME WIDTH MM
YCFB 1506- 480	15	6	480	7.200
YCFB 1509- 480	15	9	480	7.200
YCFB 1512-480	15	12	480	7.200
YGFA 1812-400 D	18	12	400	7.200
YCFA 2206-48/4	22	6	324,84	7.148
YCFA 2209-48/4	22	9	324,84	7.148
YCFA 3009-240 D	30	9	240	7.200
YCFA 3606-200 D	36	6	200	7.200
YCFA 4406-24/4 D	44	6	162,42	7.148
ZBFA 2809-48/4	28	9	324,84	9.096
ZCFA 3806-240 D	38	6	240	9.120
ZBFA 5606-24/4 D	56	6	162,42	9.096

#### SERIES CHALLENGER

TYPE	HEADS	COLOURS	EMBROIDERY FIELD WIDTH MM	BORDER FRAME WIDTH MM
CSGF 0112- 1300	1	12	1.300	1.300
CMCF 1012- 400	10	12	400	4.000
CLBF 1012- 480	10	12	480	4.800
CLBF 1212- 400	12	12	400	4.800
CXCF 1212- 480	12	12	480	5.760
CXCF 1509- 400	15	9	400	6.000
CXCF 1512- 400	15	12	400	6.000
CYCF 1012- 600 D	10	12	600	6.000
CYCF 3606- 200 D	36	06	200	7.200
CYGF 1209- 600 D	12	9	600	7.200
CYHF 2409- 330 D	24	9	330	7.920

## SPECIAL

#### CORDING & TAPING / MOSS & CHAIN

### YOU NEED A CHANGE?

#### K-HFAD

MOSS AND CHAIN

K-head is ZSK's embroidery technology for chenille or moss and chain.

The K-head is driven by several servo motors. Controlled by the T8-2 control unit, the servos allow unique designs by adjusting the head settings.

A unique selling point of the ZSK embroidery machines for moss and chain are pneumatic color changes for 6 and 12 thread colors per K head.



#### W - HEAD

CORDING, TAPING AND COILING

The W-head is capable of cording, taping and coiling. The material can be supplied via two bobbins attached to the embroidery head or via cord supply units installed on the sides of the W-head.

If supply units are installed and designs with turns greater 360° are embroidered, the machine can be equipped with an unwinding function for the head. A material cutter is offered as an optional feature in combination with the cord supply unit.



#### **COMBINATION MACHINES**

ZSK offers machines with different combinations.

Choose machines with pure W heads, machines with F and W heads, F and K heads and even machines with all three technologies.

Most combinations are offered as single and multihead machines in many different embroidery field sizes.

ZSK's largest embroidery field for a combination machine is 2.100mm x 2.400mm (w x d)







# ACCESSORIES



TWIN SEQUIN DEVICE T7 (2-9MM)



SEQUIN DEVICE (3-9MM / 3-19MM)



STRASS SEQUIN DEVICE





CORDING DEVICE



CORD / LOOP DEVICE



HAC - HOT AIR CUTTING





















## **ACCESSORIES**

#### ROLL2BASKET FOR SPRINT AND RACER

## **EMBROIDERY ON RIBBON!**





Fig.: Automatic Pull Through Device of ROLL2BASKET

#### PRODUCTS (EXAMPLES)

- Textile safety ribbons
- Nametags
- Care Label
- Brand Label
- Ribbons for the textile industry
- Textile Borders
- Piping

ZSK's ROLL2BASKET device allows fully automated embroidery on textile ribbons, even with woven designs, and with a width from 10 to 150mm.

ROLL**2**BASKET can handle material thicknesses from 0.2 to 5mm.

The ribbon is transported by a compressed air driven pull through unit in previously defined lengths. The ribbon is pulled from a roll that is installed behind the thread stand. The clamping mechanism of the device required compressed air. The digitizing is done by GiS BasePac and can be fully automated using the stencil functions.

As required, the embroidery can be single or multi-colour.

#### **Optical Sensor**

The optional Optical Sensor for ROLL**2**BASKET recognizes specific marking and woven elements on the ribbon. The pull through unit and the clamping device are controlled to allow perfect positioning of the embroidery in the Y-Axis.

#### **Automatic Winding Station**

If only the Roll**2**Basket unit is used, the ribbon is collected in a basket. When using the device in industrial applications with a follow up process, it is recommended to install the optional Winding Station. The Winding Station supports rolls with up to 400mm diameter and allows materials of up to 5mm thickness.

#### **Optional Devices**

The devices can be combined with Roll2Basket. This allows creating technical applications and a greater product variety like with placing cords or wires on tape.

- Sequin Device
- Borer
- Cord / Loop Device
- Cording Device EP-1.2



#### ROLL2ROLL FOR JAFA / JNFA AND RACER

### FROM ROLL TO ROLL



#### **KEY FEATURES**

- Device for semi- and fully automated embroidery of tapes and fabric reels
- For ZSK embroidery machines of JAFA / JNFA and RACER Series
- Pneumatic Clamping
- Automatic Pull Through from back to front
- Pull Through for up to 3 materials
- Can be combined with Automatic Bobbin Changer
- Automatic Positioning of Design in x and y direction (optional)

ROLL2ROLL is a Pull Through Device that has been developed for semi- and fully automated embroidery on tapes and fabric reels.

The system allows feeding of up to 3 materials that can be combined in the process (i.e. fabric and backings). At the front one material is rolled up.

#### **Material Handling**

When handling the material in the device, we differentiate between two methods:

**Clamping:** the maximum material width is 190mm and 140mm can be embroidered.

**Guiding:** the maximum material width is 190mm and 160mm can be embroidered

**N.B.:** upon request ZSK can develop similar devices for your measurements.

#### **Optical Sensor**

The Optical Positioning System I (developed for Roll2Roll) can recognize specific markings on fabric or (woven, printed) design elements. The software positions the design and the frame in x and y direction to allow perfect positioning.

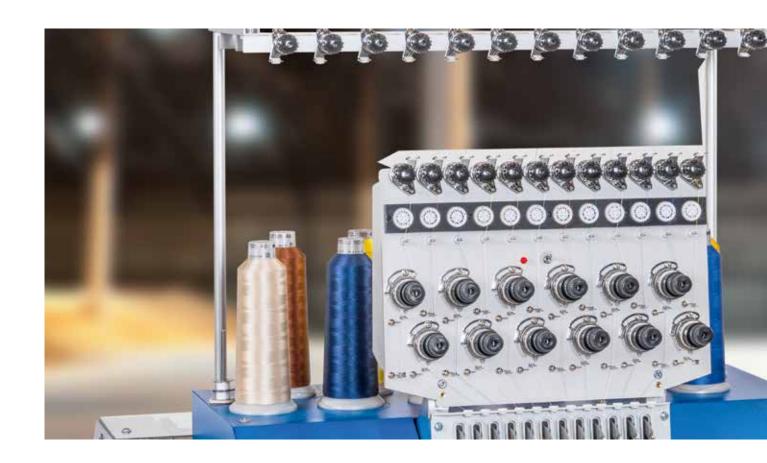
Potential applications are ribbons or tapes where weaving or printing defines an embroidery area and perfect placement is important.

#### **Machine Overview**

The ROLL2ROLL system is developed for JAFA / JNFA and RACER Series with a head spacing of at least 495mm.

The device has been implemented on 1, 2 and 6 head machines. The Roll**2**Roll device **cannot** be retrofitted on an existing machine.

## CONTROL UNIT



## **T8 CONTROL UNIT**

#### THE MAN-MACHINE INTERFACE

- INTUITIVE AND LOGICAL USE.
- READY FOR NETWORKING.
- ACCEPTS ALL COMMON INDUSTRIAL EMBROIDERY CODES.
- CAN BE OPERATED IN 13 LANGUAGES.
- STORAGE FOR UP TO 80.000.000 STITCHES.
- BARCODE CAPABILITY.





#### THE CONTROL UNIT T8 IS THE MAIN CONTROL OF ZSK EMBROIDERY MACHINES.

ZSK embroidery machines are valued and used all over the world. Of course, the T8-2 supports this with a user interface that can be viewed and operated in 14 different languages.

The languages are:

German, English, Italian, French, Russian, Portuguese, Dutch, Spanish, Turkish, Polish, Hungarian, Greek, Romanian and Bulgarian.

Just as diverse as the available languages are the data formats with which the T8-2 can work with:

- Barudan (\*.DSB)
- Tajima (\*.TBF)
- Barudan (\*.Uxx)
- Tajima (\*.DST)
- Brother (\*.PEC)
- Tajima (\*.EXX)
- Brother (\*.PES)
- Zangs / Marco (\*.DSZ)
- Fortron (\*.DSG)
- Zangs / Marco (\*.FXX)
- Melco (\*.EXP)
- Pfaff (\*.KSM)
- Zangs / Marco (\*.ZSK)

## SOLUTIONS

## LEATHER APPLICATIONS FOR AUTOMOTIVE, FASHION & FURNITURE

### QUILTING & EMBROIDERY

ZSK Embroidery Machines are equipped with up to 24 needles per head. This allows a combination of a variety of thread thickness and colours.

Using custom DH needles for embroidery applications thread thickness up to AMANN Serafil size 10 can be stitched multi-directional.

Benefiting from height adjustable presser feet and specific presser feet for different applications even very thick materials and strong leathers can be embroidered.

A growing number of leather applications require the combination of perforation and stitching. ZSK has developed a unique camera detection system and an optical positioning system.

Previously perforated items can be detected and the embroidery can be stitched at the desired location. Throughout the process the camera can check the position and adjust the embroidery file to achieve results that fulfill highest expectations.

ZSK offers specific features in ist EPCwin CAD software to support design development for quilting, embroidery and the ZSK Vision System. DXF files can be loaded into the CAD software and be digitized to embroidery files. The system supports creation of ZEPL files for the ZSK Vision System.

ZSK develops and manufactures custom frames to hold the material in place during the operation. This is especially required when working with perforated items. The frames will ensure perfect placement of the part and reduce shrinkage during the embroidery process.

The machine can scan barcodes for the frame and the design and therefore avoiding potential operator errors.









Machine: RACER 0124 with 24 needles and ZSK Vision System.

Frame: Custom frame with pneumatic clamps and QR code for automation.

#### **FEATURES**

- Sewing Fields up to 2.100 x 2.500mm / 82,67" x 98,4"
- 6 24 Needles per Head
- Custom Frames
- ZSK Vision System
- Auto Select Bobbin Changer

- CAD Software EPCWIN
- Safety Features
- Multi Directional Stitching
- MY.ZSK

## SOLUTIONS

#### TECHNICAL EMBROIDERY SOLUTIONS

### TECHNOLOGY FOR TOMORROW

ZSK TECHNICAL EMBROIDERY SYSTEMS enable the use of new and innovative techniques to place and fix different media on textiles and other flexible carrier materials.

Media as wires, fibers, tubes, and optical fibers can be placed flexibly and will be secured strongly through embroidery techniques like the ZigZag stitch. E-textile and smart textile products can be realized in semi-fully automated.

The different embroidery technologies developed by ZSK TECHNICAL EMBROIDERY SYSTEMS enable a wide scope of products, applications, and methodical procedures tp be implemented for specific design goals and constraints.

#### **Examples**

- Integration of wire into fabrics for heating and sensing (e.g. moisture, temperature, stretch) applications, via Tailored Wire Placement (TWP)
- Fixation of fibrous material like carbon, glass, basalt, aramid, natural, thermoplastic, ceramic fibers, producing near net shape preforms via Tailored Fibre Placement (TFP)
- Automated placement of LED and/or RFID and circuit boards.
- Embroidery with conductive yarn to create textile electrodes for body signal monitoring (e.g. ECG) or electro stimulation (EMS or TENS) or embroidered connectors between electronic parts and textiles (conductive paths and connection pads).



ZSK Technical System CZCW 0809- with eight W-Heads placing and fixing fibers.



 ${\sf ZSK's\;K\;head\;technology\;creating\;sensors\;with\;conductive\;yarn.}$ 

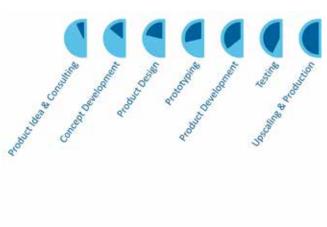


ZSK's Technical System CYCW 0600- placing and fixing conductive thread for automotive heating systems.



#### ZSK'S IN-HOUSE ENGINEERING BUREAUS





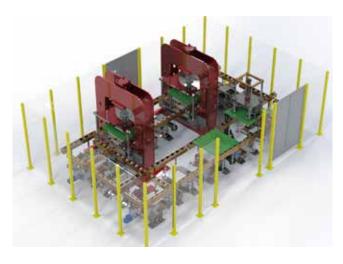
### Smart and e-textiles play an important role in shaping the future.

Whether in aerospace, automotive, medical, sports or fashion, ZSK STICKMASCHINEN enables innovation through reliability, automation, and scalability.

With its own engineering office, 3E Smart Solutions, ZSK STICKMASCHINEN offers customers a unique combination of technology and know-how transfer to make your innovation a reality.

The 3E Smart Solutions team is made up of experts in various fields such as electrical engineering, embroidery, and electronic integration, bringing together a complete knowledge of what is needed to successfully develop smart and e-textiles.





# Introducing UNWIND3D, your gateway to advanced and automated composites manufacturing, for the production of sustainable, customized and cost-efficient composites parts.

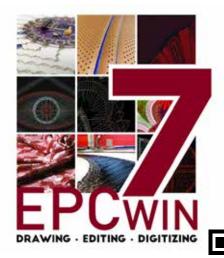
Through ZSK Additive Manufacturing machines, and in house developed molding solutions, Unwind3D provides customers with TURN-KEY solutions for the production of composites parts, from small to high-volumes.

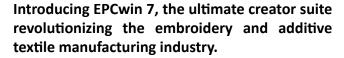
Unwind3D, born from ZSK and located in the north of Italy, provides you with unparalleled services thanks to combined expertises, worldwide network of partners and a global supply chain.

## SOFTWARE

#### FOR DESIGN AND DIGITIZING

#### **EPCWIN - THE HIGH-END CREATOR SUITE**





With its unparalleled range of intelligent features, lightning-fast shortcuts and and precise stitching with an accuracy of 0.1mm, EPCwin 7 sets a new standard for professional requirements in all sectors.

Collaborate seamlessly in your organization, store designs in a separate component library, and benefit from direct machine-to-software connectivity, enhancing production efficiency and achieving unparalleled embroidery quality. Plus with EPCwin, you have a full-fledged CAD drawing program at your fingertips.

Elevate your embroidery game with EPCwin 7—the perfect blend of power and precision.

#### BASEPAC - DIGITIZING SOFTWARE THAT GROWS WITH YOUR NEEDS





### BasePac is the ideal digitization solution for beginners through to professional digitizers.

BasePac 10 is characterized by its simplified program structure, clustered in four packages considering different user profiles and their needs.

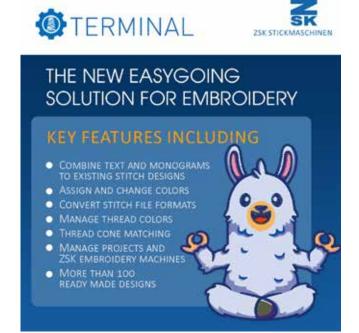
Profit from a lot of automations whilst having full control of the stitch quality thanks to detailed parameter settings. Further optimize existing stitch files with the BasePac Base stitch editor.

Take advantage from different tools that are intuitive and comparable to other graphic programs. Wether the eye dropper, magic wand or multiple grouping functions - the usage of the software will easily feel familiar to you.

Start with the smallest BasePac package and get a bigger package if you need access to more.



#### STRUGGELING WITH CREATING STITCH DATA?



### With TERMINAL you don't need to be a professional digitizer to create a stitch file for your business.

ZSK TERMINAL is a program for embroiderers and owners of ZSK embroidery machines. The clever tool provides new possibilities for your embroidery business and a competitive advantage.

With TERMINAL you can create stitch files for personalizing textiles quick and easy. Combine existing stitch data for logos or other graphics with individual text, convert a graphic into stitch data automatically or just setup new colours to a design.

TERMINAL "BASIC" and TERMINAL "MACHINES" are two packages, tailored to different requirements. With these packages you get numerous tools with which you can improve your embroidery business quickly.

#### ARE YOU AWARE OF YOUR EMBROIDERY MACHINES' OPERATIONS?



**MY.ZSK** is a tool for collecting, archiving, processing and visualizing of all relevant data of the embroidery process in your company.

- Status Dashboard of all ZSK machines
- Progress view of all orders
- Productivity and usage for each machine
- Analysis of thread breakages based on designs, machines, heads and needles
- Design Analysis
- Operator- and Daily Reports
- Shift- and Location Reports
- Sensor- and RFID Data for each machine
- Alarms for user defined events i.e. by E-Mail



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**f** ZSK.Stickmaschinen

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## ZSK - DIE STICKMASCHINE.