

WeaveMaster

Software for the weaving product development

Product description

WeaveMaster is a new CAD software, which facilitates the development and design of weaves for almost all fabrics-manufacturing areas in a unique way or supported. It offers products image simulations and machine control systems and is suited equally well for designers and practitioners as well as for teachers and learners. In no time you created for the shaft weaving viable solutions with the technical specifications necessary for production. **WeaveMaster** also serves on the development of bindings for the different effects in jacquard fabrics.

WeaveMaster been prepared following many years of industry and teaching practice and in accordance with the following reference books:

Binding technics of fabrics, construction and design with merchandise knowledge examples. Verlag Schiele & Schön, Berlin, Tel. (030) 2516029

- Band 1: Single surface shaft fabrics
- Band 2: Reinforced and more surface shaft fabrics
- Band 3: Leno-, Wrinkles-, Pile- and Jacquard fabrics

The results are presented in the specialist books of the binding techniques, is in the software design applied consistently and automatically for the most part. To represent the same Cartridge-colors be used to allow users to quickly deal with the simultaneous use of both media found. In the online help of the software is on the other hand, also referred to the relevant chapters in the books, so that the work will be supported on the screen.

System requirements

WeaveMaster is a 32-bit programming for the (IBM compatible) PC created and runs under Windows XP, Vista and 7. The application is installed as a single user.

The program is designed for a screen resolution of 1280 x 1024 or above. An adaptation from a high resolution is recommended. The color depth to 32 bit (true color) set.

What is needed is to install a CD-ROM drive as well as a mouse pointing device.

Functions

WeaveMaster Version 4.7 includes the following features.

- The working surface is available as cartridge paper, which can be chosen in every conceivable size and classification. To represent more realistic proportions can be adjusted according to the ratio setting in the warp and weft direction, a separate matched division. On the screen, two different cartridge papers represent simultaneously side by side The limited by the screen surface can work as needed in height and width by means of scroll bar scan be doubled or tripled.
- Unique binding points with 5 selectable by means of a mouse click cartridge colors set. All the lines and areas can be filled only by the mouse control.
- With bindings, receiving a regular shift is drawn only1 thread. The Binding is then automatically displayed with special functions. It is a constant as well as a varying off set possible. Furthermore, can be equally moving whole blocks of binding.
- A frame content can be filled quickly with a defined Binding.

- Up to10 standard elements (bindings that are used frequently) can be determined by the user. To draw this, just a click away.
- Binding elements, repeats or repeat parts can be turned, mirrored and inverted, reports can be enlarged and reproduced. The drawing of the fabric back (negative) or the changing of the repeat with a different beginning (Rapport image) is also only a click away. Subsequent insertion of the warp and weft lines is included in the program.
- The development of bindings over each other by changing the drawing, telescoping, or due to addition or leaving out of random points, contains the application specific automation functions.
- Special characters(arrows, circles, crosses) are the marks available for patrons.
- Reinforced fabrics are created automatically. The following features are present:
- 2-3 warp systems/1 weft system.
 - 1warp system/ 2 to3 weft systems.
 - Double and multiple fabrics with 2or3 full layers of fabric.
 - Lancier technic with 1 or 2 Lancier warps-and/or 1 to 2 Lancier weft systems.
 - Terry technology, 3- and4-shot.
- Display of fabrics cross sections.
- Developing bindings drawn of fabric cross sections.
- Search and display unwanted floats.
- Filling-in of repetitions (parentheses) in several levels. Are areas of the warp or of the weft put in brackets, then when you drag a frame not only displayed the detected warp and weft lines but also the number contained in the warp and weft threads. Clamp factors in setting parentheses calculated automatically.
- The width of a warp and weft area, dragging a frame is displayed (in cm).
- Submit texts anywhere.
- Draw auxiliary cartridges.
- Automatically create reed drawing-in. Checking and changing of reed drawing-in.
- The number of reed dents appear in the light compound brackets.
- Automatic creation of harness frames drawing-in. Duplicating, testing and conversion of harness drawing-in by different criteria. Show and save up to 5 additional warp functions (2 / 3 warp beam, etc.). The harness drawing-in can optionally be created in 6 colors to highlight certain features. Counting the heddles for the entire fabrics width.
- Symmetry of warping effects and bindings.
- Automatic generation of harness frames effects (shock cartridge). Show and save up to10 additional weft functions (control of the color sensor, exposing the fabric take-off regulator, tensioning or relaxing the warp, etc.), Stäubli-shock cartridge.
- Automatic generation of bindings from the harness frame sequence and the shock cartridge.
- Simulate a fabrics image in different sizes of binding, warping and weft sequence. Conversion to the desired "step". For this purpose, choice of fabrics density and yarn count. Structured (plastic) display. In the simulation window, any number of different representations are stored for comparison. Formation of through empty reed dents, compaction by reed stitch and exposing the fabric take-off regulator have been shown in fabric simulation.
- Design colors for the simulation can be set individually. For this purpose, 4 pallets each with 26 colors are available.
- Quick change a individual color design in the simulation.
- Re placing colors in warp and weft sequences.
- Leno bindings can be cartridge both as shown in the product image. The permit application through conventional harness drawing-in for Leno devices as well as deposed devices.
- The application provides comparative figures for binding-related fabrics density.
- All edits can be saved with the technical data and comments.

- To be printed
 - entire editing window
 - Parts of a processing window
 - Warping and weft sequences
 - entire simulation window
 - Parts of a simulation window.
- From a comprehensive binding library (more than 1500examples) canto be selected motif and binding templates and edited.
- Features for easier pattern analysis (decompose, gutting).
- Create an export file with all relevant production data integration such as PDA devices and other online systems.
- Size and format of lettering can to be selected according to the particular needs.
- The following plug-ins(add-ins) are integrated and canto be used optionally:
 - Amount of yarn and yarn costs (YarnMaster)
 - Calibrate the printer colors (ColorMaster)
 - o Displaying mélanges (MelangeMaster)
 - Calculation of the weave density or yarn settings, reed calculations (*ConstructMaster*)
 - o Machine controllers ARM-Designer und -Selectron
 - o Machine controllers Sulzer-Weaving machines with Import/Export to PAS for Windows
 - Machine controllers **Dornier-Weaving machines**
 - o Machine controllers Stäubli-dobbies
 - Further machine controls in preparation
- The user has a context-sensitive online help with references to the relevant chapter of the professional books available.
- The program is integrated into a wizard, step by step into the key features introduced. In addition, there is an extensive tutorial. All functions are displayed in it in an animated manner.

Subject to change for product optimization



Figure1:Work surface with the representation of a cartridge (Binding, reed and harness frame drawing-in, shaft sequence, warping and weft sequence, including notes)



Figure2: bindings with different offsets(Automatic Development)







Figure4: Cartridge with parentheses (2 levels of parentheses in the warp)





Figure6: Bindings, after the four-set method developed automatically







Figure13: Cross sectional view



Figure14: Fabrics image simulation



Figure15: Fabric simulation with empty reed gaps



Schärfolge			I	🔽 Scl	nußf	folge			
Farbbez.	Garnbez.	Feinheit				Farbbez.	Garnbez.	Feinheit	
H'blau 155	Eder 44	Nm 24/2		2	A	H'blau 155	Eder 44	Nm 24/2	
H'blau 212	Eder 44	Nm 24/2		4	В	M'oliv 876	Eder 44	Nm 24/2	
H'blau 155	Eder 44	Nm 24/2		4	С	H'tomate 233	Eder 44	Nm 24/2	
M'grün 433	Eder 44	Nm 24/2		1	D	D'blau 212	Eder 44	Nm 24/2	
H'blau 155	Eder 44	Nm 24/2		4	С	H'tomate 233	Eder 44	Nm 24/2	
H'bordeaux 24	Aller 65	50*2 tex							
1				4					Ŀ
2	🗖 symm	etriert	15		-				1

Figure17: Representation of the warp and weft sequence For the print out



	<u>ii — I</u>		<u> 111 –</u>	- 111
(╫──		-##	
	₩—			
			111	
		4 <u>1</u> -	111	
	╫╊╺━━╋		-##-	





Figures 18-21: Presentation of the leno weave pattern

🝺 YarnMaster		1.4				×
<u>D</u> atei <u>B</u> earbeiti	en <u>U</u> ptionen <u>H</u> ilfe	Info				
Grun	dlagen	Garnbedarf G	ewebe	Bild	Garnkosten	
	Kettfäden/cm fertig	24	Schärfolge			
	Schuß/cm roh	51,49	6A+4B+6A	=16		
	Fertigbreite	150+2×1,5	Schußfolae	Gam	sorte der Leiste 🛛 🗛	
	Rietbreite	161,1	1A=1			
Kettfad	enzahl ohne Leisten	3600	1			
	Fadenzahl 2 Leisten	72	[Webeina	rb. der Kette		
Kettf	adenzahl mit Leisten	3672				
	Materialverlust %	12		NAN 7 8 9	1	
				4 5 6 I 2 3		

WarnMaster Datei Bearbeiten Optionen I	Hilfe Info		
Grundlagen	Garnbedarf Gewebe	Bild m 617880,0 Rapp.	Garnkosten
Kette A 3444 H'blau 1 B 8743 h'tomate	Nm 20/2 5 43,6 kg Nm 20/2 5 14,1 kg	A 0122 Weiß	Nm 18/2 125,7 kg
	57,7 kg		125,7 kg
_Versuch0		Ber	echnen 🚔

📒 Yan	nMaster								
<u>D</u> atei	<u>B</u> earbeiten	<u>O</u> ptionen	<u>H</u> ilfe	Info					
	Grundla	gen	Υ	Ga	rnbedarf Geweb	ie Y		Bild	Garnkosten
	3444 8743 0122	H'blau 1 h'tomate Weiß	AB		43,6 14,1 125,7	12,22 13,44 9,67	532,79 189,50 1215,52	4,44 1,58 10,13	1937,81 16,15 Gesamt-Garnkosten/Einheit

Figures 22- 24:Additional module amount of yarn and yarn costs



Figure25: additional module the printer colors calibration



Figure26: Additional module represent mélanges

WeaveMaster - Gewebedaten		
Gewebeeinstellung	Webdaten	Hilfsprogramme
Nm 12/2 100 Wolle Streichgam h Dreh. 65*2 tex 70 Wo / 30 PES 0E-Rotorgam Webdichte löschen Fader Kette: 0.98 13,00 Schuß: 0,73 18,00 Kette + Schuß: 0,85 18,00	 Steifheit der Kette 0,83 Steifheit des Schusses 0,83 0.75 Maschinenbreite cm 170 ndichte löschen 9/m² +K 332,5 +S 245,7 578,2 	Bindung Jöschen
Einstellungsverhältnis 1,06	1,35	Berechnen

Figure27: Weave data: weave density determine

Gewebeeinstellung	Webdaten	Hilfsprogramme
24,90 Kettfd./cm roh Berecht 12,00 Kettfd./cm fertig © Ri 3 à 2 Anzahl Rietlücken im Ri 2 à 6 Anzahl Rietlücken im Ri 7 à 2 Vebeinarb.d.Schusse Webeinarb.d.Schusse Rohbre Veredlungs-Breitenve Fertigbreite ohne Leist Fertigbreite 1 Leist Fertigbreite 1 Leist	hung etwerte ettfadenzahlen lapport 12 lapport 32 es % =	Kettfäden Rohre Kettfd. ohne Leisten 24 8 Leisten: 2 x 0 0 Kettfd. mit Leisten 24 8 Genaue Rietfeinheit 40,00 Gewählte Rietfeinheit 40,0 Endgültige Rietbreite cm 2,0
Verssuch1		1. Lösung

Figure 28: Weave data: reed calculations



Figure29: Machine control ARM-DESIGNER:

Development - Copyright Prof. Martin Kienbaum Nürnberger Str. 34 D-95448 Bayreuth Tel. +49 921/50705955 Fax +49 921/50705956 www.Kienbaum-Webereitechnik.de www.Kienbaum-Gewebebindungen Sales - Distribution CH-Consulting Breslauer Str. 6 D-95497 Goldkronach Tel. +49 9273 574 913 Mob +49 176 24 969 867 <u>www.weavestruct.de</u> <u>E-Mail: weavestruct@gmail.com</u>

Regional Agent 區域代理:
A&A Consultant 香港A&A諮詢
③: www.hkaac.net

@: info@hkaac.net ☎: +852-9023 4800 〒: PO Box 143,Tung Chung, HONG KONG (香港)