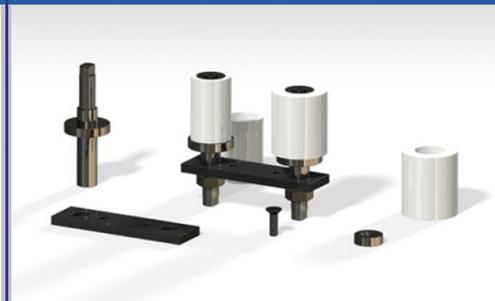


SHUTTLES & ACCESSORIES



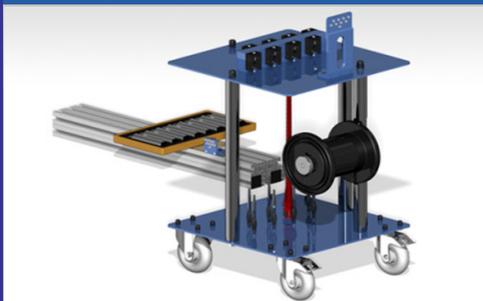
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SHUTTLE GUIDE UNIT



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ADJUSTMENT DEVICE



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PICKER & BRAKE INSERTS



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FILLING BRAKE



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YARN CUTTER



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ULTRASONIC WELDING



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YARN-& FABRIC GUIDES



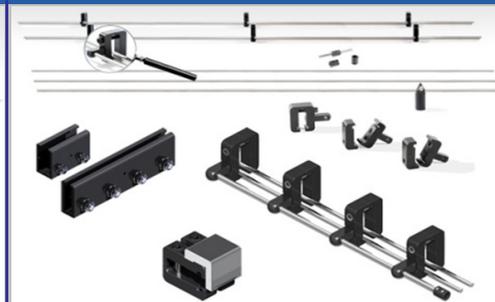
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HACOBA WINDER

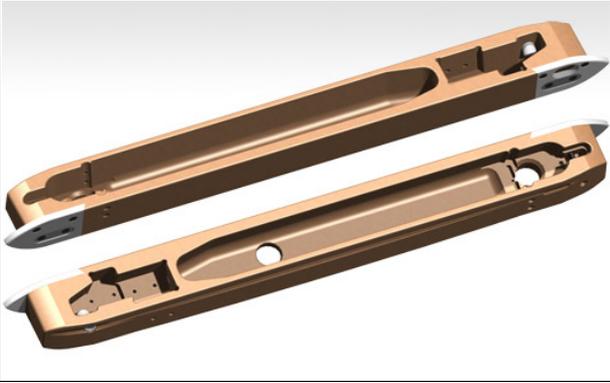
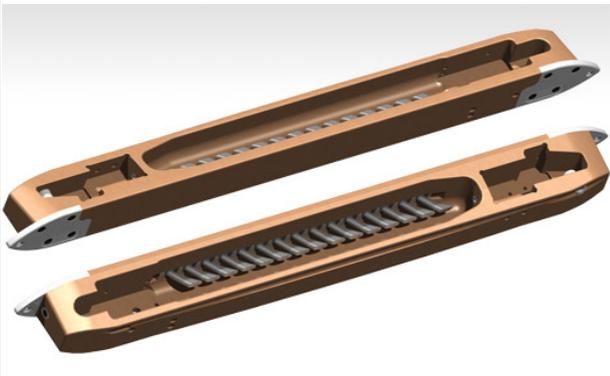


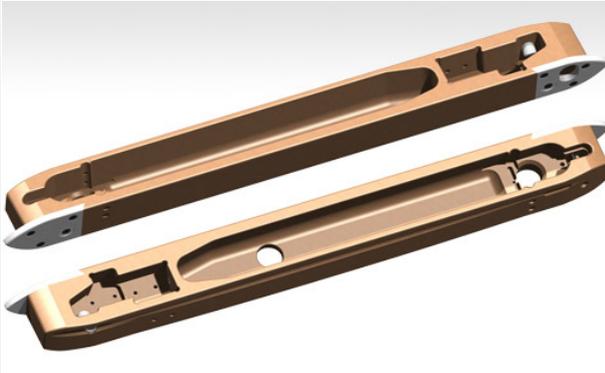
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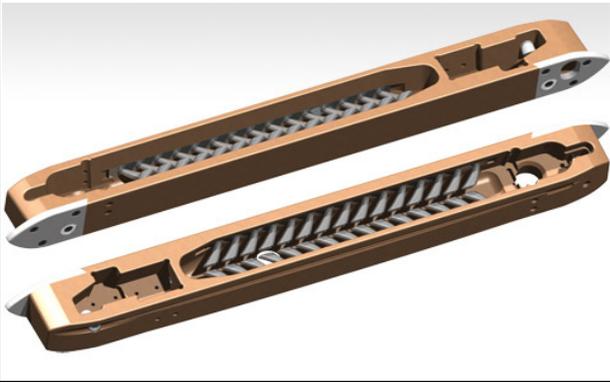
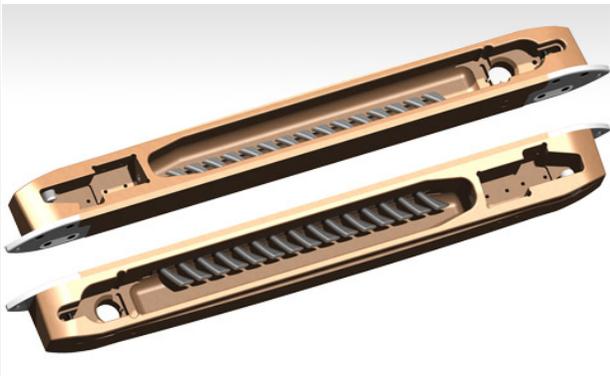
REED ACCESSORIES



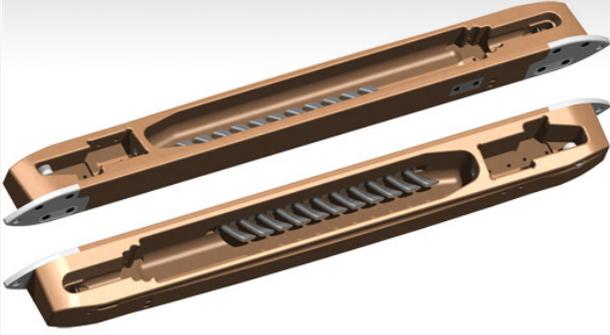
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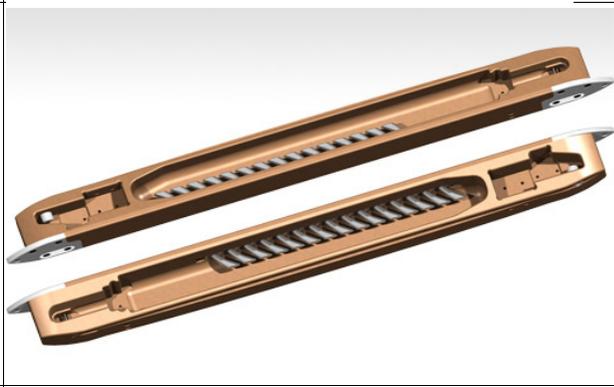
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
704-82-80-ALG	<p><b>Shuttle type ALG</b>                      HighTec Shuttle type ALG on the highest precision level, with polished sliding skirts, equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ALL, 1 Shuttle nose type ALR, and 2 Sensor plates type A. Application: Felt weaving looms with HPI hydraulic insertion system, equipped with an automatic pirn changer on the left side of the loom. Could also be used at looms with manual pirn change and rectilinear or inclined shuttle-table. Shuttle dimensions: 750/700x80x67/58 mm.</p>	
704-82-80-ALK	<p><b>Shuttle type ALK</b>                      HighTec Shuttle type ALK on the highest precision level, with polished sliding skirts and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ALL, 1 Shuttle nose type ALR, 2 Sensor plates type A, 1 Slide bow type A, 1 Clamping spring, 1 Pirn holder, 1 Yarn cutter type B and 1 Filling brake type B. Application: Felt weaving looms with HPI hydraulic insertion system, equipped with an automatic pirn changer on the left side of the loom. Could also be used at looms with manual pirn change and rectilinear or inclined shuttle-table. Shuttle dimensions: 750/700x80x67/58 mm.</p>	
704-82-80-ARG-N1	<p><b>Shuttle type ARG-N1</b>                      HighTec Shuttle type ARG-N1 on the highest precision level, with polished sliding skirts, equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Special brush strip 03-070 and 1 Special brush strip 10-229. Application: Felt weaving looms equipped with a automatic pirn changer on the right side of the loom equipped with a pirn changing mandrel. Shuttle dimensions: 760/700x80x67/50 mm.</p>	

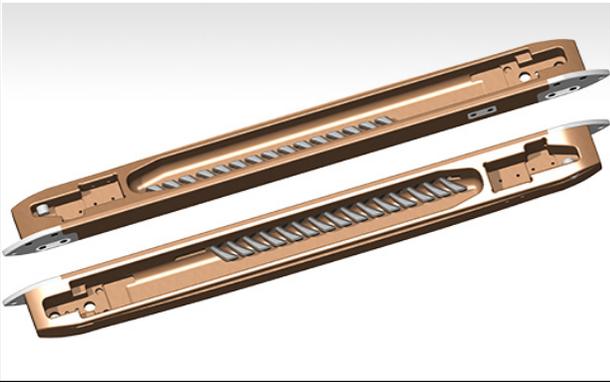
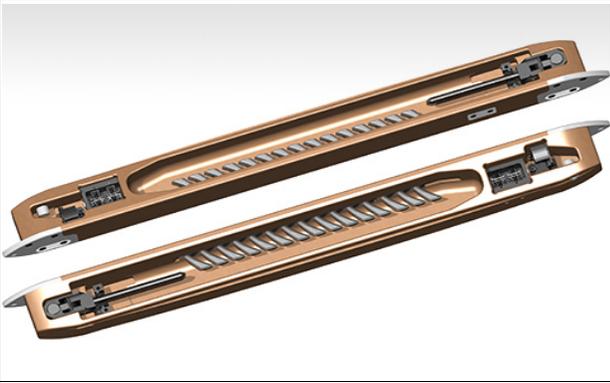
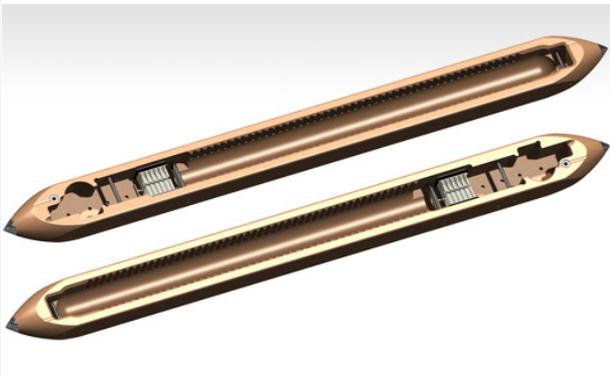
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
704-82-80-ARK-N1	<p><b>Shuttle type ARK-N1</b>                      HighTec Shuttle type ARK-N1 on the highest precision level, with polished sliding skirts and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Clamping spring type TEX, 1 Pirm holder type TEX, 1 Yarn cutter type A, 1 Filling brake type BR, 1 Special brush strip 03-070 and 1 Special brush strip 10-229. Application: Felt weaving looms equipped with a automatic pirm changer on the right side of the loom equipped with a pirm changing mandrel. Shuttle dimensions: 760/700x80x67/50 mm.</p>	
704-82-80-BLG	<p><b>Shuttle type BLG</b>                      HighTec Shuttle type BLG on the highest precision level, with polished sliding skirts, equipped with: 2 Ceramic eyelets, 1 Shuttle nose type BLL, 1 Shuttle nose type BLR, and 2 Sensor plates type B. Application: Felt weaving looms with HPII hydraulic insertion system, equipped with an automatic pirm changer on the left side of the loom and rectilinear or inclined shuttle-table. Could also be used at looms with manual pirm change. Shuttle dimensions: 750/700x80x67/58 mm.</p>	
704-82-80-BLK	<p><b>Shuttle type BLK</b>                      HighTec Shuttle type BLK on the highest precision level, with polished sliding skirts and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type BLL, 1 Shuttle nose type BLR, 2 Sensor plates type B, 1 Slide bow type B, 1 Clamping spring, 1 Pirm holder, 1 Yarn cutter type B and 1 Filling brake type B. Application: Felt weaving looms with HPII hydraulic insertion system, equipped with an automatic pirm changer on the left side of the loom and rectilinear or inclined shuttle-table. Could also be used at looms with manual pirm change. Shuttle dimensions: 750/700x80x67/58 mm.</p>	

PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
704-82-80-BLG-N1	<p><b>Shuttle type BLG-N1</b>                      HighTec Shuttle type BLG-N1 on the highest precision level, with polished sliding skids, equipped with: 2 Ceramic eyelets, 1 Shuttle nose type BLL, 1 Shuttle nose type BLR, 2 Sensor plates type B, 2 Special brush strip 03-070 and 2 Special brush strip 12-277.                      Application: Felt weaving looms with HPII hydraulic insertion system, equipped with an automatic pirn changer on the left side of the loom and rectilinear or inclined shuttle-table. Could also be used at looms with manual pirn change. Shuttle dimensions: 750/700x80x67/58 mm.</p>	
704-82-80-BLK-N1	<p><b>Shuttle type BLK-N1</b>                      HighTec Shuttle type BLK-N1 on the highest precision level, with polished sliding skids and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type BLL, 1 Shuttle nose type BLR, 2 Sensor plates type B, 1 Slide bow type B, 1 Clamping spring, 1 Pirn holder, 1 Yarn cutter type B, 1 Filling brake type B, 2 Special brush strip 03-070 and 2 Special brush strip 12-277. Application: Felt weaving looms with HPII hydraulic insertion system, equipped with an automatic pirn changer on the left side of the loom and rectilinear or inclined shuttle-table. Could also be used at looms with manual pirn change. Shuttle dimensions: 750/700x80x67/58 mm.</p>	
704-82-80-CRG-N1	<p><b>Shuttle type CRG-N1</b>                      HighTec Shuttle type CRG-N1 on the highest precision level, with polished sliding skids, equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Special brush strip 03-070 and 1 Special brush strip 10-229.                      Application: Felt weaving looms with manual pirn change. Shuttle dimensions: 760/700x80x67/50 mm.</p>	

PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
704-82-80-CRK-N1	<p><b>Shuttle type CRK-N1</b>                      HighTec Shuttle type CRK-N1 on the highest precision level, with polished sliding skirts and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Slide bow type C, 1 Pirn chuck type Z, 1 Clamping spring, 1 Pirn holder type CS, 1 Yarn cutter type A, 1 Filling brake type BR, 1 Special brush strip 03-070 and 1 Special brush strip 10-229.. Application: Felt weaving looms with manual pirn change. Shuttle dimensions: 760/700x80x67/50 mm.</p>	
704-82-80-CRK-N1-AL	<p><b>Shuttle type CRK-N1-AL</b>                      HighTec Shuttle type CRK-N1-AL on the highest precision level, with polished sliding skirts and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Slide bow type C, 1 Pirn chuck type Z, 1 Clamping spring, 1 Pirn holder type CS-AL, 1 Yarn cutter type A, 1 Filling brake type BR-HCS, 1 Special brush strip 03-070 and 1 Special brush strip 10-229. Application: Felt weaving looms with manual pirn change. Shuttle dimensions: 760/700x80x67/50 mm.</p>	
727-83-67-CRK-SS-N1-CE	<p><b>Shuttle type CRK-SS-N1-CE</b>                      HighTec Shuttle type CRK-SS-N1-CE with special height 58 mm, on the highest precision level, with polished sliding skirts, equipped with: 2 Ceramic eyelets, 2 steel tips, 2 Sensor plates type A, 1 Slide bow type C, 1 Pirn chuck type ZCE, 1 Clamping spring, 1 Pirn holder type CSCE, 1 Yarn cutter type A, 1 Filling brake type B, 1 Special brush strip 03-070-S and 1 Special brush strip 11-254. Application: At looms with manual pirn change and mechanical picking system. Shuttle Dimensions: 750/724x80x58/50 mm.</p>	

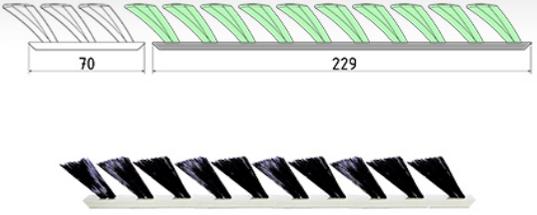
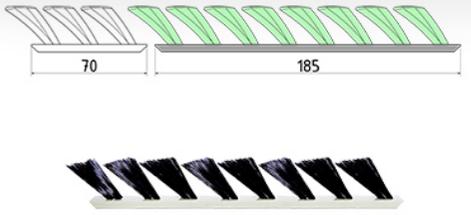
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
704-82-80-DRG-N1	<p><b>Shuttle type DRG-N1</b>                      HighTec Shuttle type DRG-N1 on the highest precision level for pirn spindle fitting, with polished sliding skids, equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Sensor plate type D, 1 Special brush strip 03-070 and 1 Special brush strip 08-185. Application: At Weaving looms with hydraulic picking units and manual pirn changing. Shuttle dimensions: 760/700x80x67/50 mm</p>	
704-82-80-DRK-N1	<p><b>Shuttle type DRK-N1</b>                      HighTec Shuttle type DRK-N1 on the highest precision level for pirn spindel fitting, with polished sliding skids and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Sensor plate type D, 1 Pirn holder type D, 1 Yarn cutter type A, 1 Filling brake type BR, 1 Pirn spindle type A2, 1 Special brush strip 03-070 and 1 Special brush strip 08-185. Application: At Weaving looms with hydraulic picking units and manual pirn changing. Shuttle dimensions: 760/700x80x67/50 mm</p>	
704-82-80-DRK-H-N1	<p><b>Shuttle type DRK-H-N1</b>                      HighTec Shuttle type DRK-H-N1 on the highest precision level for pirn spindel fitting, with polished sliding skids and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Sensor plate type D, 1 Pirn holder type DH, 1 Yarn cutter type A, 1 Filling brake type BR, 1 Pirn spindle type A4, 1 Special brush strip 03-070 and 1 Special brush strip 08-185. Application: At Weaving looms with hydraulic picking units and manual pirn changing. Shuttle dimensions: 760/700x80x67/50 mm</p>	

PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
704-82-80-DRK-DM-N1	<p><b>Shuttle type DRK-DM-N1</b>                      HighTec Shuttle type DRK-DM-N1 on the highest precision level for pirn spindel fitting, with polished sliding skids and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Sensor plate type D, 1 Pirn holder type D, 1 Yarn cutter type A, 1 Filling brake type BR, 1 Pirn spindle type A4, 1 Special brush strip 03-070 and 1 Special brush strip 08-185. Application: At Weaving looms with hydraulic picking units and manual pirn changing. Shuttle dimensions: 760/700x80x67/50 mm</p>	
804-82-80-DRGL-N1	<p><b>Shuttle type DRGL-N1</b>                      HighTec Shuttle type DRGL-N1 on the highest precision level for pirn spindle fitting, with polished sliding skids, equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Special brush strip 03-070 and 1 Special brush strip 12-277. Application: At Weaving looms with hydraulic picking units and manual pirn changing. Especially suitable for pirns without rings, with a pirn length of 500 mm. Shuttle dimensions: <b>860/800</b>x80x67/50 mm</p>	
804-82-80-DRKL-N1	<p><b>Shuttle type DRKL-N1</b>                      HighTec Shuttle type DRKL-N1 on the highest precision level for pirn spindel fitting, with polished sliding skids and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Pirn holder type D, 1 Yarn cutter type A, 1 Filling brake type BR, 1 Balloon spring pirn spindle, 1 Special brush strip 03-070 and 1 Special brush strip 12-277. Application: At Weaving looms with hydraulic picking units and manual pirn changing. Especially suitable for pirns without rings, with a pirn length of 500 mm. Shuttle dimensions: <b>860/800</b>x80x67/50 mm</p>	

PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
DRGL-RGI-N1	<p><b>High-tech Shuttle type DRLG-RGI-N1</b>                      High-tech shuttle on the highest precision level, with polished sliding skids equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Sensor plate type D, 1 Special brush strip 03-070 and 1 Special brush strip 12-277.                      Shuttle dimensions: 860/800x80x67/50 mm.</p>	
DRKL-RGI-N1	<p><b>High-tech Shuttle type DRLK-RGI-N1</b>                      High-tech shuttle on the highest precision level, with polished sliding skids and fully equipped with: 2 Ceramic eyelets, 1 Shuttle nose type ARL, 1 Shuttle nose type ARR, 2 Sensor plates type A, 1 Sensor plate type D, 1 Yarn cutter type A, 1 Filling brake type BR, 1 Special brush strip 03-070, 1 Special brush strip 12-277 and 1 complete RGI ejector provided by customer. Shuttle dimensions: 860/800x80x67/50 mm.</p>	
772-69-60-MSG	<p><b>Shuttle type MSG</b>                      HighTec Shuttle type MSG on the highest precision level, with 2 sliding skids: Basic equipment with: 2 Steel point D22, 2 Dowel pin DIN 6325 Ø5 m6 x 60 mm for fixing the Elastic Strap, 1 Ceramic eyelet Ø10x25, 2 Brush strips <b>38-15.0-050</b> (aluminum reinforced) with 35 with 35 bristle bundles and 2 Dowel pin DIN 6325 Ø5 m6 x 60 mm as filling guiders.                      Application: For use at weaving with non-rewound cops like it is eg usual at the corrugator belts production. Shuttle dimensions: 782/768x66,5x56/52 mm</p>	

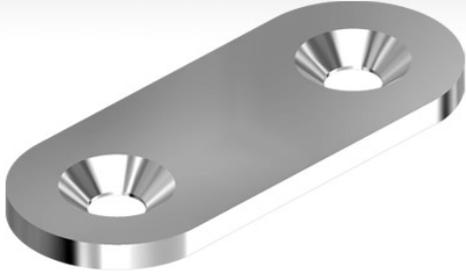
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
772-69-60-MSK	<p><b>Shuttle type MSK</b>                      HighTec Shuttle type MSK on in highest precision level with 2 sliding skids and fully equipped with: 1 shuttle made of fibre reinforced laminated plastic material with 2 Steel point D22, 2 Dowel pin DIN 6325 Ø5 m6 x 60 mm for fixing the Elastic Strap, 1 Ceramic eyelet Ø10x25, 2 Brush strips 38-15.0-050 (aluminum reinforced) with 35 with 35 bristle bundles, 2 Dowel pin DIN 6325 Ø5 m6 x 60 mm as filling guiders, 1 Yarn cutter type A, 1 Filling brake type MS and 1 Elastic Strap.                      Application: For use at weaving with non-rewound cops like it is eg usual at the corrugator belts production. Shuttle dimensions: 792/768x66,5x56/52 mm</p>	
9914023-30	<p><b>Special Brush Strip 350-030</b>                      Special brush strip to be spiked at the shuttle, to break down the balloon-building and to prevent the slipping of the layers during the filling run. 15 brush sections are located at the strip base and every brush section consists of 4 brush-bunches placed 2 and 2 above the other. Dimensions: Length = 350 mm, width = 15 mm, height = 30 mm. The fiber is black and made from PA6, diameter 0.30 mm.</p>	
070-040	<p><b>Special brush strip 03-070</b>                      Brush strip segment to be spiked at the shuttle, to break down the balloon-building and to prevent the slipping of the layers during the filling run. 3 brush sections are located at the strip base and every brush section consists of 4 brush-bunches placed 2 above the other and 2 abreast. For replacing the front brush section, as experience has shown that this shows the greatest wear. Dimensions: Length = approx. 70 mm, width = 15 mm, height = 30 mm. The fiber is black and made from PA6, diameter 0.30 mm.</p>	

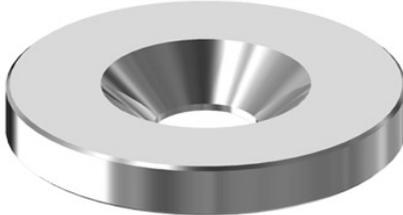
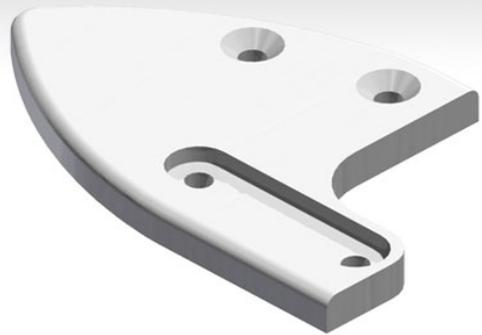
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
070-040	<p><b>Special brush strip 03-070-S</b>                      Brush strip segment to be spiked at the shuttle, to break down the balloon-building and to prevent the slipping of the layers during the filling run. 3 brush sections are located at the strip base and every brush section consists of 4 brush-bunches placed 2 above the other and 2 abreast. For replacing the front brush section, as experience has shown that this shows the greatest wear. Dimensions: Length = approx. 70 mm, width = 15 mm, height = 30 mm. The fiber is black and made from PA6, diameter <b>0.40</b> mm.</p>	
277-030	<p><b>Special Brush Strip 12-277</b>                      Special brush strip to be spiked at the shuttle, to break down the balloon-building and to prevent the slipping of the layers during the filling run. 12 brush sections are located at the strip base and every brush section consists of 4 brush-bunches placed 2 and 2 above the other. Dimensions: Length = 277 mm, width = 15 mm, height = 30 mm. The fiber is black and made from PA6, diameter <b>0.30</b> mm.</p>	
254-030	<p><b>Special Brush Strip 11-254</b>                      Special brush strip to be spiked at the shuttle, to break down the balloon-building and to prevent the slipping of the layers during the filling run. 11 brush sections are located at the strip base and every brush section consists of 4 brush-bunches placed 2 and 2 above the other. Dimensions: Length = 254 mm, width = 15 mm, height = 30 mm. The fiber is black and made from PA6, diameter <b>0.30</b> mm.</p>	

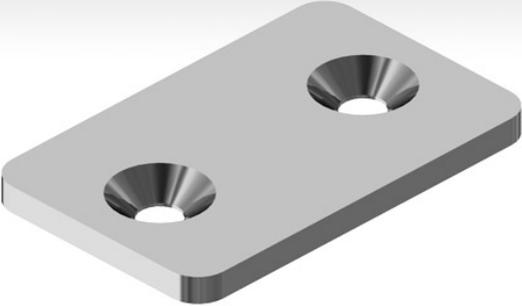
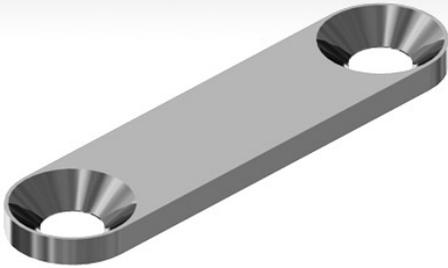
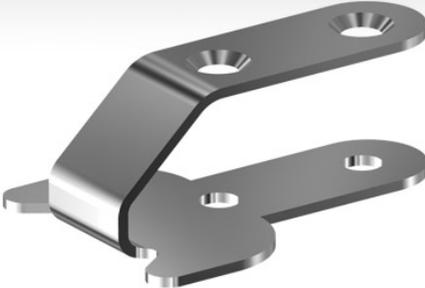
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
229-030	<p><b>Special Brush Strip 10-229</b> Special brush strip to be spiked at the shuttle, to break down the balloon-building and to prevent the slipping of the layers during the filling run. 10 brush sections are located at the strip base and every brush section consists of 4 brush-bunches placed 2 and 2 above the other. Dimensions: Length = 277 mm, width = 15 mm, height = 30 mm. The fiber is black and made from PA6, diameter <b>0.30</b> mm.</p>	
185-030	<p><b>Special Brush Strip 08-185</b> Special brush strip to be spiked at the shuttle, to break down the balloon-building and to prevent the slipping of the layers during the filling run. 8 brush sections are located at the strip base and every brush section consists of 4 brush-bunches placed 2 and 2 above the other. Dimensions: Length = 185 mm, width = 15 mm, height = 30 mm. The fiber is black and made from PA6, diameter <b>0.30</b> mm.</p>	
14-1812-011	<p><b>Complete elastic strap</b> Complete elastic strap consisting of: 1 Elastic strap, 1 Clamping Hook and 1 Cylindrical pin DIN 6325 Ø5 m6 x 60 mm. Application: For covering the cop in the Shuttle type MSK.</p>	

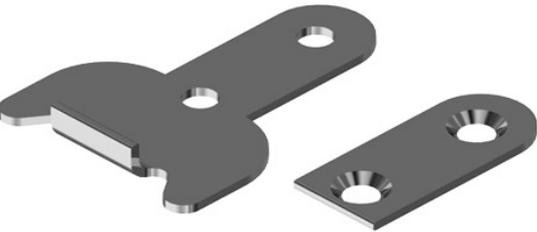
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
14-1812-001	<p><b>Elastic strap</b> Elastic strap for fastening the Clamping Hook and Cilindrical pin. Dimensions without pretension: L x W = 485 mm x 35 mm</p>	
14-1612-01	<p><b>Clamping Hook</b> Clamping hook for the fastening of the elastic rubber belt.</p>	
130907-ALL	<p><b>Shuttle nose type ALL</b> Changeable shuttle nose type ALL made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type ALG and type ALK, left side.</p>	

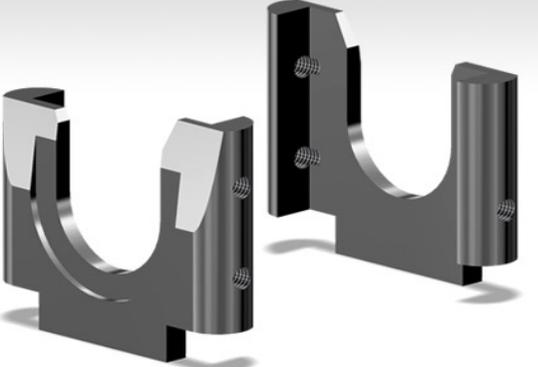
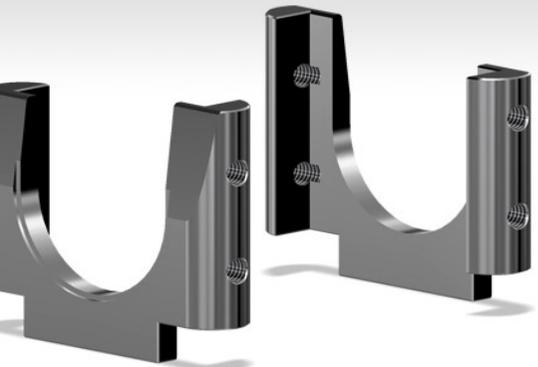
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
130907-ALR	<p><b>Shuttle nose type ALR</b> Changeable shuttle nose type ALR made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type ALG and type ALK, right side.</p>	
2909-ARL	<p><b>Shuttle nose type ARL</b> Changeable shuttle nose type ARL made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type ARG, ARK, CRG, CRK, DRG and DRK, DRGL, DRKL, DRGL-RGI and DRKL-RGI, left side.</p>	
2909-ARR	<p><b>Shuttle nose type ARR</b> Changeable shuttle nose type ARR made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type ARG, ARK, CRG, CRK, DRG and DRK, DRGL, DRKL, DRGL-RGI and DRKL-RGI, right side.</p>	

PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
10-1505-03	<p><b>Sensor plate type A</b> Sensor plate type A for shuttles type ALG, ALK, ARG, ARK, CRG, CRK, CRG-SS, CRK-SS, DRG und DRK.</p>	
130907-BLL	<p><b>Shuttle nose type BLL</b> Changeable Shuttle nose type BLL made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type BLG and BLK, left side.</p>	
130907-BLR	<p><b>Shuttle nose type BLR</b> Changeable shuttle nose type BLR made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type BLG and BLK, right side.</p>	

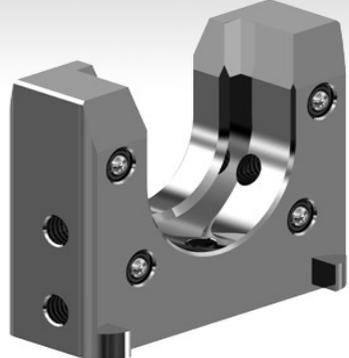
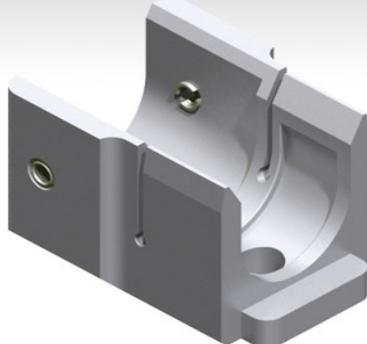
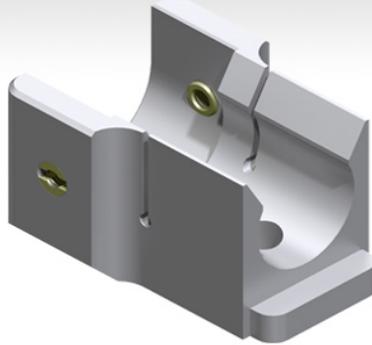
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
10-1505-04	<p><b>Sensor plate type B</b> Sensor plate type B for Shuttles type BLG and BLK.</p>	
130907-VRL	<p><b>Shuttle nose type VRL</b> Changeable Shuttle nose type VRL made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type VRG and VRK, left side.</p>	
130907-VRR	<p><b>Shuttle nose type VRR</b> Changeable Shuttle nose type VRR made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd). Application: Shuttles type VRG and VRK, right side.</p>	

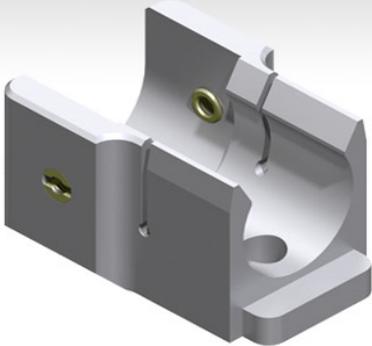
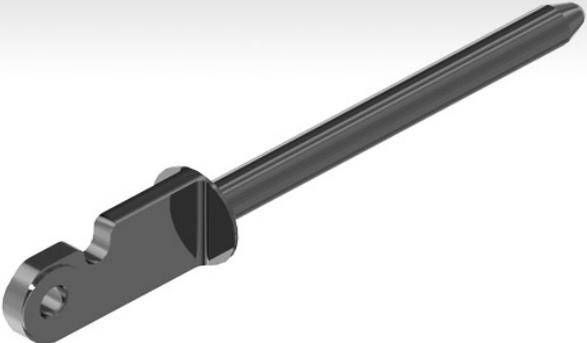
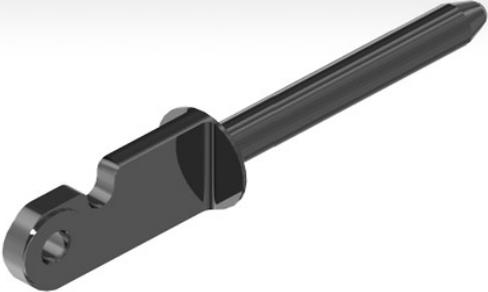
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
12-1010-01	<p><b>Sensor plate type D</b> Sensor plate type D for Shuttles type DRG, DRK, DRG-N1 und DRK-N1.</p>	
13-1107-01	<p><b>Sensor plate type V</b> Sensor plate type V for shuttles type VRG and VRK.</p>	
10-1505-02	<p><b>Slide bow type A</b> Slide bow made from 1,6 mm band steel, hardened, laser cutted, curved, countersunked and grinded. Application: At all Weaving Looms without pirchangers and at Weaving-Looms with pirchangers which run the changing process in a ejection-mode under usage of discharge cylinders.</p>	

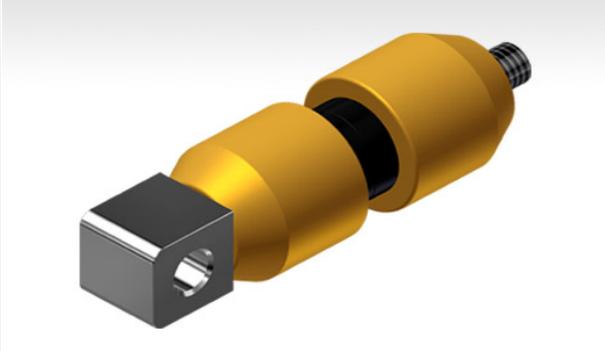
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
10-1505-022	<p><b>Slide bow type B</b> Divided Slide bow, made from 1,6 mm band steel, hardened, laser cutted, curved, countersunked and grinded. Application: At all Weaving Looms with pirnchangers which run the changing process in a clamping-mode under usage of gripper systems.</p>	
10-2711-01	<p><b>Slide bow type C</b> Slide bow with slot, made from 1,6 mm band steel, hardened, laser cutted, curved, countersunked and grinded. Application: At shuttles equipped with pirn chucks type Z.</p>	
10-1505-01	<p><b>Pirn holder type A</b> CNC milled Pirn holder for Shuttle type ALK, BLK and BLK-N1. The surface is zinc plated.</p>	

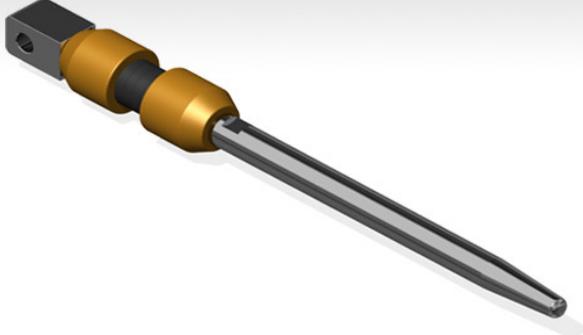
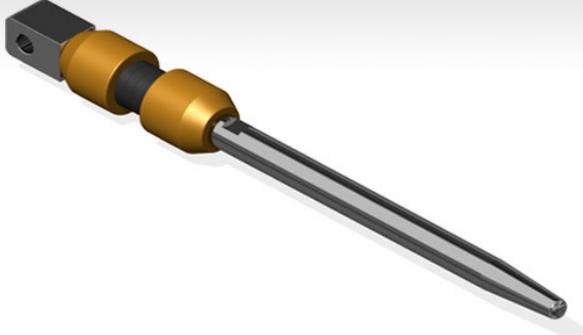
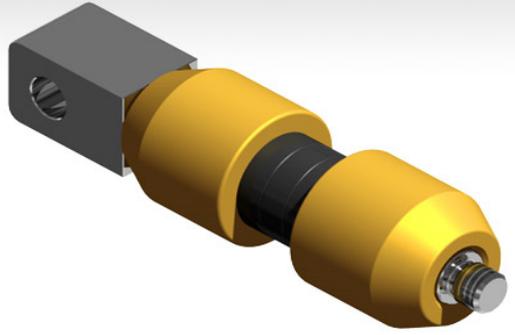
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
10-2511-01S	<p><b>Pirn holder type CS</b> Pirn holder for shuttle with Pirn chuck type Z. Application: Weaving shuttles with pirn chuck or pirn mandrels.</p>	
17-0909-01	<p><b>Pirn holder type CS-AL</b> Pirn holder for shuttle with Pirn chuck type Z. Weaving shuttles with pirn chuck or pirn mandrels. Shuttle type CRK-N1-AL</p>	
10-2511-01CE	<p><b>Pirn holder type CSCE</b> Pirn holder for shuttle with Pirn chuck type ZCE. Application: Shuttle type CRK-SS-N1-CE</p>	

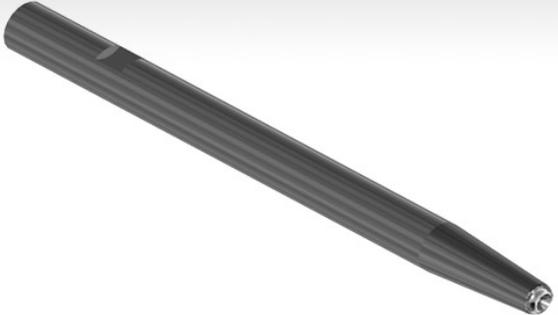
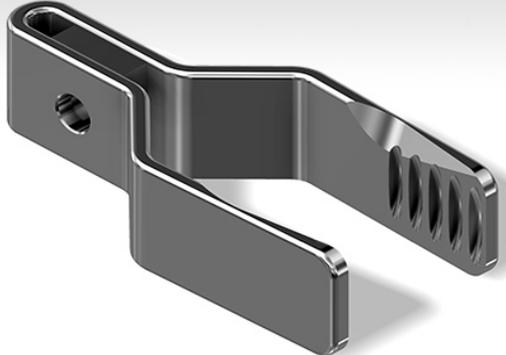
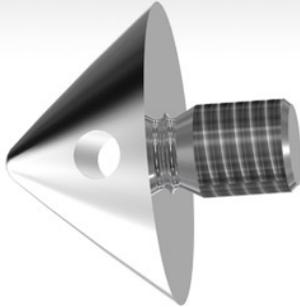
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
13-1801-01	<p><b>Pirn holder type D</b>                      Pirn holder type D for shuttle type DRK-N1 &amp; type DRKL-N1. Application: Weaving shuttles with Balloon spring pirn spindle or Pirn spindles type A.</p>	
15-1307-01 DH	<p><b>Pirn holder type DH</b>                      Pirn holder type DH for shuttle type DRK-N1 &amp; type DRKL-N1. Application: Weaving shuttles with Balloon spring pirn spindle or Pirn spindles type A.</p>	
12-3009-01	<p><b>Pirn holder type TEX</b>                      Pirn holder type TEX made of steel for the precisely positioning of pirns with 4 spring steel rings.                      Application: Shuttle type ARK &amp; Shuttle type ARK2.</p>	

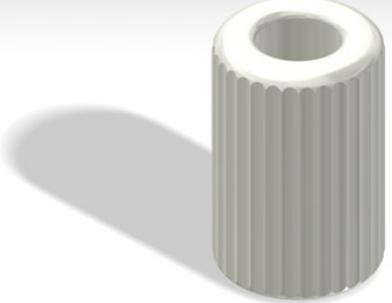
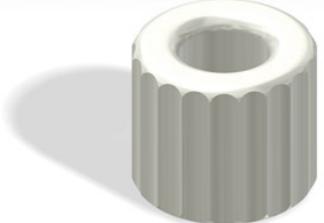
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
14-2411-02	<p><b>Pirn holder type TEX3</b>                      Pirn holder type TEX3 made of steel for the precisely positioning of pins with short cylindrical end shapes. With 4 ball-end thrust screws M6 (with LONG-LOK thread lock nylon) to adjust the pin position and a grub screw M5x8 (with LONG-LOK thread lock nylon) at the bottom for correction of the pin alignment.                      Application: Shuttle type ARK3.</p>	
12-3009-02	<p><b>Clamping spring type TEX</b>                      Clamping spring made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd) for the precisely positioning of pins with 4 spring steel rings. Application: Shuttle type ARK.</p>	
14-2411-01	<p><b>Clamping spring type TEX3</b>                      Clamping spring made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd) for the precisely positioning of pins without cone and rings. Application: Shuttle type ARK3.</p>	

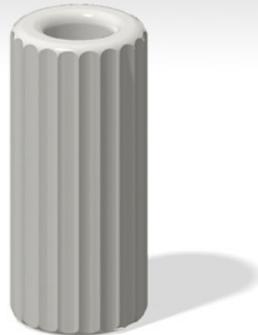
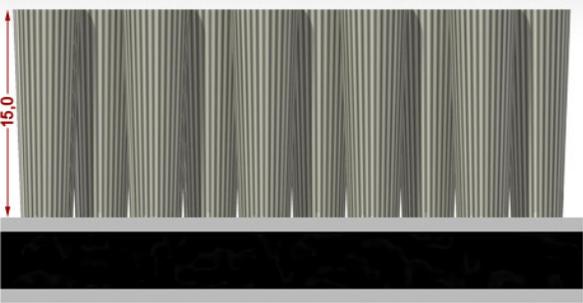
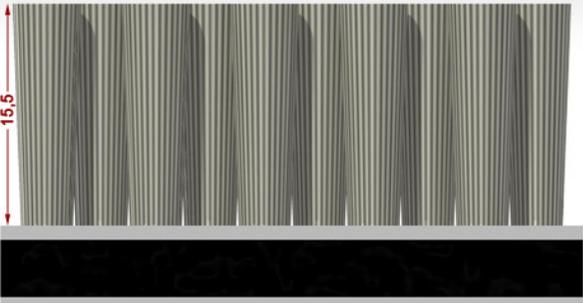
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
13-0807-01	<p><b>Clamping spring type TEXV</b> Clamping spring type TEXV made of Polyamid P6 (thermoplastic "white POM" Polyacetal / Polyformaldehyd) for the precisely positioning of the pirns in the shuttle. Designed for pirns with a cylindrical pirn end L=23 x D=30 mm without steel rings. Application: Shuttle type ARK2.</p>	
11-0310-01	<p><b>Pirn chuck type Z</b> Pirn chuck for the fixation of the filling pirn inside the shuttle and with the simultaneous use of the notched slide bow type C.</p>	
11-0310-01CE	<p><b>Pirn chuck type ZCE</b> Pirn chuck for the fixation of the filling pirn inside the shuttle and with the simultaneous use of the notched slide bow type C. Application: Shuttle type CRK-SS-N1-CE. Total length = 102,5 mm</p>	

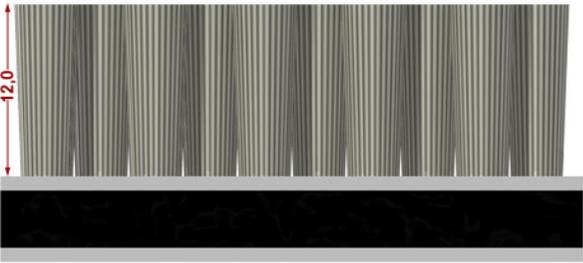
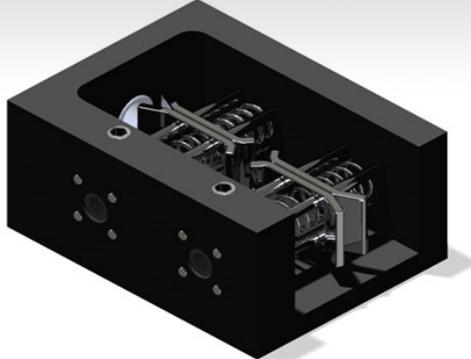
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
10-2807-00	<p><b>Balloon spring pirn spindle</b>                      Balloon spring pirn spindle for support the filling pirn inside the Shuttle type DRK. Both ballon springs type B allow to fixed the pirn without play. Longitude of the Pirn spindle = 232 mm. Application: Shuttle type DRK, DRK-N1, DRKL-N1</p>	
10-2807-01K	<p><b>Balloon spring pirn spindle base</b>                      Complete Balloon spring pirn spindle base consisting of: 1 pirn spindle part 1, 2 dampers made of Vulkollan 80 Shore, 2 spacer rings and 1 balloon spring type A. Application: Balloon Spring Pirnspindle</p>	
10-2807-02K	<p><b>Balloon spring pirn spindle front part</b>                      Complete Balloon spring pirn spindle front part consisting of: 1 Pirn spindle part 2 and 2 balloon spring type B. Length: 170 mm. Application: Balloon spring pirn spindle.</p>	

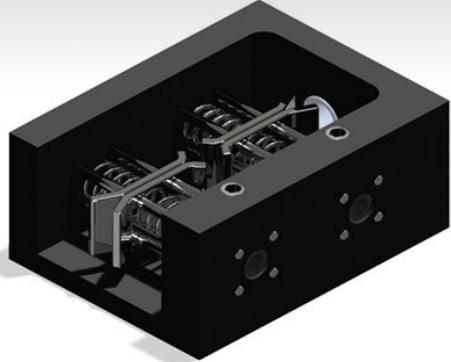
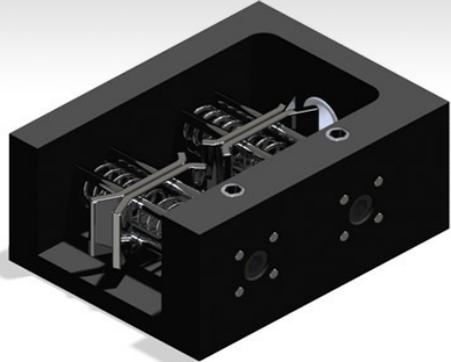
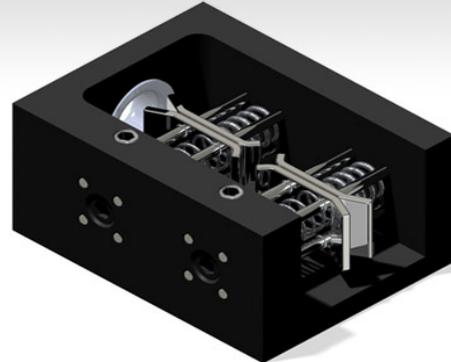
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
14-1001-00	<p><b>Pirn spindle type A2</b>                      Conical, polished Pirn spindle type A2 starting with diameter 9,98 mm for support the filling pirn inside the Shuttle type DRK-N1. Longitude of the Pirn spindle = 201,3 mm.                      Application: Shuttle type DRK-N1.</p>	
14-1001-02	<p><b>Pirn spindle type A4</b>                      Cylindrical, polished Pirn spindle type A4 with diameter 9,98 mm for support the filling pirn inside the Shuttle type DRK-N1. Longitude of the Pirn spindle = 201,3 mm.                      Application: Shuttle type DRK-N1.</p>	
10-1612-01K	<p><b>Complete Pirn spindle section 1</b>                      Complete Pirn spindle section 1 consisting of: 1 pirn spindle part 1, 2 dampers made of Vulkollan 80 Shore, 3 spacer rings and 1 balloon spring type A.</p>	

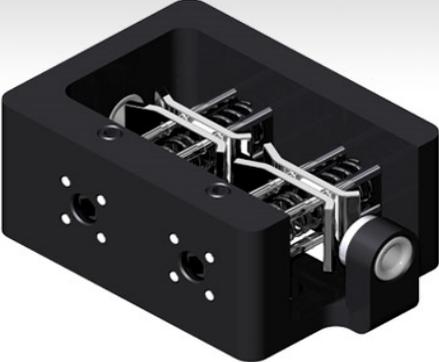
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
14-1001-022	<p><b>Pirn spindle section 3_2</b> Cylindrical, polished spindle with diameter 9,98 mm. Longitude of the spindle = 124 mm. Application: Pirn spindle type A4</p>	
10-1505-05	<p><b>Clamping spring</b> Made of 20 x 3 mm CK75G a.K. (rounded) strip steel, with a Rockwell hardness of 48-52 HRC and polished to a mirror finish. Both pirn centering chamfers, the 10 symmetrical flutes, the radius R5.5, the side hole Ø 6.4 mm and the mounting surfaces are parallel CNC-milled to the dimension 10.8 -0.05 mm. The coil clamp ensures exact positioning of the coil in the shuttle during manual or automatic pirn change. Particularly suitable for shooters with a mounting recess of 11.0 mm width.</p>	
11-1004-022	<p><b>Steel point D26</b> Interchangeable Steel point with a diameter 26 mm and a fixing thread M8. Application: Shuttle type CRG-SS and CRK-SS.</p>	

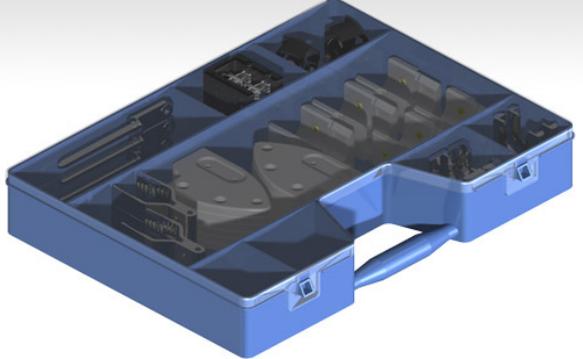
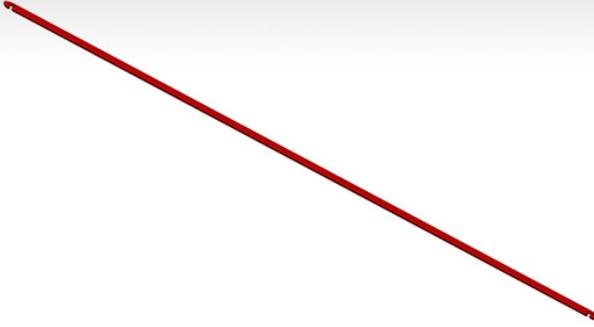
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
11-1004-02	<p><b>Steel point D22</b> Interchangeable Steel point with a diameter 22 mm and a fixing thread M8. Application: Shuttle type MSG and MSK.</p>	
12-1628-9G	<p><b>Ceramic eyelet Ø16x28</b> Grooved Ceramic eyelet for the yarn-outlet in the shuttle. Outside diameter: 16 mm, inside diameter: 8,0 mm and length: 28 mm.</p>	
12-1010-5G	<p><b>Ceramic eyelet Ø10x10</b> Grooved Ceramic eyelet for the middle bar of the shuttle. Outside diameter: 10 mm, inside diameter: 4,9 mm and length: 10 mm.</p>	

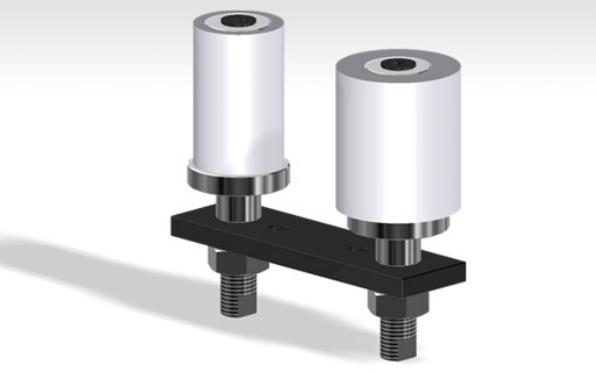
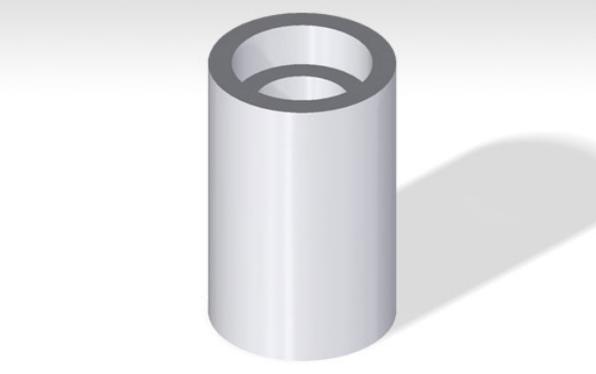
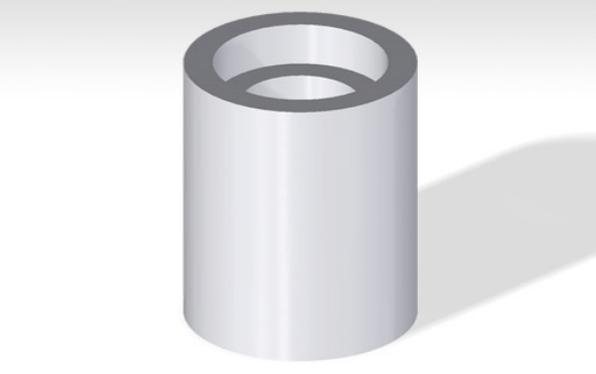
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
12-1025-5G	<p><b>Ceramic eyelet Ø10x25</b> Grooved Ceramic eyelet for the yarn-outlet in the Shuttle type MSG, type MSK, type ARG-Cops-1 and Shuttle type ARK-Cops-1. Outside diameter: 10 mm, inside diameter: 4,9 mm and length: 25 mm.</p>	
11-0804 K15.0	<p><b>Brush strip 38-15.0-050</b> Interchangeable Special brush strip with 7 rows of bristle bundles with a diameter of 3,0 mm, to be glued into the Shuttle type MSG und Shuttle type MSK. The fiber is transparent and made from PA6 with a diameter of 0,5 mm and a height of <b>15,0 mm</b>.</p>	
11-0804 K15.5	<p><b>Brush strip 38-15.5-050</b> Interchangeable Special brush strip with 7 rows of bristle bundles with a diameter of 3,0 mm, to be glued into the Shuttle type MSG und Shuttle type MSK. The fiber is transparent and made from PA6 with a diameter of 0,5 mm and a height of <b>15,5 mm</b>.</p>	

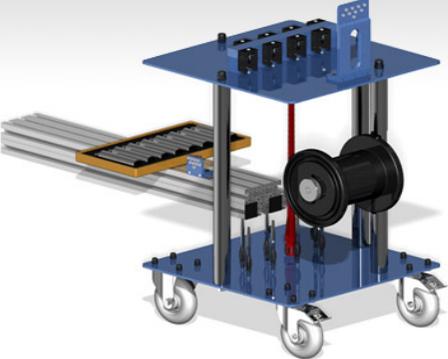
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
11-0804 K12.0	<p><b>Brush strip 38-12.0-050</b> Interchangeable Special brush strip with 7 rows of bristle bundles with a diameter of 3,0 mm, to be glued into the Shuttle type MSG und Shuttle type MSK. The fiber is transparent and made from PA6 with a diameter of 0,5 mm and a height of <b>12,0 mm</b>.</p>	
08900-A0920x20	<p><b>Drill bush D15</b> Hardened and ground Drill bush. Dimension: D 15 mm x D 9,2 mm x 20 mm. (needed 1 pcs.) Application: Shuttle type ARK-N1.</p>	
1-000-30-4B	<p><b>Filling brake type B</b> Modular filling brake (left version) with a polished ceramic eyelet (central through hole Ø 4.7 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of: 2 pairs Slide Shoes type HC made of spring steel. The surface is hard chrome plated with a minimum hard chrome coating thickness of 20 µm. The contact surfaces of the sliding shoes are ground flat and provided with diamond polish, on running surfaces and on the inlet and outlet radius: Ra 0.5 µm. Vickers hardness: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads. Application: Shuttle type ALK, BLK and CRK-SS.</p>	

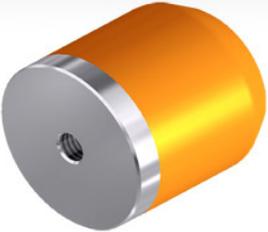
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
1-000-30-4BR-HCS	<p><b>Filling brake type BR-HCS</b>                      Modular filling brake (right version) with a polished ceramic eyelet (central through hole Ø 4,5 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of 2 pairs of slide shoes type <b>HCS</b>. The surface is hard chrome plated with a minimum thickness of the hard chrome coating layer of <b>70 µm</b>. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads.                      Application: Shuttle type ARK-N1 and Shuttle type CRK-N1</p>	
1-000-30-4BR	<p><b>Filling brake type BR</b>                      Modular filling brake (right version) with a polished ceramic eyelet (central through hole Ø 4.7 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of: 2 pairs Slide Shoes type HC made of spring steel. The surface is hard chrome plated with a minimum hard chrome coating thickness of 20 µm. The contact surfaces of the sliding shoes are ground flat and provided with diamond polish, on running surfaces and on the inlet and outlet radius: Ra 0.5 µm. Vickers hardness: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads.                      Application: Shuttle type ARK, CRK and DRK.</p>	
1-000-33-4MS	<p><b>Filling brake type MS</b>                      Modular filling brake (left version) with a polished ceramic eyelet with (central through hole Ø 9 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of 2 pairs of hard-chrome plated slide shoes made of spring steel. The contact surfaces of the slide shoes are even grounded and the running surfaces and radii are diamond polished. The fastening of the brake occurs through 2 internal M4 threads. Application: Shuttle type MSK</p>	

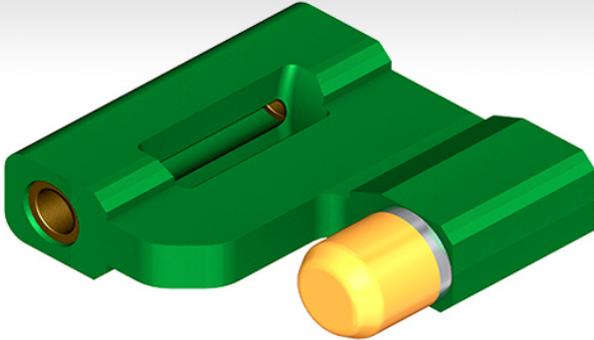
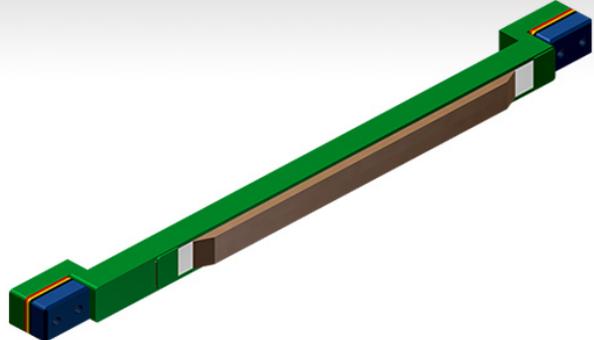
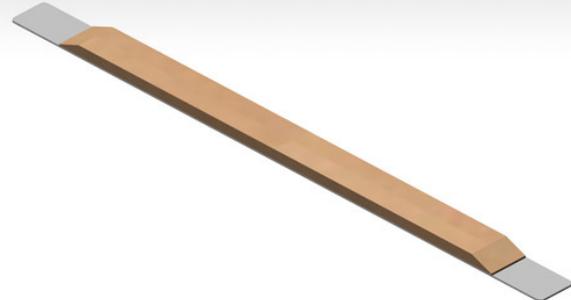
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
1-000-30-4CE2	<p><b>Filling brake type BCE2</b>                      Modular filling brake "left version" with 2 polished ceramic eyelets (central through hole Ø 4.7 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of: 2 pairs Slide Shoes type HC made of spring steel. The surface is hard chrome plated with a minimum hard chrome coating thickness of 20 µm. The contact surfaces of the sliding shoes are ground flat and provided with diamond polish, on running surfaces and on the inlet and outlet radius: Ra 0.5 µm. Vickers hardness: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads. Application: Yarn tension adjustment at rigid monofilament fibers with a high abrasion tendency.</p>	
1-010-56	<p><b>Yarn cutter type A</b>                      Modular yarn cutter type A "right version" made of black anodized aluminium with integrated yarn cutting equipment. The yarn guide is ensured by a polished ceramic eyelet. Application: Shuttle type ARK, CRK, CRK-SS, DRK and MSK.</p>	
1-000-34-4	<p><b>Yarn cutter type B</b>                      Modular yarn cutter type B "left version" made of black anodized aluminium with integrated yarn cutter equipment. The yarn guide is ensured by a polished ceramic eyelet. Application: Shuttle type ALK and BLK.</p>	

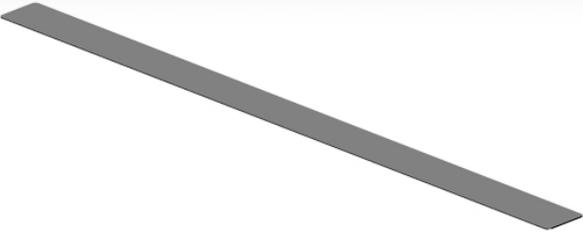
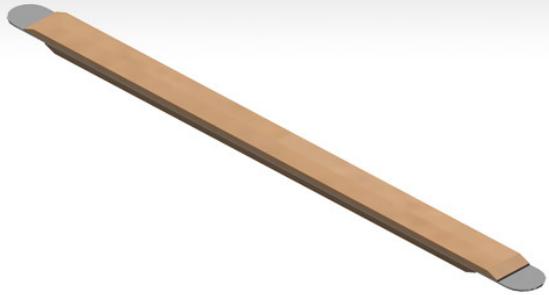
PG 1	SHUTTLES & ACCESSORY	Graphic
Article-no.	Description / Specification	
14-1103-02CRK	<p><b>Spare part box - Shuttle ARK-N1 &amp; Shuttle CRK-N1</b>                      Consisting of: 20 Brush strip 300-030, 10 Shuttle nose type ARR, 10 Shuttle nose type ARL, 2 Filling brake type BR, 2 Yarn cutter type A, 10 Clamping spring, 2 Pirn holder type TEX, 10 Clamping spring type TEX, 2 Slide bow type C, 6 Pirn chuck type Z, 5 Socket Screw M6x60/50 mm, 20 Socket Screw M5x10 mm, 10 Countersunk screw M5x40 mm, 50 Countersunk screw M5x16 mm, 5 Countersunk screw M5x20 mm S, 20 Socket Screw M4x16 mm, 20 Socket Screw M5x12 mm, 5 Grub Screw M5x8 mm                      RRP: 5.195.50 €</p>	
15-2511-01ES	<p><b>Pull-in hook</b>                      Pull-in hook made of plastic for threading the yarn.                      Dimension: 198 mm x 4 mm x 2 mm.</p>	
15-2511-01E	<p><b>Special Plastic hooks</b>                      Special Plastic hooks for threading the yarn.                      Dimension: 404 mm x 4 mm x 2 mm.</p>	

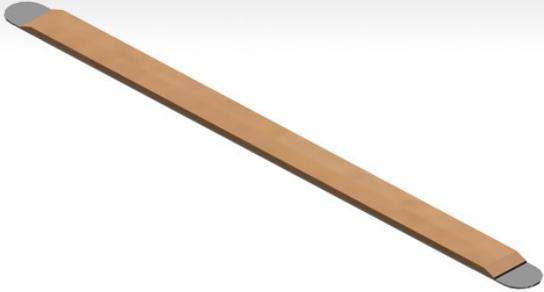
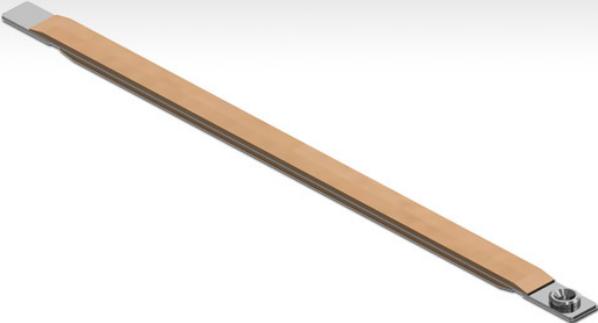
PG 2	SHUTTLE GUIDE UNIT	Graphic
Article-no.	Description	
02-100-40	<p><b>Shuttle guide unit</b> Shuttle guide unit serves the protection of the picker by exact positioning of the shuttle in the shuttle box.</p>	
02-100-03	<p><b>Guide roller D40</b> Guide roller D40 made of Polyamid P6 (thermoplastic "white POM" Polyacetal/Polyformaldehyd) with diameter 40 mm.</p>	
02-100-04	<p><b>Guide roller D55</b> Guide roller D55 made of Polyamid P6 (thermoplastic "white POM" Polyacetal/Polyformaldehyd) with diameter 55 mm.</p>	

PG 3	ADJUSTMENT DEVICE	Graphic
Article-no.	Description / Specification	
05-1609-01-G	<p><b>Mobile bobbin unit for seam fabrics</b>                      The mobil bobbin unit for seam fabrics facilitates the use of one bobbin Typ 200-E DIN EN 60264-2-3 with seam cable and up to 8 pins with BCF-Yarns for a better web adhesion at the seam area of the base fabrics with integrated 8 separate adjustable Yarn Brakes, 8 Pirn Spindles. Compact and exceedingly sturdy design. Weight approx. 80 kg.</p> <p><b>Additional delivery:</b>                      7 Modular Guide Rail Profiles 800x40x40 mm each including all fastener accessories                      1 Angle Bracket with 9 high quality ceramic eyelets, 1 Wooden Box with 8 Balance-Weights each 650 g, 8 Net Hoses and 2 Spools K 200.</p>	

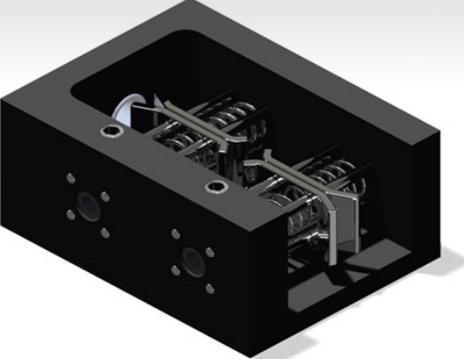
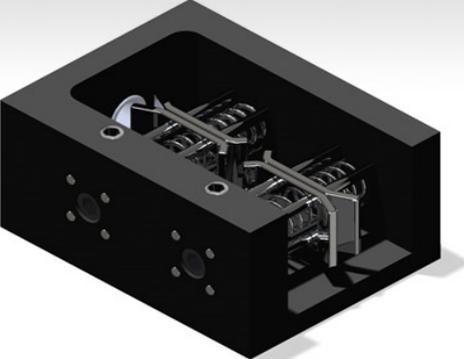
PG 4	PICKER & BRAKE INSERTS	Graphic
Article-no.	Description	
10-1602-01	<p><b>Picker type A</b> Energy storer device, used as interface during the acceleration and deceleration process of the shuttle. Dimensions: Diameter = 40 mm, length = 42 mm, with internal M8. Used on Looms with THS-hydraulic picking units. The picker type A can also be used with Picker type FM.</p>	
9980001	<p><b>Picker type B</b> Energy storer device, used as interface during the acceleration and deceleration process of the shuttle. Dimensions: Diameter = 45 mm, length = 124 mm, with internal fine thread M16 x 1,5 mm. Used on Looms with HP I &amp; HP II hydraulic picking units.</p>	
10-1207-01M	<p><b>Picker type CM</b> Energy storer device, used as interface during the acceleration and deceleration process of the shuttle. Dimensions: Diameter = 45 mm, length = 115 mm, with internal fine thread M18 x 1,5 mm and fit 19H7. Used on Looms with THS-B hydraulic picking units.</p>	

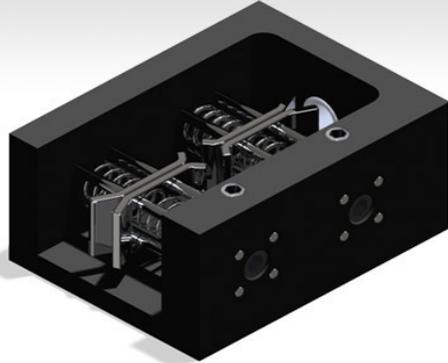
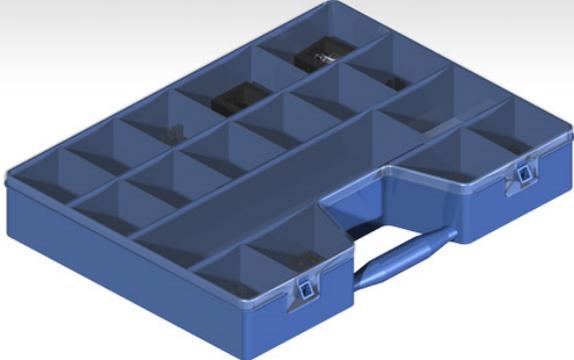
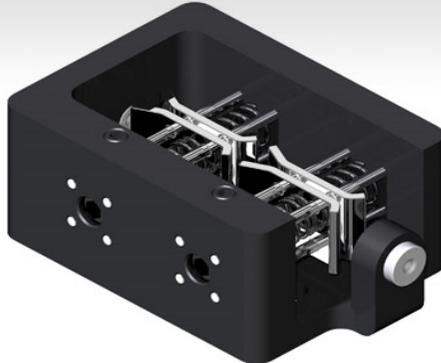
PG 4	PICKER & BRAKE INSERTS	Graphic
Article-no.	Description	
22-2909-01	<p><b>Picker type FM</b>                      Picker combination consisting of a Durolen-Picker and a Vulkolan-Picker intended for use of weaving shuttles with reed-side thread dividers and a flat picking surface on weaving looms with mechanical picking sticks.</p>	
: 22-0710-02	<p><b>Brake Unit type SDM</b>                      Brake Unit type SDM, consisting of: 1 Stable housing, 2 Clamping module EV 20-180-5, 8 Cylinder head screws DIN 912 M5x18 mm, 2 Elbow quick connections, 1 Push-in Y-connector, 6 Spacer plates 3 mm thick, 2 adjustable Mounting adapter, 4 Cylinder head screw DIN 912 M10x30 mm, 1 Guide rail and 1 Brake insert type AD.                      Application: Specially developed for shuttle boxes which has been designed for longer shuttles such as Shuttle type DRKL-N1 860/800x80x67/50.                      Dimensions: 750 mm x 70 mm x 45 mm, weight = 6.2 kg.</p>	
9950002-D	<p><b>Brake insert type AD</b>                      Flexible, on the basis of about 11 mm full leather bounded friction-material with high strength (without metal-admixture), glued in cold adhesion methods on spring steel (540 mm x 35 mm x 2,0 mm). The brake leather insert is available in different sizes.</p>	

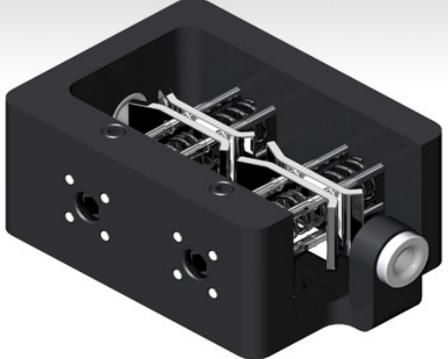
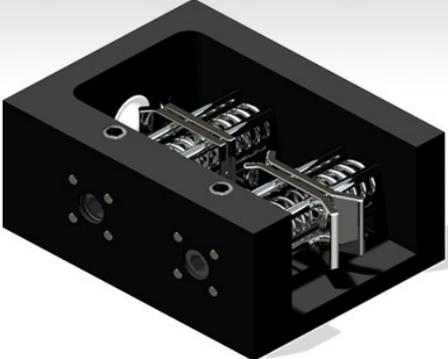
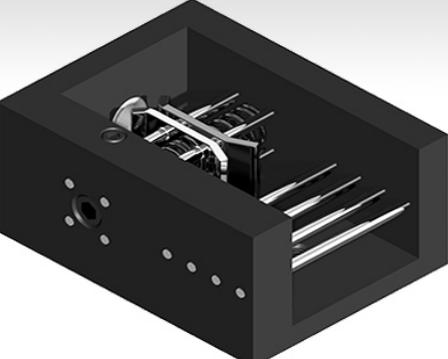
PG 4	PICKER & BRAKE INSERTS	Graphic
Article-no.	Description	
9950001-12	<p><b>Guide rail insert 540</b>                      Guide rail insert 540 made of spring steel. Dimension: 540 mm x 35 mm x 0,6 mm for the protection of the clamping modules EV and for a smooth guidance of the brake leather insert type AD. The guide rail insert enables the brake leather insert to went sideways during the incoming and outgoing of the shuttle, without having a direct contact to the clamping modules.</p>	
13-1505-1	<p><b>Brake insert type B</b>                      Flexible, on the basis of 10 mm full leather bounded friction-material with high strength (without metal-admixture), glued in cold adhesion methods on spring steel (440 mm x 30 mm x 2,0 mm). The brake leather insert is available in different sizes.</p>	
9950004	<p><b>Brake insert type C</b>                      Brake-side: Flexible, on the basis of 5 mm full leather bounded friction-material with high strength (without metal-admixture). Backside: Flexible, on the basis of 4 mm full leather bounded friction-material with high strength (without metal-admixture). Both sides are glued in a cold adhesion method on spring steel: 485 mm x 30 mm x 1,5 mm with R15 on both sides. The brake leather insert is available in different sizes.</p>	

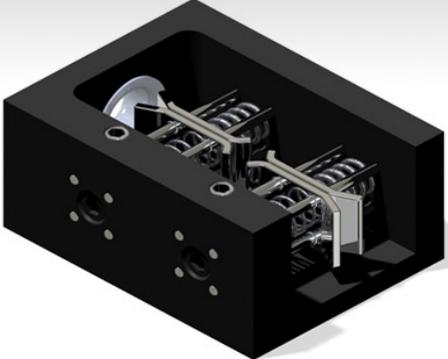
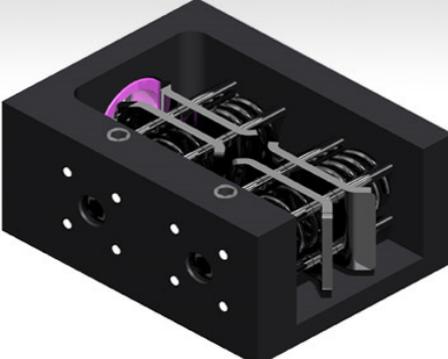
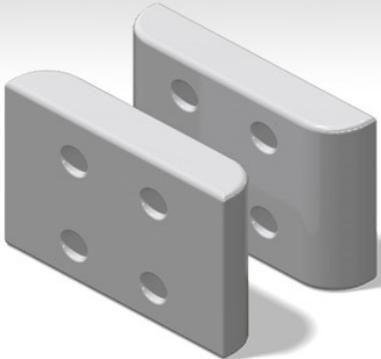
PG 4	PICKER & BRAKE INSERTS	Graphic
Article-no.	Description	
9950004-E	<p><b>Brake insert type CE</b> Flexible, on the basis of 5 mm full leather bounded friction-material with high strength (without metal-admixture), glued in cold adhesion methods on spring steel: 485 mm x 30 mm x 1,5 mm with R15 on both sides. The brake leather insert is available in different sizes.</p>	
13-2503-1	<p><b>Brake insert type T</b> Brake-side: Flexible, on the basis of 5 mm full leather bounded friction-material with high strength (without metal-admixture) and one tie hole with conical steel sleeve. Backside: Flexible, on the basis of 5 mm full leather bounded friction-material with high strength (without metal-admixture). Both sides are glued in a cold adhesion method on spring steel: 630 mm x 30 mm x 2,0 (3,5 mm). The brake leather insert is available in different sizes.</p>	
14-2511-01	<p><b>Brake insert typ TBS</b> Flexible, on the basis of 10 mm full leather bounded friction-material with high strength (without metal-admixture), glued in cold adhesion methods on spring steel (300 mm x 35 mm x 2,0 mm). The brake leather insert is available in different sizes.</p>	

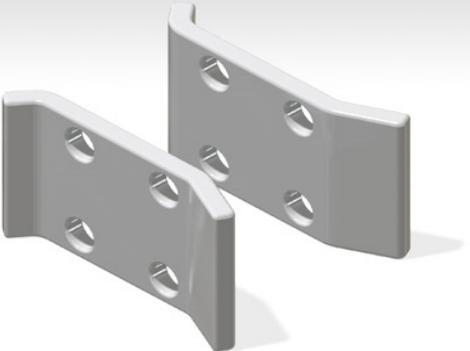
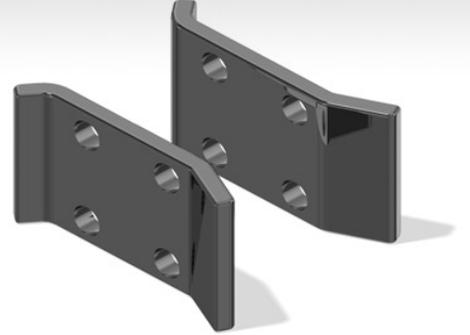
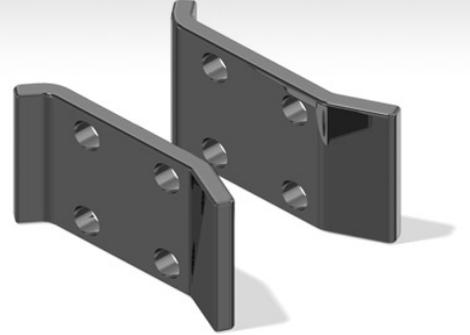
PG 4	PICKER & BRAKE INSERTS	Graphic
Article-no.	Description	
13-2705-01	<p><b>Spindle Buffer</b> Special spindle buffer for looms with picking sticks and picker spindles with a diameter of 18 mm. Consisting of one full leather buffer unit for the picking force damping and 4 leather rings for the rear picker damping.</p>	
102204-01	<p><b>Driving belt 25x5</b> Driving Belt made of full leather used for Hacoba weft winding machine. Delivered of yard goods. Dimensions: Width = <b>25 mm</b>; Height = <b>5 mm</b>; Roll length = <b>10 meter</b>.</p>	
102204-02	<p><b>Driving belt 30x5</b> Driving Belt made of full leather used for Hacoba weft winding machine. Delivered of yard goods. Dimensions: Width = <b>30 mm</b>; Height = <b>5 mm</b>; Roll length = <b>10 meter</b>.</p>	

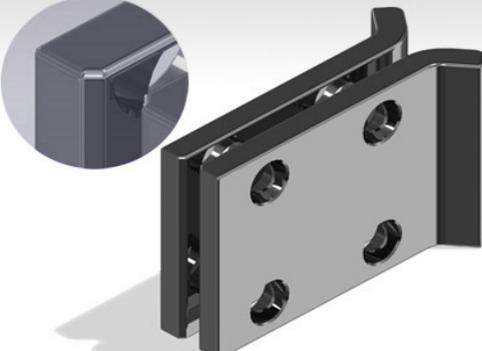
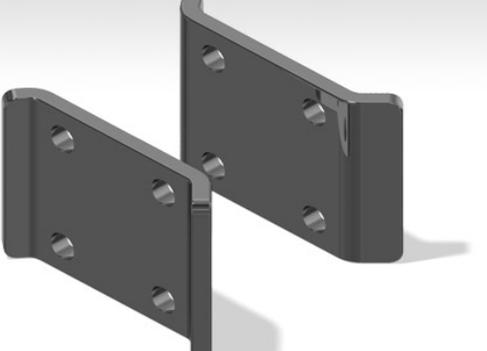
PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
1-000-30-4BR-HCS	<p><b>Filling brake type BR-HCS</b>                      Modular filling brake (right version) with a polished ceramic eyelet (central through hole Ø 4,5 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of 2 pairs of slide shoes type <b>HCS</b>. The surface is hard chrome plated with a minimum thickness of the hard chrome coating layer of <b>70 µm</b>. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads. Application: Shuttle type ARK-N1 and Shuttle type CRK-N1</p>	
1-000-30-4BRK	<p><b>Filling brake type BRK</b>                      A further variant of the filling brake type BRK is the type BRK (right version) equipped with 2 Slide shoes type HCS and 2 "knot-killer" Slide shoes typ KKS, which blocks nearly every knot or loop and activate the yarn cutter. The surfaces of the slide shoes are hard chrome plated with a minimum thickness of the hard chrome coating layer of <b>70 µm</b>. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1200. The Filling brake type BRK is equipped with 4 strong Pressure spring type C. Application: Shuttle type ARK-N1, Shuttle type CRK-N1 and Shuttle type DRK-N1.</p>	
1-000-30-4B	<p><b>Filling brake type B</b>                      Modular filling brake "left version" with a polished ceramic eyelet (central through hole Ø 4.7 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of: 2 pairs Slide Shoes type HC made of spring steel. The surface is hard chrome plated with a minimum hard chrome coating thickness of 20 µm. The contact surfaces of the sliding shoes are ground flat and provided with diamond polish, on running surfaces and on the inlet and outlet radius: Ra 0.5 µm. Vickers hardness: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads. Application: Shuttle type ALK, BLK and CRK-SS.</p>	

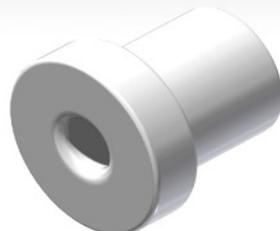
PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
1-000-30-4BR	<p><b>Filling brake type BR</b>                      Modular filling brake "right version" with a polished ceramic eyelet (central through hole Ø 4.7 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of: 2 pairs Slide Shoes type HC made of spring steel. The surface is hard chrome plated with a minimum hard chrome coating thickness of 20 µm. The contact surfaces of the sliding shoes are ground flat and provided with diamond polish, on running surfaces and on the inlet and outlet radius: Ra 0.5 µm. Vickers hardness: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads.                      Application: Shuttle type ARK, CRK and DRK.</p>	
14-1103-03BR-B	<p><b>Spare part box - Filling brake type BR or type B</b>                      Consisting of: 1 Filling brake type BR or type B, 10 Pair of Slide Shoes type KB, 10 Pair of Slide Shoes type HCS, 5 Ceramic eyelets D 4,5 mm, 20 Pressure springs type B, 20 Pressure springs type C, 10 Pressure bolts D3 x 4 mm, 5 Spring supports, 20 Alignment pins, 20 Threaded pins M4 x 5 mm, 10 Threaded pins M6 x 8 mm, 50 Socket Screws M4x16 mm, 50 Washer Ø4.3, 1 Screw Locker medium strength 25 g, 1 Superglue Klebefix 20 g and 1 drift punch d 1.8 mm. RRP: 1.861.00 €</p>	
1-000-30-4CE	<p><b>Filling brake type BCE</b>                      Modular filling brake "left version" with 2 polished ceramic eyelets (central through hole Ø 2 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of: 2 Pairs of sliding shoes type HC made of spring steel. The surface is hard chrome plated with a minimum hard chrome coating thickness of 20 µm. The contact surfaces of the sliding shoes are ground flat and provided with diamond polish, on running surfaces and on the inlet and outlet radius: Ra 0.5 µm. Vickers hardness: HV = 1200. The thread brake is fastened via 2 M4 internal threads. Application: Thread tension adjustment for rigid monofilament yarns with high abrasion tendency.</p>	

PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
1-000-30-4CE2	<p><b>Filling brake type BCE2</b> Modular filling brake "left version" with 2 polished ceramic eyelets (central through hole Ø 4.7 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of: 2 pairs Slide Shoes type HC made of spring steel. The surface is hard chrome plated with a minimum hard chrome coating thickness of 20 µm. The contact surfaces of the sliding shoes are ground flat and provided with diamond polish, on running surfaces and on the inlet and outlet radius: Ra 0.5 µm. Vickers hardness: HV = 1200. The fastening of the brake occurs through 2 internal M4 threads. Application: Yarn tension adjustment at rigid monofilament fibers with a high abrasion tendency.</p>	
1-000-30-4BK	<p><b>Filling brake type BK</b> A further variant of the filling brake type B is the type BK (left version) equipped with one pair "knot-killer" slide shoes typ KK, which blocks nearly every knot or loop and activate the yarn cutter. This type is equipped with one weak spring A and one strong spring C at the pretension area and two strong springs type C at the main tension area. Application: Shuttle type ALK, BLK and CRK-SS.</p>	
1-000-30-4C4	<p><b>Filling brake type C</b> Modular filling brake (left version) with a polished ceramic eyelet (central through hole Ø 4,5 mm) and 1 integrated device for fine adjustment of the yarn tension, consisting of 1 pair of hard-chrome plated slide shoes type HC and 4 slide pins to string out loops. The contact surfaces of the slide shoes are even grounded and the running surfaces and radii are diamond polished. The fastening of the brake occurs through 2 internal M4 threads. Application: Shuttle type ALK, BLK and CRK-SS.</p>	

PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
1-000-33-4MS	<p><b>Filling brake type MS</b> Modular filling brake (left version) with a polished ceramic eyelet with (central through hole Ø 8 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of 2 pairs of hard-chrome plated slide shoes type HC. The contact surfaces of the slide shoes are even grounded and the running surfaces and radii are diamond polished. The fastening of the brake occurs through 2 internal M4 threads. Application: Shuttle type MSK.</p>	
122009-KAS	<p><b>Filling brake type KAS</b> Modular filling brake (left version) with a polished ceramic eyelet with (central through hole Ø 8 mm) and 2 integrated devices for fine adjustment of the yarn tension, consisting of 2 pairs of hard-chrome plated slide shoes type KAS. Particularly suitable for very thick yarns. The contact surfaces of the slide shoes are even grounded and the running surfaces and radii are diamond polished. The fastening of the brake occurs through 2 internal M4 threads. Modular filling brake contains 2 pressure springs type BK in the front area and 2 pressure springs type CK-long in the rear area. Application: Shuttle type MSK.</p>	
15-3004-01	<p><b>Ceramics II Slide Shoes</b> Ceramics slide shoes made from Al<sub>2</sub>O<sub>3</sub> 99% with material thickness 4 mm. The contact surfaces of the slide shoes are even grounded and the running surfaces and radii are diamond polished Ra 0,4 µm. Temperature resistance: 1.750 °C, Hardness: 1.800 HV. Application: Filling brake type BCE.</p>	

PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
02-100-31-4K	<p><b>Ceramics Slide Shoes</b>                      Ceramics slide shoes made from Al<sub>2</sub>O<sub>3</sub> 99%. The contact surfaces of the slide shoes are even grounded and the running surfaces and radii are diamond polished. Temperature resistance: 1.750 °C, Hardness: 1.800 HV.                      Application: Filling brake type A, type B, type BR and type C.</p>	
02-100-31-4	<p><b>Slide Shoes type HC</b>                      Hard chrome plated pair of slide shoes with a minimum thickness of the hard chrome coating layer of <b>20 µm</b>. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1200. Application: Filling brake type A, type B, type BR and type C.</p>	
02-100-31-4S	<p><b>Slide Shoes type HCS</b>                      Hard chrome plated pair of slide shoes with a minimum thickness of the hard chrome coating layer of <b>70 µm</b>. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1200.</p>	

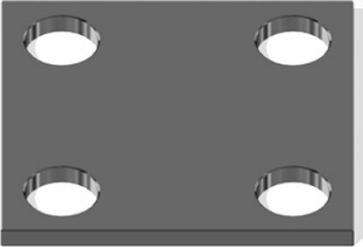
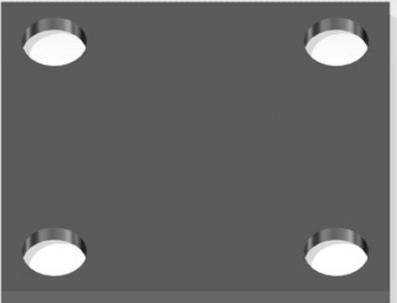
PG 5		FILLING BRAKE	Graphic
Article-no.	Description		
02-100-KB	<p><b>Slide Shoes type KB</b> Ceramic coated pair of slide shoes with a minimum thickness of the ceramic coating layer of <b>120 µm</b>. Coating material: Cr2O3 (99) grey-green. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1800. The holes are chamfered and then cleaned to prevent the breaking out of the ceramic. Please note: The lifetime is approx. 5 times higher than the lifetime of the Pair of Slide Shoes type HC.</p>		
02-100-KKS	<p><b>Slide Shoes type KKS</b> Hard chrome plated pair of "Knot-Killer" slide shoes with a minimum thickness of the hard chrome coating layer of <b>70 µm</b>. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1200</p>		
122009-02	<p><b>Slide shoes type KAS</b> Hard chrome plated pair of slide shoes with a minimum thickness of the hard chrome coating layer of <b>20 µm</b>. Polished design with fine surface finish: Ra 0.5 µm. Hardness according to Vickers: HV = 1200.</p>		

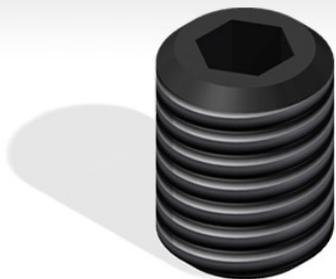
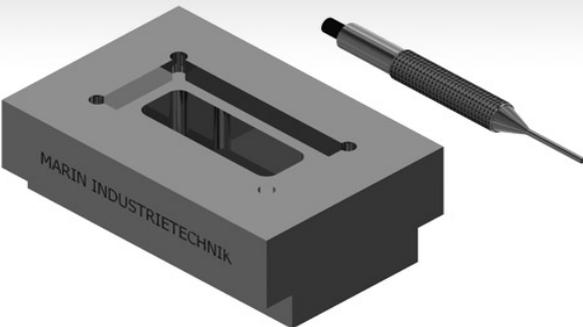
PG 5		FILLING BRAKE	Graphic
Article-no.	Description		
1-000-49-4	<p><b>Ceramic eyelet D 4,5</b> Polished ceramic eyelet for a ensured smooth-running yarn guide with a central through hole Ø 4,5 mm. Application: Filling brake type B, type BR, type BK and type C.</p>		
11-0808-1MS	<p><b>Ceramic eyelet D10</b> Polished ceramic eyelet for a ensured smooth-running yarn guide with a central through hole Ø 10 mm. Application: Filling brake type MS and type KAS</p>		
1-000-49-42-0	<p><b>Ceramic eyelet D 2,0</b> Polished ceramic eyelet for a ensured smooth-running yarn guide with a central through hole Ø 2 mm. Application: Filling brake type BCE</p>		

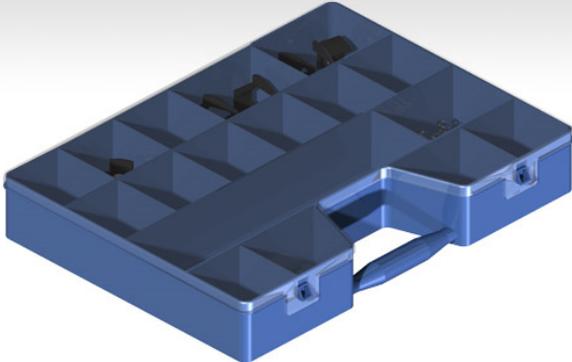
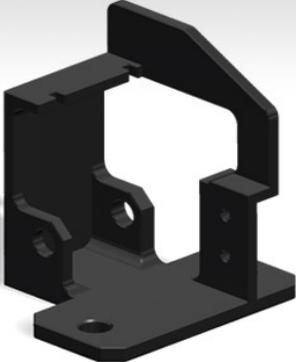
PG 5		FILLING BRAKE	Graphic
Article-no.	Description		
1-000-30-4-01	<p><b>Pressure spring type A</b> Pressure spring type A "weak version", made of stainless steel for setting the initial yarn tension. Length: 11,5 mm, Spring force: 12 N. Application: Filling brake type B, type BR, type BK and type C.</p>		
1-000-30-4-02	<p><b>Pressure spring type B</b> Pressure spring type B "medium version", made of stainless steel for setting the initial yarn tension. Length: 10,5 mm, spring force: 27 N. Application: Filling brake type B, type BR, type BK and type C.</p>		
1-000-30-4-03	<p><b>Pressure spring type C</b> Pressure spring type C "strong version" made of stainless steel for setting the initial yarn tension. Length: 10,3 mm, spring force: 58 N. Application: Filling brake type B, type BR, type BK and type C.</p>		

PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
14-1903-01	<p><b>Pressure spring type C2-0,2</b> Pressure spring type C2-0,2 "strong version" made of stainless steel for setting the initial yarn tension. Length: 9,8 mm, spring force: 49 N. Application: Filling brake type BCE</p>	
1-000-30-4-11	<p><b>Pressure spring type E</b> Pressure spring type E "very strong version" made of stainless steel for setting the initial yarn tension. Length: 9 mm, spring force: 64 N. Application: Filling brake type MS.</p>	
G139828	<p><b>Pressure spring type BK</b> Pressure spring type BK "medium version" made of stainless steel for setting the initial yarn tension. Length: 7,9 mm, spring force: 29 N. Application: Filling brake type KAS.</p>	

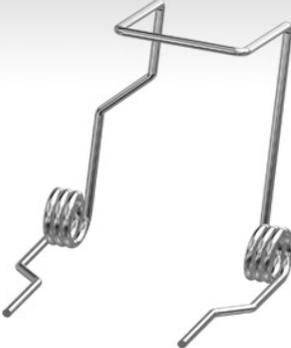
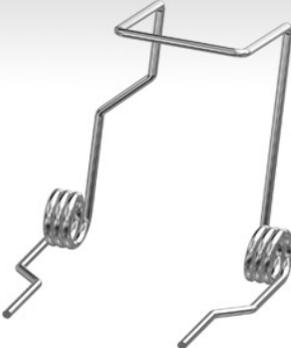
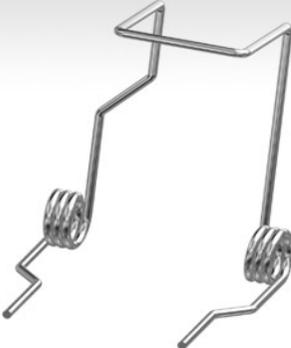
PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
20-0206-01	<p><b>Pressure spring type CK</b> Pressure spring type CK "strong version" made of stainless steel for setting the initial yarn tension. Length: 6,3 mm, spring force: 29 N. Application: Filling brake type KAS.</p>	
20-0206-01	<p><b>Pressure spring type CK-long</b> Pressure spring type CK-long "strong version" made of stainless steel for setting the initial yarn tension. Length: 10 mm, spring force: 39 N. Application: Filling brake type KAS.</p>	
1-000-32-4	<p><b>Pressure bolt D3 x 4 mm</b> Pressure bolt made of brass for clamping the adjustment screw. Dimension: Diameter 3 mm, Length 4 mm.</p>	

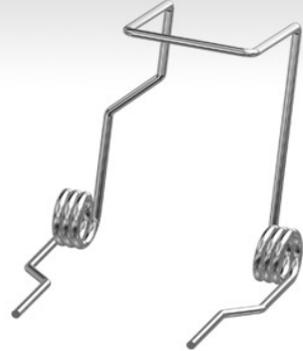
PG 5	FILLING BRAKE	Graphic
Article-no.	Description	
1-000-48-4	<p><b>Spring support</b> Spring support for setting the initial yarn tension.</p>	
122009-03	<p><b>Spring support type KAS</b> Spring support for setting the initial yarn tension.</p>	
1-000-58-4	<p><b>Alignment pin</b> Special alignment pin 2.00 +/-0.002 x 39.00 mm; alloyed steel (X5CrNi1810 1.4301) hardened and polished.</p>	

PG 5		FILLING BRAKE	Graphic
Article-no.	Description		
913-M4-5	<p><b>Threaded pin M4x5</b> Threaded pin M4 x 5 mm to clamp the Pressure bolt.</p>		
913-M6-8	<p><b>Threaded pin M6x8</b> Threaded pin M6 x 8 mm for the fine adjustment of the yarn tension.</p>		
15-3010-01	<p><b>Mounting block</b> Mounting block made of aluminium ALMgSi 0,5 including 1 Parallel punch D1.8 mm for the removal of the "Alignment pins" during the replacement of the "Slide shoes" or "Pressure springs".</p>		

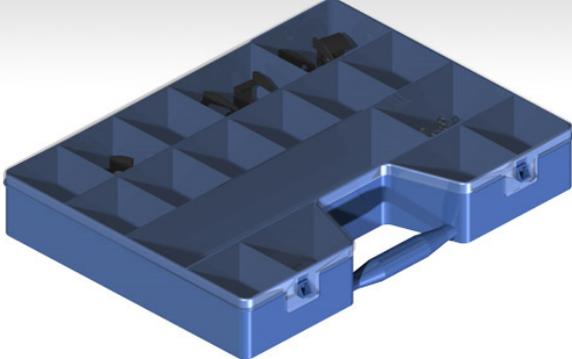
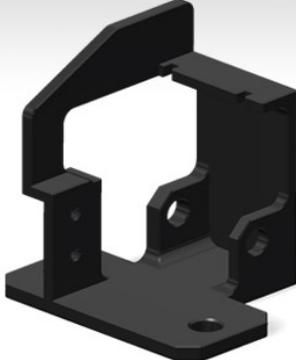
PG 6	YARN CUTTER TYPE A	Graphic
Article-no.	Description	
1-010-56	<p><b>Yarn cutter type A</b> Modular yarn cutter type A "right version" made of black anodized aluminium with integrated yarn cutting equipment. The yarn guide is ensured by a polished ceramic eyelet. Application: Shuttle type ARK, CRK, CRK-SS, DRK and MSK.</p>	
14-1103-02A	<p><b>Spare part box - Yarn cutter type A</b> Consisting of: 2 Yarn cutter type A, 2 Casing type A with blade, 2 Swingarms type A, 5 Ceramic eyelets D 4,5 mm, 5 Blades, 2 Formed springs type A/A, 2 Formed springs type A/C, 2 Leg springs type A, 10 Straight pins D4 x 29 mm, 50 Screw &amp; Washer, 50 Socket Screws M4x16 mm, 50 Washer Ø4.3, 1 Screw Locker medium strength 25 g, 1 Superglue Klebefix 20 g and 1 Screwdriver. RRP: 1.115.90 €</p>	
1-010-55	<p><b>Casing type A</b> CNC-milled Casing Type A "right version" made of black anodized aluminium for the application in the Yarn cutter type A.</p>	

PG 6	YARN CUTTER TYPE A	Graphic
Article-no.	Description	
1-000-46-4	<p><b>Swingarm type A</b> Swingarm type A "right version" made of black anodized aluminium, used in yarn cutter type A, including the polished ceramic eyelet for the controlled yarn guide.</p>	
1-000-49-4	<p><b>Ceramic eyelet D 4,5</b> Polished ceramic eyelet for a ensured smooth-running yarn guide. Dimensions: d: 4,5 mm; D: 9,0 mm; D1: 7,5 mm; h: 2,0 mm; H: 7,0 mm.</p>	
1-000-35-4	<p><b>Blade</b> Ice-hardened blade with titanium-coated cutting edges for a long service life. Special three-angle cut for optimum sharpness and perfect cut. Length = 18.5 mm, width = 12.7 mm, height = 0.45 mm, with cutting angle 26 °.</p>	

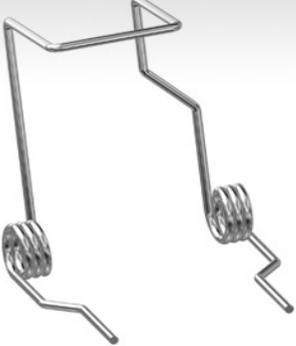
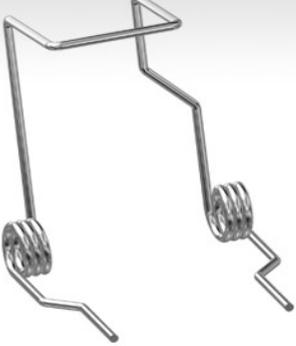
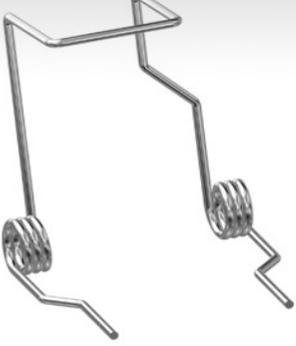
PG 6	YARN CUTTER TYPE A	Graphic
Article-no.	Description	
1-000-28-4	<p><b>Formed spring type A/A</b> Formed spring type A/A "right version". Diameter of wire 1,0 mm, for the application in the Yarn cutter type A.</p>	
1-000-28-42	<p><b>Formed spring type A/B</b> Formed spring type A/B "right version". Diameter of wire 0,9 mm, for the application in the Yarn cutter type A.</p>	
1-000-28-43	<p><b>Formed spring type A/C</b> Formed spring type A/C "right version". Diameter of wire 0,8 mm, for the application in the Yarn cutter type A.</p>	

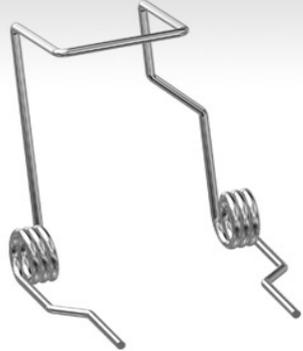
PG 6	YARN CUTTER TYPE A	Graphic
Article-no.	Description	
1-000-28-44	<p><b>Formed spring type A/D</b> Formed spring type A/D "right version". Diameter of wire 0,7 mm, for the application in the Yarn cutter type A.</p>	
1-000-47-4	<p><b>Leg spring type A</b> Leg spring type A in special edition, according to the design, for the application in the yarn cutter type A.</p>	
1-000-39-4-03	<p><b>Straight pin D4x29</b> Straight pin D4 x 29 mm DIN7 for fixing the Swingarm.</p>	

PG 6	YARN CUTTER TYPE A	Graphic
Article-no.	Description	
1-000-39-4-12	<p><b>Screw &amp; Washer</b> Cylinder head screw M2x5 with washer DIN D2,2 DIN125 for fixing the blade.</p>	
912-M4-16	<p><b>Socket Screw M4x16</b> Socket Crew DIN 912, M4 x 16 mm, for the fastening of the Yarn cutter.</p>	
125B-4.3	<p><b>Washer Ø4.3</b> Washer DIN125B Ø4.3 mm, for the fastening of the Yarn cutter.</p>	

PG 7	YARN CUTTER TYPE B	Graphic
Article-no.	Description	
1-000-34-4	<p><b>Yarn cutter type B</b> Modular yarn cutter type B "left version" made of black anodized aluminium with integrated yarn cutter equipment. The yarn guide is ensured by a polished ceramic eyelet. Application: Shuttle type ALK and BLK.</p>	
14-1103-02B	<p><b>Spare part box - Yarn cutter type B</b> Consisting of: 2 Yarn cutter type B, 2 Casing type B with blade, 2 Swingarms type B, 5 Ceramic eyelets D 4,5 mm, 5 Blades, 2 Formed springs type B/A, 2 Formed springs type B/C, 2 Leg springs type A, 10 Straight pins D4 x 29 mm, 50 Screw &amp; Washer, 50 Socket Screws M4x16 mm, 50 Washer Ø4.3, 1 Screw Locker medium strength 25 g, 1 Superglue Klebefix 20 g and 1 Screwdriver. RRP: 1.115. 90 €</p>	
1-010-53	<p><b>Casing type B</b> CNC-milled Casing Type B "left version" made of black anodized aluminium for the application in the yarn cutter type B.</p>	

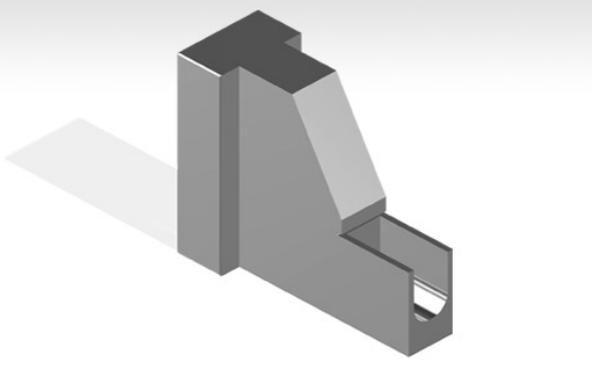
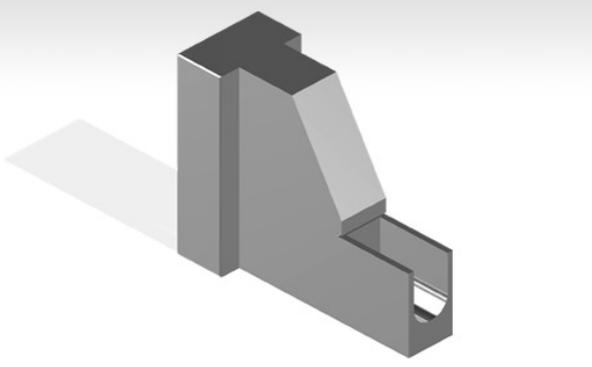
PG7	YARN CUTTER TYPE B	Graphic
Article-no.	Description	
1-000-39-4	<p><b>Swingarm type B</b> Swingarm type B "left version" made of black anodized aluminium, used in yarn cutter type B, including the polished ceramic eyelet for the controlled yarn guide.</p>	
1-000-49-4	<p><b>Ceramic eyelet D 4,5</b> Polished ceramic eyelet for a ensured smooth-running yarn guide. Dimensions: d: 4,5 mm; D: 9,0 mm; D1: 7,5 mm; h: 2,0 mm; H: 7,0 mm.</p>	
1-000-35-4	<p><b>Blade</b> Ice-hardened blade with titanium-coated cutting edges for a long service life. Special three-angle cut for optimum sharpness and perfect cut. Length = 18.5 mm, width = 12.7 mm, height = 0.45 mm, with cutting angle 26 °.</p>	

PG7	YARN CUTTER TYPE B	Graphic
Article-no.	Description	
1-000-42-4	<p><b>Formed spring type B/A</b> Formed spring type B/A "left version". Diameter of wire 1,0 mm, for the application in the Yarn cutter type B.</p>	
1-000-42-42	<p><b>Formed spring type B/B</b> Formed spring type B/B "left version". Diameter of wire 0,9 mm, for the application in the Yarn cutter type B.</p>	
1-000-42-43	<p><b>Formed spring type B/C</b> Formed spring type B/C "left version". Diameter of wire 0,8 mm, for the application in the Yarn cutter type B.</p>	

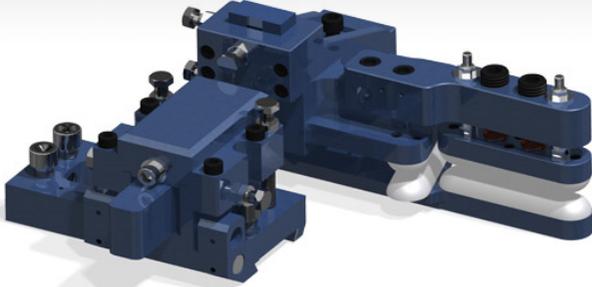
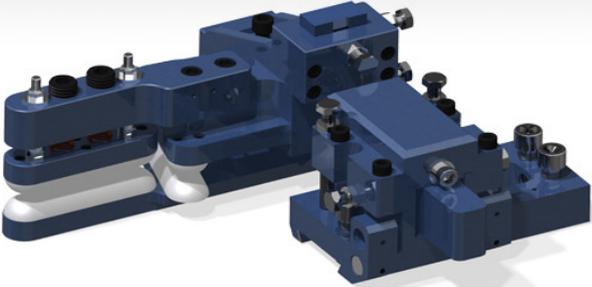
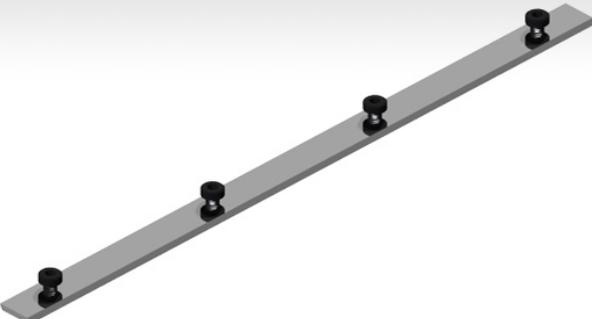
PG7	YARN CUTTER TYPE B	Graphic
Article-no.	Description	
1-000-42-44	<p><b>Formed spring type B/D</b> Formed spring type B/D "left version". Diameter of wire 0,7 mm, for the application in the Yarn cutter type B.</p>	
1-000-41-4	<p><b>Leg spring type B</b> Leg spring type B "left version" for the application in the yarn cutter type B.</p>	
1-000-39-4-03	<p><b>Straight pin D4x28</b> Straight pin D4 x 28 mm DIN7 for fixing the Swingarm.</p>	

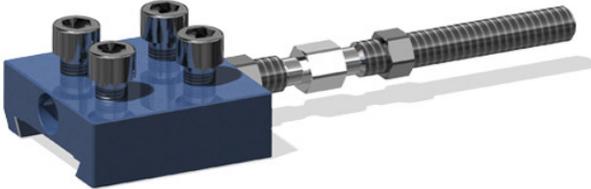
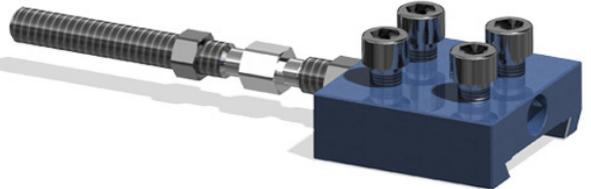
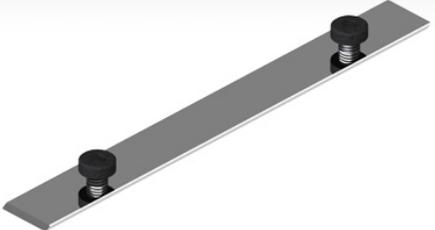
PG7	YARN CUTTER TYPE B	Graphic
Article-no.	Description	
1-000-39-4-12	<p><b>Screw &amp; Washer</b> Cylinder head screw M2x5 with washer DIN D2,2 DIN125 for fixing the blade.</p>	
912-M4-16	<p><b>Socket Screw M4x16</b> Socket Crew DIN 912, M4 x 16 mm, for the fastening of the Yarn cutter type B.</p>	
125B-4.3	<p><b>Washer Ø4.3</b> Washer DIN125B Ø4.3 mm, for yarn cutter fastening</p>	

PG 8	ULTRASONIC WELDING	Graphic
Article-no.	Description	
9931000	<p><b>Mobile USW-Device</b>                      Mobile Ultrasonic Welding Device with automatic yarn cutter unit for the use at the synthetic yarn welding sector. By the use of special sonotrodes and anvils with diverse material thickness webs, the field of use ranged from monofilaments up to twisted multiple yarns with different diameters. The precision engineering of the device ensures a perfect yarn welding and remaining threads cutting. Areas of application: Twisting, Winding, Pirn-winding, Warping, filament lay-up (longitudinal yarn layer formation) at a calendar from a creel, etc.. The Ultrasonic Welding Unit contains optionally a Sonotrode 1,0 mm or 0,5 mm with the associated Anvil 1,2 mm or 0,6 mm.</p>	
9920004	<p><b>Sonotrode 40 kHz-1,0</b>                      Sonotrode made of titanium adjusted for a frequency of 40 KHz, with internal thread M8; welding path widthness 11,6 mm; welding path thickness 1,0 mm; radius 0,2 mm. Appropriate for Anvil 1,2 mm.</p>	
9920005	<p><b>Sonotrode 40 kHz-0,5</b>                      Sonotrode made of titanium adjusted for a frequency of 40 KHz, with internal thread M8; welding path widthness 11,6 mm; welding path thickness 0,5 mm; radius 0,2 mm. Appropriate for Anvil 0,6 mm.</p>	

PG 8	ULTRASONIC WELDING	Graphic
Article-no.	Description	
9910003	<p><b>Anvil 1,2</b> Polished, eroded and height adjustable anvil made of hardened tool-steel. Welding path widthness 12,0 mm; welding path thickness 1,2 mm. Available also with the welding path thickness 0,6 mm and 0,7 mm. Appropriate for Sonotrode 40 kHz-1,0 mm.</p>	
9910004	<p><b>Anvil 0,6</b> Polished, eroded and height adjustable anvil made of hardened tool-steel. Welding path widthness 12,0 mm; welding path thickness 0,6 mm. Appropriate for Sonotrode 40 kHz-0,5 mm.</p>	
9970005	<p><b>Separator pair type A</b> Yarn separator pair with integrated blade made of spring steel "Hasberg 0,6 mm", for trimming the ends of the ultrasonic welded yarns. The edges are fine polished and the blade is laser welded. Length = 124 mm.</p>	

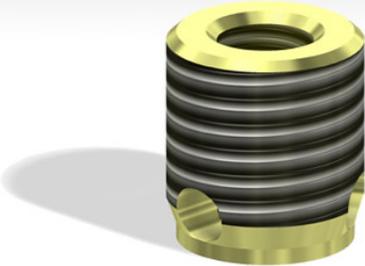
PG 8	ULTRASONIC WELDING	Graphic
Article-no.	Description	
9970001	<p><b>Separator pair type B</b> Yarn separator pair with integrated blade made of spring steel "Hasberg 0,6 mm", for trimming the ends of the ultrasonic welded yarns. The edges are fine polished and the blade is laser welded. Length = 165 mm.</p>	
9920001	<p><b>Sonotrode 35 kHz-1,0</b> Sonotrode made of titanium adjusted for a frequency of 35 KHz, with internal thread M8; welding path widthness 11,6 mm; welding path thickness 1,0 mm; radius 0,2 mm. Appropriate for Anvil 1,2 mm.</p>	
99100/02	<p><b>Sonotrode 35 kHz-0,5</b> Sonotrode made of titanium adjusted for a frequency of 35 KHz, with internal thread M8; welding path widthness 11,6 mm; welding path thickness 0,5 mm; radius 0,2 mm. Appropriate for Anvil 0,6 mm.</p>	

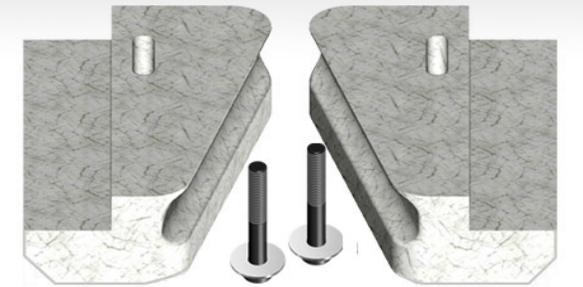
PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
1110-L	<p><b>Temple type A</b>                      Varnished, very stable Temple type A "left version" for heavy weight weaving, including 2 fabric guides type LS and 2 fabric guides type KS. Fine adjustable in X-, Y- and Z-direction during weaving under high tension. Constructed with a very heavy lower bracket plate. Dovetail guide width: 73,3 mm. Powder coated to RAL 5023 distant blue. Weight approx. 33 kg.  <i>The price is valid only when buying one set (Type A &amp; Type B).</i></p>	
1110-R	<p><b>Temple type B</b>                      Varnished, very stable Temple type B "right version" for heavy weight weaving, including 2 fabric guides type LS and 2 fabric guides type KS. Fine adjustable in X-, Y- and Z-direction during weaving under high tension. Constructed with a very heavy lower bracket plate. Dovetail guide width: 73,3 mm. Powder coated to RAL 5023 distant blue. Weight approx. 33 kg.  <i>The price is valid only when buying one set (Type A &amp; Type B).</i></p>	
1110-52	<p><b>Clamping strip long</b>                      Polished clamping strip "long version" (2,5 mm thickness), which allows a range of use at a dovetail guide width between 68,3 mm and 70,8 mm. Application: Temple type A and Temple type B</p>	

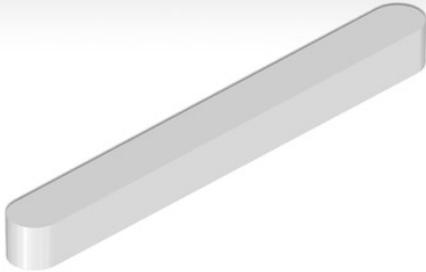
PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
1110-L-6	<p><b>Temple shoe type A</b>                      Temple shoe type A "left version" adjustable with 280 mm left and right handed trapezoidal threadspindle with 1 left-hand threaded and 1 right hand threaded union nut to adjust the base pre-tension at the Temple type A.                      Dovetail guide width: 73,3 mm.                      Powder coated according RAL 5023 distant blue.</p>	
1110-R-6	<p><b>Temple shoe type B</b>                      Temple shoe type B "right version" adjustable with 280 mm left and right handed trapezoidal threadspindle with 1 left-hand threaded and 1 right hand threaded union nut to adjust the base pre-tension at the Temple type B.                      Dovetail guide width: 73,3 mm.                      Powder coated according RAL 5023 distant blue.</p>	
1110-62	<p><b>Clamping strip short</b>                      Polished clamping strip "short version" (2,5 mm thickness), which allows a range of use at a dovetail guide width between 68,3 mm and 70,8 mm.                      Application: Temple shoe type A and Temple shoe type B</p>	

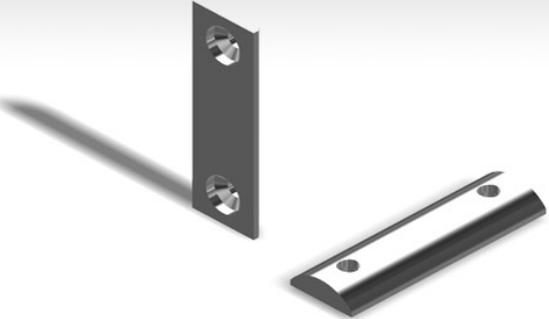
PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
10-2302-01	<p><b>Temple guide type A</b>                      CNC-milled temple guide type A with hand polished inner and outer radii, inclusive special shaft with fitted key: 60 mm x 6 mm x 7 mm made from Polyamide (Ertalon®). The inclination is <b>72°</b> (18°). Suitable for temples type A or type B. The application range lasts from endless bases to double-endless and Seamfelt-bases (from single-layer to four-layer).</p>	
10-2302-01-S	<p><b>Temple guide type A short Version</b>                      CNC-milled temple guide type A short version with hand polished inner and outer radii, inclusive special shaft with fitted key: 60 mm x 6 mm x 7 mm made from Polyamide (Ertalon®). The inclination is <b>72°</b> (18°). Suitable for temples type A or type B. The application range lasts from endless bases to double-endless and Seamfelt-bases (from single-layer to four-layer).</p>	
10-2302-02	<p><b>Temple guide type B</b>                      CNC-milled temple guide type B with hand polished inner and outer radii, inclusive special shaft with fitted key: 60 mm x 6 mm x 7 mm made from Polyamide (Ertalon®). The inclination is <b>75°</b> (15°). Suitable for temples type A or type B. The application range lasts from endless bases to double-endless and Seamfelt-bases (from single-layer to four-layer).</p>	

PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
10-2302-02-L	<p><b>Temple guide type B-long</b> CNC-milled temple guide type B-long (long version) with hand polished inner and outer radii, inclusive special shaft with fitted key: 60 mm x 6 mm x 7 mm made from Polyamide (Ertalon®). The inclination is <b>75°</b> (15°). Suitable for temples type A or type B. The application range lasts from endless bases to double-endless and Seamfelt-bases from single-layer to four-layer.</p>	
10-2302-02-V2	<p><b>Temple guide type B-V2</b> CNC-milled temple guide type B-V2 (long version) with hand polished inner and outer radii, inclusive special shaft with fitted key: 60 mm x 6 mm x 7 mm made from Polyamide (Ertalon®) and inclusive 1 modular Insert type B-V2 also made from Polyamide (Ertalon®). The inclination is <b>75°</b> (15°). Suitable for temples type A or type B. The application range lasts from endless bases to double-endless and Seamfelt-bases from single-layer to four-layer.</p>	
22-1201-02	<p><b>Insert type B-V2</b> CNC-milled, replaceable insert type B-V2 made from polyamide (Ertalon®). The insert contains 2 hardened threaded inserts M6 x 12 mm for secure screwing. Application: Temple guide type B-V2</p>	

PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
22-1201-01	<p><b>Thread insert M6x12</b>                      Ensat®-SB Thread insert self-tapping with tapping holes for steel and plastic applications, internal thread M6, external thread M10x1.25 and length=12 mm. Material: Case hardened steel yellow zinc plate. Application: Insert type B-V2</p>	
10-2302-03	<p><b>Temple guide type C</b>                      CNC-milled temple guide type C with hand polished inner and outer radii, inclusive special shaft with fitted key: 60 mm x 6 mm x 7 mm made from Polyamide (Ertalon®). The inclination is <b>80°</b> (10°). Suitable for temples type A or type B. The application range lasts from endless bases to double-endless and Seamfelt-bases (from single-layer to four-layer).</p>	
04092004-1	<p><b>Temple plastic insert</b>                      Plastic insert for temple guides made of thermoplastic -white POM- (Polyacetal / Polyformaldehyd).</p>	

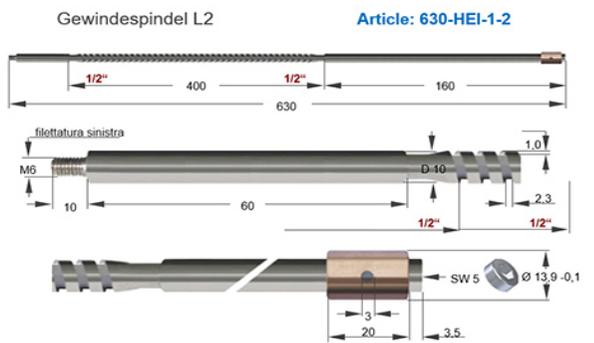
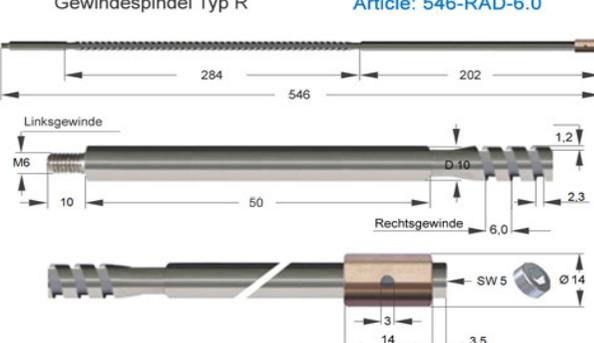
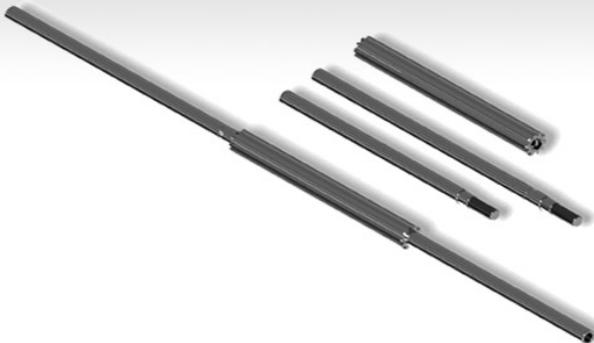
PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
1110-LR-14A	<p><b>Pair of Wedge type A</b>                      CNC-milled Pair of Wedge type A "left version and right version" made of polyamide PA6. The inclination is <b>72°</b> (18°). Range of use: Temple type A "left version" and Temple type B "right version", to stabilize the Temple base fabric guide type A at the weaving start-up during the style change. The distance between the Temple guide type A and the Wedge type A is base-thickness dependent adjustable and lockable. For fastening the pair of wedges, 2 cylinder head screws M5x40 mm and 2 washers D. 5.3 mm are included in the scope of delivery.</p>	
1110-LR-14B	<p><b>Pair of Wedge type B</b>                      CNC-milled Pair of Wedge type B "left version and right version" made of polyamide PA6. The inclination is <b>75°</b> (15°). Range of use: Temple type A "left version" and Temple type B "right version", to stabilize the Temple base fabric guide type B at the weaving start-up during the style change. The distance between the Temple guide type B and the Wedge type B is base-thickness dependent adjustable and lockable. For fastening the pair of wedges, 2 cylinder head screws M5x40 mm and 2 washers D. 5.3 mm are included in the scope of delivery.</p>	
1110-LR-14C	<p><b>Pair of Wedge type C</b>                      CNC-milled Pair of Wedge type C "left version and right version" made of polyamide PA6. The inclination is <b>80°</b> (10°). Range of use: Temple type A "left version" and Temple type B "right version", to stabilize the Temple base fabric guide type C at the weaving start-up during the style change. The distance between the Temple guide type C and the Wedge type C is base-thickness dependent adjustable and lockable. For fastening the pair of wedges, 2 cylinder head screws M5x40 mm and 2 washers D. 5.3 mm are included in the scope of delivery.</p>	

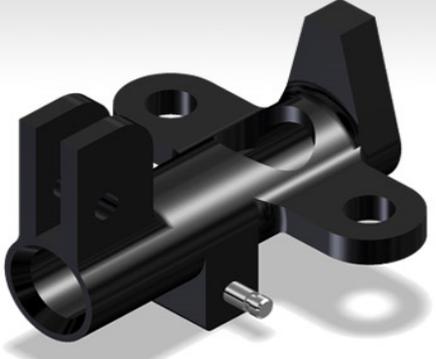
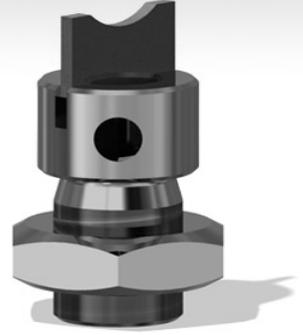
PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
1110-14KW	<p><b>Fabric guide type KW</b>                      Fabric guide type KW "short version" made of thermoplastic -white POM- (Polyacetal / Polyformaldehyd). Range of use: Lower temple bracket left &amp; right, adjusting die.</p>	
1110-15LW	<p><b>Fabric guide type LW</b>                      Fabric guide type LW "long version" made of thermoplastic -white POM- (Polyacetal / Polyformaldehyd). Range of use: Lower temple bracket left &amp; right, upper temple bracket left &amp; right.</p>	
13-2905-01	<p><b>Feather key</b>                      Feather key made of polyamide PA6 to protect the weaving reed from damages. Available for use in the Temple guide type A, Temple guide type B and Temple guide type C.                      Dimensions: 60 ± 0,05 mm x 6 -0,05 mm x 7 mm</p>	

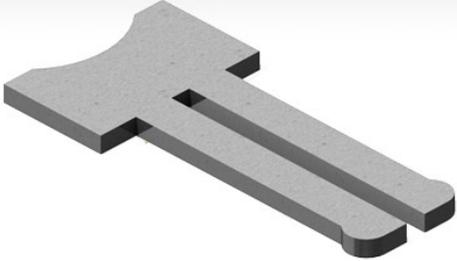
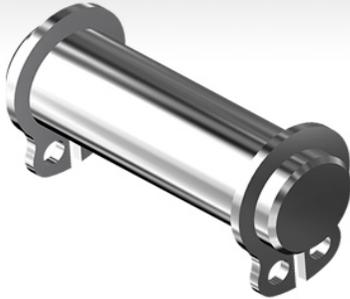
PG 9	YARN- & FABRIC GUIDES	Graphic
Article-no.	Description	
1110-32	<p><b>Connecting rod</b> Connecting rod</p>	
1110-44	<p><b>Guide plate</b> Guide plate with semicircled shape. Price per piece!</p>	
1110-33	<p><b>Compression spring</b> Compression spring Ø21x40 for use at the adjusting die.</p>	

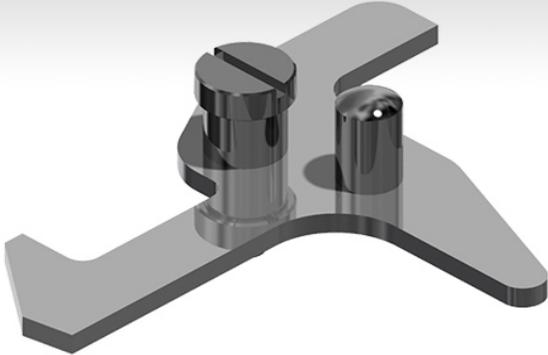
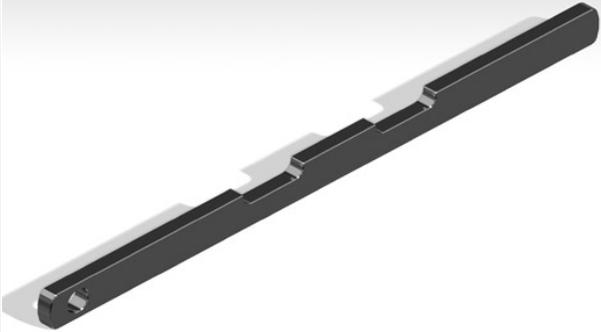


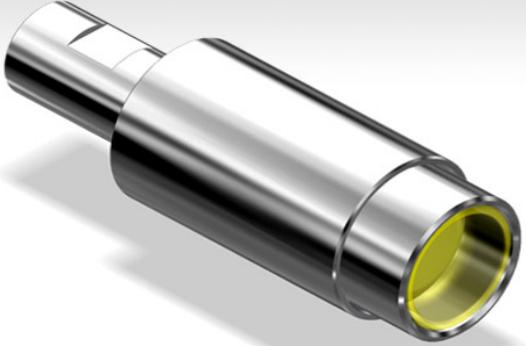
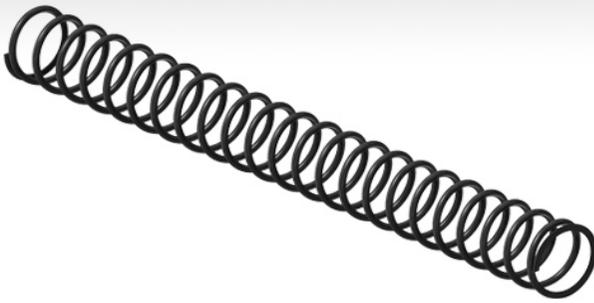
PG 10	HACOPA WINDER	Graphic
Article-no.	Description	
730-CE-1-8	<p><b>Threaded spindle type CE</b>                      Precision CNC machined threaded spindle type CE for the Hacoba ® bobbin machine.                      Dimensions: Diameter = 10 mm, Length = 730 mm, thread depth = 1,1 mm and a thread pitch with smooth transition of 1/8 inch.</p>	<p><b>Threaded spindle type CE</b>      <b>Article-no.: 730-CE-1-8</b></p>
723-VOI-1-4-1-5	<p><b>Threaded spindle type H</b>                      Precision CNC machined threaded spindle type H for the Hacoba ® bobbin machine.                      Dimensions: Diameter = 10 mm, Length = 723 mm, thread depth = 1,0 mm and a thread pitch with smooth transition from 1/4" to 1/5". The threaded spindle is available in different sizes.</p>	<p><b>Threaded spindle type H</b>      <b>Article: 723-VOI-1-4-1-5</b></p>
630-HEI-1-4-1-5	<p><b>Threaded spindle type L1</b>                      Precision CNC machined threaded spindle type L1 for the Hacoba ® bobbin machine.                      Dimensions: Diameter = 10 mm, Length = 630 mm, thread depth = 1,0 mm and a thread pitch with smooth transition from 1/4" to 1/5". The threaded spindle is available in different sizes.                      Minimum Purchase Quantity: 6 pcs</p>	<p><b>Gewindespindel L1</b>      <b>Article: 630-HEI-1-4-1-5</b></p>

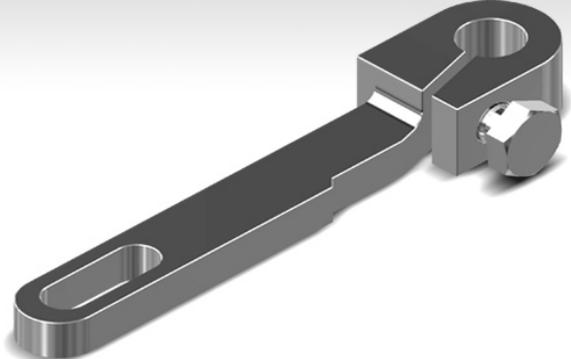
PG 10	HACOPA WINDER	Graphic
Article-no.	Description	
630-HEI-1-2	<p><b>Threaded spindle type L2</b> Precision CNC machined threaded spindle type L2 for the Hacoba ® bobbin machine. Dimensions: Diameter = 10 mm, Length = 630 mm, thread depth = 1,0 mm and a thread pitch with smooth transition of 1/2 inch. The threaded spindle is available in different sizes. <b>Minimum Purchase Quantity: 4 pcs</b></p>	<p>Gewindespindel L2 <b>Article: 630-HEI-1-2</b></p> 
546-RAD-6.0	<p><b>Threaded spindle type R</b> Precision CNC machined threaded spindle type R for the Hacoba ® bobbin machine. Dimensions: Diameter = 10 mm, Length = 546 mm, thread depth = 1,2 mm and a thread pitch with smooth transition of 6,0 mm. The threaded spindle is available in different sizes.</p>	<p>Gewindespindel Typ R <b>Article: 546-RAD-6.0</b></p> 
10-1911-01	<p><b>Spindle with pinion</b> Total-length: 400 mm, pinion length: <b>120 mm</b>. Material: 42 Cr Mo 4 V90, number of teeth: 10, Modul: 1, pitch angle l: 20°, gearing: quality: 9, roughness: Rz 6,3, bath nitriding: 0,02 mm deep, 2 hours. <b>Shaft:</b> Diameter: 8 h7 chrome plated, left side M6 left-hand thread and right side plan with Rz 100, circularity: 0,05 mm</p>	

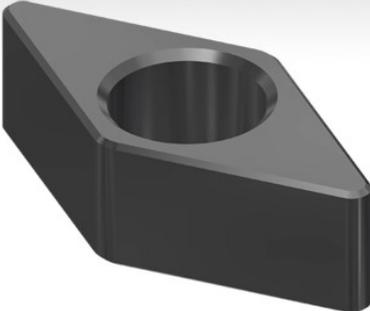
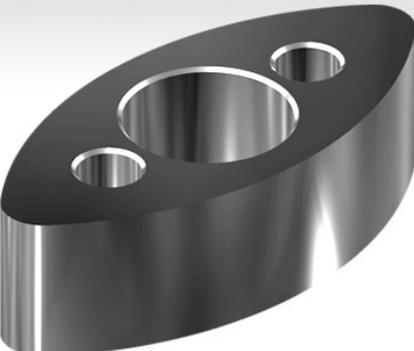
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
17-0708-01	<p><b>Thread Guide Lower</b> Basic adapter for the Spindle guide</p>	
05-2308-01	<p><b>Spindle guide</b> CNC machined and burnished spindle guide made of material ST37.</p>	
05-2308-02H	<p><b>Spindle guide sleeve</b> Spindle guide sleeve made of free cutting steel including spindle guide rotor.</p>	

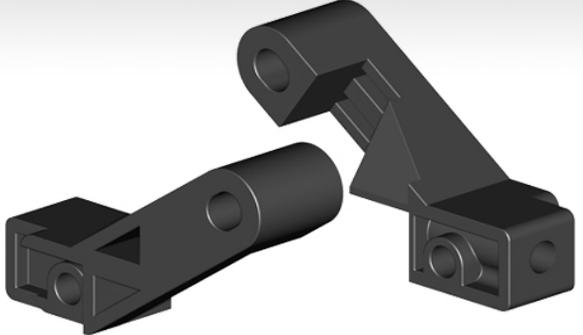
PG 10	HACOPA WINDER	Graphic
Article-no.	Description	
09-2312-01	<p><b>Thread Guide Plate</b> The Thread Guide Plate ensures reliable transmission of running direction with minimum wear.</p>	
22-1810-03	<p><b>Locking Pin + Ring DIN 471</b> Consisting of locking pin Ø4 m6 x13 mm and locking ring Ø4 DIN 471. Application: For connecting the Spindle Guide to the Thread Guide Lower.</p>	
19-1212-01	<p><b>Thread Guide Spring ES 5007</b> Thread Guide Spring Hacoba ES 5007 made of stainless spring wire EN 10270-3-1.4310 for the preload between Thread Guide Lower &amp; Spindle guide.</p>	

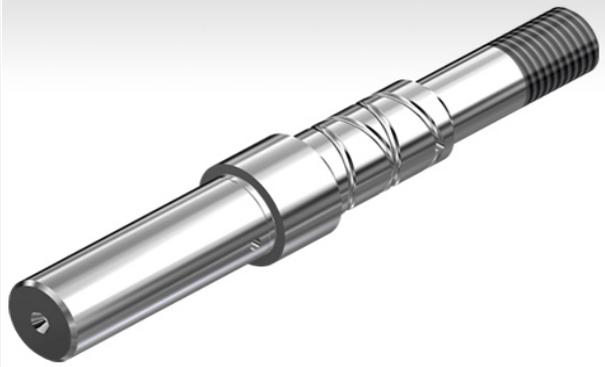
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
1271 (U11)	<p><b>Trip Lever assembled 1271 (U11)</b> Trip Lever complete with stud and collar stud</p>	
95-0107-02	<p><b>Scissors 1008 U15</b> Scissors type 1008U5 (N1019) short version upper and lower part</p>	
18-0805-02	<p><b>Grooved Bar</b> Milled and black burnished grooved bar</p>	

PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
16-2911-01	<p><b>Dead Center Assembly</b>                      Complete dead center consisting of 3 parts: Housing, steel head insert and double ball bearing. Dimensions: Outer diameter at the front: 22 mm, outer diameter at the back: 14 mm, length at the front: 50 mm, length at the back: 24 mm.                      The dead center assembly can be customized according to the used pirn winder.</p>	
16-2911-02	<p><b>Driving Head Assembly</b>                      The complete driving head includes a complete driving cup with ejector. Outer diameter: 32 mm. The driving head is customized according to the pirn type and mounting thread type.</p>	
1112S a	<p><b>Torsion spring 1112SA</b>                      Torsion spring 1112SA made of stainless spring wire EN 10270-3-1.4310, with applied spring ends on both sides:                      Wire diameter d = 1.5 mm                      Outer coil diameter De = 16.5 mm                      Length L0 = 145 mm                      Spring ends: 90° angled</p>	

PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
13-1309-1	<p><b>Bracket</b> Cast aluminum bracket with assembly pin.</p>	
1348	<p><b>Clamping piece 1348</b> Clamping piece 1348 made of ST50, with galvanized surface. For fastening, 1 hexagon head screw M8 x 25 mm DIN 933 is included in the delivery.</p>	
18-0905-01	<p><b>Cam 55</b> Cam made of POM natural with a stroke of 55 mm</p>	

PG 10	HAC OBA WINDER	Graphic
Article-no.	Description	
20-0309-01	<p><b>Cam shoe</b> Cam shoe for guiding the Cam 55. Dimensions: Length = 25 mm Wdith = 11,84 mm +/- 0,01 mm Thickness = 8 mm Bore diameter = 7,95 mm +/- 0,01 mm Surface = Burnished with finely polished 2 mm radii</p>	
20-0309-02	<p><b>Cam shoe 2</b> Cam shoe 2 for guiding the Cam 55. Specification: 1 Hole with diameter = 7,95 mm +/- 0,01 mm 2 drilling with diameter = 3,04 mm - 0,01 mm, 4,2 mm deep Width = 11,84 mm +/- 0,02 mm Height = 8,0 mm +/- 0,1 mm Length = 25,35 mm - 0,15 mm Material = 42CrMo4+QT Hardness = Nitrided: HRC 56+2 Surface = polished all around</p>	
1344	<p><b>Connecting Lever 1344</b> Connecting Lever 1344 made of ST50 with ground surface. Dimensions: Length = 194 mm; Width = 8 mm; Height = 3 mm</p>	

PG 10	HAC OBA WINDER	Graphic
Article-no.	Description	
1346	<p><b>Connecting Lever 1346</b> Connecting Lever 1346 made of ST50 with ground surface. Dimensions: Length = 74,5 mm; Width = 10,0 mm; Height = 3 mm</p>	
1153	<p><b>Adjusting Piece 1153</b> Adjusting Piece 1153 made of black hard rubber. Price for 1 piece!</p>	
18-0805-01	<p><b>Locking device</b> Locking device made of CK75G hardened with rounded edges and ground locking surface. Surface: Tempered to HRC 64+/- 1 and sandblasted.</p>	

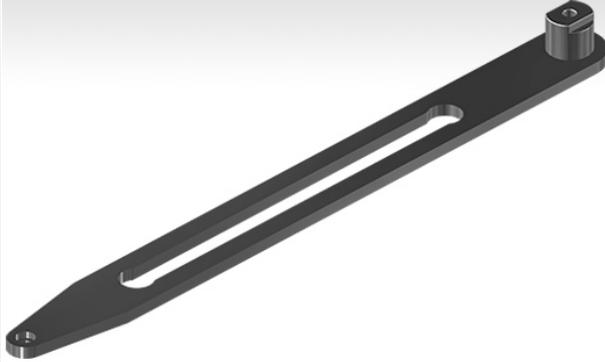
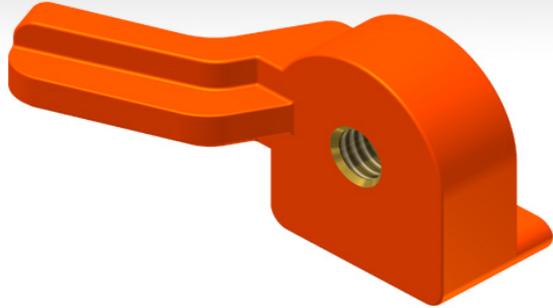
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
759A (U9)	<p><b>Worm Wheel assembly 759A (U9) with 66 teeth</b>                      Worm Wheel assembly 759A (U9) 66 teeth with catch bolts, pressure springs and clamps or E-clips.                      Application: Change Automaton type 12-700</p>	
759A	<p><b>Worm wheel with 66 teeth</b>                      Worm Wheel 759 (U9) with 66 teeth for Worm Wheel assembly 759 (U9).                      Application: Change Automaton type 12-700</p>	
754	<p><b>Worm Wheel Shaft 754</b>                      Worm Wheel Shaft for bearing the Worm Wheel 759 (U9).                      Application: Change Automaton type 12-700</p>	

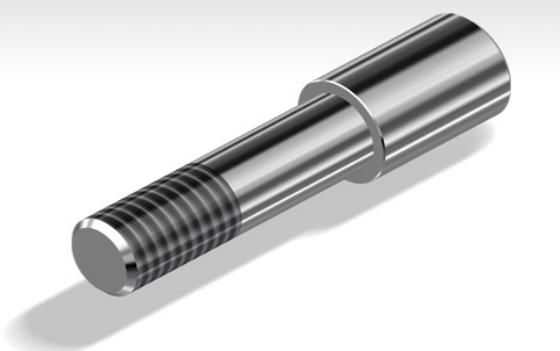
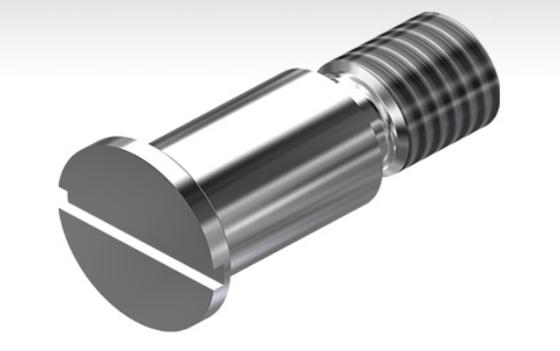
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
759A (U9) GÜ	<p><b>General overhaul worm wheel assembly</b>                      General overhaul worm wheel assembly, consisting of: Disassembly, sandblasting, 10 new Catch Bolt 760a, 10 new Pressure spring 763, 10 new Clamps or 10 new E-Clips.                      Application: Change Automaton type 12-700</p>	
760a	<p><b>Catch Bolt 760a</b>                      Catch Bolt for Worm Wheel 759 (U9) - Application: Change Automaton type 12-700</p>	
763	<p><b>Pressure spring 763</b>                      Pressure Spring for Catch Bolt 760a - Application: Change Automaton type 12-700</p>	

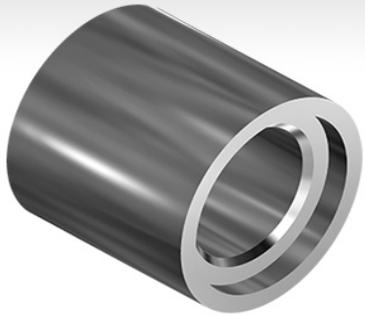
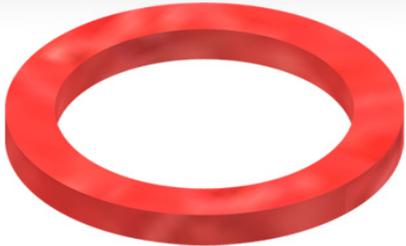
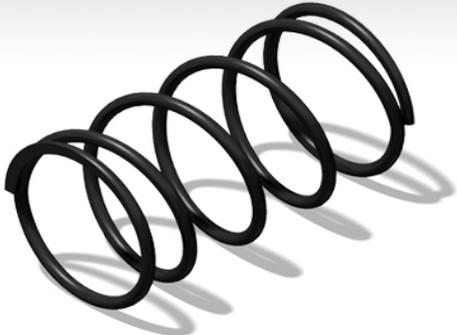
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
12-700-18	<p><b>Clamp</b> Clamp for fixing Catch Bolt 760a - Application: Change Automaton type 12-700</p>	
12-700-18-S	<p><b>E-Clip</b> E-Clip 9x18,8x1,1 DIN 6799 for fixing Catch Bolt 760a - Application: Change Automaton type 12-700</p>	
12-703-B	<p><b>Loose Pulley assembly Group</b> Loose Pulley assembly group consisting of: 1 Loose Pulley assembly, 1 Worm 720A and 1 Worm Shaft 12-702-1. Application: Change Automaton type 12-700</p>	

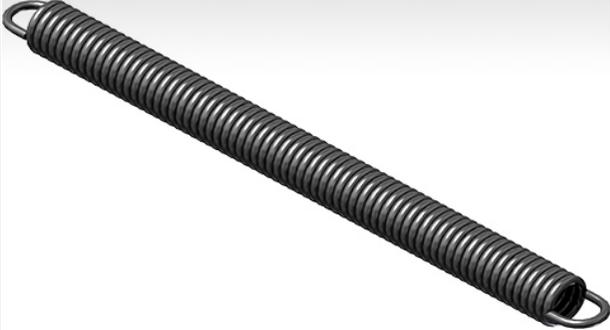
PG 10	HAC OBA WINDER	Graphic
Article-no.	Description	
12-703	<p><b>Loose Pulley assembly</b> Loose Pulley with bushings for free running of the drive belt. Application: Change Automaton type 12-700</p>	
720A	<p><b>Worm 720A</b> Worm 720A for Worm wheel 759A (U9) 66 teeth. Application: Change Automaton type 12-700</p>	
12-702-1	<p><b>Worm Shaft</b> Worm Shaft for Worm 720A. Application: Change Automaton type 12-700</p>	

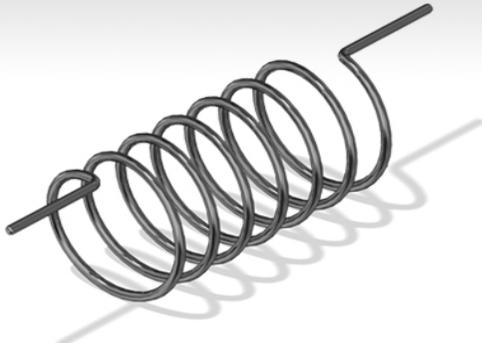
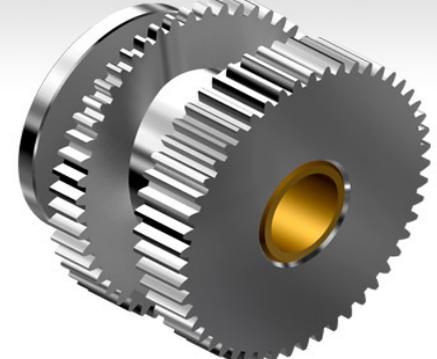
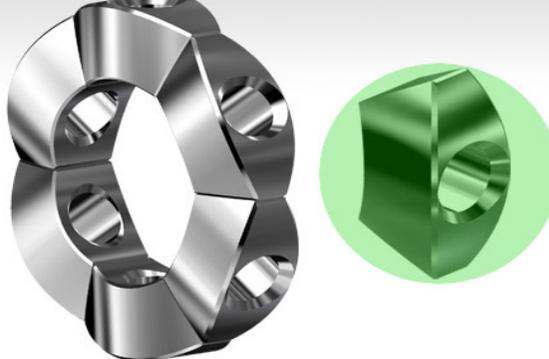
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
12-707-K	<p><b>Square &amp; Cam Bolt assembly</b>                      Square &amp; Cam Bolt including threaded pint and 2 hexagon nuts M4 &amp; M8.                      Application: Change Automaton type 12-700</p>	
12-707-2	<p><b>Cam Bolt 12-707-2</b>                      Cam Bolt for Square 12-700-1.                      Application: Change Automaton type 12-700</p>	
12-700-1	<p><b>Square 12-700-1</b>                      Square for Cam Bolt 12-707-2.                      Application: Change Automaton type 12-700</p>	

PG 10	HAC OBA WINDER	Graphic
Article-no.	Description	
724 (U3)	<p><b>Swivelling Lever assembly 724 (U3)</b> Swivelling Lever assembly 724 (U3) for changing slide movement. Application: Change Automaton type 12-700</p>	
5202-6R	<p><b>Locking Plate right version</b> Locking Plate right version as technical protection part for the Bridge 5202.</p>	
5202-5L	<p><b>Locking Plate left version</b> Locking plate left version as technical protection part for the Bridge 5202.</p>	

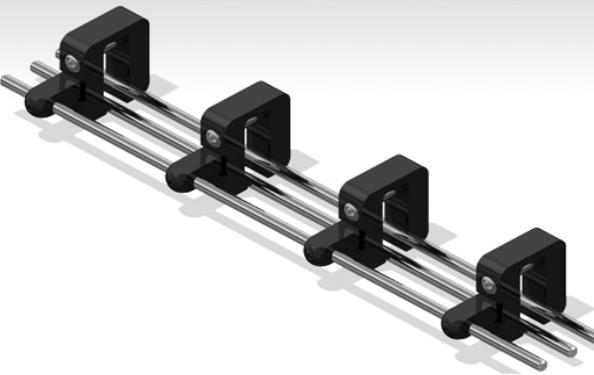
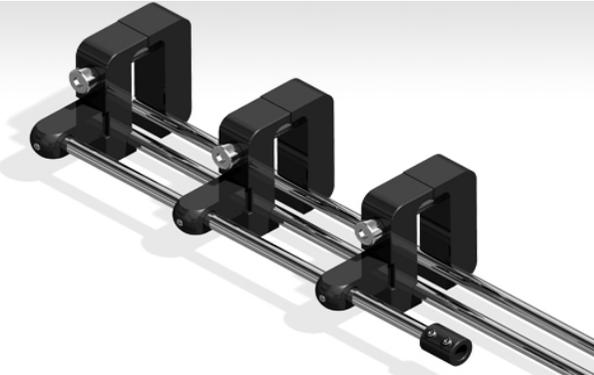
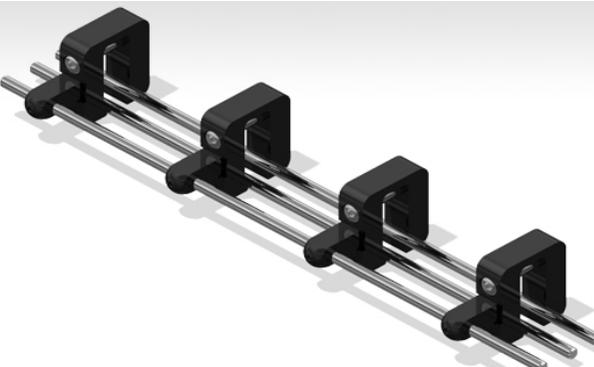
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
788	<p><b>Pin 788</b> Pin 788 made of free-cutting steel with zinc-plated surface. Dimensions: length 34 mm, thread M6 and 2 fittings Ø 8h9 - Ø 6h9. Application: Change Automaton type 12-700</p>	
12-712-3	<p><b>Collar Bolt 12-712-3</b> Collar Bolt for Roller 12-712-2 Application: Change Automaton type 12-700</p>	
12-702-2	<p><b>Bush 12-702-2</b> Bush for Whorm Shaft 12-702-1. Application: Change Automaton type 12-700</p>	

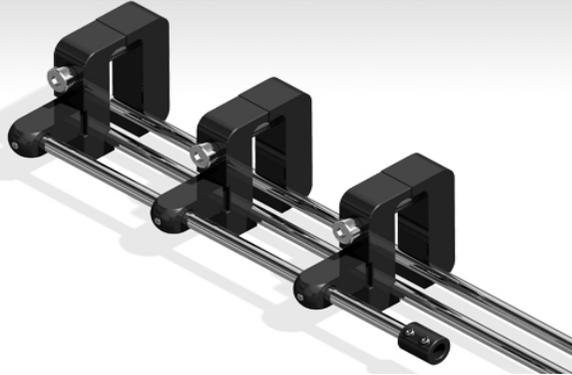
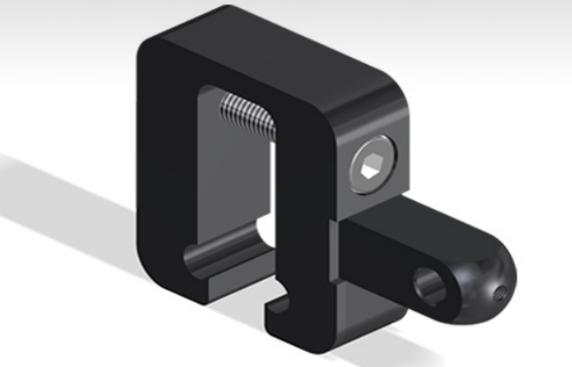
PG 10	HAC OBA WINDER	Graphic
Article-no.	Description	
12-712-2	<p><b>Roller</b> Roller for Collar Bolt 12-712-3. Application: Change Automaton type 12-700</p>	
757	<p><b>Vulcanized Fibre Ring</b> Vulcanized Fibre Ring for Worm Wheel Shaft 754. Application: Change Automaton type 12-700</p>	
B320	<p><b>Pressure Spring B320</b> Pressure Spring B320 made of spring wire EN 10270-3. Wire diameter d = 0,6 +0,2 mm Outer coil diameter De = 8,3 +0,3 mm Length L0 = 16 mm Spring ends: applied and ground</p>	

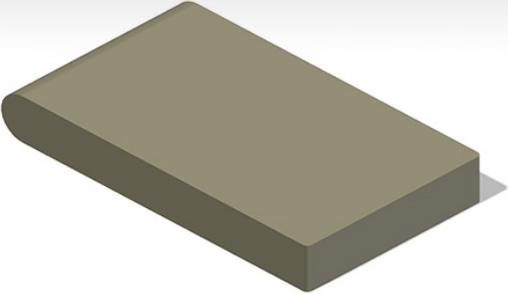
PG 10	HAC OBA WINDER	Graphic
Article-no.	Description	
747	<p><b>Traction Spring 747</b> Traction Spring for Switch Lever 12-707. Application: Change Automaton type 12-700</p>	
12-700-5	<p><b>Traction Spring 12-700-5</b> Traction Spring for Pressure lever 12-706-1. Application: Change Automaton type 12-700</p>	
748a	<p><b>Traction Spring 748a</b> Traction Spring for Cam Lifting Lever 739 (U6). Application: Change Automaton type 12-700</p>	

PG 10	HAC OBA WINDER	Graphic
Article-no.	Description	
F1717	<p><b>Torsion spring F1717</b>                      Torsion spring F1717 made of stainless spring wire EN 10270-3-1.4310, with spring ends angled 90° on both sides:                      Length L0: 21.0 mm                      Outer diameter Da: 10.4 mm                      Lever arm: 8.0 mm                      Wire diameter d: 0,7 mm                      Number of windings: 7                      Force Fn: 5.73 N</p>	
350a (U17)	<p><b>Differential Cam and Gear combined, 10 mm stroke</b>                      Differential Cam and Gear combined made of bright drawn round steel 9S 20K for a 10 mm stroke, module 1, number of teeth 51, stroke 10 mm, flank angle 40°</p>	
376 a	<p><b>Differential Cam Shoe 10 mm stroke for 350a (U17)</b>                      Differential Cam Shoe made of bright drawn round steel 9S 20K for a 10 mm stroke, carbonitrided 0.5 mm deep with a Rockwell hardness of HRC 64 ± 2.                      A ring consists of 6 Differential Cam Shoes. Price per Differential Cam Shoe:</p>	

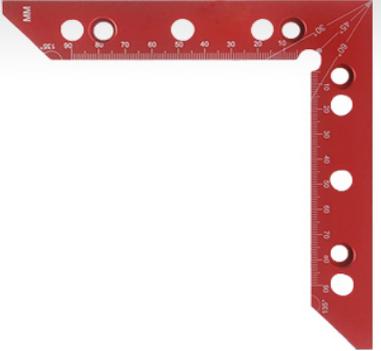
PG 10	HACOB A WINDER	Graphic
Article-no.	Description	
102204-00	<p><b>Driving belt 20x5</b> Driving Belt made of full leather used for Hacoba weft winding machine. Delivered of yard goods. Dimensions: Width = <b>20 mm</b>; Height = <b>5 mm</b>; Roll length = <b>10 meter</b>.</p>	
102204-01	<p><b>Driving belt 25x5</b> Driving Belt made of full leather used for Hacoba weft winding machine. Delivered of yard goods. Dimensions: Width = <b>25 mm</b>; Height = <b>5 mm</b>; Roll length = <b>10 meter</b>.</p>	
102204-02	<p><b>Driving belt 30x5</b> Driving Belt made of full leather used for Hacoba weft winding machine. Delivered of yard goods. Dimensions: Width = <b>30 mm</b>; Height = <b>5 mm</b>; Roll length = <b>10 meter</b>.</p>	

PG 11	REED ACCESSORIES	Graphic
Article-no.	Description	
9930000 A	<p><b>Deflection Unit type A</b>                      Universal Deflection Unit type A for the controlled yarn guidance consisting of: 3 x 2 meter long polished stainless steel shafts with diameter 10 mm and 4 Reed Clamps Jaws type A. During narrowing the reedwidth on a loom the ends still stay in the weaving reed.                      Application: Reed with top profile 20 mm x 20 mm or 25 mm x 20 mm.</p>	
9930000 EA	<p><b>Extension Segment type EA</b>                      Universal Extension Segment type EA for the controlled yarn guidance consisting of: 3 x 2 meter long polished stainless steel shafts with diameter 10 mm, 1 connecting sleeve and 3 reed Clamps Jaws type A. During narrowing the reedwidth on a loom the ends still stay in the weaving reed.                      Application: Reed with top profile 20 mm x 20 mm or 25 mm x 20 mm.</p>	
9930000 B-C	<p><b>Deflection Unit type B-C</b>                      Universal Deflection Unit type B-C for the controlled yarn guidance consisting of: 3 x 2 meter long polished stainless steel shafts with diameter 10 mm, 1 connecting sleeve and 4 Reed Clamps Jaws type B-C. During narrowing the reedwidth on a loom the ends still stay in the weaving reed.                      Application: Reed with top profile 30 mm x 20 mm or 35 mm x 20 mm.</p>	

PG 11	REED ACCESSORIES	Graphic
Article-no.	Description	
9930000 EB-C	<p><b>Extension Segment type EB-C</b>                      Universal Extension Segment type EB-C for the controlled yarn guidance consisting of: 3 x 2 meter long polished stainless steel shafts with diameter 10 mm, 1 Connecting Sleeve and 3 Reed Clamps Jaws type A. During narrowing the reedwidth on a loom the ends still stay in the weaving reed.                      Application: Reed with top profile 30 mm x 20 mm or 35 mm x 20 mm.</p>	
9930000-A	<p><b>Reed Clamps Jaws type A</b>                      Reed Clamps Jaws type A for mounting on Universal Deflection Unit type A or on Extension Segment type EA.                      Application: Reed with top profile 20 mm x 20 mm or 25 mm x 20 mm.</p>	
9930000-BC	<p><b>Reed Clamps Jaws type B-C</b>                      Reed Clamps Jaws type A for mounting on Universal Deflection Unit type B-C or on Extension Segment type EB-C.                      Application: Reed with top profile 20 mm x 20 mm or 25 mm x 20 mm.</p>	

PG 11	REED ACCESSORIES	Graphic
Article-no.	Description	
14-1803-01	<p><b>Pumice stone GRAIN 150</b> Coarse pumice stone for removing sharp edges on the reed dents.</p>	
14-1803-02	<p><b>Pumice stone GRAIN 250</b> Medium-sized pumice stone for rounding off ground edges on the dents of the reed.</p>	
14-1803-03	<p><b>Pumice stone GRAIN 400</b> Very fine pumice stone for polishing rounded edges on the reed dents.</p>	

PG 11	REED ACCESSORIES		Graphic
Article-no.	Description		
22-2909-02	<p><b>Weaver-Set</b> Weaver-Set consisting of: 1 Temple adjustment angle with scale, 1 Precision linen tester 25x25 mm, 1 Darning needle, 3 Long weaver needles, 3 Weaver needles round pointed, 1 Weaver comb short, 1 Weaver comb long, 1 Weaver scissors, 1 Pocket microscope with illumination</p>		
22-0710-01	<p><b>Needle with handle</b> For the use at heavy weight fabric weaving for various applications such as selvage control and scratching of weaving start-up marks.</p>		
22-1310-01	<p><b>Long weaver needle</b> For the use in heavy fabric weaving for various applications such as sewing on when widening, weaving on, attaching selvage cord etc.</p>		

PG 11	REED ACCESSORIES	Graphic
Article-no.	Description	
22-1310-02	<p><b>Adjustment angle with scale</b> Temple adjustment angle for initial positioning of the temple when start-up weaving a new fabric.</p>	
02-100-05	<p><b>Reed clamp type A</b> Burnished reed clamp type A made of material ST37. Dimensions: 100,0 x 60,0 x 12,0 x 8,5.</p>	
02-100-06	<p><b>Reed clamp type B</b> Burnished reed clamp type B made of material ST37. Dimensions: 100,0 x 70,0 x 19,6 x 11,1.</p>	

PG 11	REED ACCESSORIES	Graphic
Article-no.	Description	
02-100-07	<p><b>Reed clamp type C</b> Burnished reed clamp type C made of material ST37. Dimensions: 200,0 x 60,0 x 12,0 x 8,5.</p>	
02-100-08	<p><b>Reed clamp type D</b> Burnished reed clamp type D made of material ST37. Dimensions: 200,0 x 70,0 x 19,6 x 11,1.</p>	