

shoes & leather.















intelligent threads.

amann group.

For more than 160 years, AMANN has been one of the global leaders in the field of high-quality sewing and embroidery threads. From universal sewing threads to special high-tech threads, AMANN offers a wide range of threads for all sewing and embroidery applications. Each product requires very specific thread properties – which are often not featured by off-the-shelf products. As a global player and technological leader, AMANN counts on intelligent products, individual solutions and innovative concepts.

AMANN's sewing and embroidery threads – intelligent. individual. innovative.

The combination of carefully selected high quality raw yarns and processing skills that have been acquired in more than 160 years of sewing and embroidery thread production, guarantee the outstanding performance profile of AMANN's products.

Ideally balanced thread twist and elongation level, highest possible thread strength level, highly consistent thread finish in combination with a perfectly adjusted precision winding process guarantee our customers the best sewing and processing performance resulting in higher production efficiency and reduced scrap rates.

AMANN's sewing threads: Best performance for our customers - any time at any place.

AMANN's Code of Sustainability - maximum compliance through minimum environmental impact.

Dealing with the environment and its resources responsibly and sustainably is an important aspect of AMANN Group's corporate activity. This is documented by Augsburg's production site's certification in accordance with DIN EN ISO 14001 environmental management system as well as with DIN 50001 energy management system.

All AMANN sewing and embroidery threads including finishing consist only of non-hazardous materials and substances with no risk for people and environment. Compliance with REACh and certification under Oeko-Tex Standard 100 guarantee that AMANN's products are not harmful.



performance profile.



Reliability.

Based on its vast expertise in the production of Providing excellent technical and processing sewing and embroidery threads, AMANN has support is one of the key strengths of AMANN. been serving the shoes and leather industry and Technical sewing and embroidery advisory its suppliers for many decades. With expert services include on-site training courses, technical product solutions from fashion to technical workshops, customised tests, as well as product applications, AMANN has become an integral and processing recommendations. part of the global textile industry.

International Sales Team.

a global sales network with a comprehensive uses the latest state of the art technology. regarding all business related aspects.

Quality Management.

is a core point of AMANN's corporate philosophy. The entire group has been certified in accordance with DIN EN ISO 9001. Fulfilment of our process- Logistics & Warehousing. oriented quality commitment for a safe production ISO/TS 16949 standards.

Technical Advisory.

Colour Competence.

Colour is the key when it comes to shoes and More than 1,680 motivated employees and leather. AMANN's colour competence centre understanding of the nature of the shoes and Experienced specialists work to meet the leather business guarantee successful support customers' colour requests, fulfilling all standards of the shoes and leather industry. A huge globally available colour range helps to cover the most diverse requirements of all major thread Living up to our high quality standards at any time consuming industries. Standard and trend shades create a large variety of colours.

Producing threads for the global shoes and environment is proven by our Augsburg pro- leather industry, shipping and warehousing are duction site's certification under the strict part of our daily business. Just-in-time delivery, flexibility in meeting the changing customer requirements and efficient logistics management with a huge range of products - this is what AMANN stands for

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products and applications.

Shoes, bags and belts are important fashion accessories, so the way they look is crucial. Seams are an important design element for the look of elegant shoes and leather goods. Upholstered furniture made from leather or artificial leather also calls for extremely high-quality seams requiring durability, abrasion resistance and elasticity. Quality sewing threads from AMANN will master these tasks - individually, intelligently and innovatively.

Serafil

Polyester continuous filament

- the outstanding product for shoes and leather
- for closing and decorative seams
- noble soft sheen
- high seam strength
- most reliable sewing performance with perfect stitch formation

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MAG	

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	8	350	Nm 190-260	850 m FS	on request
	10	270	Nm 170-220	300 m FS	148
	10	270	INM 170-220	1.000 m FS	148
	15	210	Nm 140-180	450 m FS	148
	20	135	Nm 120-140	600 m FS	240
	20	135	INM 120-140	2.500 m FS	240
Serafil	20	00	N. 100 120	900 m FS	240
Seran	30	90	Nm 100-130	4.000 m FS	240
	40	70	NL 00 100	1.200 m FS	240
	40	70	Nm 90-120	5.000 m FS	240
	40	4.5	NL: 00 110	1.800 m FS 240	240
	60	45	Nm 80-110	5.000 m FS	on request
		20	N., 70 110	2.400 m FS	240
	80	30	Nm 70-110	10.000 m FS	on request

The broad assortment is completed by the hydrophobic finish "WR", one of the basic requirements for waterproof seams.

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	10	270	Nm 170-220	300 m FS	on request
	20	135	Nm 120-140	600 m FS	148
Serafil WR	30	90	Nm 100-130	900 m FS	on request
	40	70	Nm 90-120	1.200 m FS	148
	60	45	Nm 80-110	1.800 m FS	on request

Serabond

Polyester continuous filament, bonded

- bonded version of Serafil
- resistant to untwisting and therefore ideal for multidirectional sewing
- extremely durable

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	20	135	Nm 120–140	2.000 m FS	6
Serabond	30	90	Nm 110–130	3.000 m FS	6
	40	70	Nm 90–120	4.000 m FS	6

ONYX

Polyamide 6.6 continuous filament

- the ultra-strong sewing thread for heavy-duty seams
- for closing and topstitch seams
- robust, abrasion resistant, durable
- excellent strength properties

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	10	270	Nm 180-210	1.500 m FS	27
	13	210	Nm 160-190	1.500 m FS	40
	20	135	Nm 120-150	2.000 m FS	57
ΟΝΥΧ	30	105	Nm 110-140	2.500 m FS	87
ONTA	40	70	Nm 100-120	2.000 m FS	87
	40	70	INM 100-120	4.000 m FS	87
	60	45	Nm 80-100	6.000 m FS	87
	80	35	Nm 60-90	8.000 m FS	17

The broad assortment is completed by the hydrophobic finish "WR", one of the basic requirements for waterproof seams.

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
ONYX WR	30	105	Nm 110-140	2.500 m FS	on request
	40	70	Nm 100-120	4.000 m FS	on request



products and applications.

Serabraid

Polyester continuous filament, braided

- the braided thread for individual decorative effects
- for closing and topstitch seams on leather
- decorative, impressive, effective
- waxed version available for hand sewing



Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	800 T60	380	Nm 180	700 m SSP	30
	800 T90	450	Nm 180	700 m XW	30
	1000 T60	500	Nm 200	500 m SSP	46
Serabraid	1000 T90	600	Nm 200	500 m XW	46
Serubraia	1200 T60	750	Nm 230	500 m SSP	46
	1200 T90	890	Nm 230	500 m XW	46
	1400 T60	1030	Nm 250	300 m SSP	30
	1400 T90	1200	Nm 250	300 m XW	30

The broad assortment is completed by the hydrophobic finish "WR", one of the basic requirements for waterproof seams.

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	1000 WR	500	Nm 200	500 m SSP	on request
Serabraid WR	1400 WR	1030	Nm 250	300 m SSP	on request

Depending on the application, Serabraid is available in three different finishes:

- T60 = standard
- T90 = waxed for hand sewing
- WR = water-repellent

saba^c

Polyester/polyester core spun

- AMANN's all-rounder
- high-performing, outstanding sewing behaviour
- ideal abrasion resistance and strength properties
- great in tickets and colours
- textile look
- for closing and topstitch seams
- for matt embroideries

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	8	400	Nm 210-250	800 m Co	30
	12	260	Nm 160-180	1.100 m Co	75
	18	200	Nm 140-160	1.400 m Co	75
	30	105 Nm	Nm 110-130	300 m XW	500
saba ^c			19m 110-130	3.000 m Co	on request
saba	35	80	Nm 100-120	5.000 m Co	75
	50		60 Nm 90-110	500 m XW	500
	50	00		2.500 m Co	500
0.0	80	40	Nm 90-100	1.000 m XW	500
	00	40	1411 90-100	5.000 m Co	500



Polyester/cotton core spun, glacé

- the sewing thread with special finish for heavy-duty applications
- for closing and decorative seams
- fine matt sheen
- extremely durable in the seam

Product	Ticket no.	Tex no.	Needle size	Make-up	No. of colours
	11	260	Nm 160-180	1.100 m FS	20
	15	200	Nm 140-160	1.400 m FS	20
	20	135	Nm 130-160	2.000 m FS	20
Rasant-Oxella	25	120	Nm 130-160	2.750 m FS	36
	30*	105	Nm 120-140	2.500 m FS	37
	35	80	Nm 110-130	4.000 m FS	60



*Polyamide/cotton core spun, glacé





quality and processing.

Further quality features.

In addition to the before mentioned properties, Serafil and ONYX offer the following quality features:

- high thermal resistance during the sewing process
- antistatic properties
- outstanding sewing performance

The smooth surface of Serafil and ONYX provides a lustrous appearance where decorative seams are required.

Besides our continuous filaments, the shoes and leather industry also appreciates our polyester/ polyester and polyester/cotton core spun threads.

saba^C and Rasant-Oxella are high-performing core spun threads which offer an alternative to smooth continuous filaments due to their textile surface. For example:

- as bobbin thread in lockstitch seams in combination with Serafil as needle thread
- as needle thread in zigzag machines
- for an optimized stich adhesion on shoe lining
- for sewing of boot linings with flatlock or overlock sewing machines
- for decorative seams, especially on upholstery



Raw materials for sewing threads.

Today, shoes and leather are almost exclusively sewn using synthetic sewing threads. For this, mainly polyester or polyamide continuous filaments are used.

Serafil, Serabond, saba^C, Serabraid and the bearing core of Rasant-Oxella are made of high-strength polyester filaments* which are responsible for their high seam quality and the optimal functional properties. Due to the high breaking strength and abrasion resistance of polyester, shoe seams are very durable over a long period of time. In addition, polyester has a high resistance to chemicals and UV.

Due to their higher specific weight compared to polyamide sewing threads of the same ticket number, polyester sewing threads have a finer cross section and are accordingly thinner. This allows the use of smaller needle sizes which reduces the needle heating and leads to a more appealing look of the seam. The risk of perforation is reduced when cutting needles are used and conditions for sealing are improved.

ONYX is made of polyamide 6.6 filaments. Although polyamide does not feature the universal characteristics of polyester, it is superior in regards to breaking strength and abrasion resistance. *) Exception: Rasant-Oxella 30: Polyamide/cotton core spun, glacé



quality and processing.

Water-repellent seams.

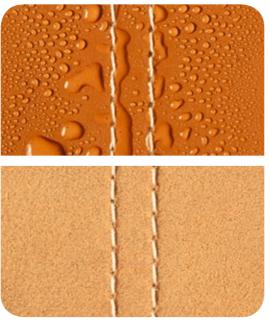
The requirement for shoes to be waterproof is nothing new. Due to their texture, sewing threads have a wicking effect. The thread, even when part of a seam, soaks up the water and transports it through the stitch holes towards the inside. In order to prevent this, there are sewing threads with a water-repellent (VVR) finish.

No water-repellent seams



Water stains on the seam when using sewing threads without WR-finish (capillary action/ wicking)

Water-repellent seams



No water stains/dry seam when using sewing threads with WR-finish

AMANN is continuously testing its WR-finish by applying the so-called rising-test. All laboratories are equipped with the respective test equipment.

We care.

AMANN's WR-finish does not contain PFOA.

AMANN does not use WR-finish with PFOA (perfluorooctanoic acid) at all. All AMANN threads with WR-finish are environmentally friendly and certified according to Oeko-Tex Standard 100.



Needles.

Please keep in mind:

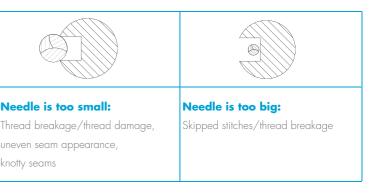
- Using bigger needles than recommended is not a problem using finer needles can lead to thread breakage, skipped stitches and damages in the sewing thread.
- The needle protects the sewing thread during the sewing process provided that the size of the needle and the size of the sewing thread match.



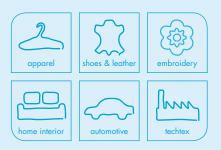
Ideal needle size: The sewing thread is perfectly protected and guided = best sewing result

- We strongly recommend to use high quality needles. Low quality needles are mostly polished badly and could damage the sewing thread – which finally leads to thread breakage.
- Many needle manufacturers offer special needles for difficult materials and seams. We recommend to contact the needle manufacturers for professional advice.
- All AMANN threads have a special protective finish that not only provides excellent gliding performance of the sewing thread but also reduces the temperature at the eye of the needle. In exceptional cases, the use of thread lubricant (for example silicone oil) or a precisely calibrated machine air-cooling system may be an alternative.
- AMANN thread lubricator provides cooling for the needle and keeps it clean; it also simplifies the penetration of the needle and the thread passing through needle and material.

When processing leather and similar materials, sewing machine needles are of special importance. The needle must be selected carefully because most types of leather and artificial leather need to be sewn with cutting point needles. The relevant cutting profiles and needle sizes in combination with sewing thread and stitch density determine the look of a seam - industry model designers should consider the needle point form of the different shoe seams early in the design phase.



intelligent threads.



Our management systems are certified according to





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