

NITTA



- *Poly*
- *CFTG*
- *Super Endless*
- *PolySprint*
- *New Light Grip*
- *Tooling*

...more than just Power Transmission



Poly

Examples of Applications for Nitta Belts Poly



Textile Industry

OE Spinning Machines, twisting and double twisting machines, carding machines, circular knitting machines, automatic winders and other applications.



Printing and Paper Industries

Drives and Tapes for printing machines, calendering machines, cross cutters, folder gluers, sheet feeders, re-winders, pulpers and other applications.



Wood Industry

Chipping machines, laminate coating lines, planing and sanding, saws, milling machines, routing machines and other applications.

Further Application Areas

Oil and water separators, centrifuges, ventilation fans, quarry machines, presses, pumps, cable pulling machines, cable making machines and other applications.

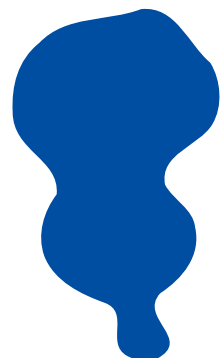


The success of Nitta's Poly Belt range owes itself not only to the numerous years of experience in the transmission sector, but also to Nitta's continuous investment in the most up to date manufacturing processes and production equipment.

All polyamide flat belts from Nitta consist of an exceptional monofilament polyamide layer which provides the strength combined with a wide choice of covers for abrasion and wear resistance. Due to their excellent performance, durability and quality, Nitta Belt Poly is particularly ideal for the demanding applications in the textile and printing industries. A wide range of quality products has ensured that Nitta Belt Poly is also suitable for many other applications for which reliability along with ease of installation, low maintenance and minimal power loss are key factors.

The products of the XH series also consist of a polyamide nylon core which is covered on both sides with a special synthetic rubber which has a high abrasion resistance. These belts are recognised by their excellent resistance to abrasion, low noise emission, high resistance to oil and a good coefficient of friction. This combination of qualities, for example, makes this the ideal choice for demanding folder gluer / box making applications.

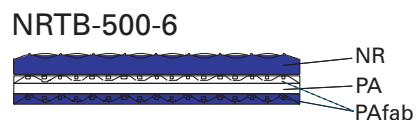
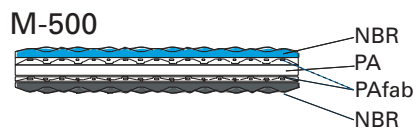
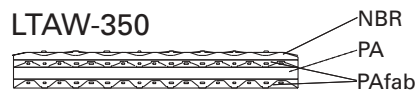
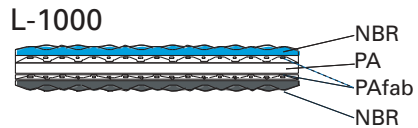
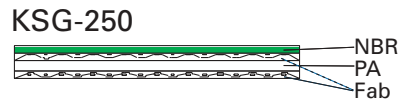
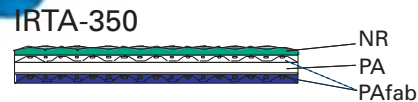
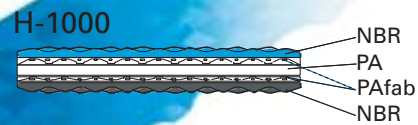
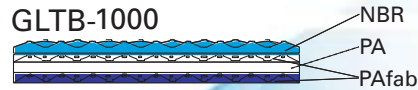
Focusing on specialised innovation is a commitment undertaken by Nitta to meet existing and future industry requirements. These market demands are consistently being met by Nitta through its continuous policy of new developments and are fulfilled in particular by the excellent properties of the polyamide and elastomers which are used.



NITTA

Poly - Techn

Example of the Construction:



Type
Thickness (mm)
Weight (kg/m²)

GLTB-1000	2,75	2,6
GMTA-500	1,9	2,0
H-500	3,5	3,8
H-750	3,75	4,1
H-1000	4,0	4,4
H-1500	4,5	5,0
H-2000	5,0	5,6
HU-250	1,3	1,6
IR-500	1,3	1,5
IRS-6S	1,35	1,4
IRTA-350	1,15	1,2
KCS-350	1,1	0,8
KSG-250	0,85	0,8
KSG-350	1,0	0,9
L-250	1,25	1,4
L-350	1,4	1,6
L-500	1,55	1,8
L-750	2,2	2,5
L-1000	2,45	2,8
L-1500	2,95	3,4
L-2000	3,45	4,0
LA-350-Z SI	2,1	2,4
LA 500	1,55	1,8
LW-350	1,4	1,6
LTAW-350	1,4	1,6
LWS-350H	2,1	2,6
M-250	2,2	2,4
M-350	2,35	2,6
M-500	2,5	2,7
M-750	2,75	3,0
M-1000	3,0	3,3
M-1500	3,5	4,0
M-2000	4,0	4,6
M-1000GS	2,6	2,9
MB-1000GSR	2,6	2,9
MH-2500	5,0	6,0
MH-3000	5,5	6,5
MH-4000	6,5	7,6
NRTB-500-6	6,0	6,9
NRL-500-6	6,0	6,9

Poly

The advantages briefly:

- Excellent wear resistance
- High flexibility
- No maintenance
- High energy efficiency
- Long service life
- Power efficiency
- Fast installation
- Resistant to oil and humidity
- Permanently anti-static

Abbreviations:

PA = Polyamide

Technical Data

Min. Pulley
Dia. in mm

Specific Tension
at 1% in N/mm

60	7,5
40	3,8

50	3,8
75	5,6
100	7,5
150	11,3
200	15,0
20	1,5

50	3,8
60	5,8
30	2,6

30	2,6
20	1,5
35	2,6

25	1,5
35	2,6
50	3,8
75	5,6
100	7,5
150	11,3
200	15,0

35	2,6
50	3,8

30	2,6
30	2,6
30	2,6

25	1,5
35	2,6
50	3,8
75	5,6
100	7,5
150	11,3
200	15,0

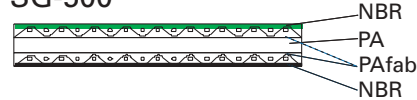
100	9,8
100	9,8

250	18,8
300	22,5
400	30,0

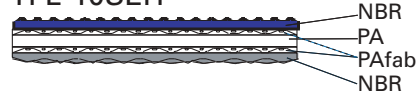
60	3,8
60	3,8

Example of the Construction:

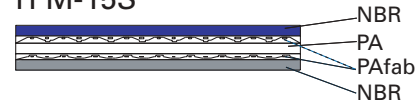
SG-500



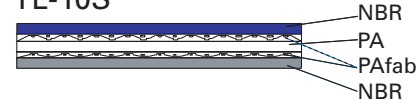
TFL-10SEH



TFM-15S



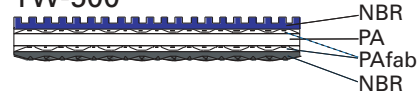
TL-10S



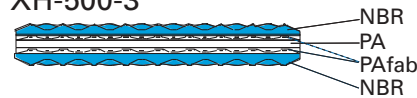
TTA-1000N



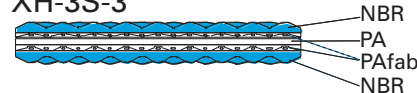
TW-500



XH-500-3



XH-3S-3



Type

Thickness (mm)

Weight (kg/m²)

Min. Pulley Dia. in mm

Specific Tension at 1% in N/mm

SG-250	0,8	0,8	25	1,5
SG-500	1,1	1,1	50	3,8
SG-750	1,35	1,4	75	5,6
SG-750-2P	1,1	1,2	50	5,6
SG-1000	1,6	1,7	100	7,5
SGL-250	1,0	1,0	25	1,5
SGL-500	1,3	1,4	50	3,8

TFL-6S	2,25	2,4	60	5,8
TFL-7S	2,4	2,6	75	7,5
TFL-10S	2,6	2,8	100	9,8
TFL-3SH	2,0	2,0	35	3,4
TFL-10SEH	2,6	2,8	100	9,8
TFL-12S	2,85	3,1	125	12,3
TFL-15S	3,1	3,4	150	15,0
TFL-15S-LW	3,1	3,4	150	15,0
TFL-18S	3,35	3,7	175	17,0

TFM-10S	3,2	3,5	100	9,8
TFM-15S	3,7	4,1	150	15,0

TL-7S	1,9	2,0	75	7,5
TL-10S	2,2	2,4	100	9,8

TTA-250N	1,0	0,9	25	1,5
TTA-500N	1,3	1,2	40	3,8
TTA-1000N	1,8	1,7	60	7,5
TTB-1000	2,8	2,5	60	7,5

TW-500	2,1	1,9	40	3,8
TWH-500	3,8	3,8	40	3,8

XH-500-3	3,0	3,4	50	3,8
XH-500-3.5	3,5	3,9	55	3,8
XH-500-4	4,0	4,3	60	3,8
XH-500-5	5,0	5,5	70	3,8
XH-500-6	6,0	6,6	80	3,8
XH-750-3	3,0	3,3	60	5,6
XH-750-4	4,0	4,4	70	5,6
XH-750-6	6,0	6,6	80	5,6
XH-1000-4	4,0	4,4	75	7,5

XH-3S-3	2,85	3,2	50	3,4
XH-3S-4	3,85	4,1	60	3,4
XH-3S-6	5,85	6,4	80	3,4

PAfab = Polyamide fabric

Fab = Fabric

NBR = Nitrile rubber (acrylnitrilebutadiene rubber)

CFTG

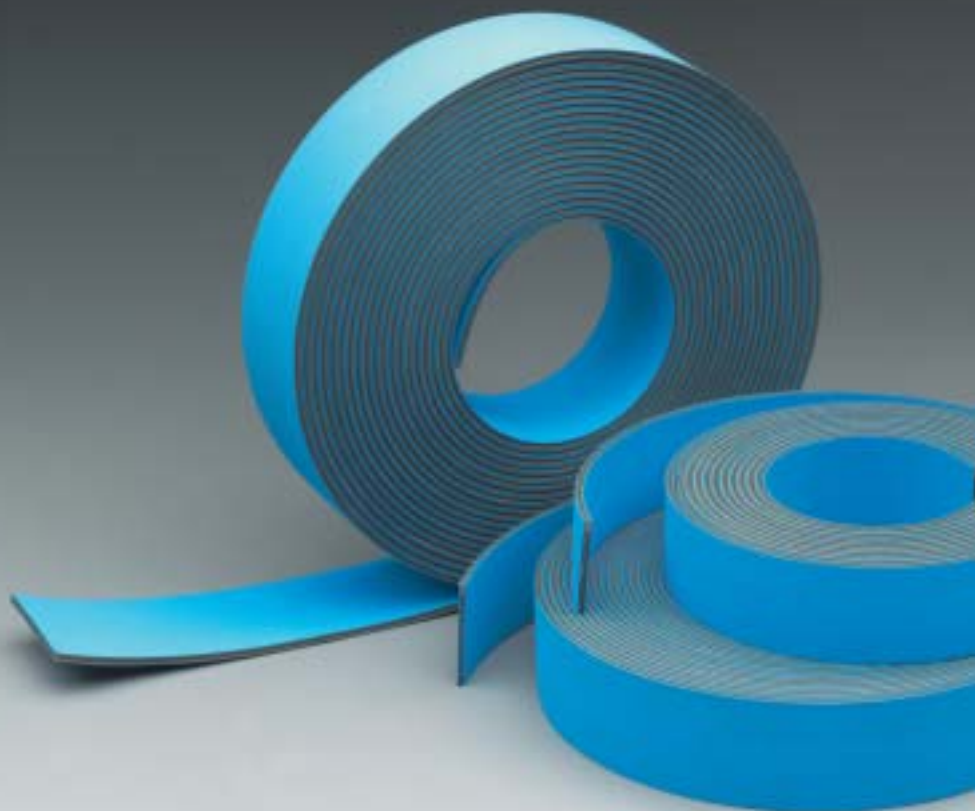
CFTG

The advantages briefly:

- Excellent service life
- Reduced power loss
- Low noise level
- Small take-up for tensioning
- Consistency of speed
- Quick and easy jointing method
- Chemical resistance
- Permanently anti-static
- Variable running direction
- Not sensitive to torsion

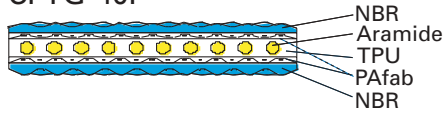
The aramid flat belts of the CFTG-series were developed, using a specialised technique from Nitta, to satisfy the future requirements of an increasing quality conscious market.

It's individual design makes the CFTG flat belt range (see the page on the right) one of reliably and at the same time cost effective. In this way, CFTG belts facilitate amongst other things the use of smaller pulley diameters and short take-up for the machine designers.

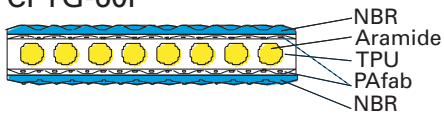


Example of the Construction:

CFTG-40F



CFTG-60F

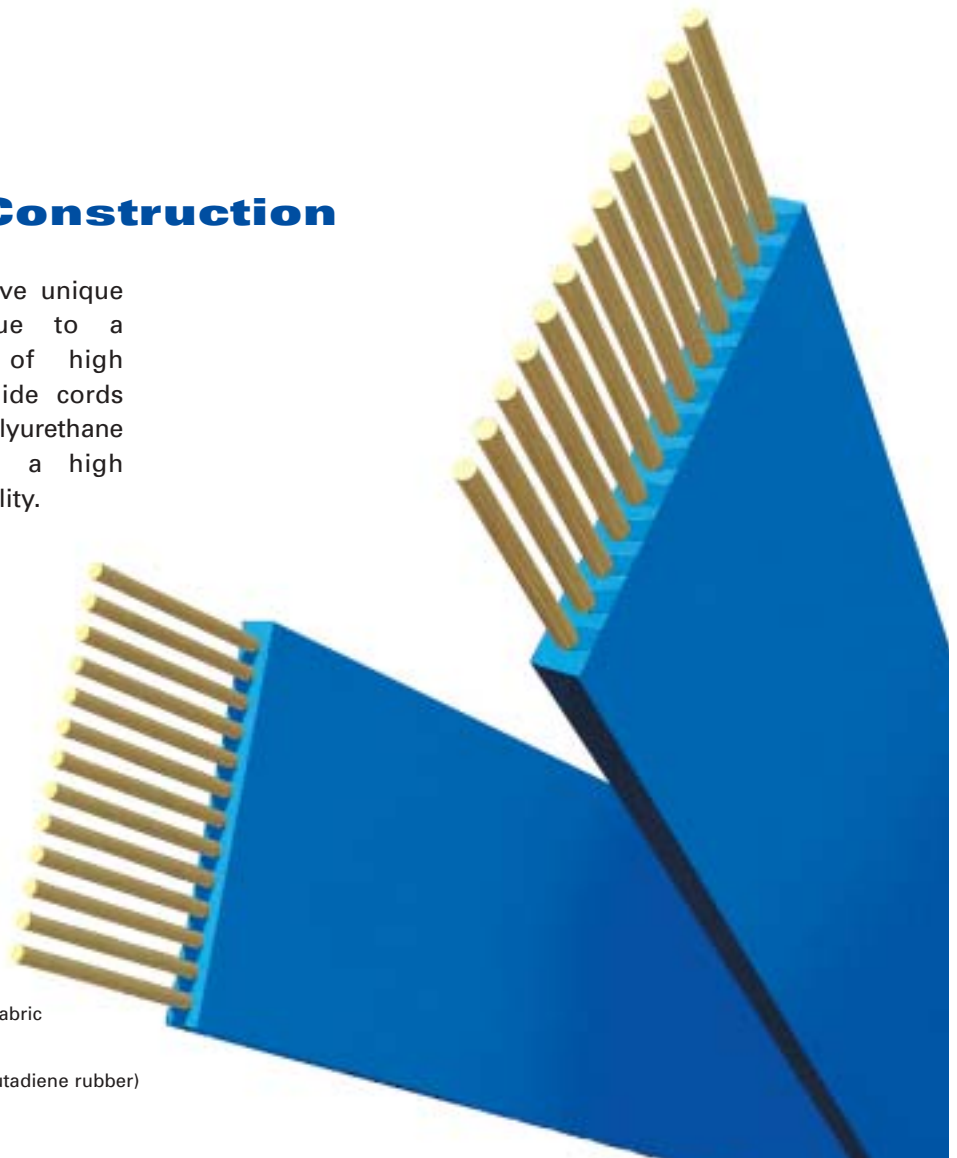


Type
Thickness (mm)
Weight (kg/m²)
Min. Pulley Dia. in mm
Specific Tension at 0.5 % in N/mm

Type	Thickness (mm)	Weight (kg/m ²)	Min. Pulley Dia. in mm	Specific Tension at 0.5 % in N/mm
CFTG-40F	3,0	3,6	70	40
CFTG-60F	3,9	4,5	110	60

Unique Construction

CFTG belts have unique properties due to a combination of high modular aramide cords and special polyurethane polymer with a high bending flexibility.



Abbreviations:

- PAfab = Polyamide fabric
- TPU = Polyurethane
- NBR = Nitrile rubber
(acrylnitrilebutadiene rubber)



Super Endless

Seamless - jo

The most stringent requirements for power transmission and conveying along with high performance are met in the range of seamless SE belts. They contribute to the improved performance of diversified equipment by ensuring high speed capability, high rotation accuracy and dimensional consistency.

Super Endless

The Advantages briefly:

- High energy efficiency
- Thin and light construction
- Maintenance free; no creep elongation
- Seamless: Excellent dimension consistency
- High rotation accuracy
- Excellent flexibility, bending and abrasion resistant
- Oil, cold, heat, ozone and chemical resistant
- Anti-static
- Low noise



SS

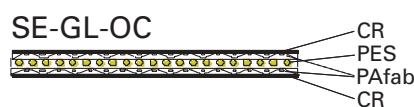
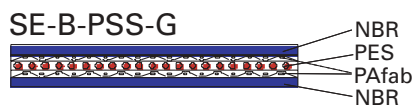
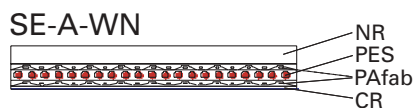
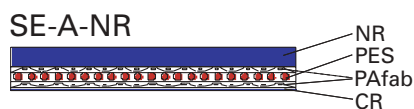
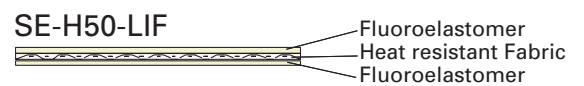
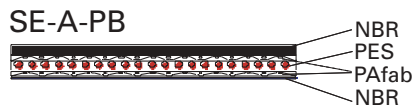
Print-free



Examples of Applications:

- Office equipment
- Printing and paper making machines
- Automatic ticket validating machines
- ATMs, Bank machines
- Ticket dispensers
- Gaming machines
- Check Weighers
- Photo machines
- Postal machines

Description and Example of the Construction:



Abbreviations:

NBR = Nitrile rubber
(acrylonitrilebutadiene rubber)
PAfab = Polyamide fabric
PES = Polyester cord
PESfab = Polyester fabric

NR = Natural Rubber
CR = Chloroprene rubber
MPU = Millable polyurethane
Glass Cord = Glass Cord

PolySprint

PolySprint

The Advantages briefly:

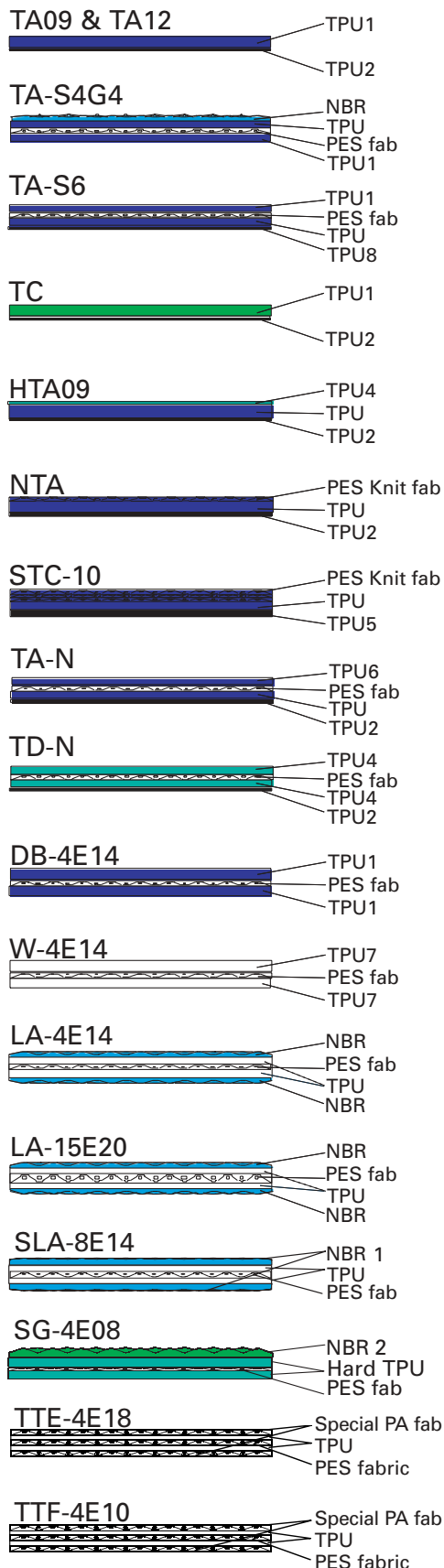
- Simple installation
- Long service life
- Optimal elasticity
- Highly flexible
- Quiet running
- Simple jointing procedure
- Non-marking capability



The Nitta PolySprint series offers a wide range of belts which are produced from a variety of material combinations such as thermoplastic polyurethane, nitrile rubber and elastic fabrics. The anti-static PolySprint are distinguished by the various surface constructions, from smooth to structured, offering a varied range of friction characteristics. Generally they are used for applications in the paper processing industry, packaging machines, parcel and postal sorting machines as well as for light conveying and transfer applications.



Example of the Construction:



Type
Thickness (mm)
Weight (kg/m²)
Min. Pulley Dia. in mm
Specific Tension in N/mm at max. Stretch
Recommend Elongation Range (%)

TA09	0,9	0,9	20	0,45 (5%)	3 to 8
TA12	1,2	1,1	25	0,65 (5%)	3 to 8
TA-S4G4	1,3	1,4	25	0,55 (2%)	1 to 3
TA-S6	0,9	1,0	25	0,65 (5%)	3 to 8
TC	1,4	1,5	40	0,75 (5%)	3 to 8
HTA09	0,9	0,9	25	0,5 (5%)	3 to 8
NTA	1,0	0,9	25	0,45 (5%)	3 to 8
STC-10	1,4	1,3	25	0,5 (5%)	3 to 8
TA-N	1,0	1,1	25	1,0 (2%)	1 to 3
TD-N	1,0	1,1	40	1,5 (2%)	1 to 3
DB-4E14	1,4	1,6	25	4,0 (1%)	0,5 to 2
W-4E14	1,4	1,6	25	4,0 (1%)	0,5 to 2
LA-4E14	1,4	1,5	25	4,0 (1%)	0,5 to 2
LA-15E20	2,0	2,2	40	15,0 (1%)	0,5 to 2
SLA-8E14	1,4	1,7	25	8,0 (1%)	0,5 to 2
SG-4E08	0,8	0,8	15	4,0 (1%)	0,5 to 2
TTE-4E18	1,8	1,7	40	4,0 (1%)	0,5 to 2
TTF-4E10	1,0	1,0	40	4,0 (1%)	0,5 to 2

Abbreviations:

NBR = Nitrile Rubber
 NBR1 = Nitrile Rubber, blue, fine structure
 NBR2 = Nitrile Rubber, green, fine structure

PA = Polyamide
 PAfab = Polyamide fabric
 PES = Polyester
 PES Knit fab = knit, Polyester fabric
 TPU = Polyurethane
 TPU1 = Blue, fine structure
 TPU2 = Black conductive, rough structure

TPU3 = Green, fine structure
 TPU4 = Green, Hard TPU, smooth structure
 TPU5 = Black conductive, smooth structure
 TPU6 = Blue, smooth structure
 TPU7 = White, fine structure
 TPU8 = Black conductive, fine structure

New Light G

New Light Grip

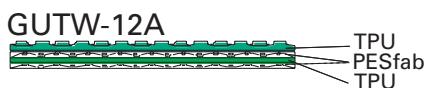
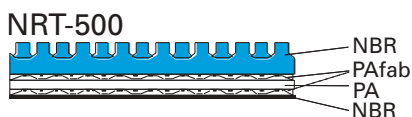
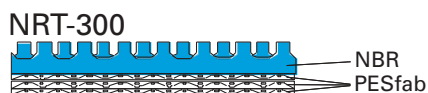
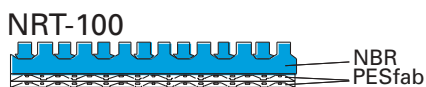
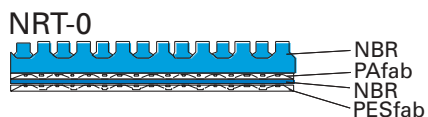
The Advantages briefly:

- High speed capability
- Precise transportation of goods
- Suitable for foodstuffs
- Allows compact design

Combining advanced Nitta technology with the latest materials available on the market, the New Light Grip range is specifically designed and manufactured for use in the light duty transportation of goods. In addition, for specialised applications Nitta offers a range of teflon coated New Light Grips.



Example of the Construction:



Type
Thickness (mm)
Weight (kg/m²)
Min. Pulley Dia. in mm
Specific Tension at 1% in N/mm

NRT-0	5,0	4,8	100	0,7
NRT-100	4,5	3,6	50	6,0
NRT-300	6,5	6,5	100	6,0
NRT-500	6,0	5,6	90	3,8
GH-15-Z	1,6	2,0	30	6,0
GH-20-Z	2,1	2,4	40	6,0
GH-30-Z	3,0	3,5	100	15,0
GSTW-20	2,0	2,0	50	6,0
GUF-6AK	0,8	0,8	30	2,0
GUF-12AK	1,3	1,5	50	4,0
GUTW-12A	1,8	1,7	30	4,0
WEU-12 ANF	1,4	1,3	20	2,0
WU-6A	0,7	0,7	15	2,0

Abbreviations:

PA	= Polyamide	EPDM	= Ethylenpropyleneterpolymer
PAfab	= Polyamide fabric	Teflon	= Teflon coated
PESfab	= Polyester fabric	NBR	= Nitrile Rubber (acrylnitrilebutadiene rubber)
TPU	= Polyurethane		

Tooling

- the tools

There are a wide range of tools suitable for the preparation and installation of Nitta belts. We would be pleased to advise you on the selection of the ideal tool for your specialised requirements. The product choice ranges from thermal heating jointing tools, tools for preparation of the surfaces right through to devices for measuring the acoustic belt tension.

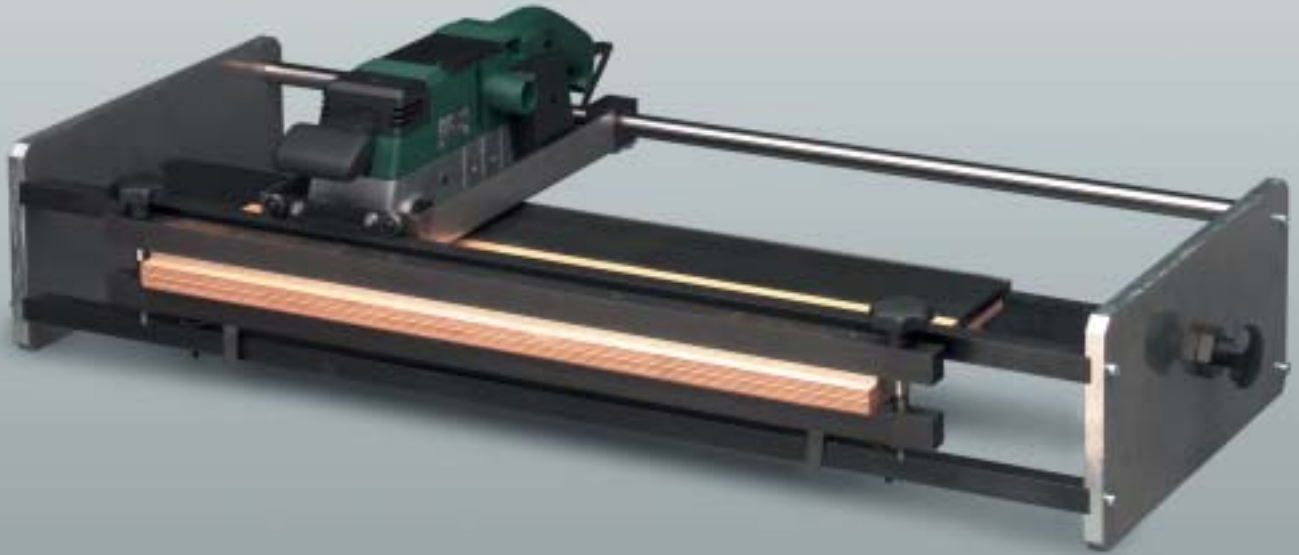
Call us or send an email!

Sonic Tension Meter

With this revolutionary non-contact device the belt tension can be accurately determined using acoustic sound-waves. (picture below)



Heating press HPL-100 for overlap jointing of Poly Belts (max. belt width: 100mm)



Skiving machine for the preparation of the overlap joints for Poly belts and NLG belts.

Right:
Heating Press PCF-2210
for endless finger joints
for CFTG belts.



Above: Puncher FP-30-10-50 for
endless finger joints for
PolySprint.



Left: Heating press
HPL-300 for overlap
joints for Poly Belts
(maximum belt
width: 300mm)



Left: Heating press
HPL-50 for overlap
joints for Poly Belts
(maximum belt
width: 50mm)

Nitta Industries Europe GmbH

Nitta is an innovative player in the area of power transmission and conveyor belting. The Poly (polyamide flat belts), Super Endless (seamless belts), PolySprint (machine tapes) CFTG belts (aramide flat belts) and the appropriate machine tools for splicing combine the highest quality standards with modern, innovative materials and production methods.

• Nitta Industries Europe Düsseldorf

NITTA HISTORY AND FIGURES

For more than a century, since the company was established in 1885, we have been at the forefront of technology in the power transmission field and have won our customers trust with our quality and technical excellence.

Nitta started its business activities in transmission belting systems. Today, our business includes conveyance systems, rubber and resin precision molding, air filtration, mechatronics and various sensors, thermoplastic hose and tubing, timing belts and precision polishing systems.



NITTA

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