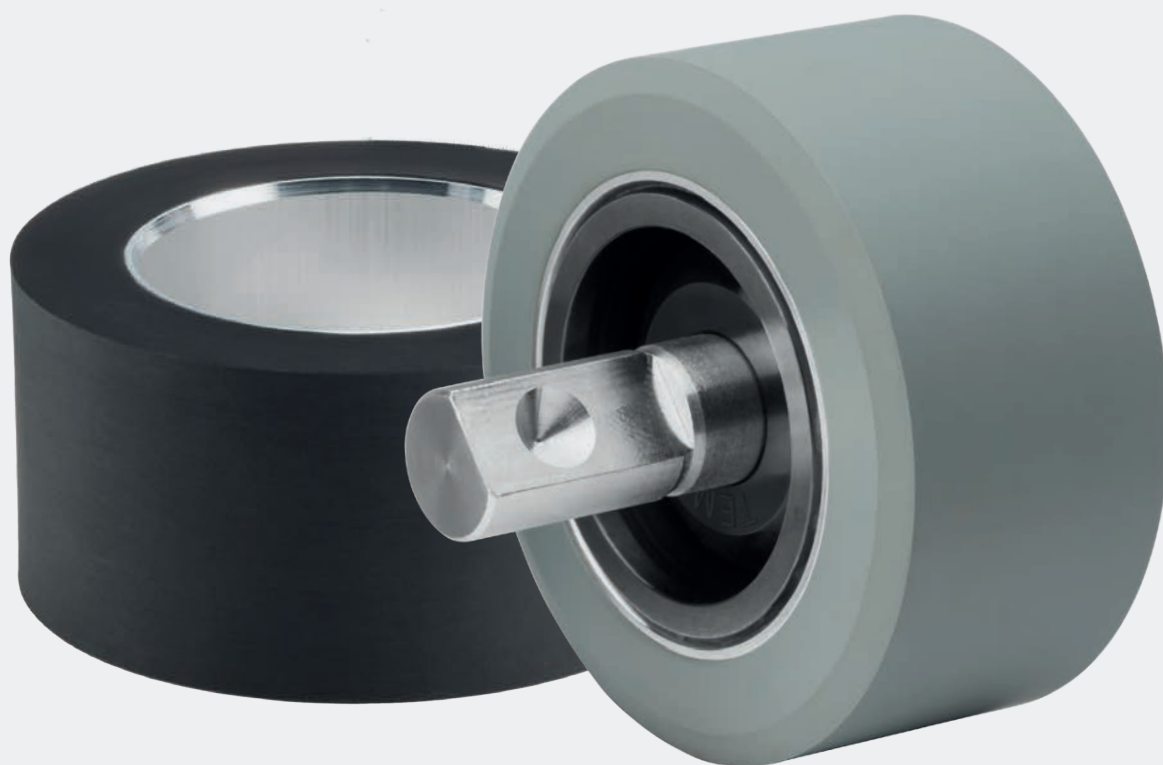


Nip Rollers LR

Technical information



For Outstanding
Yarn Quality



For Outstanding Yarn Quality

The nip roller unit, consisting of a Temco bearing and a market-standard cot, combines the company's key competencies, which has a direct impact on the quality of the textured yarn.

Modern false twist texturing (DTY) machines are equipped with up to four nip roller feeds per texturing position. Nip rollers have a major impact on the drawing process and therefore exert a direct influence on the quality of the textured yarn. Temco nip rollers also ensure a dramatic reduction of power consumption while maximizing competitiveness.

Nip rollers serve to press continuous material like textile yarn or glass fibers onto a feed shaft during the manufacturing process. This creates frictional locking which guarantees an uniform and gentle drawing of the yarn. Direct influence on the textured yarn qualities has the nip roller unit on the DTY machine. This component corresponds to the key competence of Temco and Accotex DAYTEX: vibration-free running with low bearing friction.

OUTSTANDING

ADVANTAGES

Temco

Nip Roller LR

Vibration free
smooth running

Long lifetime
without
relubrication

Perfect operation based
on integrated vibration
absorber and patented
gimbal-mounting

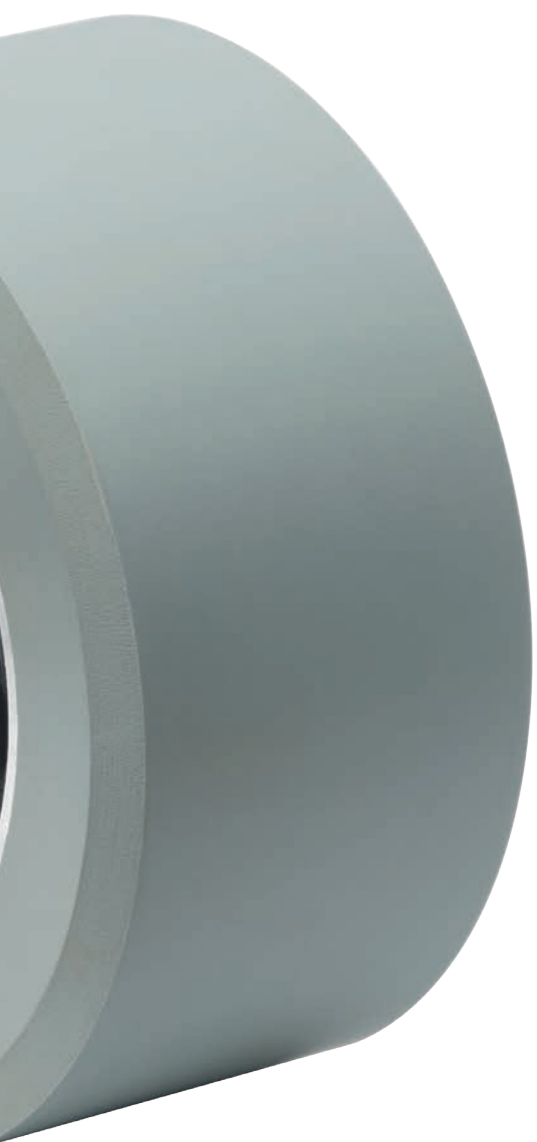


Highest quality
standards

Outstanding product
properties

Up to 50% energy savings
compared to a conventional
nip roller

Universal application



Nip Roller LR

Expertise

Customers benefit from a huge savings potential on manufacturing costs and by increasing profits. Because nip roller units are synonymous for:

- Up to 50% energy savings compared to a conventional nip roller
- Outstanding bearing quality for long lifetime without re-lubrication
- Optimal operation performance based on the integrated vibration absorber and patented gimbal-mounting
- Extended unit lifetime

Product features

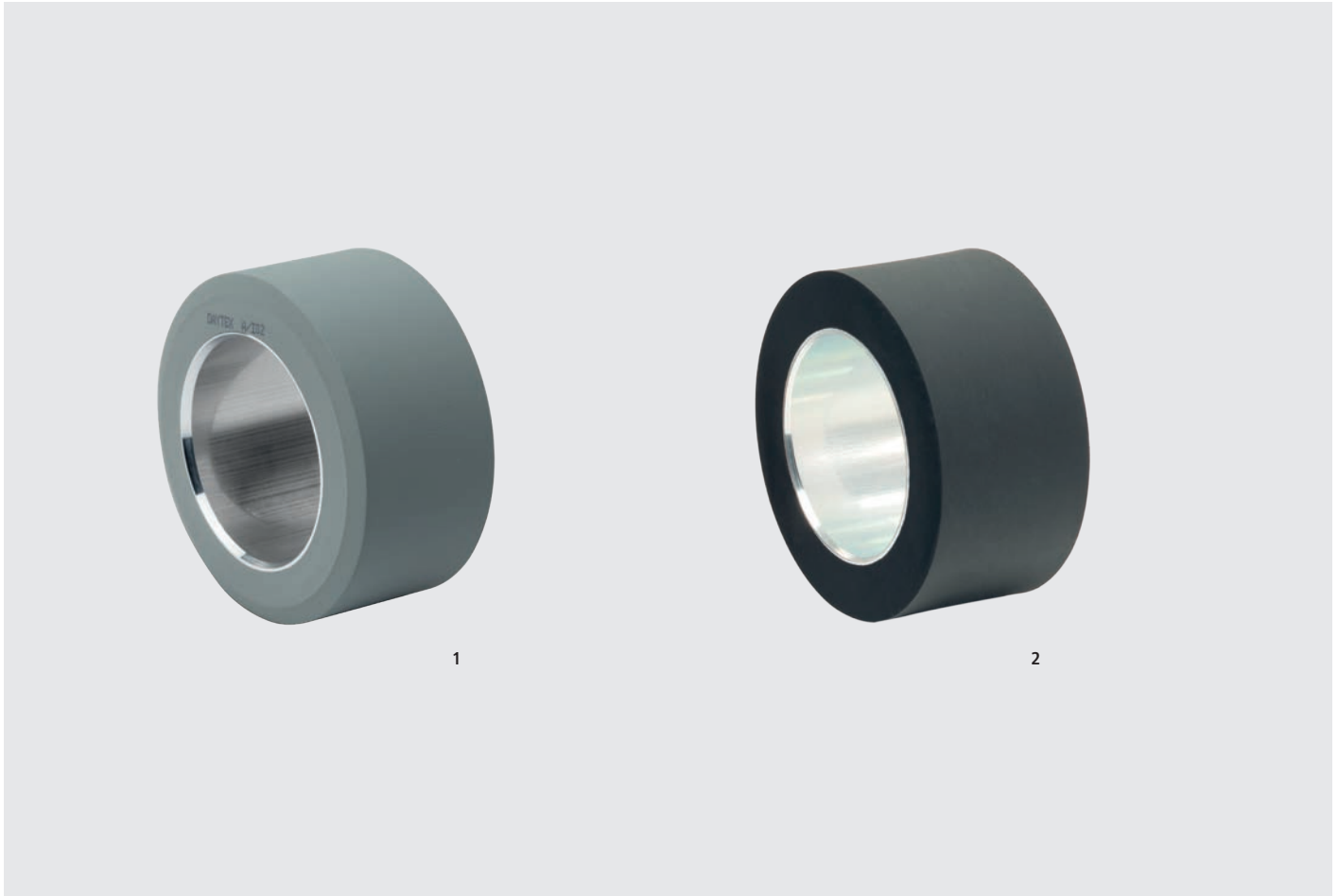
- Excellent radial run-out
- Compact construction due to the optimized bearing size
- Low friction moment and thus significant energy savings
- Rotational speeds up to 2,000 m/min
- Maintenance-free due to lifetime lubrication
- Possibility to use different covers
- Gentle yarn treatment



Advantages

- Outstanding wear and crack resistance, excellent oil, chemical and heat resistance
- Designed to meet the highest demands on all fibers and working conditions for all common and high speed texturing machines
- Long lasting durability and easy handling, ensuring higher productivity
- Better thread clamping force on the yarn. Enabled by the higher contact pressure
- Constant form against the drive shaft due to lower concavity minimizes light leakage
- Lower vibration level at high production speeds
- Less deformation during regrinding





1. Accotex DAYTEX G-836 with 75 Shore A, grey
2. Accotex DAYTEX 121 - 70 Shore A, black

Types

Pressfit cots consist of an aluminium core and virtually tension free rubber. This guarantees constant results during the whole life cycle. Springloc cots consist of an elastic core and are used when it is not possible to use pressfit cots because of limited space. For example, like the cots from Accotex DAYTEX:

G-836 with 75 Shore A, grey

The latest cots in the range features technical as well as economical advantages:

- More stable against chemical attacks like swelling
- Less deformation caused by yarn wraps due to the better compression set at process temperatures from 50 to 70°C
- Highest mechanical stability for reduced micro cracking

121 - 70 Shore A, black

- Soft cot for special applications e.g. micro filament and flat yarn
- Highest yarn visibility due to the compound colour

Temco Nip Roller LR are specified by all the leading texturing machine producers worldwide. The latest polymer technology and state-of-the-art production techniques are the fundamental properties of our manufacturing facility in Germany.

- High precision and constant tension control at the highest speeds to enable high quality production
- Anti-static elastomer compositions
- Trouble-free running behaviour, less end breaks and thus higher machine efficiency
- Consistency and stability every time
- Outstanding wear and crack resistance, excellent oil, chemical and heat resistance
- Designed to meet the highest demands on all fibres and working conditions for all common and high speed texturing machines
- Long lasting durability and easy handling, ensuring higher productivity
- Better thread clamping force on the yarn. Enabled by the higher contact pressure
- Constant 'form' against the drive shaft due to lower concavity minimizes light leakage
- Lower vibration level at high production speeds



Comparison to the competition

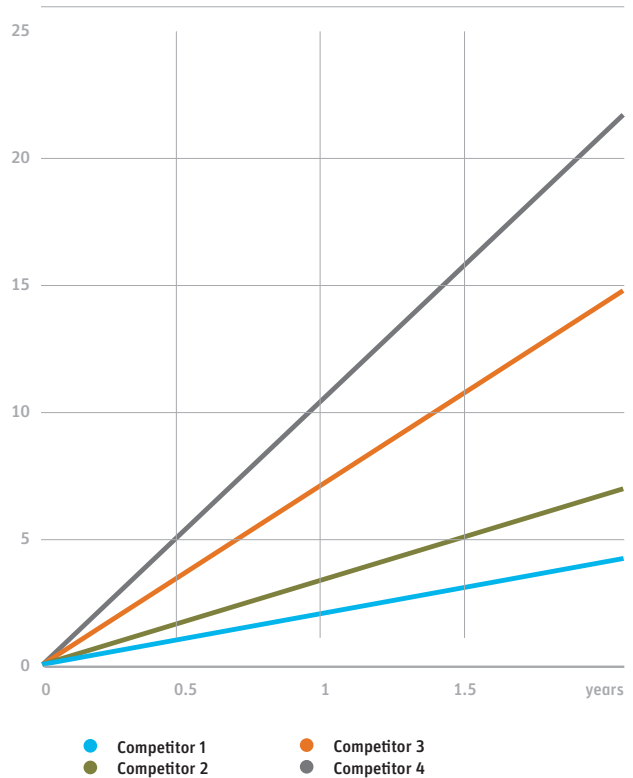
Energy LR7035 – power consumption

850 m/min – 50 N



Cost savings in comparison at 0.1€ per kWh

in Euro



Energy saving

Rising energy costs nowadays have a wide influence on your production costs. Temco Nip Roller Units ensure a dramatic reduction of power consumption and maximize your competitiveness.

Assumption

By switching to Temco, on a DTY machine using 960 Nip Rollers you can save up to 8 400 W.
With 8 000 working hours this totals 67 200 kW/yr and it's great for the environment using 51.6 tons less CO₂.

Power saving = No. of positions
× no. of nip rollers
× difference of power consumption in Watt

Example 1:

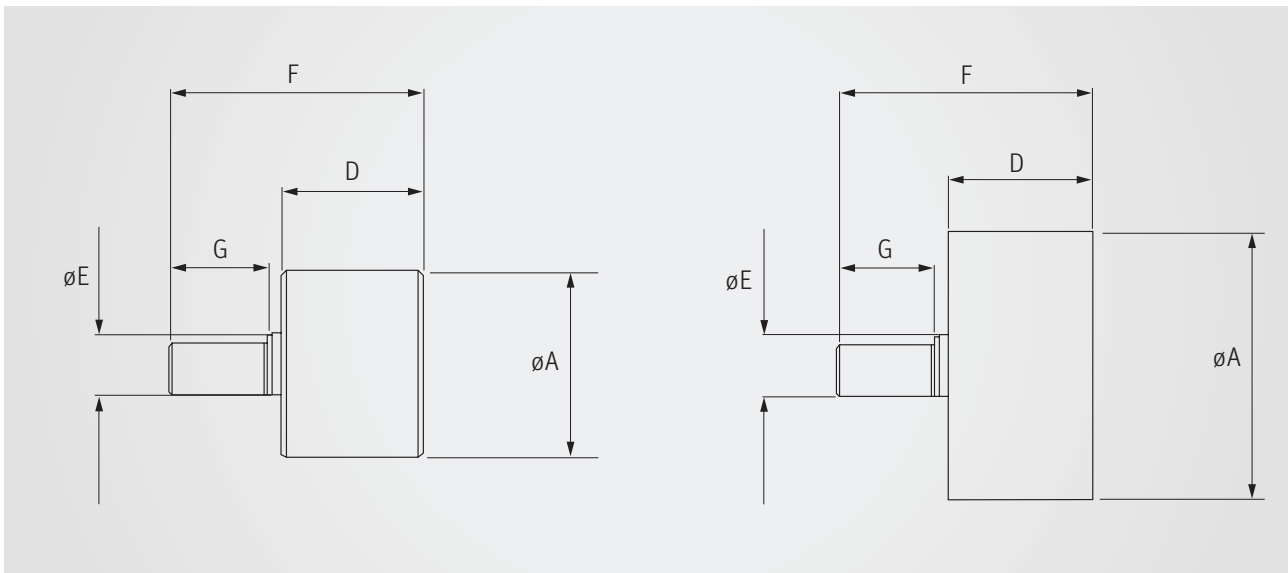
240 pos × 4 nip rollers × 2.625 W* = 2 520 W

Example 2:

240 pos × 4 nip rollers × 8.75 W* = 8 400 W

* Power W1 50 % of other shafts

Dimensions



Nip roller units are available for all current texturing machines. Due to the different constructions from e.g. the connection pin diameters of the Temco Nip Roller Bearing and the varying diameters of the DAYTEX cots, we recommend to contact us for the specification of the type matching to your demands.

Key numeric system

LR7035-10. S. 301P

S = Springloc, P = Pressfit

B = Type 121 (black color and 70 ShoreA hardness)

G = Type G-836

(gray color and 75 ShoreA hardness)

S = Type S-880

Settings for different fabrics

Bearing	Niproller	Machine type	A 45	B 35	C	D	E	F	G
LR4535-10	LR6535-10. B. 301P	Oerlikon Barmag			65	35	15	62	24
	LR6535-10. G. 301P	Oerlikon Barmag			65	35	15	62	24
	LR6535-10. S. 301P	Oerlikon Barmag			65	35	15	62	24
	LR6535-10. G. 303P	Oerlikon Barmag			65	35	15	62	24
	LR6535-10. S. 303P	Oerlikon Barmag			65	35	15	62	24
	LR7035-10. B. 301P	Oerlikon Barmag			70	35	15	62	24
	LR7035-10. G. 301P	Oerlikon Barmag			70	35	15	62	24
	LR7035-10. S. 301P	Oerlikon Barmag			70	35	15	62	24
	LR7035-10. G. 303P	Oerlikon Barmag			70	35	15	62	24
	LR7035-10. S. 303P	Oerlikon Barmag			70	35	15	62	24

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