

# CONVEYOR AND WEAR SOLUTIONS



#### INTRODUCTION

- Established in 1999.
- Nylocomp designs, manufactures, and install a full range of premium conveyor equipment and wear lining products.
- The company is based in South Africa with branches and distributors throughout the country, and some of its products are exported to Australia through network of distributors.
- With over 25 years of experience, our premium products, creative designs, hands-on service, and commitment to client satisfaction have earned us a loyal and expanding client base, locally and globally.
- We follow the best manufacturing practices and Inspection Methods with 1 in every 10 rollers tested throughout the production cycle.
- We offer short manufacturing lead times which allows our customers to have minimal disruptions to their day-to-day operations.



#### **NYLOCOMP VISION, MISSION & VALUES**

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To be the most customer-centric company for materials handling and wear solutions globally providing outstanding premium products, service, and value to our customers.

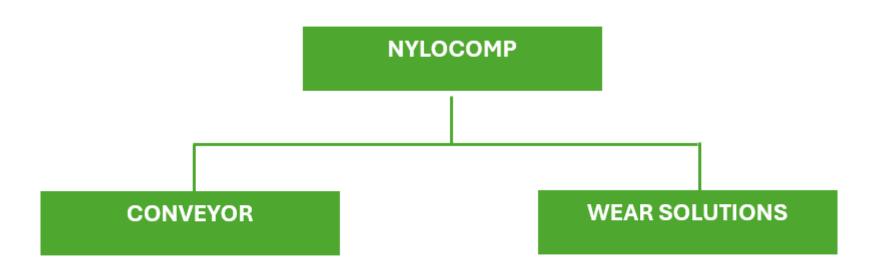
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Our mission is to increase our value proposition to clients namely by manufacturing conveyor idlers/rollers, associated components and solutions that can be fully customised on time, at low cost, without compromising quality and safety by empowering our employees through a business model which continuously adapts to the practical requirements of each client and be the leader globally.

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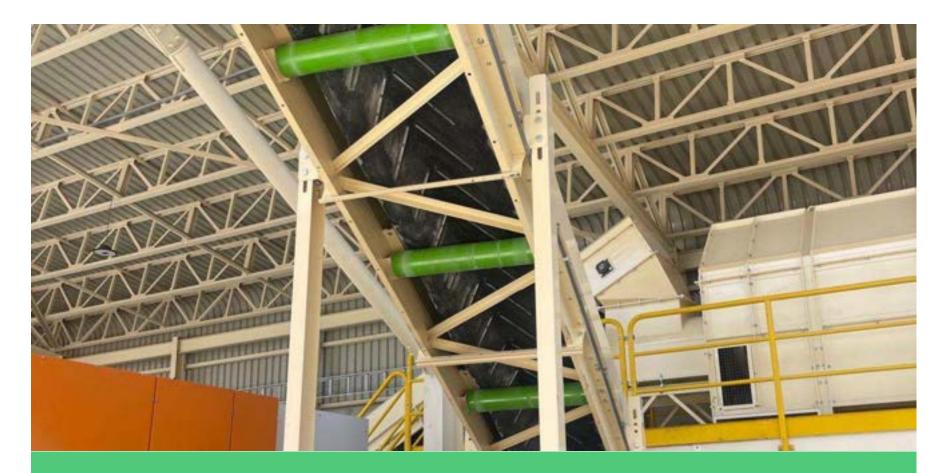
Accountability, Integrity, Innovation, Collaboration, Value-centricity and Zero Harm to People & Environment.





Premium conveyer equipment manufacturer since 1999.





#### NYLOCOMP CONVEYOR



#### NYLOCOMP CONVEYOR PRODUCTS

- UHMWPE "YIGA-P®" Idlers (Patented)
- Anti-Static "Ostrich Black™" Idlers (Patented)
- HDPE Idlers
- Steel Idlers
- Hybrid Steel Idlers
- Impact Idlers
- Tube conveyer idlers "Tarentaal®" (Patented)
- Frames (Bent Angle iron/ Tubular/ Channel)
- Drop brackets (40MM DROP & 90MM DROP)

All our idlers are available in Anti Roll-back



- Improve Safety
  - Less Change outs / Idler Changes
  - Lower human interface / Lower Manpower requirement
  - Less conveyor stoppages/down time
  - Less risk of belt damage
- Save Money
  - Save maintenance costs
  - Save operating costs
- Improve system availability
  - Fewer breakdowns





















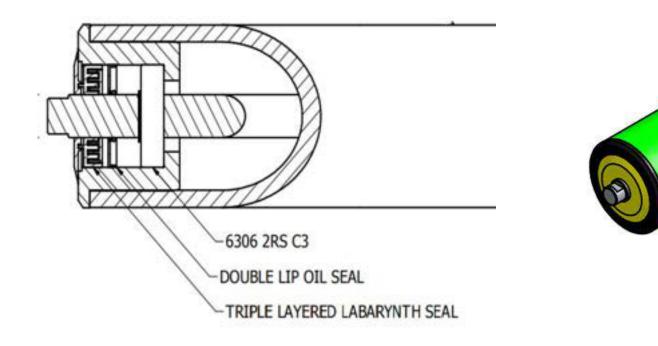
# ADVANTAGES OF NYLOCOMP YIGA-P® IDLERS (PATENTED)

- 2Life span Yiga P will last up to 10x longer than Steel and the HDPE
- Shaft is high quality **plated bright bar**(not mild steel)
- Bearing is **heavy duty 6302**, twice the duty of standard rollers
- Shafts machined from **bright steel**
- With the 16mm thickness of UHMWPE, Yiga-P idlers will withstand tremendous impacts and has fantastic wear characteristics due to the molecular structure of the material.
- Highly corrosion resistant
- Peace of mind lower labour requirement decreasing the requirement to monitor a risk operation , roller replacement



# ADVANTAGES OF NYLOCOMP YIGA-P® IDLERS (PATENTED)

- Roller failure will **not damage** the belt like a worn steel roller
- No material buildup takes place on the outside of the shell, resulting in quiet running of the conveyer.





#### NYLOCOMP ANTI-STATIC IDLER "OSTRICH BLACK™" IDLERS (PATENTED)

Nylocomp manufactures the Anti-Static rollers specifically for underground use in coal mines. The hull of the roller is produced from UHMWPE which is mixed with carbon thus ensuring the flow of electricity. The hull is connected to the roller shaft with a brass strip, thereby conducting the electricity to frame installation which must be grounded by law.





#### NYLOCOMP OSTRICH BLACK<sup>™</sup> IDLERS TECHNICAL INFORMATION (PATENTED)

Property	Method	SI Unit	SI Value	English Unit	English Value
Density	ASTM D-792	Kg/m <sup>3</sup>	938	Jbs/ft³	58.5
Yield Point	ASTM D-638	MPa	22.1	psi	3205
Elongation at Yield	ASTM D-638	%	14	%	14
Tensile Break	ASTM D-638	MPa	36.6	psi	5304
Elongation at Break	ASTM D-638	%	267	%	267
Tensile Modulus	ASTM D-638	MPa	1082	psi	156900
Flexural Modulus	ASTM D-790	MPa	882	Psi	127900
Izod Impact	ASTM D-4020	kJ/m <sup>2</sup>	46	ft-lbs/in <sup>2</sup>	22
Tensile Impact	DIN 53448	kJ/m²	1841	ft-lbs/in <sup>2</sup>	877
Sand Wheel Wear	ASTM G-65	T-1000=100	100	T-1000=100	100
Hardness	ASTM D-2240	Type D	69	Type D	69
Static Friction	ASTM D-1894	Unitless	0.18	Unitless	0.18
Dynamic Friction	ASTM D-1894	Unitless	0.12	Unitless	0.12
Coefficient of Thermal Exp.	ASTM D-696	°C-1	0.00018	°F-1	0.00011
Melt Point	ASTM D-3417	°C	137-143	°F	278-289
Compressive Modulus	ASTM D-695	MPa	na	Psi	na
Compressive Deformation	ASTM D-621	% at 454.5 kg	3-4	% at 1000 psi	3-4
Volume Resistivity	ASTM D-257	Ohm-cm	<10 <sup>9</sup>	Ohm-cm	<10 <sup>9</sup>
Surface Resistivity	ASTM D-257	Ohm	<10 <sup>9</sup>	Ohm	<10 <sup>9</sup>
Static Decay	Federal 101B	Seconds	<0.1	Seconds	<0.1
Water Absorption	ASTM D-570	%	nil	%	nil



### NYLOCOMP HDPE IDLERS

- Roller 12mm HDPE tube
- Idler with gauge length of 546mm and longer will be reinforced with a 3 mm steel tube.
- End cap / Bearing housing Polypropylene
- Flinger HDPE with integrated labyrinth seal.
- Bearings 6205 2RS C3 (One on each side)
- Shaft 25 mm steel Tin plated.
- □ SABS 0123 The control of undesirable static electricity.

The idler are available in 127 mm and 152 mm diameter, Series 25

Also Available: Anti-rollback HDPE idler



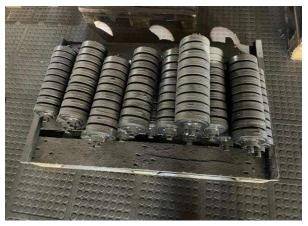




### NYLOCOMP IMPACT IDLERS

- Impact rollers provide absorption in impact loading areas to protect the belt.
- Roller diameter (mm) and (Shaft series (mm)):
- 133 and (25, 30)
- 159 and (25, 30, 35, 40)
- 178 and (30, 35, 40)
- 219 and (50)









#### NYLOCOMP STEEL IDLERS

Nylocomp manufacture wide range of steel idlers from minimum face diameter of 50mm – 152mm, and from 20 series – 40 series.





#### **NYLOCOMP STEEL IDLERS**





#### NYLOCOMP HYBRID STEEL IDLERS

- Roller 4 mm Steel tube.
- End cap / Bearing housing 30 % Glass filled Nylon
- Flinger 30 % Glass filled Nylon with integrated labyrinth seal.
- Bearings 6205 2RS C3 (One on each side)
- Shaft 25 mm steel Tin plated.



The idler are available in 127 mm and 152 mm diameter, Series 25



#### NYLOCOMP GARLANDS IDLERS

All Nylocomp conveyor idlers can be manufactured in "Garland" style idlers as required by operations.



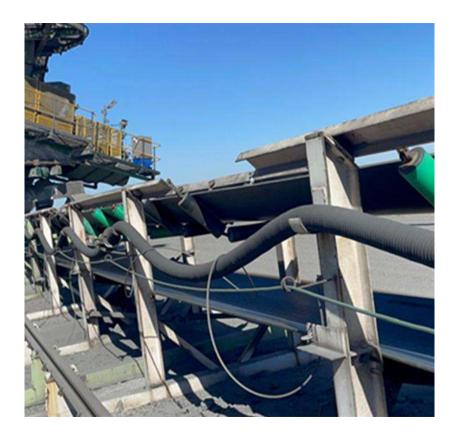






#### NYLOCOMP GARLANDS IDLERS







#### NYLOCOMP TUBE CONVEYER IDLERS "TARENTAAL®" (PATENTED)

- These idlers are used in tube-conveyors applications.
- The biggest advantage of these idlers is the fact that they cannot cut the belt. Similar idlers produced from steel develop sharp edges and will eventually cut the belt.
- Thousands if these idlers are also used as guide idlers to keep the belt from sliding to one side and prevent spillage.







### NYLOCOMP TUBE CONVEYER IDLERS "TARENTAAL®" (PATENTED)





#### NYLOCOMP TUBE CONVEYER IDLERS "TARENTAAL®" (PATENTED)



Nylocomp Tube conveyer idlers at Eskom Kendal Ash Plant conveyor operation

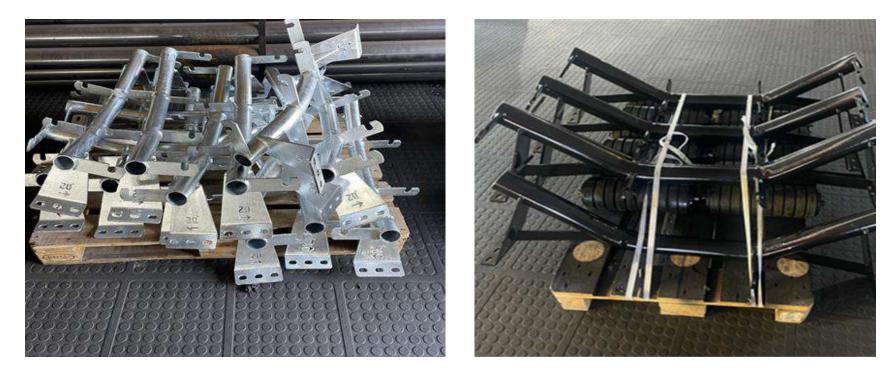




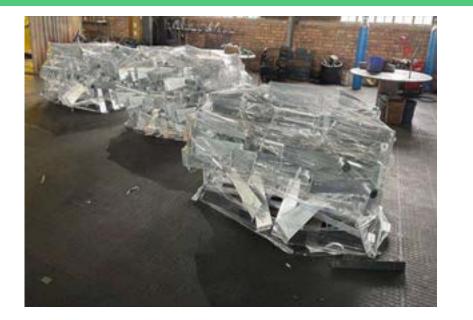
- Nylocomp manufactures a variety of frames design configurations according to industry standards such as SANS 1313, DIN or CEMA or according to customer requirements (Angle iron, Tubular, and Channel).
- Frame configuration can be as per standards or customized to meet client specific needs. Frames are engineered to ensure deflection and load limitation, optimal price and ease of use.
- Frames are manufactured in dedicated factories, using advanced machinery such as plasma cutters, bend press brake and robotic welding machines, to ensure high quality products in large volume



Nylocomp design, and manufacture both tubular and bent angle iron troughing frames with an option of galvanizing or painting depending on the application. Special paint systems are also available for corrosive environments.









Customers have an option to chose from: Galvanized / Passivated and Painted or Zinc Plated







#### SASOL SECUNDA PROJECT COMPLETED BY NYLOCOMP

Nylocomp supplied and installed both conveyer frames and Yiga-P Idlers at Sasol Secunda plant.

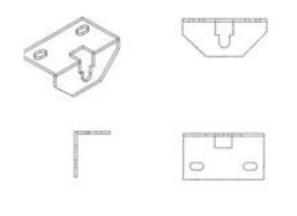


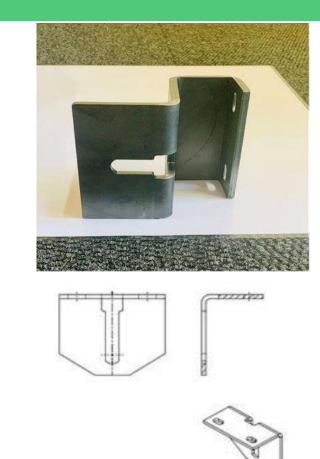




#### NYLOCOMP CONVEYOR DROP BRACKETS

- 40MM DROP (1 x 90° Bend)
- 90MM DROP (1 x 90° Bend)
- 90MM DROP (2 x 45° Bends)





#### SELF-TRAINING TROUGHERS SUPPLIED BY NYLOCOMP

- Nylocomp self-training troughers are designed to automatically adjust and maintain the alignmen of the conveyor belt. Nylo-Selftraining troughers have a unique design that allows the idler to pivo or tilt in response to any deviation in the belt's alignment.
- Nylocomp offers different type of Self-Training Troughers, 3 Roll, 5 Rol Specialized, designed to fit site specific requirements.
- All components are laser cut ensuring that the belt training device is of highest quality.





#### SELF-TRAINING TROUGHERS SUPPLIED NYLOCOMP



#### **RETURN TRACKERS SUPPLIED BY NYLOCOMP**

- Nylocomp supplies a quality belt-centralizing return tracker that uses precision-turned C.N.C. components. Specially hardened steels, high quality bearings and high-quality components to ensure that the return tracker performs optimally over an extended period.
- Nylocomp offers a variety of designs of return trackers for both high and low speed conveyer belt, ranging from Flat Return Tracker, Dual Return Tracker, and V-Return Tracker.





#### **RETURN TRACKERS SUPPLIED BY** NYLOCOMP "IN ACTION"

"Please note the damage caused by a badly aligned belt before Return tracker was installed". The angle iron of the structure was almost cut through. The return tracker was then installed and prevented further damage to the structure.



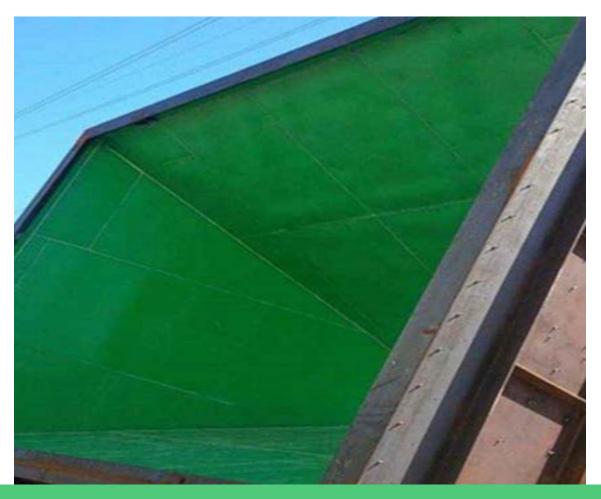


#### ADVANTAGES OF USING RETURN TRACKERS SUPPLIED BY NYLOCOMP

- Return tracker responds instantly to misaligning of the belt.
- No special changes to the structure needed.
- Return tracker requires little or no maintenance and fits into a standard drop bracket.
- Return tracker can be manufactured to suite all belt sizes.
- Saves money by reducing down time and reducing belt and structural damage.







#### **NYLOCOMP WEAR SOLUTIONS**



#### **NYLOCOMP WEAR SOLUTIONS**

Nylocomp supply and install a complete range of wear solutions for different application in bulk materials handling and classification applications against high-velocity impact and sliding abrasion.

- Chutes
- Bins and Hoppers
- Pipes
- cyclones
- Conveyor Belt Skirting
- Tipper Trucks
- Excavators

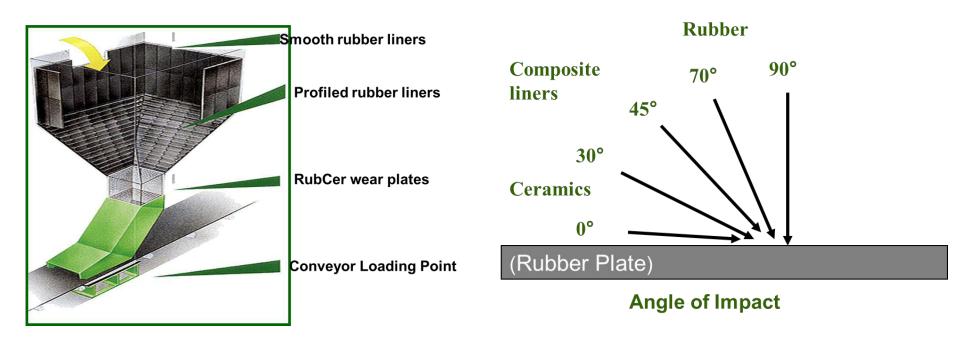


#### NYLOCOMP WEAR SOLUTIONS PRODUCTS

- UHMWPE "Yiga-P® "Liners (Patented)
- Polyurethane Liners
- Rubber wear linings
- Ceramic Wear linings
- Composite Wear Liners
- Profiles Wear liners
- Sheet Liners with Steel Backing and with No steel Backing

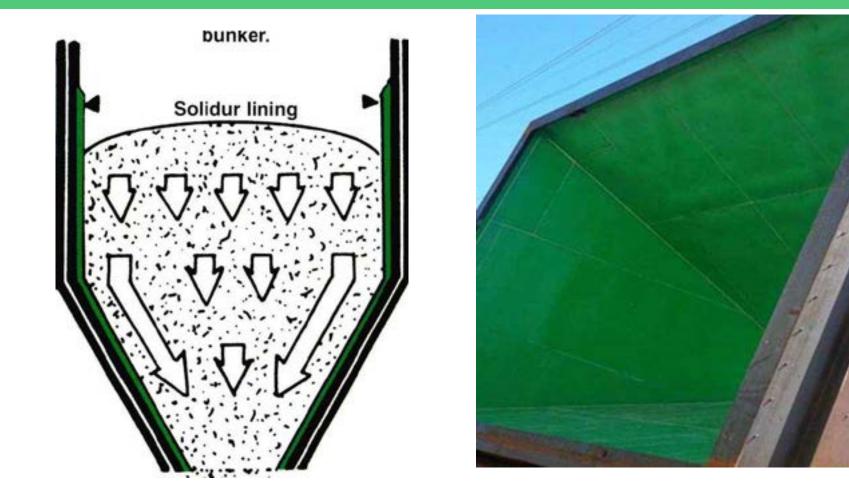


### ANGLE OF IMPACT





#### NYLOCOMP YIGA-P® LINERS





#### NYLOCOMP YIGA-P® LINERS







#### **IMPACT CHUTES, ANGLO PLATINUM**

Impact Chute at Anglo Platinum lined with Yiga-P® liners .







#### NYLOCOM YIGA-P® LINERS AT IMPACT CHUTES AT ANGLO PLATINUM





#### **ADVANTAGEDS OF YIGA-P® LINERS**

- Lighter than steel liners
- Easier to handle and install
- Safer to handle
- Reduction of impact forces into structures and equipment
- Reduction in movement and vibration of building structure
- Reduction in noise levels
- Reduction in carry-back materials
- Less or no contamination of product with iron







Our service starts with understanding the root cause of your conveyor problems, and what it is that you want to achieve, based on your production targets, costs savings, and safety, then Nylocomp can offer a full range of solutions for your problems. Nylocomp field service offer following service on site:

- Conveyor frames and Idler's installation
- Pulley Lagging
- Wear solutions
- Condition monitoring/Site Inspections



Nylocomp Field Service team conducts stock counts for customers to prepare for planned maintenances.







Nylocomp field service team conducting inspections, helping our customers to prevent unnecessary premature belt damages.







#### SOME OF NYLOCOMP CUSTOMERS





### NYLCOMP FACTORY





#### NYLOCOMP FACTORY





## NYLOCOMP FACTORY





### **QUALITY ASSURANCE**

- All materials used are fully certified
- Raw Material Inspection conducted (Establish Supplier Quality Standards)
- In-process quality inspections are carried out
- Final inspections are carried out after each process including Shore Hardness Testing for the rubber.
- Quality Audits conducted







# NYLOCOMP ACCREDITATION & AFFILIATION

- Nylocomp is a Level 1B-BBEE
- Manufacture according to SABS 1313, DIN 53505, SASS 653-3 specifications.
- Process of obtaining ISO 9001 Certification End December 2023
- Member of South African United Employers Organisation (SAUEO)
- Manufacturing, Engineering and Related Services SETA (MerSETA)
- Conveyor Manufacturers Association of South Africa
- Member with SERR Synergy
- Employees affiliated to NUMSA



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