



# Underground Mining LHD Tyre Protection Chains

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# How pewag TPCs are produced & our guarantee to you?

## Welding equipment:

- Production on electronically operated welding machines for a consistently high quality standard

## Heat treatment:

- The **special hardening** using latest techniques leads to **high wear resistance** and particularly **long service life** (*biggest chamber furnaces in Europe*)
- **Cryogenic** treatment for **higher wear & breaking resistance of rings & links**

## Quality Assurance System:

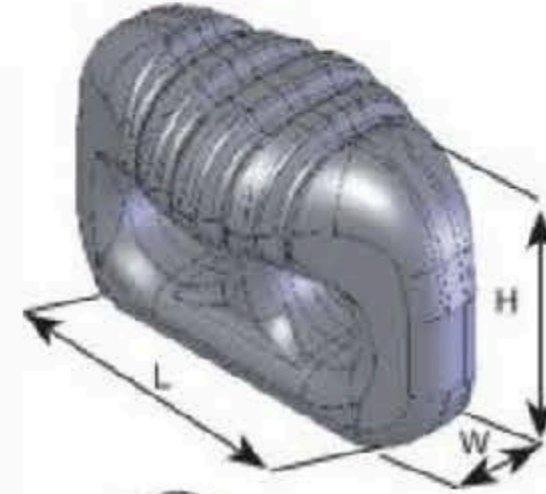
- Our Quality Inspectors operating as part of our PEWAG Quality Assurance System – certified according to ISO 9001

## Environmental responsibility:

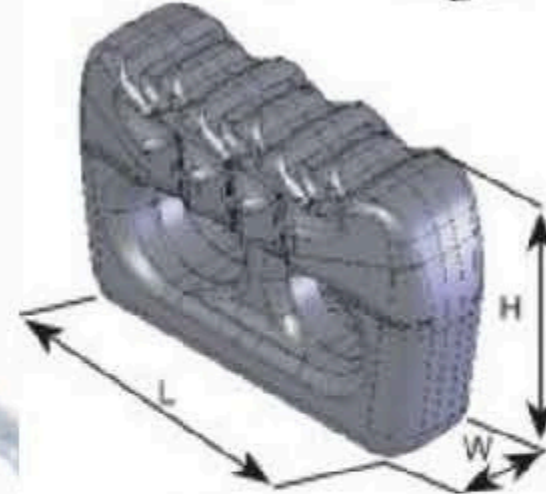
- Ecological awareness in all areas according to ISO 14001



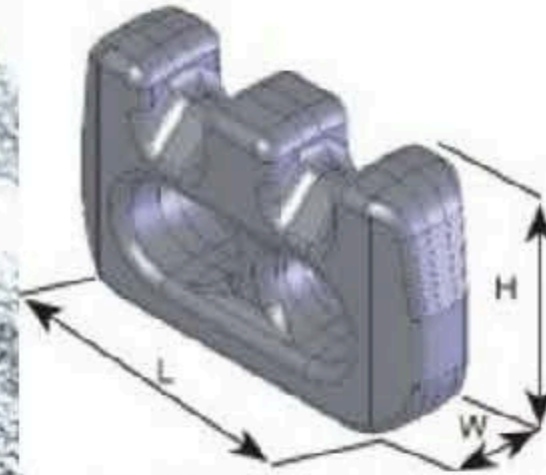
# A specialised link for every condition



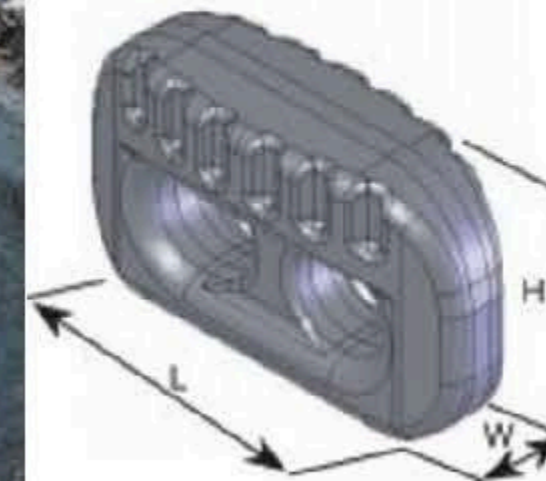
**TYCOON:** Ultra-resistant heavy duty wear link especially developed for the world's largest wheel loaders as well as for operations in most abrasive hard rock conditions.



**GRANITE:** The multipurpose chain link suitable for **all conditions**



**SPIKE:** For **all applications where traction is needed**



**TYRO:** Innovative link design with excellent wear volume, it is suitable for S-L sized earth moving equipment working in **soft to medium hard rock applications**

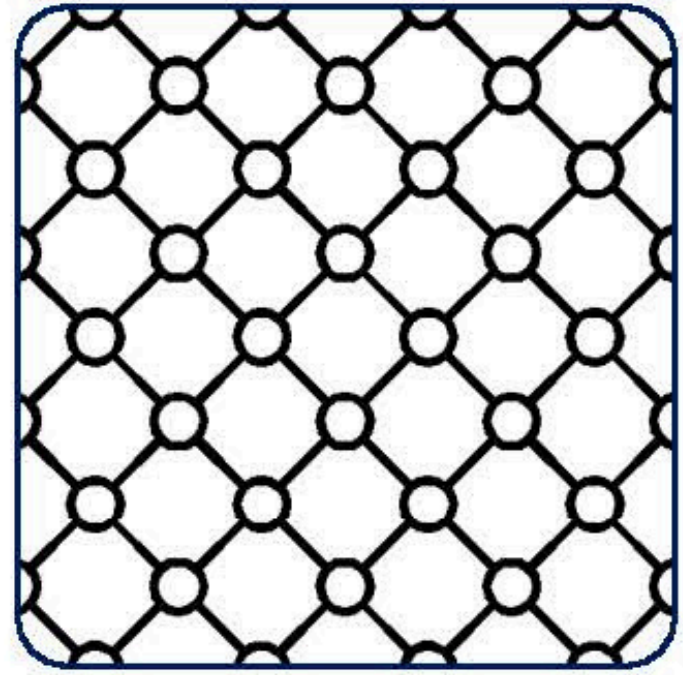
# Types of Mesh – We've got you covered



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WEAR SOLUTIONS

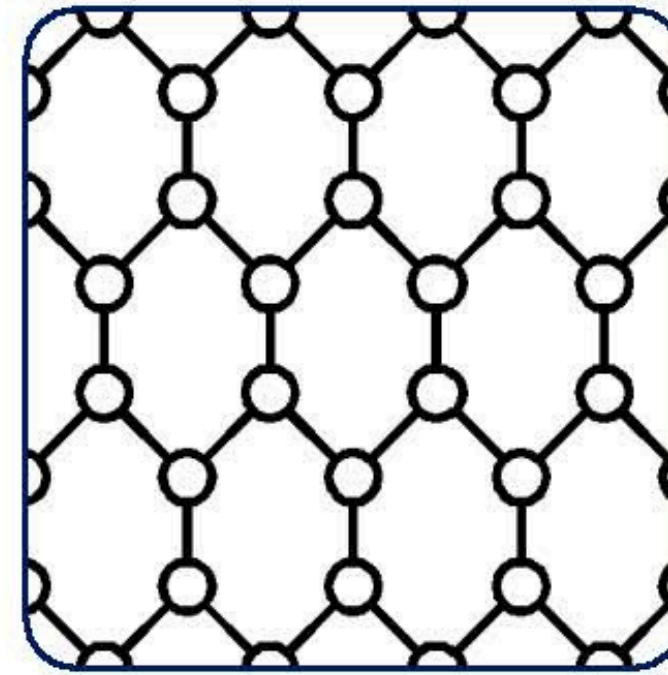
**pewag**

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IS NOT  
ENOUGH**  
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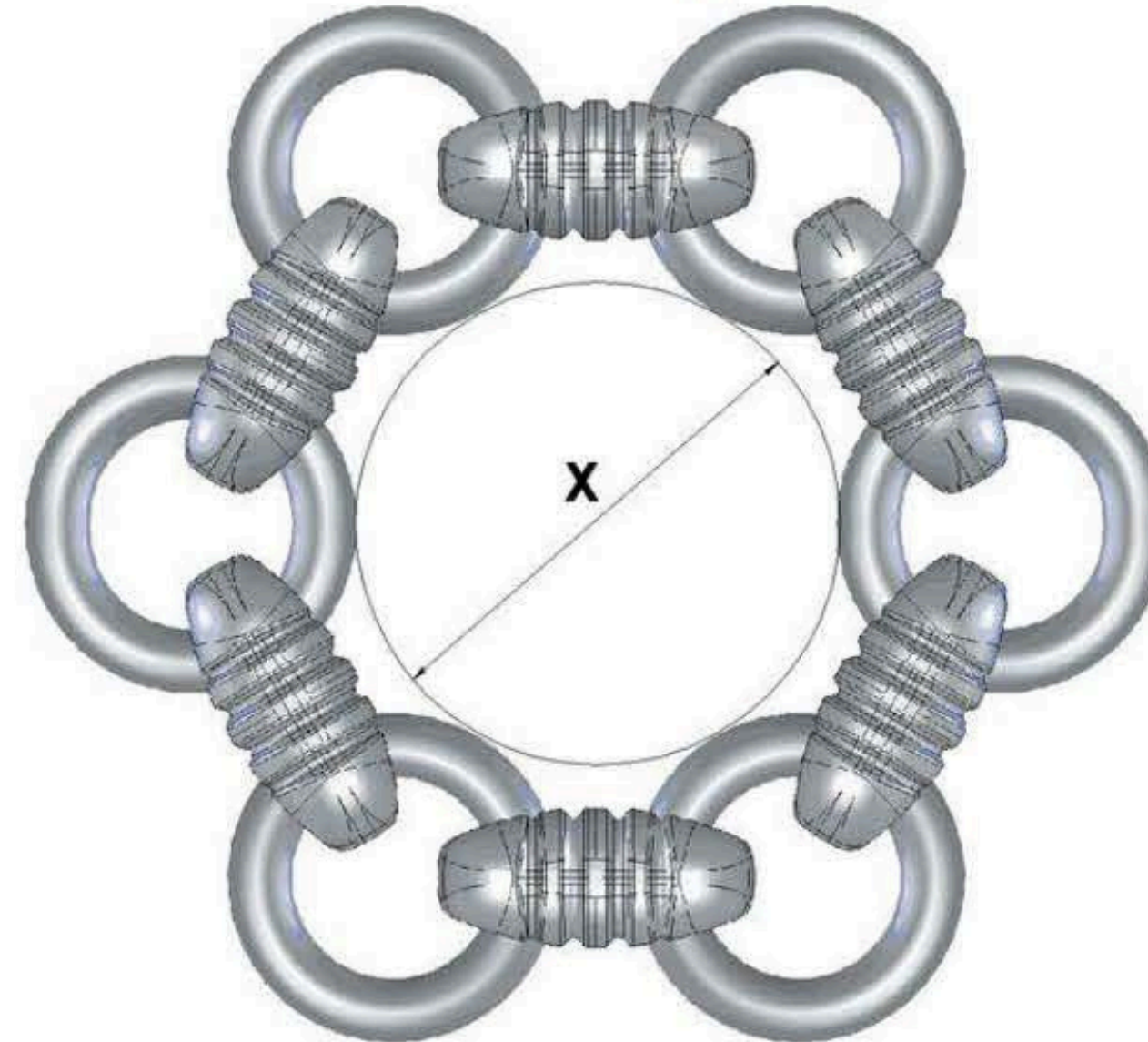
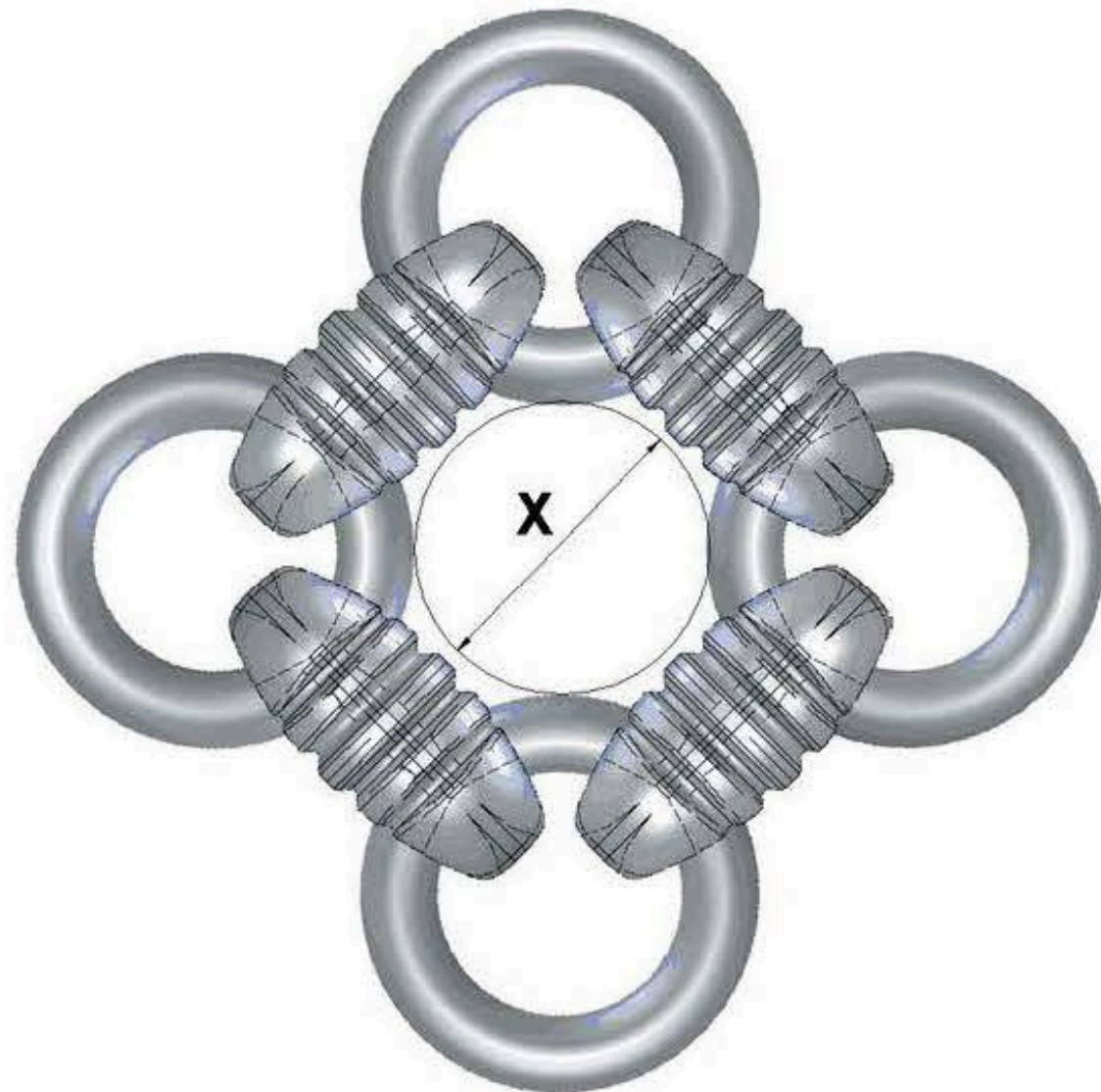
**Square  
(4x4 pattern)**

The fine mesh of square design provides optimum tire protection even on the sharpest rock.



**Hexa  
(6x6 pattern)**

The hexagonal mesh design ensures excellent grip and sufficient tire protection. Suitable for all vehicles where traction is needed before protection.



# TYCOON

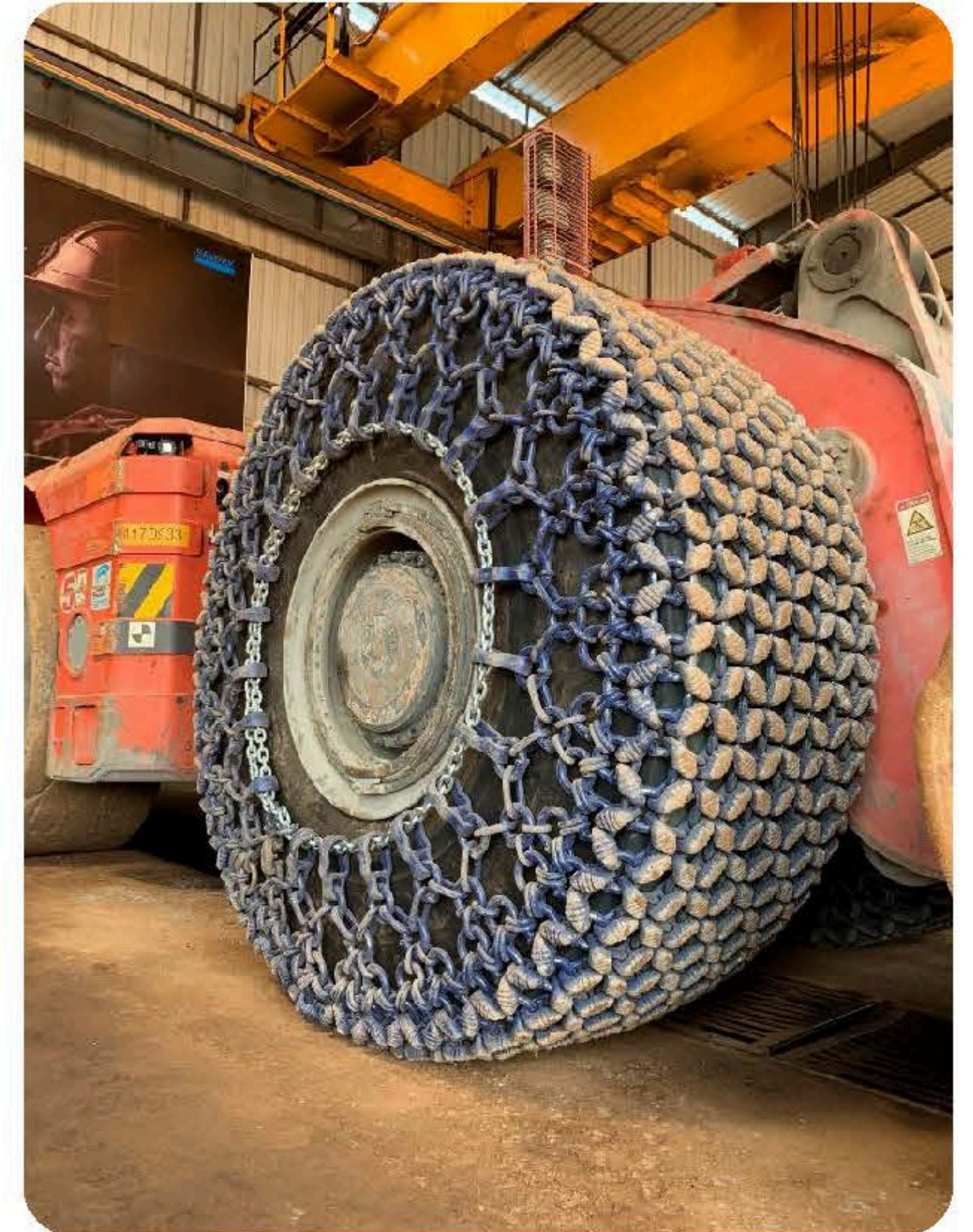
The SQUARE TYCOON 16/18 was developed as a solution to the challenges in mounting chains for underground LHDs. The chain is made up of reinforced 18mm rings welded to more compact links.

## Characteristics:

- Innovative link design
- Stronger ring system
- Largest wear volume per m<sup>2</sup>
- Highest breaking resistance
- Densest mesh
- Special chain executions (dense side wall pattern; reinforced rings)
- Minimum need for maintenance and low spare part costs
- Less machine downtime



**suitable mesh design: square | hexa**



# GRANITE

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IS NOT  
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[www.pewag.com](http://www.pewag.com)

The multipurpose chain link suitable for all rock applications. This link design offers excellent tire protection and traction.

available in sizes 12 | 14 | 16 | 18 mm

Characteristics:

- long-term approved link design
- large wear volume per m<sup>2</sup>
- high breaking resistance
- heavy duty tension chain
- low need for maintenance
- less machine downtime

**suitable mesh design: square | hexa**



# SPIKE

Narrow link design with prominent grip teeth provides excellent traction and self cleaning. For all applications where traction is needed.

available in sizes 12 | 14 | 16 | 18 mm

## Characteristics:

- long-term approved link design
- excellent grip
- high breaking resistance
- heavy duty tension chain
- reduced number of mechanical joints
- low need for maintenance
- less machine downtime



**suitable mesh design: square | hexa**



# TYRO

A multipurpose chain link suitable for soft to medium-hard rock applications up to tire size 35/65-33. This link design offers excellent tire protection and traction.

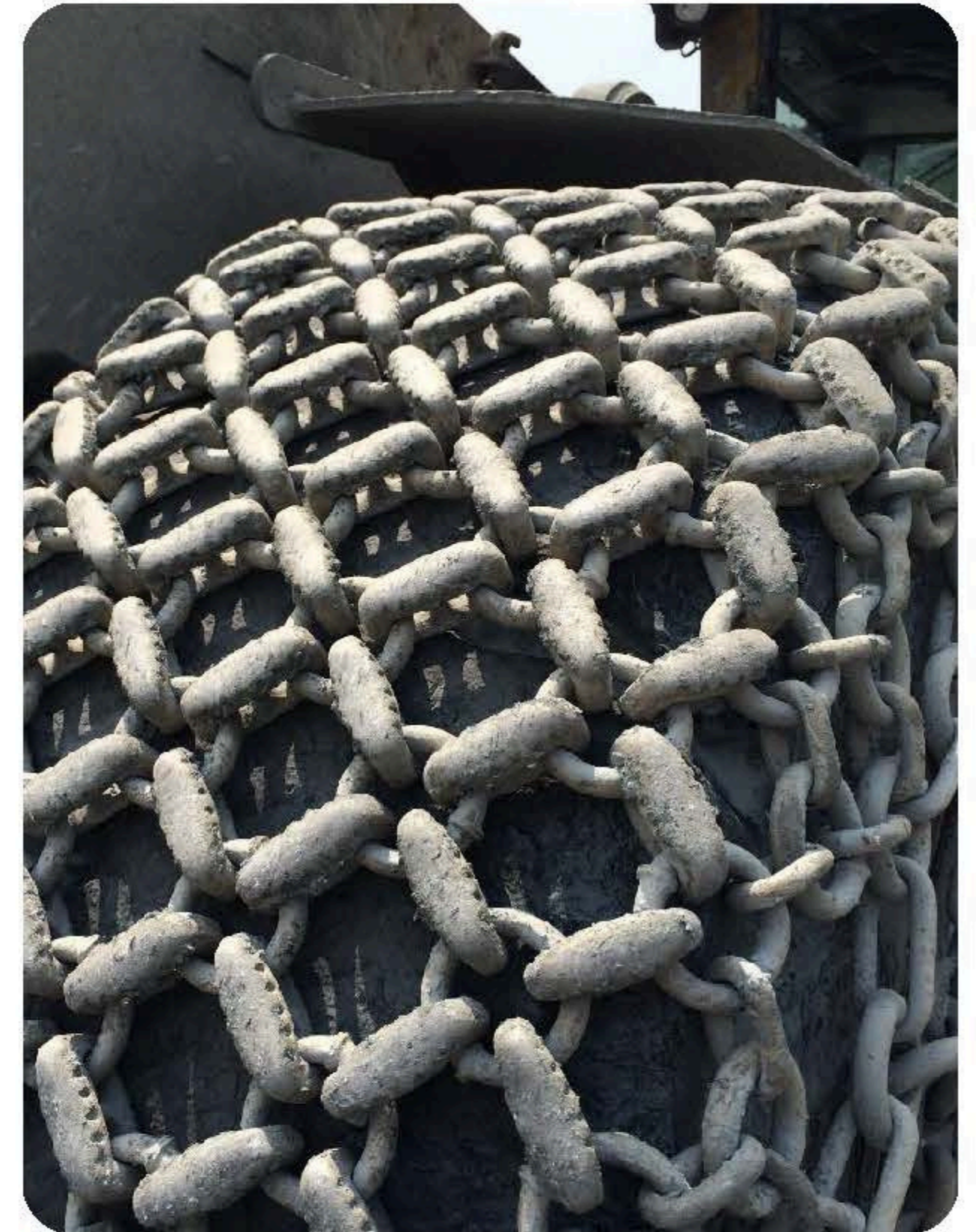
available in sizes 14 | 16 | 18 mm

Characteristics:

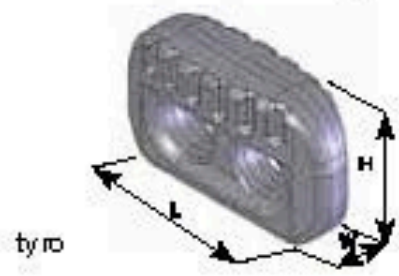
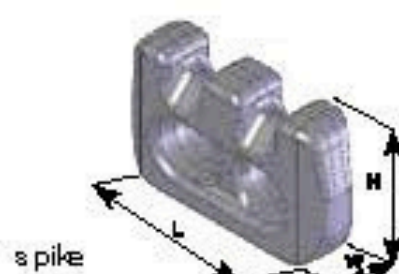
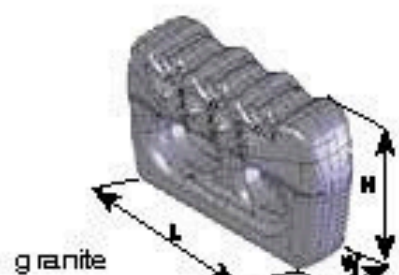
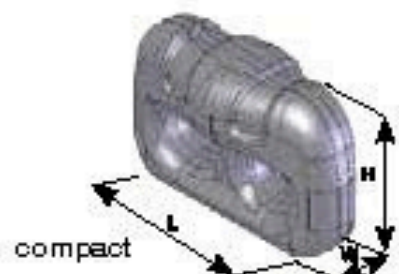
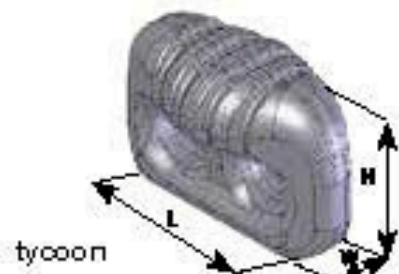
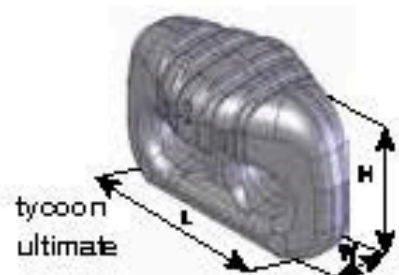
- excellent grip
- good breaking resistance
- heavy duty tension chain
- made out of 1 section (low number of mechanical joints)



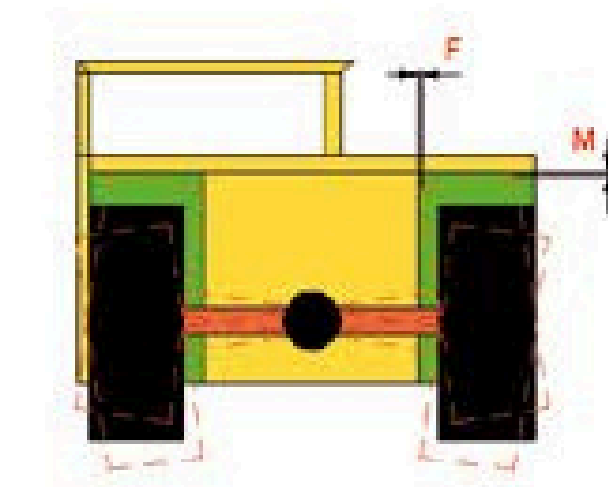
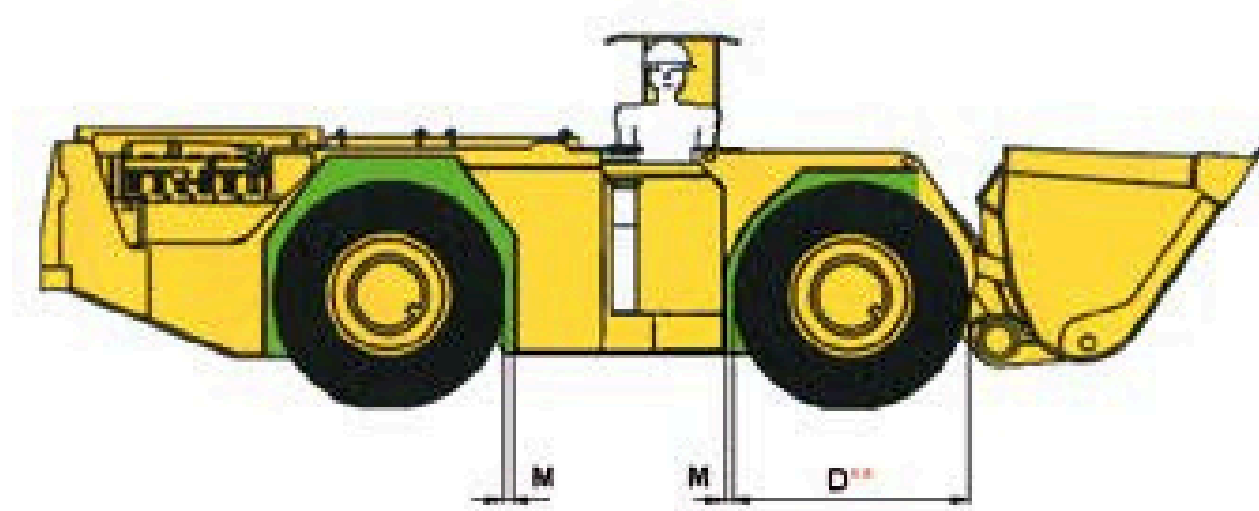
**suitable mesh design: square | hexa**



# Measurements



	Link measurements			Ring measurements		Mesh opening (x)				Clearance required for TPC		
	L	W	H	d	D	square	hexa	quad cross	compact cross	M	F	R
tycoon ultimate	108	57	72	21	70	81	163	-	-	120	80	110
12												
granite	63	22	38	12	45	63	103	103	174	70	50	70
spike	60	16	40	12	45	50	96	99	169	70	50	70
14												
tycoon	79	39	47	14	50	61	122	-	-	80	60	80
granite	79	27	46	14	50	63	122	122	204	80	60	80
tyro	76	26	46	14	50	63	122	122	204	80	60	80
spike	71	19	47	14	50	57	112	112	194	80	60	80
14/16												
tycoon	79	39	47	16	54	64	122	-	-	80	60	80
16												
tycoon	88	48	59	16	54	60	130	-	-	90	70	90
granite	90	34	53	16	54	67	130	130	222	90	70	90
spike	86	22	54	16	54	67	130	130	222	90	70	90
tyro	88	30	54	16	54	67	130	130	222	90	70	90
ringstar	-	21	69	14x17	54(46)	44	96	-	-	115	70	90
16/18 S												
tycoon	88	48	59	18	54	60	126	-	-	90	70	90
18												
granite	100	38	65	18	64	81	156	156	258	100	70	100
spike	88	24	60	18	64	70	138	140	241	100	70	100
tyro	97	34	62	18	64	81	156	156	258	100	70	100
18/20 S												
granite	100	38	65	19.5	64	78	153	-	-	100	70	100
20												
tycoon	97	54	67.5	19.5	64	74	153	-	-	100	70	100
21												
compact	108	46	72	21	70	83	163	-	-	120	80	110
spike	108	30	72	21	70	83	163	164	275	120	80	110
23												
tycoon	112	60	76	23	72	84	170	-	-	120	80	110



# Chain reaction....more than protection



**The benefits of using pewag tyre protection chains have been found to be more than just increased protection.....**

Our Pewag customer in a copper mine in India, installed a set of Pewag Tyre Protection Chains on their underground LHDs. Following an initial period of getting used to the chains on the front axle, the operator began to adapt to the new experience and handling of the LHD and reported the following results:

- Better counter-weight on the LHD due to the chains, leading to shorter loading times and easier operating whilst scooping
- Easier loading of the bucket
- Quicker turnaround after each load
- Increased productivity

The overall results, lead to an  
**increase of productivity each shift of somewhere between 5% - 7%!!**

This means **an increase of 8-10 tonnes per shift!!**

# PEWAG - Tire Protection Chains



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*The best  
price/performance  
ratio for the lowest  
hourly costs, and a  
service that secures  
your business!*



**Enhance Productivity, Protect Your  
Tyres – Trust Pewag.**

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