



**TURNKEY<sup>®</sup>**  
*RHINO*

Bucket Equipment for  
Mining and Quarries



### 30 YEARS OF EXPERIENCE

A subsidiary of the international Safe group, FEURST was created in 1992. FEURST manufactures teeth, adapters and protections in the group's factories and our selected subcontractors. Over 1 million wear parts are produced and sold each year worldwide.



### R&D

With its own Design and Methods Office, equipped with the latest 3D design and printing technologies, Feurst is able to adapt to all market demands, including the most demanding ones.



### PATENTED TECHNOLOGY

FEURST holds patents on the TURNKEY® Grizzly and TURNKEY® Rhino range, which cover the locking devices and adapters.



### TECHNICAL SUPPORT

Thanks to a very knowledgeable technical and sales team, FEURST is able to offer tailor-made solutions adapted to all applications.



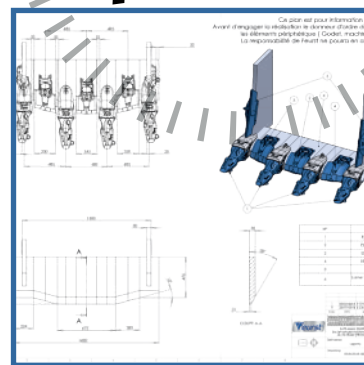
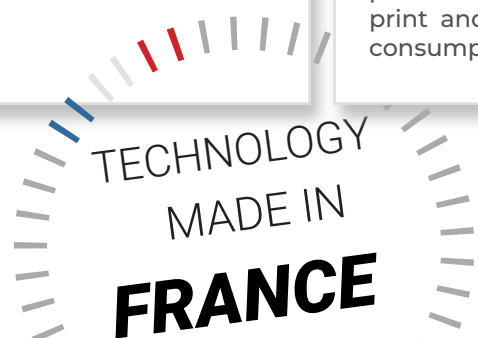
### CUSTOMER SUPPORT

Thanks to an optimised Supply chain, sales administration, its new online platform, allow FEURST to deliver a high level of performance to any customers.



### CSR

95% of FEURST products are made from recycled materials (scrap). And 90% of its own waste is recycled. The Safe Group invests and builds a long-term action plan to reduce its carbon footprint and therefore its energy consumption.



*TURNKEY® Rhino is a wide range of ground engaging tools using hammerless locking devices with permanent compression for teeth and shrouds.*

The TURNKEY® Rhino process is :

- A secured pin locking at 180°
- A dustproof plug
- Permanent compression of the tooth on the adaptor and compensation for wear.
- A reusable locking devices.

The horizontal, rotative, and self locking devices, offers to the user a great ease and safe handling during assembly and disassembly.

**8 %**  
Fuel savings

**- 30 %**  
assembly time

**+ 30 %**  
lifetime

**350 T**  
Maximum machine weight

**300+**  
References

# The Technology

## TURNKEY® Rhino

The teeth & adapters from the TURNKEY® Rhino range, patented FEURST products, are designed to fulfil the requirements of mining and quarrying machinery.

Our buckets equipments combine performance, productivity, and durability in the toughest abrasive shock applications.

### Reversible Wear Cap

A sliding mechanical wear cap is mounted on top of each adaptor to avoid premature wear and damage.

The wear caps are reversible, held in place by the teeth, and last up to 2 tooth changes, depending on the abrasiveness of the material.

### Long Life Time

All teeth profiles are designed to self-sharpen as they wear and do not need to be reversed.

This reduces machine downtime. The adapter's geometry is designed to protect the welds from wear, ensuring a secure fitting at all times.

The teeth are locked onto the adapter, minimizing movement and thus wear on the adapter nose.

Adapter noses do not need to be rebuilt.

### Optimum Safety

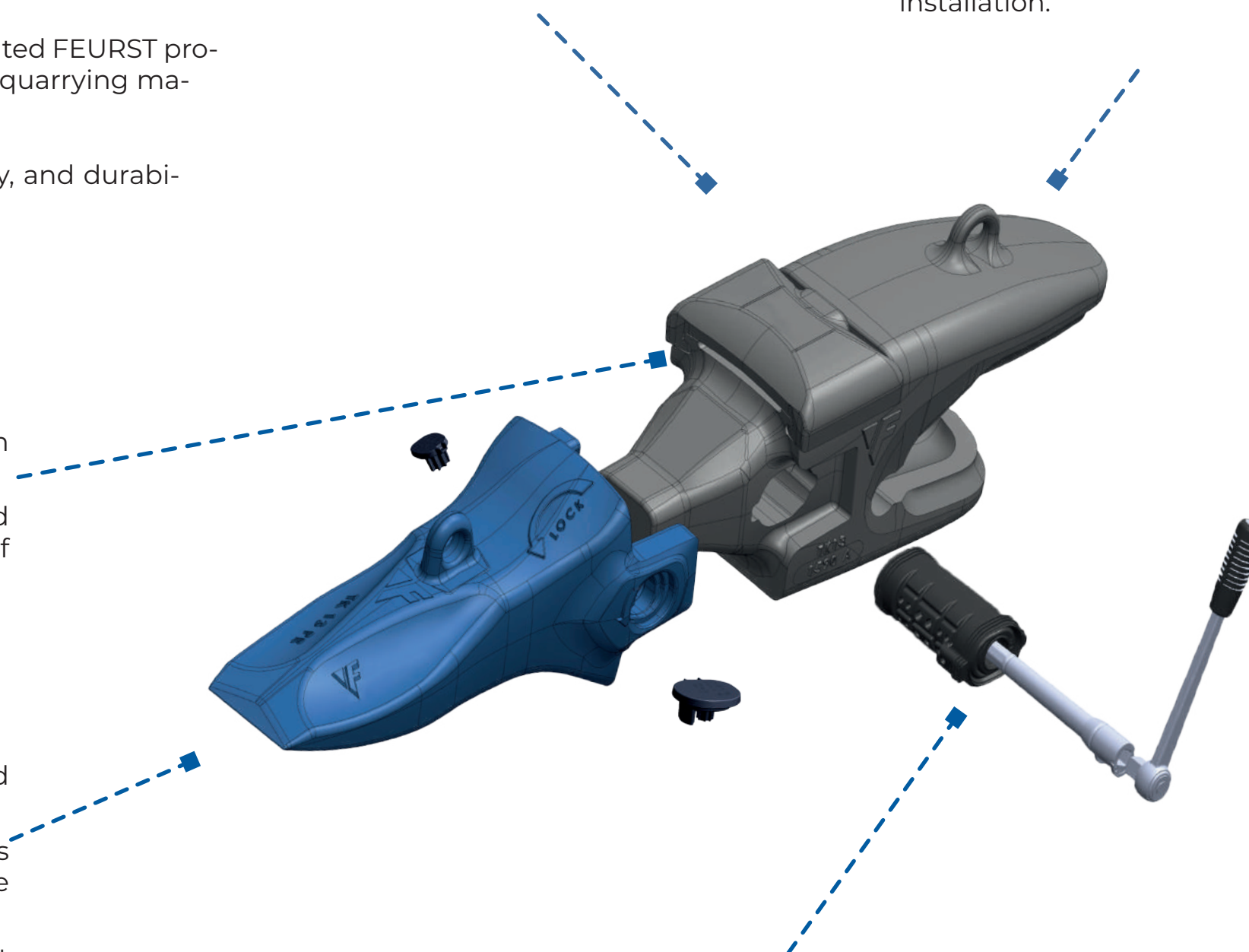
The TURNKEY® Rhino locking devices is a hammerless system, greatly reducing the risk of metal projection and accidents.

The pins are simply pushed by hand and turned 180° counter-clockwise using a manual assembly tool.

### Quicker Teeth Change

Teeth and wear caps are quick and easy to replace on site by a single person.

A lifting ring on the upper part of the tooth and adapters allows for a smooth installation.



### Pin, Plug & Caps

The pin and the plug can not be damaged during installation or disassembly.

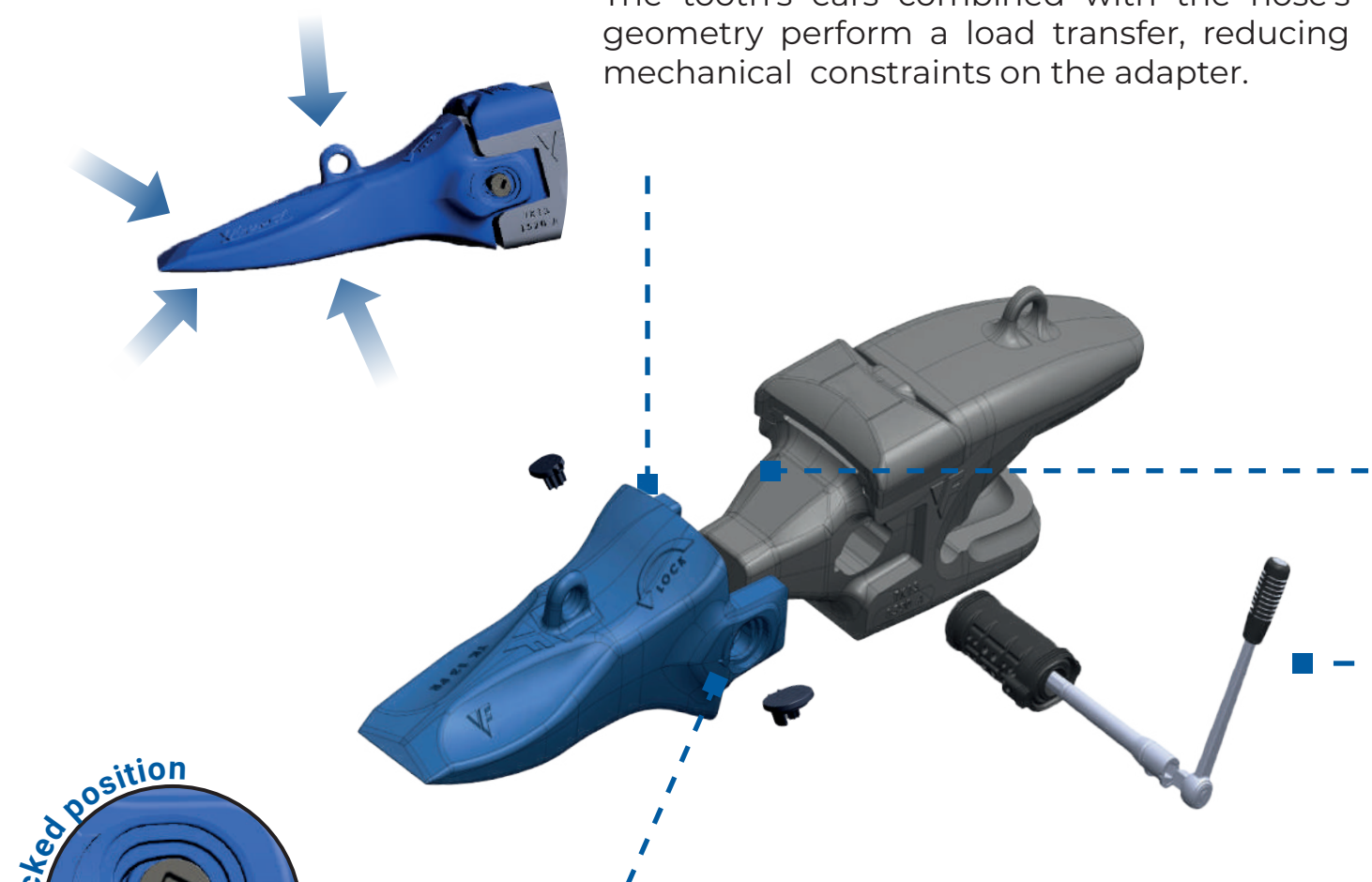
The dustproof plug protects and facilitates teeth replacement operations. The caps secure quick access to pin socket hole.



# The Solution for Mining and Quarries

## More wear Material

The tooth's ears combined with the nose's geometry perform a load transfer, reducing mechanical constraints on the adapter.



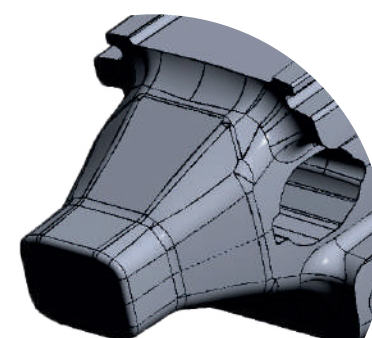
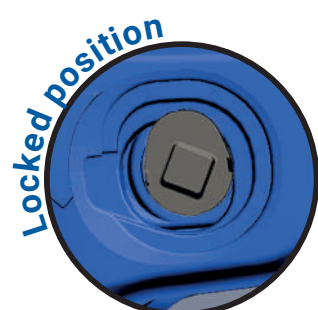
## Features of the new TURNKEY® Rhino locking devices

Reduce risk of bad fitting

Only one way coding conical fitting plug

Only one way coding fitting pin

At the end of a 180° counter-clockwise rotation, a tactile effort and a sound element confirm that the system is locked.



## Nose

The complex shapes of the nose, the conical seats, the stabilization flats, combined with the ears, allow optimal tightening with the help of the locking devices.



## Locking devices

The innovative, rotating, eccentric, and dustproof system that compresses the tooth on the adapter, combined with the performance of the nose, ensures assembly performance, in-service holding, and disassembly under all circumstances.

## BENEFITS






### Performance and Safety in service

- Innovative and secure locking devices
- Perfect fitting
- No loss of teeth
- Better soil penetration
- Driver comfort
- Very easy assembly and disassembly
- Bucket loading optimization



### Reduction of operating costs (T.C.O\*)

- Reduced fuel consumption  -8%
- Zero machine downtime 
- Best quality/price ratio 
  - Extra-long life adapters
  - Increased wear ratio up to 75%
  - Protection of the machine and its components

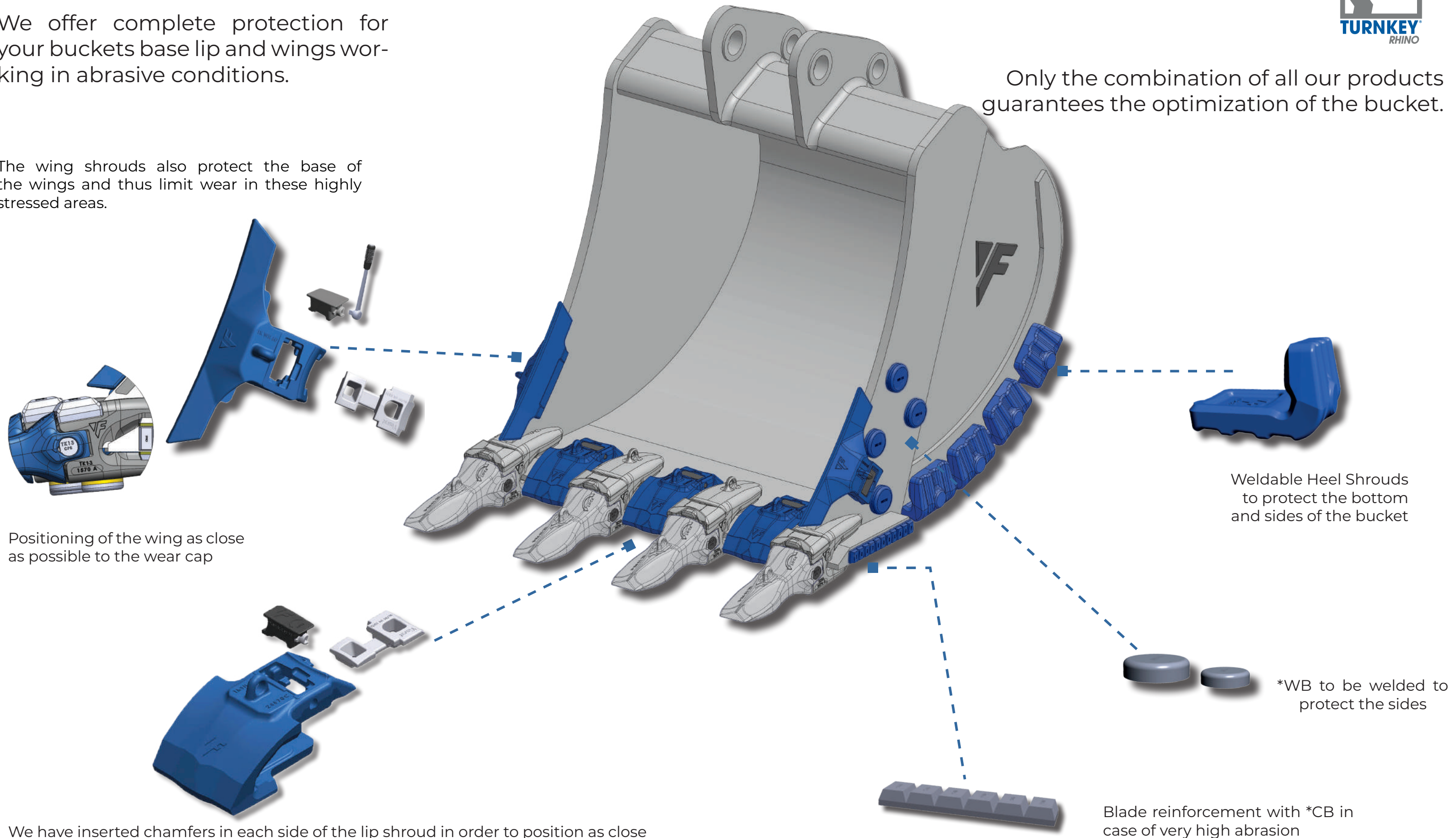
# The complete solution to protect your buckets



We offer complete protection for your buckets base lip and wings working in abrasive conditions.

The wing shrouds also protect the base of the wings and thus limit wear in these highly stressed areas.

Only the combination of all our products guarantees the optimization of the bucket.



Positioning of the wing as close as possible to the wear cap

Weldable Heel Shrouds to protect the bottom and sides of the bucket

\*WB to be welded to protect the sides

We have inserted chamfers in each side of the lip shroud in order to position as close as possible of the bucket lip and covering adapter's weldings.

Blade reinforcement with \*CB in case of very high abrasion

\*WB = Wear Button  
\*CB = Chocky Bar





| SIZE | MACHINES<br>Weight  | ADAPTERS  | TEETH   | LOCKING DEVICES   | BUCKET SHROUDS   |  |  |
|------|---|---|---|---|--|--|--|
| 10   | <br>30 - 42 T<br><br><br>50-60 mm<br>2 / 2.36 / 2.50 in<br><br><br>STD. 70T<br>HD 50T | <br>TKN10 1550 A 10<br>TKN10 1560 A 10<br><br><br>TKN 10 PA<br><br><br>TKN10 1550 STD<br>TKN10 1560 STD<br><br><br>TKN10 NS | <br>TKN10 PE<br><br><br>TKN10 PR-R<br><br><br>TKN10 PE-C<br><br><br>**TKN10 RM-R  | <br>TKN10 PR<br><br><br>TKN10 DPE<br><br><br>TKN10 DPE - AUS<br><br><br>**TKN10 RM-RR | <br>TKN10 SB<br><br><br>TKN10 CL<br><br><br>TKN OD 10 11   | <div>BLADE SHROUDS</div> <div>Compatible Turnkey®<br/><br/><br/>FB 45-300<br/><br/><br/>TKSH EXC 240 60 C<br/>TKSH EXC 240 60 L/R<br/><br/><br/>TKSH OD</div> | <div>WING SHROUDS</div> <div><br/>TKWH 30<br/>Wing Thickness (30mm)<br/><br/><br/>TKSH 60-90 AD<br/><br/><br/>TKSH 60-90 CL</div> |
|      | 11  | <br>40 - 52 T<br><br><br>60-70 mm<br>2.36 / 2.5 / 2.75 in<br><br><br>STD. 108T<br>HD 80T   | <br>TKN11 1560 A 10<br>TKN11 1570 A 10<br><br><br>TKN 11 PA<br><br><br>TKN11 1560 STD<br>TKN11 1570 STD<br><br><br>TKN11 NS | <br>TKN11 PE<br><br><br>TKN11 PR-R<br><br><br>TKN11 PE-C<br><br><br>**TKN11 RM-R    | <br>TKN11 PR<br><br><br>TKN11 DPE<br><br><br>TKN11 DPE- AUS<br><br><br>**TKN11 RM-RR | <br>TKN11 SB<br><br><br>TKN11 CL<br><br><br>TKN OD 10 11  | <div>TKSH EXC 240 60 C<br/>TKSH EXC 240 60 L/R<br/>TKSH EXC 245 70 C<br/>TKSH EXC 250 70 L/R<br/>TKSH EXC 280 70 C<br/>TKSH EXC 280 70 L/R<br/>TKSH EXC 320 70 C<br/>TKSH EXC 320 70 L/R</div> <div><br/>TKSH OD</div>  |

\*\*In development

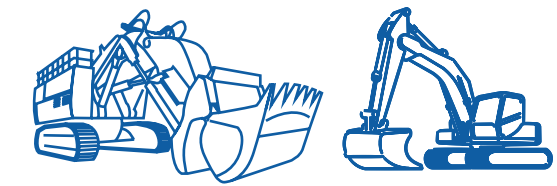




| SIZE | MACHINES<br>Weight   | ADAPTERS   | TEETH  | LOCKING DEVICES   | BUCKET SHROUDS  |   |  |
|------|--|--|--|---|---|---|--|
| 13   | <br>50- 87 T                        | <br>TKN13 1570 A 10<br>TKN13 1580 A 10<br>TKN13 1590 A 10 | <br>TKN13 PE     | <br>TKN13 SB       | <b>BLADE SHROUDS</b>  | <b>WING SHROUDS</b>   |  |
|      | <br>70-80-90 mm<br>2.75/3.15/3.5 in | <br>TKN 13 PA   | <br>TKN13 PR-R   | <br>TKN13 CL       | <br>TKSH EXC 245 70 C<br>TKSH EXC 250 70 L/R<br>TKSH EXC 280 70 C<br>TKSH EXC 280 70 L/R<br>TKSH EXC 320 70 C<br>TKSH EXC 320 70 L/R   | <br>TKWH 50<br>Wing Thickness (50mm)   |  |
|      | <br>STD. 180T<br>HD 135T           | <br>TKN13 1570 STD<br>TKN13 1590 STD                      | <br>TKN13 PE-C   | <br>TKN OD 13 19  | TKSH EXC 245 90 C<br>TKSH EXC 245 90 L/R<br>TKSH EXC 280 90 C<br>TKSH EXC 280 90 L/R<br>TKSH EXC 320 90 C<br>TKSH EXC 320 90 L/R<br>TKSH EXC 360 90 C<br>TKSH EXC 360 90 L/R  | <br>TKSH OD                            |  |
|      |  | <br>TKN13 NS  | <br>TKN13 DPE   | <br>**TKN13 CP    |   | <br>TKSH 60-90 AD                     | <br>TKSH 60-90 CL   |
| 15   | <br>85 - 150 T                    | <br>TKN15 1590 A 10<br>TKN15 15100 A 10                 | <br>TKN15 PE   | <br>TKN15 SB     | <br>TKSH EXC 245 90 C<br>TKSH EXC 245 90 L/R<br>TKSH EXC 280 90 C<br>TKSH EXC 280 90 L/R<br>TKSH EXC 320 90 C<br>TKSH EXC 320 90 L/R<br>TKSH EXC 360 90 C<br>TKSH EXC 360 90 L/R<br>TKSH EXC 345 100 C<br>TKSH EXC 345 100 L/R | <br>TKWH 50<br>Wing Thickness (50mm) |  |
|      | <br>90-100 mm<br>3.5/4 in         | <br>TKN 15 PA   | <br>TKN15 PE-C | <br>TKN15 CL     | TKSH OD   | <br>TKSH 60-90 AD                    | <br>TKSH 60-90 CL   |
|      | <br>STD. 250T<br>HD 190T          | <br>TKN15 NS  | <br>TKN15 RM-R | <br>TKN OD 13 19 |   | <br>TKSH 100-140 AD                  | <br>TKSH 100-140 CL |
|      |  |  | <br>TKN15 CP   | <br>TKN15 RM-RR  |   |   |  |

\*\*In development





| SIZE | MACHINES<br>Weight   | ADAPTERS   | TEETH  | LOCKING DEVICES  | BUCKET SHROUDS   |  |
|------|--|--|--|--|--|--|
| 17   | <br><b>140 - 200 T</b><br><br><br>100-120 mm<br>4 / 4.75 in<br><br><br><b>STD. 315T</b><br><b>HD 250T</b>        | <br><b>TKN17 15100 A 10</b><br><b>TKN17 15120 A 10</b><br><br><br><b>TKN 17 PA</b><br><br><br><b>TKN17 NS</b>      | <br><b>TKN17 PE-C</b><br><br><br><b>TKN17 PR</b><br><br><br><b>TKN17 PE</b><br><br><br><b>TKN17 RM-R</b><br><br><br><b>TKN17 RM-RR</b>            | <br><b>TKN17 SB</b><br><br><br><b>TKN17 CL</b><br><br><br><b>TKN OD 13 19</b>      | <b>BLADE SHROUDS</b>   | <b>WING SHROUDS</b>  |
|      |  |  |  |  | <br><b>TKSH EXC 345 100 C</b><br><b>TKSH EXC 345 100 L/R</b><br><b>TKSH EXC 380 120 C</b><br><b>TKSH EXC 380 120 L/R</b><br><br><br><b>TKSH OD</b>    | <br><b>TKWH 70</b><br>Wing Thickness (70mm)<br><br><br><b>TKSH 100-140 AD</b><br><br><br><b>TKSH 100-140 CL</b>    |
| 19   | <br><b>200 - 350 T</b><br><br><br>120-140 mm<br>4.75 / 5.5 in<br><br><br><b>STD. 460T</b><br><b>HD 340T</b> | <br><b>TKN19 15120 A 10</b><br><b>TKN19 15140 A 10</b><br><br><br><b>TKN 19 PA</b><br><br><br><b>TKN19 NS</b> | <br><b>TKN19 PE-C</b><br><br><br><b>TKN19 PR</b><br><br><br><b>TKN19 PR-R</b><br><br><br><b>TKN19 RM-R</b><br><br><br><b>TKN19 RM-RR</b> | <br><b>TKN19 SB</b><br><br><br><b>TKN19 CL</b><br><br><br><b>TKN OD 13 19</b> | <b>BLADE SHROUDS</b>   | <b>WING SHROUDS</b>  |
|      |  |  |  |  | <br><b>TKSH EXC 380 120 C</b><br><b>TKSH EXC 380 120 L/R</b><br><b>TKSH EXC 420 140 C</b><br><b>TKSH EXC 420 140 L/R</b><br><br><br><b>TKSH OD</b> | <br><b>TKWH 90</b><br>Wing Thickness (90mm)<br><br><br><b>TKSH 100-140 AD</b><br><br><br><b>TKSH 100-140 CL</b> |





| SIZE | MACHINES<br>Weight   | ADAPTERS  | TEETH  | LOCKING DEVICES   | BUCKET SHROUDS   |   |
|------|--|---|--|---|--|---|
|      |  |   |  |   | BLADE SHROUDS  | WING SHROUDS  |
| 10   | <br>STD. 85T<br>HD 60T<br><br>50-60 mm<br>2 / 2.36 / 2.50 in | <br>TKN10 1850 A 16<br>TKN10 1860 A 16<br><br>TKN 10 PA<br><br>*TKN10 1550 STD<br>*TKN10 1560 STD<br><br>TKN10 NS       | <br>TKN10 SA<br><br>TKN10 RA-X<br><br>TKN10 AP<br>*Usable with the RA-X tooth only.       | <br>TKN10 SB<br><br>TKN10 CL<br><br>TKN OD 10 11      | Compatible with Turnkey®<br><br>FB45-300<br><br>TKSH OD   | <br>TKWH 30<br>Wing Thickness (30mm)<br><br>TKSH 60-90 AD<br><br>TKSH 60-90 CL  |
|      |  | <br>TKN11 1860 A 16<br>TKN11 1870 A 16<br><br>TKN 11 PA<br><br>*TKN11 1560 STD<br>*TKN11 1570 STD<br><br>TKN11 NS | <br>TKN11 SA<br><br>TKN11 RA-X<br><br>TKN11 AP<br>*Usable with the RA-X tooth only. | <br>TKN11 SB<br><br>TKN11 CL<br><br>TKN OD 10 11 | <br>FB60-70 TKN<br>FB60 200 TKN<br>FB60 200 L / R - TKN<br>FB60 250 TKN<br>FB60 300 TKN<br>FB60 350 TKN<br>FB70 250 TKN<br>FB60-70 L / R - TKN<br><br>TKSH LOAD 370 70 C<br>TKSH LOAD 370 70 L / R<br><br>TKSH OD | <br>TKWH 50<br>Wing Thickness (50mm)<br><br>RPF 300 (A souder)<br>Wing Thickness (30mm)<br><br>TKSH 60-90 AD<br><br>TKSH 60-90 CL |

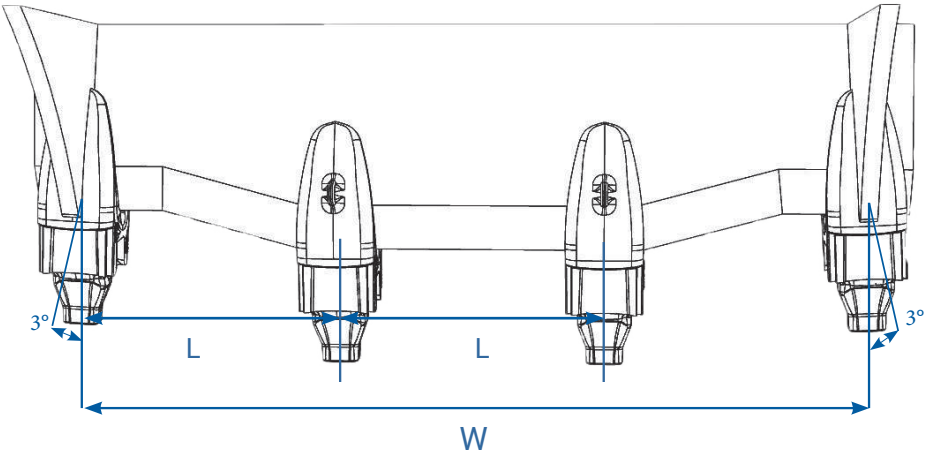


| SIZE | MACHINES<br>Weight  | ADAPTERS   | TEETH  | LOCKING DEVICES   | BUCKET SHROUDS  |   |
|------|---|--|--|---|---|---|
| 13   | <br>STD. 170T<br>HD 133T<br><br>70-80-90 mm<br>2.75/3.15/3.54in | <br>TKN13 1870 A 16<br>TKN13 1880 A 16<br>TKN13 1880 A 16R<br>TKN13 1880 A 16L<br>TKN13 1890 A 16<br><br>TKN 13 PA<br><br>*TKN13 1570 STD<br><br>*TKN13 1590 STD<br>TKN13 NS | <br>TKN13 SA<br><br>TKN13 AP<br><br>TKN13 RA-X<br>*Usable with the RA-X tooth only. | <br>TKN13 SB<br><br>TKN13 CL<br><br>TKN OD 13 19       | BLADE SHROUDS   | WING SHROUDS  |
|      |   |  |  |   | <br>TKSH LOAD 370 70 C<br>TKSH LOAD 370 70 L/R<br>TKSH LOAD 370 76 C<br>TKSH LOAD 370 76 L/R<br>TKSH LOAD 370 80 C<br>TKSH LOAD 370 80 L/R<br>TKSH LOAD 370 90 C<br>TKSH LOAD 370 90 L/R<br><br>TKSH OD | <br>TKWH 50<br>Wing Thickness (50mm)<br><br>TKSH 60-90 AD<br><br>TKSH 60-90 CL |
| 15   | <br>STD. 280T<br>HD 220T<br><br>90-100 mm<br>3.5 / 4 in     | <br>TKN15 1890 A 16<br>TKN15 18100 A 16<br><br>TKN 15 PA<br><br>TKN15 NS  | <br>TKN15 SA<br><br>TKN15 RPL  | <br>TKN15 SB<br><br>TKN15 CL<br><br>TKN OD 13 19 | TKSH LOAD 370 90 C<br>TKSH LOAD 370 90 L/R<br>TKSH LOAD 370 100 C<br>TKSH LOAD 370 100 L/R  | TKWH 50<br>Wing Thickness (50mm)<br>TKSH 60-90 AD<br>TKSH 60-90 CL  |
|      |   |  |  |   | TKSH OD   | TKSH 60-90 CL   |
| 17   | <br>STD. 300T<br>HD 270T<br><br>100-120 mm<br>4 / 4.75 in   | <br>TKN17 15100 A 10<br>TKN17 15120 A 10<br><br>TKN 17 PA<br><br>TKN17 NS   | <br>**TKN17 RPL   | <br>TKN17 SB<br><br>TKN17 CL<br><br>TKN OD 13 19 | TKSH 100-140 AD<br>TKSH 100-140 CL  | TKWH 70<br>Wing Thickness (70mm)  |
|      |   |  |  |   | TKSH OD   |   |

\*\*In development



# Determination of the number of TURNKEY® adapters for a given width of bucket data:



## Determination of the number of adapters for a given width:

(For an easier calculation, It is assumed that the corner adapter centerline is aligned with the inside of side plate)

W= Inside lips width (mm)  
L mini & L maxi = adapters spacing (See dimensions below)

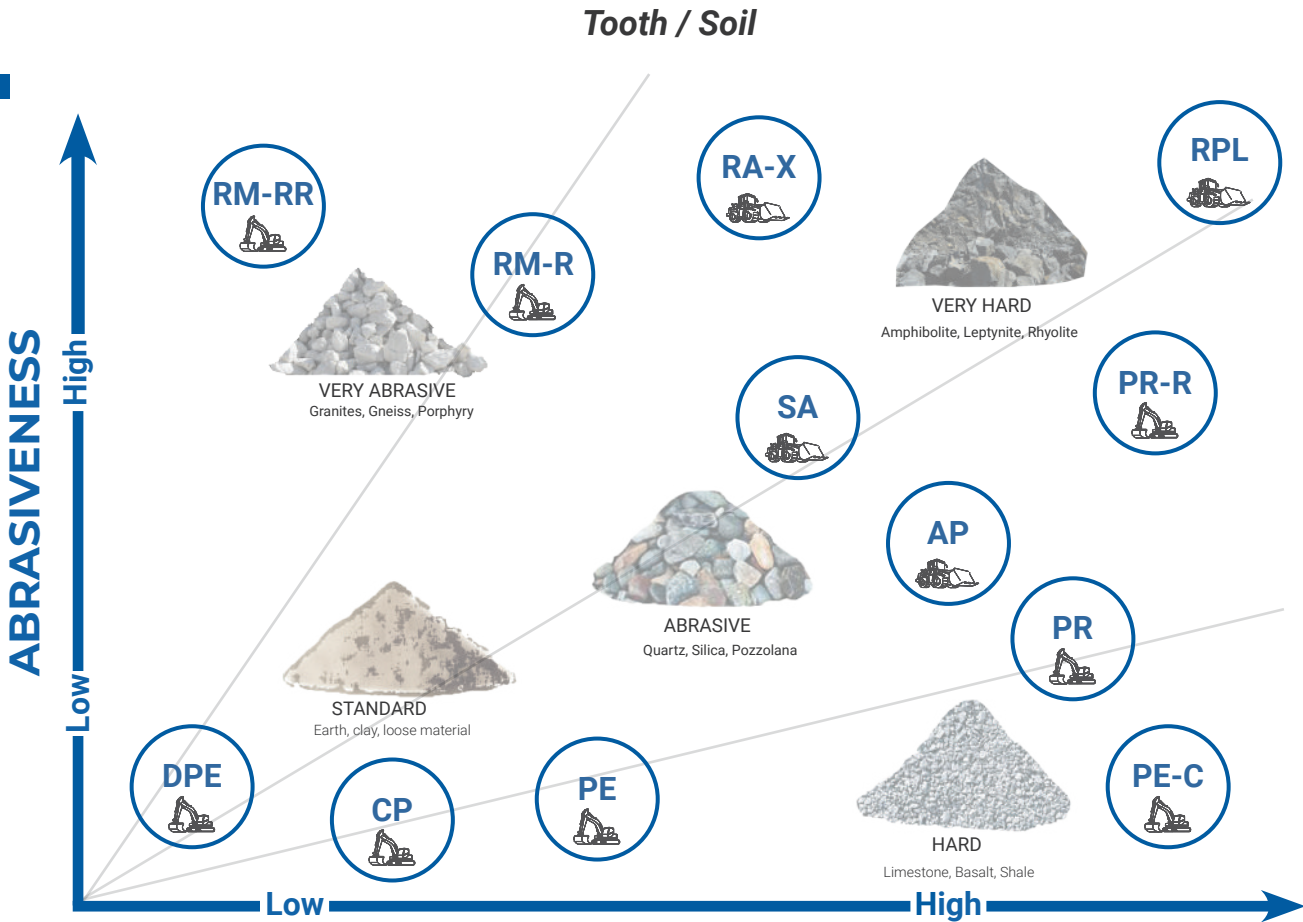
Minimum number of adapters :  $\frac{W}{L_{maxi}} + 1 =$

Maximum number of adapters:  $\frac{W}{L_{mini}} + 1 =$

The choice of the number of adapters is made according to the criteria of applications encountered, knowing that we will put for example :

- In an abrasive environment, a maximum of adapters are recommended
- For better penetration in less abrasive environments, install the minimum number of adapters bucket

| Excavator |      |        |                    | Wheel Loader |      |
|-----------|------|--------|--------------------|--------------|------|
| L (mm)    |      | Size   | Adapter Width (mm) | L (mm)       |      |
| Mini      | Maxi |        |                    | Mini         | Maxi |
| 350       | 490  | TKN 10 | 150                | 465          | 620  |
| 380       | 530  | TKN 11 | 170                | 500          | 670  |
| 440       | 550  | TKN 13 | 185                | 505          | 680  |
| 475       | 665  | TKN 15 | 215                | 620          | 825  |
| 540       | 750  | TKN 17 | 245                | 690          | 920  |
| 630       | 880  | TKN 19 | 270                | -            | -    |



DPE



**Twin Pick :** Double vector tooth used on bucket corners to protect the sides from wear.

PE



**Pick :** Long and sharp tooth ensuring an excellent penetration.

PE-C



**Pick Short :** Short tooth, accurate shape to be used as rock cutting tooth.

RM-R



**Resistance Mining :** Mining tooth provides a good balance of abrasion resistance and penetration for tough applications

PR



**Rock Chisel :** Perfect tooth shape for a strong penetration. Excellent compromise wear material/penetration.

PR-R



**Rock Chisel + :** Enough material for a correct abrasion resistance perfect shape enabling better penetration.

RM-RR



**Resistance Mining + :** Reinforced mining excavator tooth offering a good ratio between abrasion resistance and penetration in severe applications.

SA



**Super Abrasion :** Excellent abrasion resistance with penetration-maintaining heel profile.

RPL



**Reinforced Abrasion :** Loader tooth for highly abrasive use, large heel.

RA-X



**Reinforced Abrasion + :** Loader tooth for very hard and abrasive use, important heel.

AP



**Penetrating Abrasion :** Loader tooth offering good wear resistance combined with good penetration.




CP



**Coal Penetration :** Pointed and penetrating tooth, used to scalp layers of materials in less abrasive environments (such as coal).

## Equipment to install on an HD bucket

Equipment recommendations between machine weight and its breakout force  
(B.O.F= Break Out Force) expressed in Tons (T)

| Taille  |               | TKN 10   |    | TKN 11   |    | TKN 13   |       | TKN 15   |     | TKN 17   |     | TKN 19   |     |
|---|---------------|----------|----|----------|----|----------|-------|----------|-----|----------|-----|----------|-----|
| Machine   |               | Standard | HD | Standard | HD | Standard | HD    | Standard | HD  | Standard | HD  | Standard | HD  |
| <br>Excavator     | Max. T Weight | 70       | 50 | 110      | 88 | 180      | 130   | 270      | 188 | 325      | 210 | 450      | 350 |
|   | Max. B.O.F.   | 35       | 29 | 46       | 38 | 60       | 46-48 | 79       | 63  | 95       | 73  | 120      | 98  |
| <br>Front Shovel  | Max. T Weight | 70       | 50 | 108      | 80 | 180      | 135   | 250      | 190 | 315      | 250 | 460      | 340 |
|   | Max. B.O.F.   | 42       | 35 | 56.5     | 46 | 70       | 54    | 88       | 70  | 105      | 82  | 140      | 110 |
| <br>Wheel Loader | Max. T Weight | 85       | 60 | 133      | 93 | 170      | 133   | 280      | 220 | 300T     | 270 | -        | -   |
|   | Max. B.O.F.   | 59       | 49 | 77       | 63 | 98       | 78    | 133      | 105 | 160      | 130 | -        | -   |

1 Tonne = 9.8067 Kn

Recommendation valid for a standard bucket equipped with 5 teeth.

In case of extremely severe use, oversize by one size.

Applications and working conditions must be taken into consideration, consult your FEURST dealer.

Data provided for recommendation purposes only, under no circumstances can FEURST's liability be engaged.

### Bucket Selection Based on Application

**Standard Bucket :** Suitable for digging and loading of soft to medium hard, compact and non-abrasive materials such as earth/rock, sand/gravel, coal, chalk, and non-abrasive ores.

**\*HD Bucket :** Suitable for digging and loading of mixed earth and rock soils with a high proportion of rock or other abrasive materials.

**\*XHD Bucket :** Suitable for digging and loading of mixed earth and rock soils with a high proportion of rock and other hard and abrasive materials.

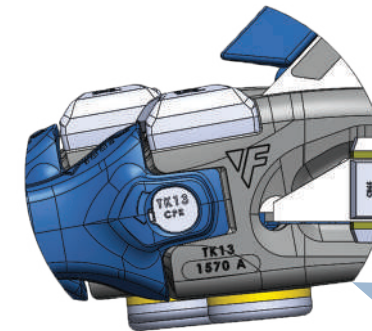
\* HD = Heavy Duty

\* XHD = Extrem Heavy Duty

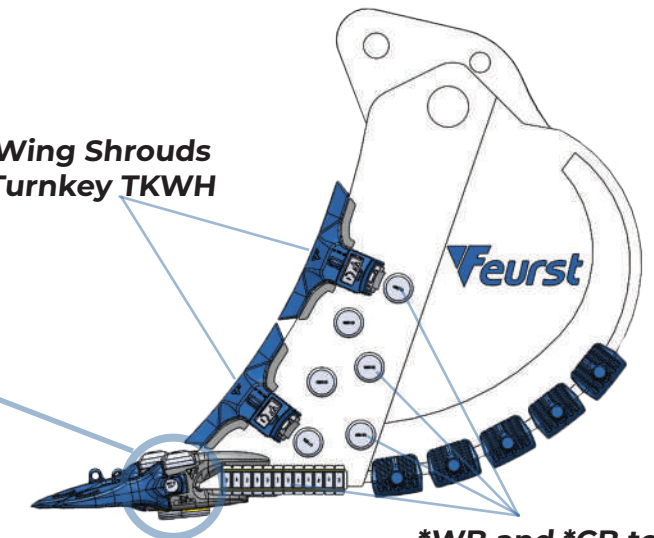
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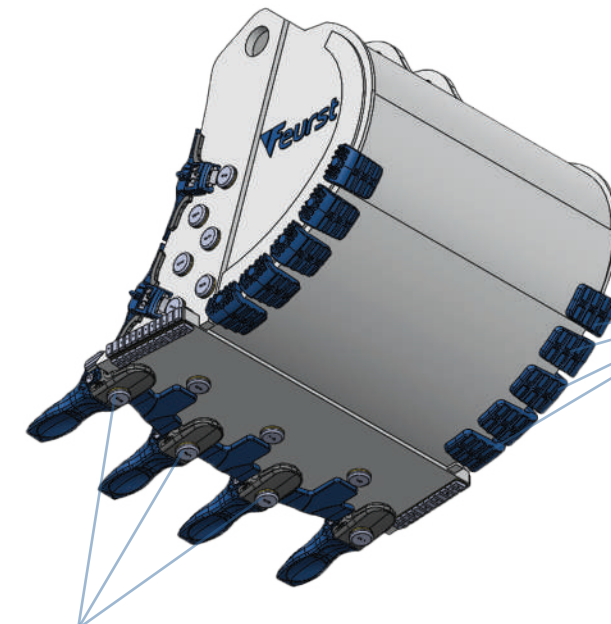
Wing positioning as close as possible to the wear cap



Wing Shrouds  
Turnkey TKWH

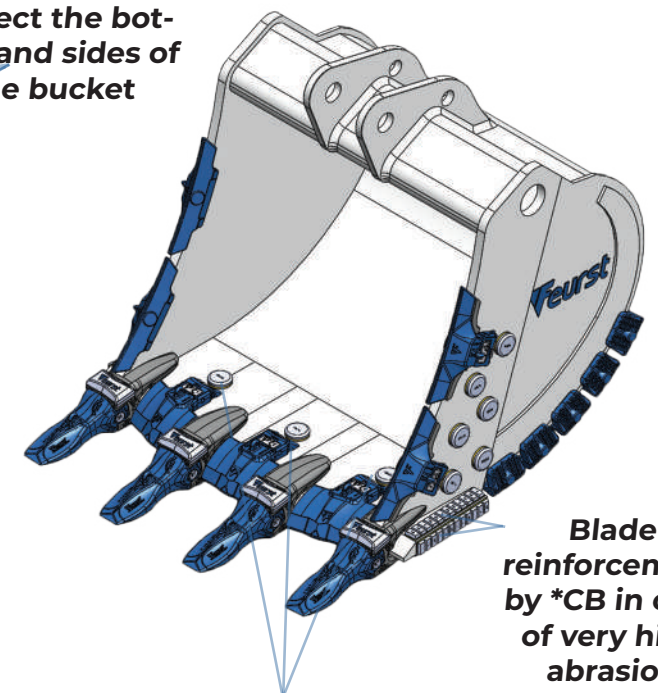


\*WB and \*CB to weld to protect the sides and bottom of the adapter



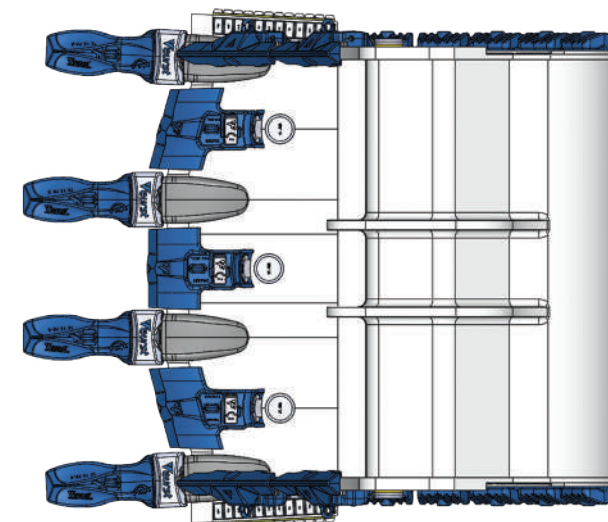
PTG to weld to protect the bottom and sides of the bucket

Possibility to weld \*WB on the lower branches in case of very high abrasion



Blade reinforcement by \*CB in case of very high abrasion

Possibility to weld \*WB behind the lips shrouds to act as a deflector



\*WB = Wear Button  
\*CB = Chocky Bar





\*\* In development

| SIZE | TYPE      | PART NUMBER   | WEIGHT<br>[kg] | DIMENSIONS [ mm] |     |    |     |     |
|------|-----------|---------------|----------------|------------------|-----|----|-----|-----|
|      |           |               |                | A                | B   | C  | D   | E   |
| 10   | PE        | TKN10 PE      | 17             | 440              | 168 | 3  | 18  | 113 |
| 10   | PR        | TKN10 PR      | 19             | 415              | 167 | 7  | 92  | 113 |
| 10   | PR-R      | TKN10 PR-R    | 22             | 445              | 168 | 9  | 100 | 113 |
| 10   | DPE       | TKN10 DPE     | 18             | 430              | 168 | 10 | 210 | 113 |
| 10   | DPE - AUS | TKN10 DPE-AUS | 21.5           | 432              | 171 | 45 | 183 | 113 |
| 10   | PE-C      | TKN10 PE-C    | 15             | 370              | 168 | 3  | 25  | 113 |
| 10   | SA        | TKN10 SA      | 23             | 383              | 168 | 20 | 120 | 113 |
| 10   | AP        | TKN10 AP      | 33.4           | 485              | 170 | 25 | 146 | 113 |
| 10   | RA-X      | TKN10 RA-X    | 42.3           | 500              | 170 | 40 | 146 | 113 |
| 10   | RM-R      | **TKN10 RM-R  | 27             | 415              | 168 | 32 | 100 | 113 |
| 10   | RM-RR     | **TKN10 RM-RR | 29             | 410              | 168 | 38 | 116 | 113 |
| 11   | PE        | TKN11 PE      | 21             | 480              | 184 | 4  | 20  | 123 |
| 11   | PR        | TKN11 PR      | 21.85          | 442              | 182 | 11 | 53  | 123 |
| 11   | PR-R      | TKN11 PR-R    | 27             | 500              | 182 | 6  | 114 | 123 |
| 11   | DPE       | TKN11 DPE     | 22             | 450              | 184 | 11 | 232 | 123 |
| 11   | DPE - AUS | TKN11 DPE-AUS | 25.75          | 462              | 185 | 45 | 197 | 123 |
| 11   | PE-C      | TKN11 PE-C    | 18.5           | 400              | 184 | 4  | 28  | 123 |
| 11   | SA        | TKN11 SA      | 27.95          | 422              | 182 | 18 | 117 | 123 |
| 11   | AP        | TKN11 AP      | 43.33          | 545              | 185 | 36 | 160 | 123 |
| 11   | RA-X      | TKN11 RA-X    | 50.6           | 550              | 185 | 55 | 160 | 123 |
| 11   | RM-R      | **TKN11 RM-R  | 31             | 450              | 182 | 37 | 109 | 123 |
| 11   | RM-RR     | **TKN11 RM-RR | 34             | 440              | 182 | 45 | 127 | 123 |
| 13   | PE        | TKN13 PE      | 26.5           | 500              | 196 | 8  | 20  | 139 |
| 13   | PR        | TKN13 PR      | 30.5           | 485              | 196 | 8  | 105 | 139 |
| 13   | PR-R      | TKN13 PR-R    | 37             | 524              | 196 | 8  | 113 | 139 |
| 13   | RM-R      | TKN13 RM-R    | 38.5           | 475              | 196 | 48 | 110 | 139 |
| 13   | RM-RR     | TKN13 RM-RR   | 45             | 477              | 198 | 59 | 113 | 139 |
| 13   | DPE       | TKN13 DPE     | 32             | 490              | 196 | 12 | 250 | 139 |
| 13   | PE-C      | TKN13 PE-C    | 28             | 435              | 196 | 5  | 32  | 139 |
| 13   | SA        | TKN13 SA      | 41.8           | 450              | 196 | 17 | 116 | 139 |
| 13   | RA-X      | TKN13 RA-X    | 66             | 540              | 196 | 6  | 123 | 139 |
| 13   | AP        | TKN13 AP      | 56.5           | 529              | 232 | 37 | 178 | 139 |
| 13   | CP        | **TKN13 CP    | -              | -                | -   | -  | -   | -   |
| 15   | PE        | TKN15 PE      | 40             | 555              | 230 | 5  | 17  | 154 |
| 15   | PR        | TKN15 PR      | 46.5           | 535              | 230 | 9  | 143 | 154 |
| 15   | PR-R      | TKN15 PR-R    | 55             | 570              | 230 | 11 | 155 | 154 |
| 15   | PE-C      | TKN15 PE-C    | 40             | 490              | 230 | 6  | 39  | 154 |
| 15   | SA        | TKN15 SA      | 57             | 524              | 230 | 31 | 148 | 154 |
| 15   | RM-R      | TKN15 RM-R    | 60             | 530              | 230 | 68 | 127 | 154 |
| 15   | RM-RR     | TKN15 RM-RR   | 76             | 560              | 230 | 82 | 113 | 154 |
| 15   | RPL       | TKN15 RPL     | 95             | 550              | 230 | 28 | 110 | 154 |
| 15   | CP        | TKN15 CP      | 35.4           | 575              | 230 | 8  | 38  | 154 |
| 17   | PE        | TKN17 PE      | 56.5           | 605              | 287 | 27 | 30  | 171 |
| 17   | PE-C      | TKN17 PE-C    | 58             | 533              | 283 | 7  | 39  | 171 |
| 17   | PR        | TKN17 PR      | 74             | 600              | 237 | 17 | 144 | 171 |
| 17   | RM-R      | TKN17 RM-R    | 75             | 529              | 285 | 54 | 178 | 171 |
| 17   | RM-RR     | TKN17 RM-RR   | 97.5           | 570              | 285 | 85 | 157 | 171 |
| 17   | RPL       | **TKN17 RPL   | 138            | 600              | 285 | 50 | 130 | 171 |
| 19   | PE-C      | TKN19 PE-C    | 80.4           | 600              | 328 | 6  | 52  | 197 |
| 19   | PR        | TKN19 PR      | 93             | 635              | 328 | 8  | 160 | 197 |
| 19   | PR-R      | TKN19 PR-R    | 99             | 645              | 328 | 30 | 150 | 197 |
| 19   | RM-RR     | TKN19 RM-RR   | 113            | 600              | 328 | 83 | 138 | 197 |
| 19   | RM-R      | TKN19 RM-R    | 95             | 560              | 328 | 74 | 161 | 197 |

Adapters Dimensions

| SIZE | PART NUMBER        | WEIGHT<br>[kg] | Blade Th<br>[mm] | DIMENSIONS [ mm] |     |     |     |     |     | APPLICATIONS |
|------|--------------------|----------------|------------------|------------------|-----|-----|-----|-----|-----|--------------|
|      |                    |                |                  | A                | B   | C   | L   | ø°  | β°  |              |
| 10   | TKN10 1550 A10°    | 31             | 50               | 52               | 137 | 240 | 150 | 30° | 10° | E            |
| 10   | TKN10 1560 A10°    | 31             | 60               | 62               | 137 | 240 | 150 | 30° | 10° | E            |
| 10   | TKN10 1550 STD     | 28,5           | 50               | 51               | 142 | 240 | 148 | 30° | 10° | E            |
| 10   | TKN10 1560 STD     | 27,5           | 60               | 62               | 142 | 240 | 149 | 30° | 10° | E            |
| 10   | TKN10 1850 A16°    | 32             | 50               | 52               | 160 | 245 | 150 | 30° | 16° | L            |
| 10   | TKN10 1860 A16°    | 32             | 60               | 64               | 160 | 235 | 150 | 30° | 16° | L            |
| 10   | TKN10 NS           | 19.5           | -                | -                | -   | -   | 150 | -   | -   | E / L        |
| 10   | TKN10 PA           | 3              | -                | 168              | 98  | 43  | -   | -   | -   | E / L        |
| 11   | TKN11 1560 A 10°   | 46             | 60               | 62               | 178 | 275 | 170 | 30° | 10° | E            |
| 11   | TKN11 1570 A 10°   | 45.5           | 70               | 72               | 178 | 275 | 170 | 30° | 10° | E            |
| 11   | TKN11 1560 STD     | 40.5           | 60               | 63               | 190 | 280 | 167 | 30° | 10° | E            |
| 11   | TKN11 1570 STD     | 40.5           | 70               | 72               | 190 | 283 | 167 | 30° | 10° | E            |
| 11   | TKN11 1860 A 16°   | 46.9           | 60               | 62               | 202 | 281 | 170 | 30° | 16° | L            |
| 11   | TKN11 1870 A 16°   | 47.2           | 70               | 72               | 183 | 281 | 170 | 30° | 16° | L            |
| 11   | TKN11 NS           | 26.3           | -                | -                | -   | -   | 168 | -   | 0°  | E / L        |
| 11   | TKN11 PA           | 5.26           | -                | 201              | 11  | 51  | -   | -   | -   | E / L        |
| 13   | TKN13 1570 A 10°   | 70.5           | 70               | 73               | 193 | 330 | 190 | 30° | 10° | E            |
| 13   | TKN13 1580 A 10°   | 70             | 80               | 83               | 193 | 330 | 190 | 30° | 10° | E            |
| 13   | TKN13 1590 A 10°   | 70.5           | 90               | 93               | 193 | 330 | 190 | 30° | 10° | E            |
| 13   | TKN13 1570 STD     | 59             | 70               | 75               | 190 | 330 | 182 | 30° | 10° | E            |
| 13   | TKN13 1590 STD     | 59             | 90               | 95               | 200 | 330 | 182 | 30° | 10° | E            |
| 13   | TKN13 1870 A 16°   | 77             | 70               | 76               | 245 | 365 | 190 | 30° | 16° | L            |
| 13   | TKN13 1880 A 16°   | 76.5           | 80               | 84               | 245 | 365 | 190 | 30° | 16° | L            |
| 13   | TKN13 1880 A 16° L | 77.3           | 80               | 84               | 245 | 365 | 190 | 30° | 16° | L            |
| 13   | TKN13 1880 A 16° R | 77.3           | 80               | 84               | 245 | 365 | 190 | 30° | 16° | L            |
| 13   | TKN13 1890 A 16°   | 75             | 90               | 94               | 245 | 365 | 190 | 30° | 16° | C            |
| 13   | TKN13 NS           | 33.2           | -                | -                | -   | -   | 183 | -   | 0°  | E / L        |
| 13   | TKN13 PA           | 6.6            | -                | 278              | 124 | 55  | -   | -   | -   | E / L        |
| 15   | TKN15 1590 A 10°   | 102.5          | 90               | 93               | 236 | 410 | 210 | 30° | 10° | E            |
| 15   | TKN15 15100 A 10°  | 104            | 100              | 103              | 236 | 410 | 210 | 30° | 10° | E            |
| 15   | TKN15 1890 A 16°   | 109            | 90               | 95               | 270 | 430 | 210 | 30° | 16° | L            |
| 15   | TKN15 18100 A 16°  | 104            | 100              | 104              | 245 | 410 | 210 | 30° | 16° | L            |
| 15   | TKN15 NS           | 46.8           | -                | -                | -   | -   | 207 | -   | 0°  | E / L        |
| 15   | TKN15 PA           | 9.3            | -                | 236              | 151 | 62  | -   | -   | -   | E / L        |
| 17   | TKN17 15100 A 10°  | 146            | 100              | 104              | 236 | 420 | 240 | 30° | 10° | E            |
| 17   | TKN17 15120 A 10°  | 143            | 120              | 126              | 236 | 420 | 240 | 30° | 10° | E            |
| 17   | TKN17 NS           | 67             | 100              | -                | -   | -   | 239 | -   | 0°  | E / L        |
| 17   | TKN17 PA           | 17             | -                | 276              | 172 | 74  | -   | -   | -   | E / L        |
| 19   | TKN19 15120 A 10°  | 188            | 120              | 122              | 300 | 510 | 272 | 30° | 10° | E            |
| 19   | TKN19 15140 A 10°  | 187            | 140              | 142              | 300 | 510 | 273 | 30° | 10° | E            |
| 19   | TKN19 NS           | 91.25          | -                | -                | -   | -   | 270 | -   | 0°  | E / L        |
| 19   | TKN19 PA           | 27             | -                | 345              | 215 | 97  | -   | -   | -   | E / L        |

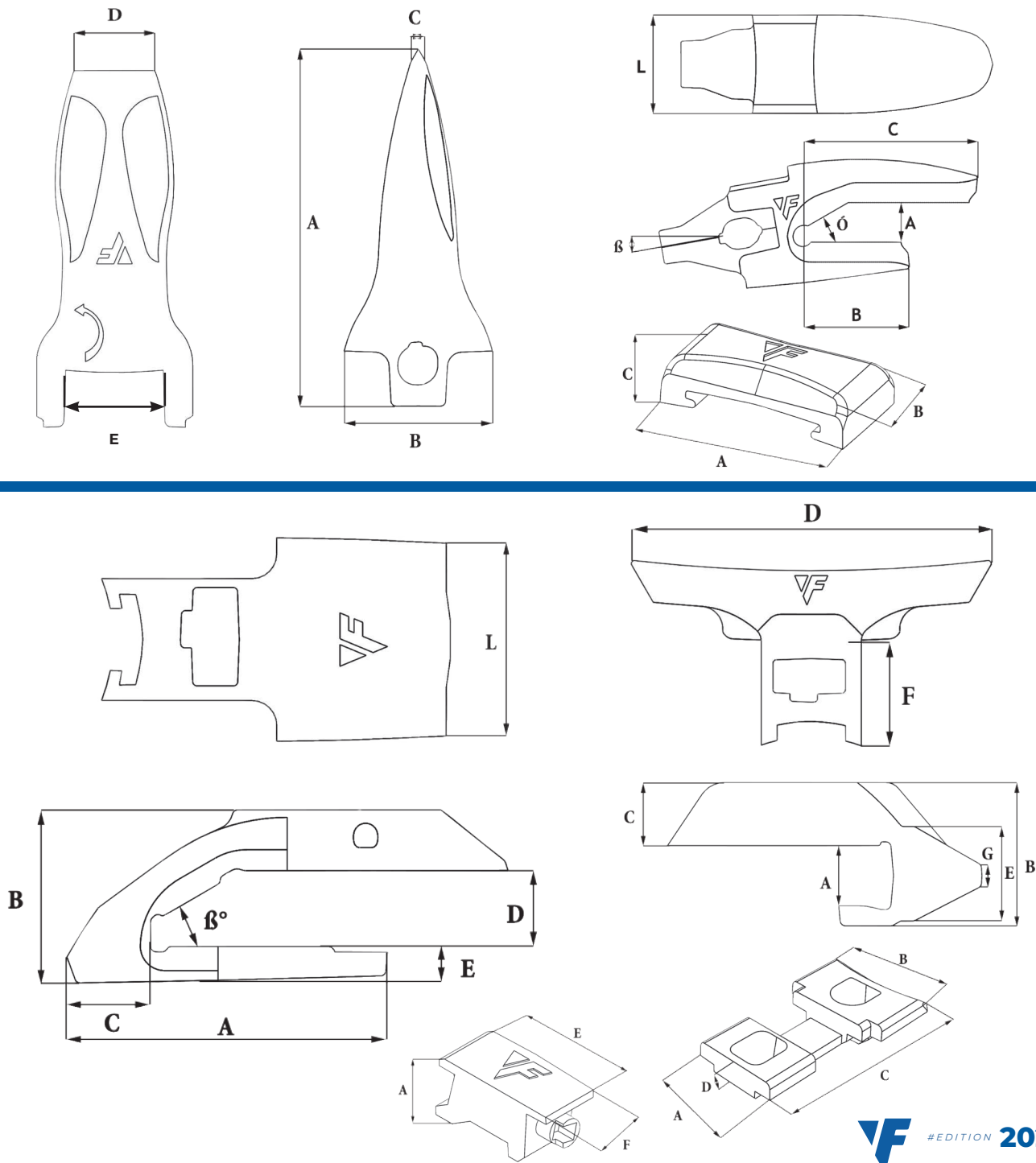
E = Excavator / L = Loader

Blade Shrouds Dimensions

| PART NUMBER         | WEIGHT<br>[kg] | Blade Th.<br>[ mm] | DIMENSIONS [ mm] |     |     |     |     |    |     | APPLICATIONS |
|---------------------|----------------|--------------------|------------------|-----|-----|-----|-----|----|-----|--------------|
|                     |                |                    | L                | A   | B   | C   | D   | E  | β°  |              |
| TKSH EXC 240 60 C   | 30.5           | 60                 | 240              | 275 | 156 | 64  | 66  | 30 | 30° | E            |
| TKSH EXC 240 60 R   | 30.5           | 60                 | 240              | 275 | 156 | 64  | 66  | 30 | 30° | E            |
| TKSH EXC 240 60 L   | 30             | 60                 | 240              | 275 | 153 | 68  | 66  | 30 | 30° | E            |
| TKSH EXC 245 70 C   | 35.33          | 70                 | 245              | 300 | 162 | 74  | 72  | 32 | 30° | E            |
| TKSH EXC 250 70 R   | 35.83          | 70                 | 245              | 300 | 162 | 74  | 72  | 32 | 30° | E            |
| TKSH EXC 250 70 L   | 35.33          | 70                 | 245              | 300 | 162 | 74  | 72  | 32 | 30° | E            |
| TKSH EXC 280 70 C   | 38.25          | 70                 | 280              | 300 | 164 | 74  | 73  | 33 | 30° | E            |
| TKSH EXC 280 70 R   | 37.87          | 70                 | 280              | 300 | 164 | 73  | 73  | 33 | 30° | E            |
| TKSH EXC 280 70 L   | 38             | 70                 | 280              | 300 | 164 | 73  | 73  | 33 | 30° | E            |
| TKSH EXC 320 70 C   | 41.83          | 70                 | 320              | 300 | 163 | 73  | 73  | 33 | 30° | E            |
| TKSH EXC 320 70 R   | 42.16          | 70                 | 320              | 300 | 163 | 73  | 73  | 33 | 30° | E            |
| TKSH EXC 320 70 L   | 42.16          | 70                 | 320              | 300 | 163 | 73  | 73  | 33 | 30° | E            |
| TKSH LOAD 370 70 C  | 81             | 70                 | 370              | 375 | 200 | 158 | 73  | 69 | 30° | L            |
| TKSH LOAD 370 70 R  | 81.75          | 70                 | 370              | 380 | 205 | 170 | 73  | 71 | 30° | L            |
| TKSH LOAD 370 70 L  | 82.25          | 70                 | 370              | 380 | 205 | 170 | 73  | 71 | 30° | L            |
| TKSH LOAD 370 76 C  | 80             | 76                 | 370              | 380 | 204 | 165 | 79  | 67 | 30° | L            |
| TKSH LOAD 370 76 R  | 80.5           | 76                 | 370              | 380 | 204 | 167 | 79  | 67 | 30° | L            |
| TKSH LOAD 370 76 L  | 80.5           | 76                 | 370              | 380 | 204 | 167 | 79  | 67 | 30° | L            |
| TKSH EXC 245 90 C   | 49.66          | 90                 | 245              | 358 | 200 | 106 | 93  | 47 | 30° | E            |
| TKSH EXC 245 90 R   | 50.66          | 90                 | 245              | 365 | 200 | 116 | 93  | 47 | 30° | E            |
| TKSH EXC 245 90 L   | 50.16          | 90                 | 245              | 365 | 200 | 116 | 93  | 45 | 30° | E            |
| TKSH EXC 280 90 C   | 54.5           | 90                 | 280              | 350 | 200 | 105 | 93  | 44 | 30° | E            |
| TKSH EXC 280 90 R   | 56.25          | 90                 | 280              | 360 | 200 | 110 | 93  | 47 | 30° | E            |
| TKSH EXC 280 90 L   | 55             | 90                 | 280              | 360 | 200 | 110 | 93  | 47 | 30° | E            |
| TKSH EXC 320 90 C   | 60             | 90                 | 320              | 350 | 202 | 205 | 93  | 47 | 30° | E            |
| TKSH EXC 320 90 R   | 61.75          | 90                 | 320              | 350 | 200 | 110 | 93  | 48 | 30° | E            |
| TKSH EXC 320 90 L   | 61.25          | 90                 | 320              | 360 | 202 | 113 | 93  | 47 | 30° | E            |
| TKSH EXC 360 90 C   | 65.75          | 90                 | 360              | 360 | 200 | 110 | 93  | 48 | 30° | E            |
| TKSH EXC 360 90 R   | 67.50          | 90                 | 360              | 355 | 200 | 114 | 93  | 48 | 30° | E            |
| TKSH EXC 360 90 L   | 66.25          | 90                 | 360              | 355 | 200 | 114 | 93  | 48 | 30° | E            |
| TKSH LOAD 370 90 C  | 106            | 90                 | 370              | 420 | 225 | 170 | 93  | 77 | 30° | L            |
| TKSH LOAD 370 90 R  | 109            | 90                 | 370              | 420 | 225 | 170 | 93  | 78 | 30° | L            |
| TKSH LOAD 370 90 L  | 109            | 90                 | 370              | 420 | 225 | 170 | 93  | 78 | 30° | L            |
| TKSH LOAD 370 100 C | 102            | 100                | 370              | 420 | 225 | 170 | 103 | 77 | 30° | L            |
| TKSH LOAD 370 100 R | 105            | 100                | 370              | 420 | 225 | 170 | 103 | 68 | 30° | L            |
| TKSH LOAD 370 100 L | 105            | 100                | 370              | 420 | 225 | 170 | 103 | 68 | 30° | L            |
| TKSH EXC 345 100 C  | 109            | 100                | 345              | 400 | 236 | 137 | 103 | 56 | 30° | E            |
| TKSH EXC 345 100 R  | 111            | 100                | 345              | 410 | 236 | 134 | 103 | 56 | 30° | E            |
| TKSH EXC 345 100 L  | 111            | 100                | 345              | 403 | 236 | 134 | 103 | 56 | 30° | E            |
| TKSH EXC 380 120 C  | 122            | 120                | 380              | 425 | 257 | 150 | 124 | 55 | 30° | E            |
| TKSH EXC 380 120 R  | 122            | 120                | 380              | 430 | 257 | 144 | 124 | 55 | 30° | E            |
| TKSH EXC 380 120 L  | 122            | 120                | 380              | 430 | 257 | 144 | 124 | 55 | 30° | E            |
| TKSH EXC 420 140 C  | 148            | 140                | 420              | 425 | 282 | 150 | 146 | 53 | 30° | E            |
| TKSH EXC 420 140 R  | 146            | 140                | 420              | 437 | 286 | 152 | 146 | 55 | 30° | E            |
| TKSH EXC 420 140 L  | 146            | 140                | 420              | 437 | 286 | 152 | 146 | 55 | 30° | E            |

Wing Shrouds Dimensions

| PART NUMBER     | WEIGHT<br>[kg] | WING THICKNESS<br>[mm] | DIMENSIONS [ mm] |     |     |      |     |     |    | APPLICATIONS |
|-----------------|----------------|------------------------|------------------|-----|-----|------|-----|-----|----|--------------|
|                 |                |                        | A                | B   | C   | D    | E   | F   | G  |              |
| TKWH 30         | 21             | 30                     | 36               | 116 | 58  | 570  | 68  | 213 | 10 | E / L        |
| TKWH 50         | 24.3           | 55                     | 57.6             | 132 | 58  | 590  | 82  | 213 | 17 | E / L        |
| TKWH 70         | 52.5           | 70                     | 77               | 178 | 90  | 545  | 140 | 350 | 19 | E / L        |
| TKWH 90         | 81.04          | 90                     | 95               | 210 | 80  | 610  | -   | 315 | 45 | E / L        |
| TKSH 60-90 AD   | 2.05           | -                      | 87               | 110 | 207 | 36.3 | -   | -   | -  | E / L        |
| TKSH 60-90 CL   | 1.4            | -                      | 56.3             | -   | -   | -    | 109 | 51  | -  | E / L        |
| TKSH 100-140 AD | 5.26           | -                      | 116              | 147 | 285 | 44   | -   | -   | -  | E / L        |
| TKSH 100-140 CL | 3.47           | -                      | 75               | -   | -   | -    | 164 | 66  | -  | E / L        |



E = Excavator / L = Loader





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