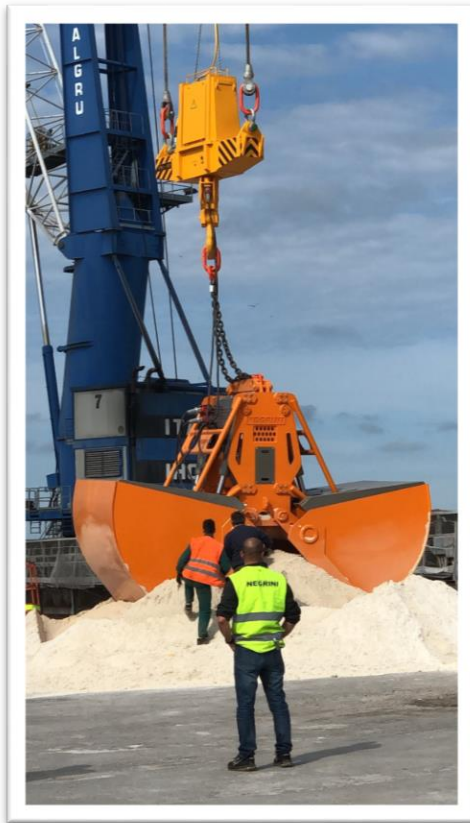
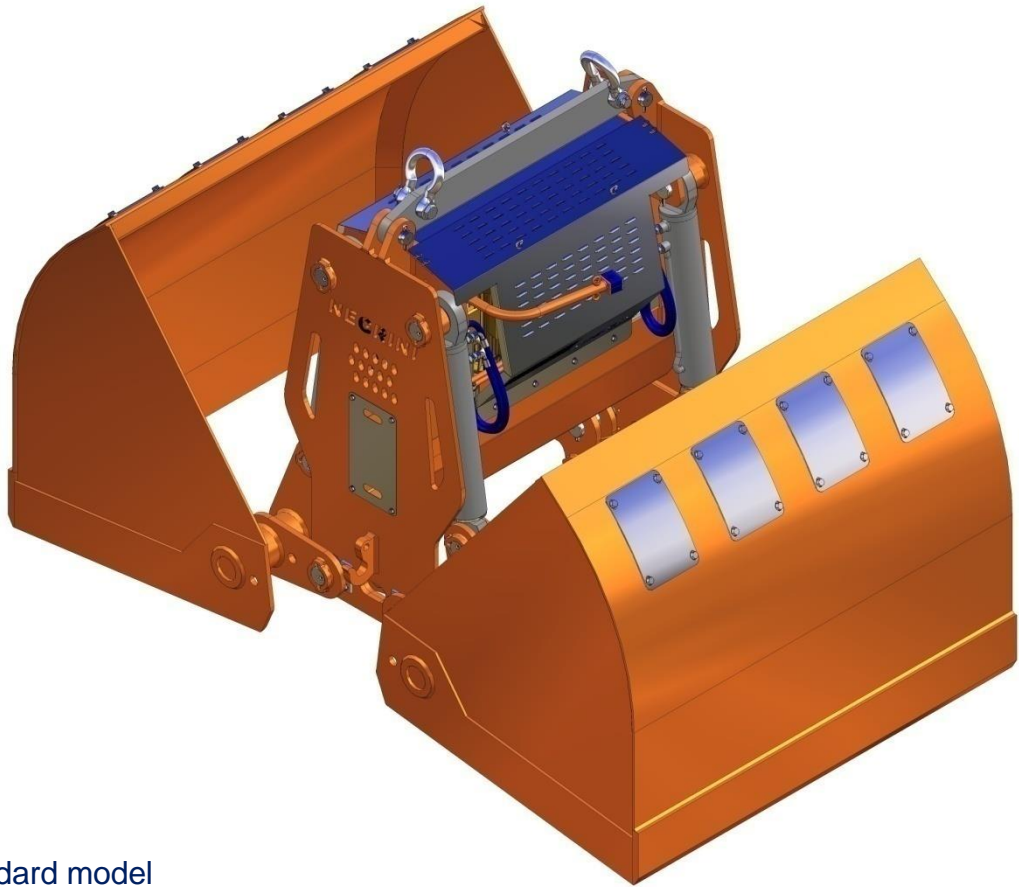


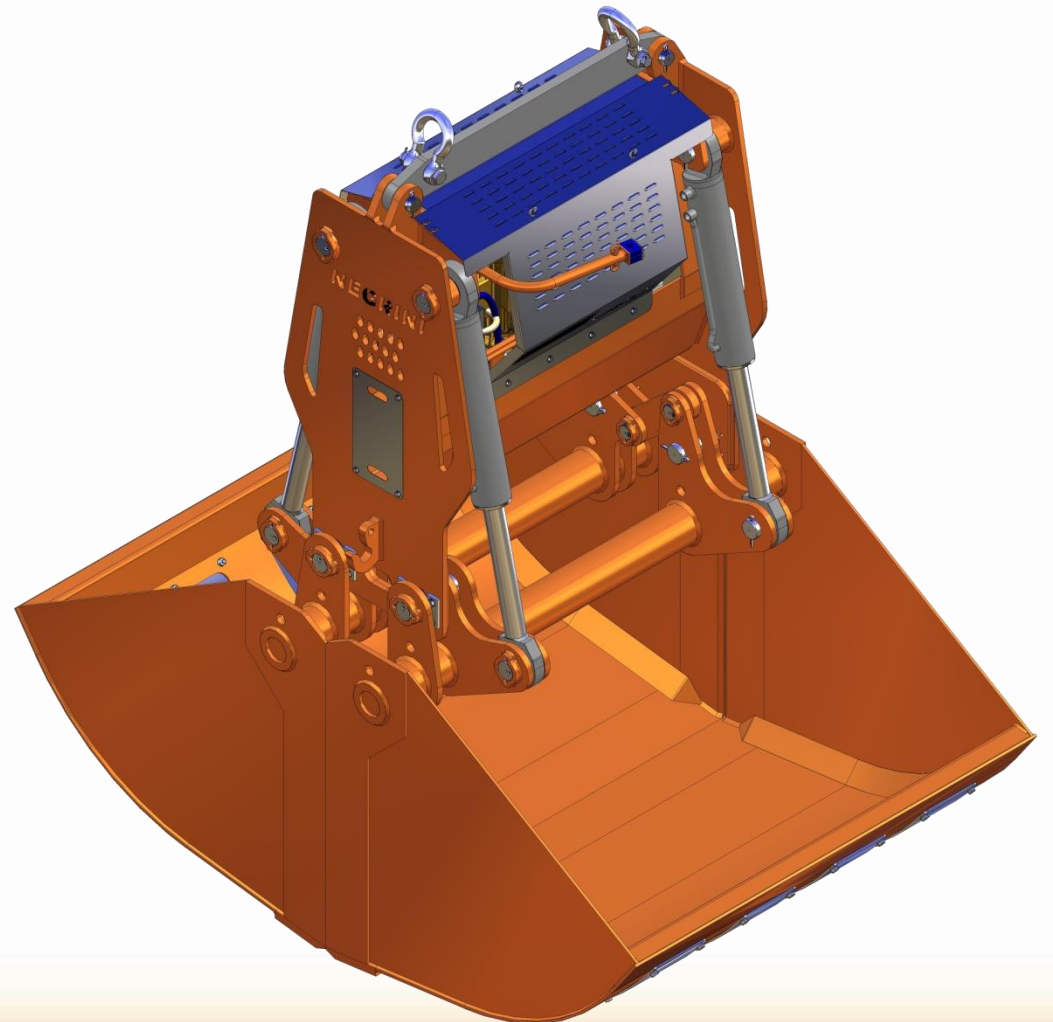
Electro hydraulic clamshell

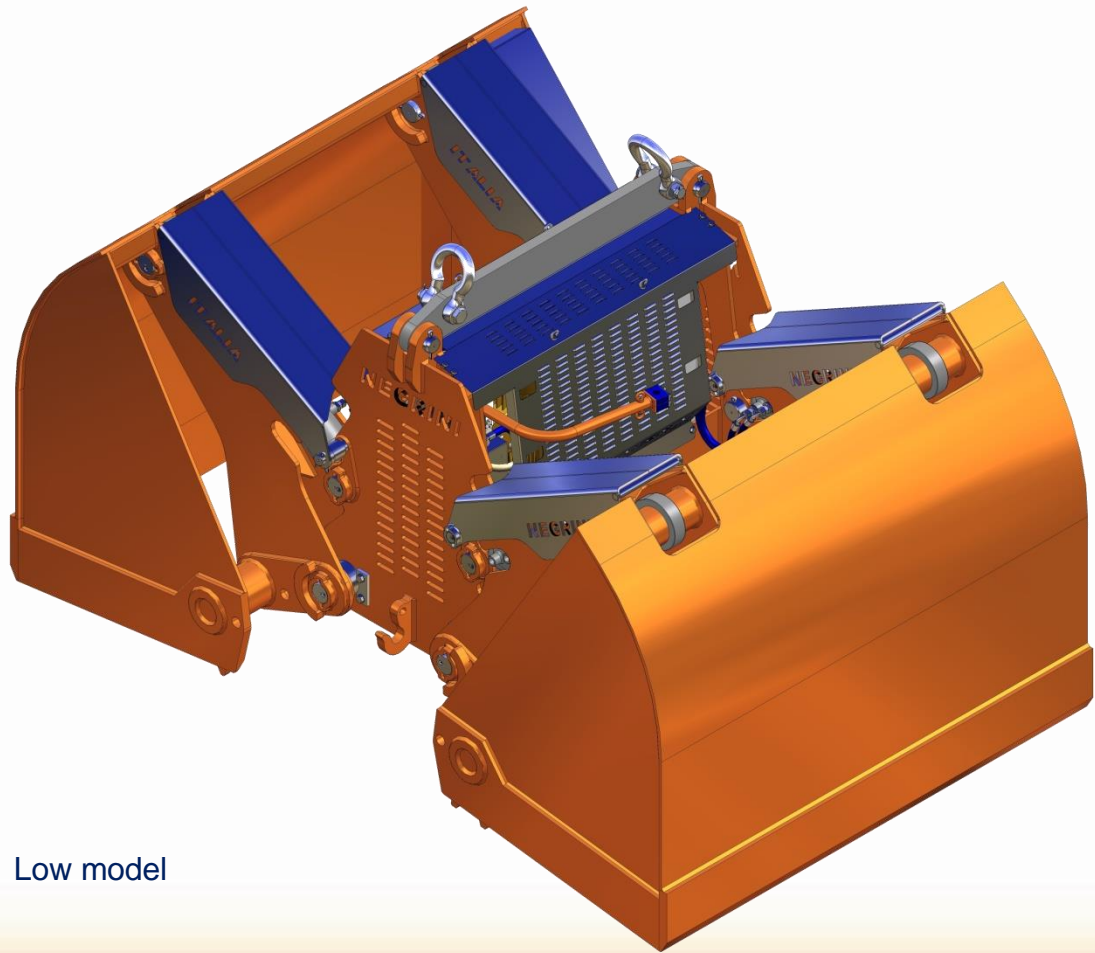


- Exclusive electro-hydraulic system
- Independent removable electrohydraulic control unit
- Independent control unit that works even disconnected from the bucket
- Oil filtration until 3 microns, the standard filtrations are approximately 60 microns
- Bucket with longitudinal or transverse orientation as specifically requested
- Option of replacing the shells with different sizes and shapes

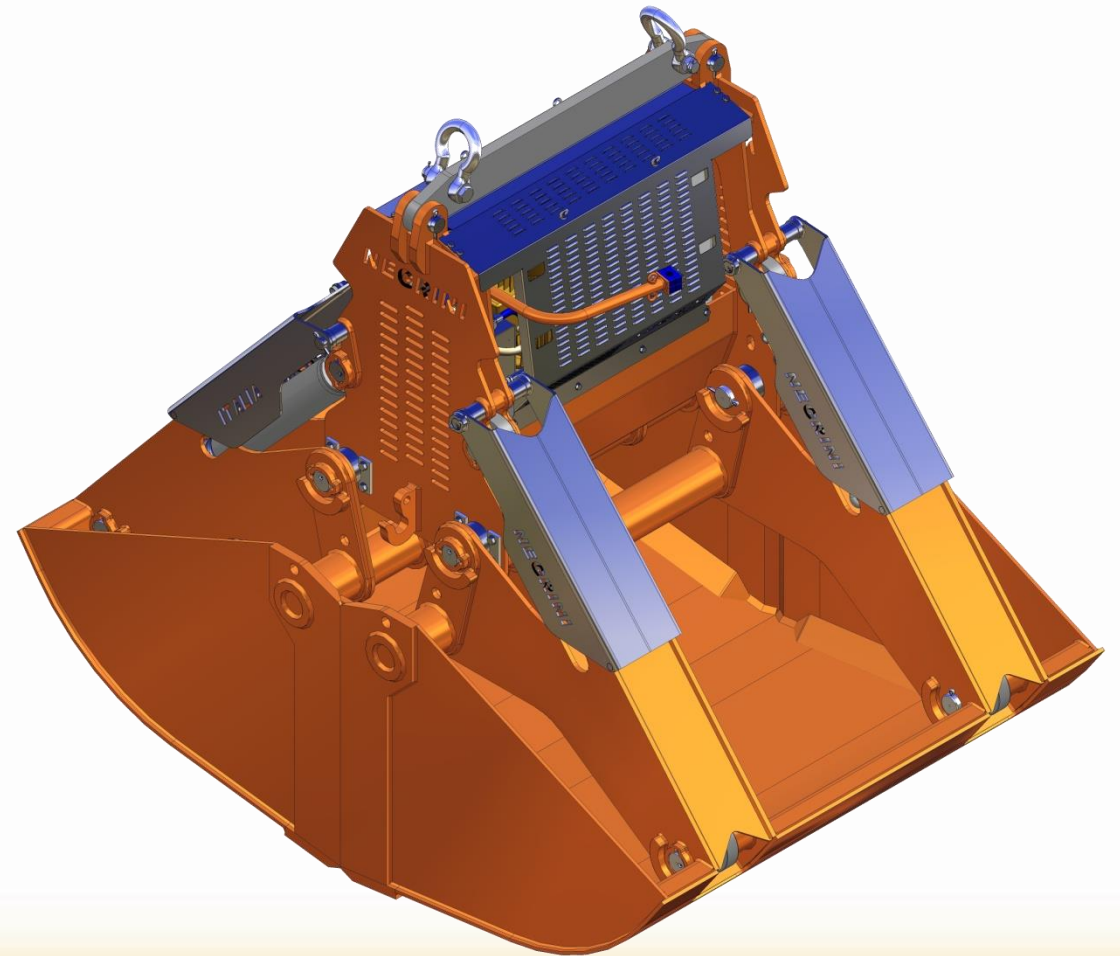


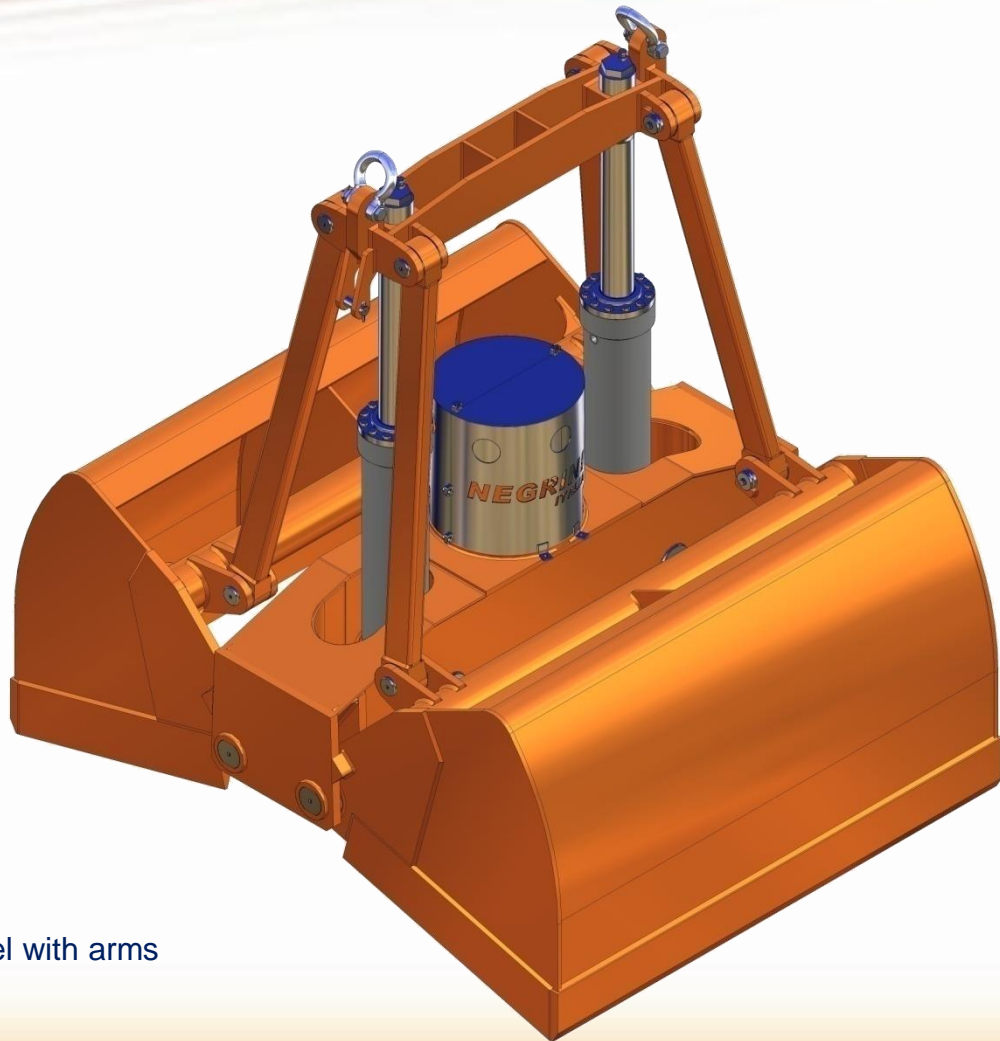
Standard model



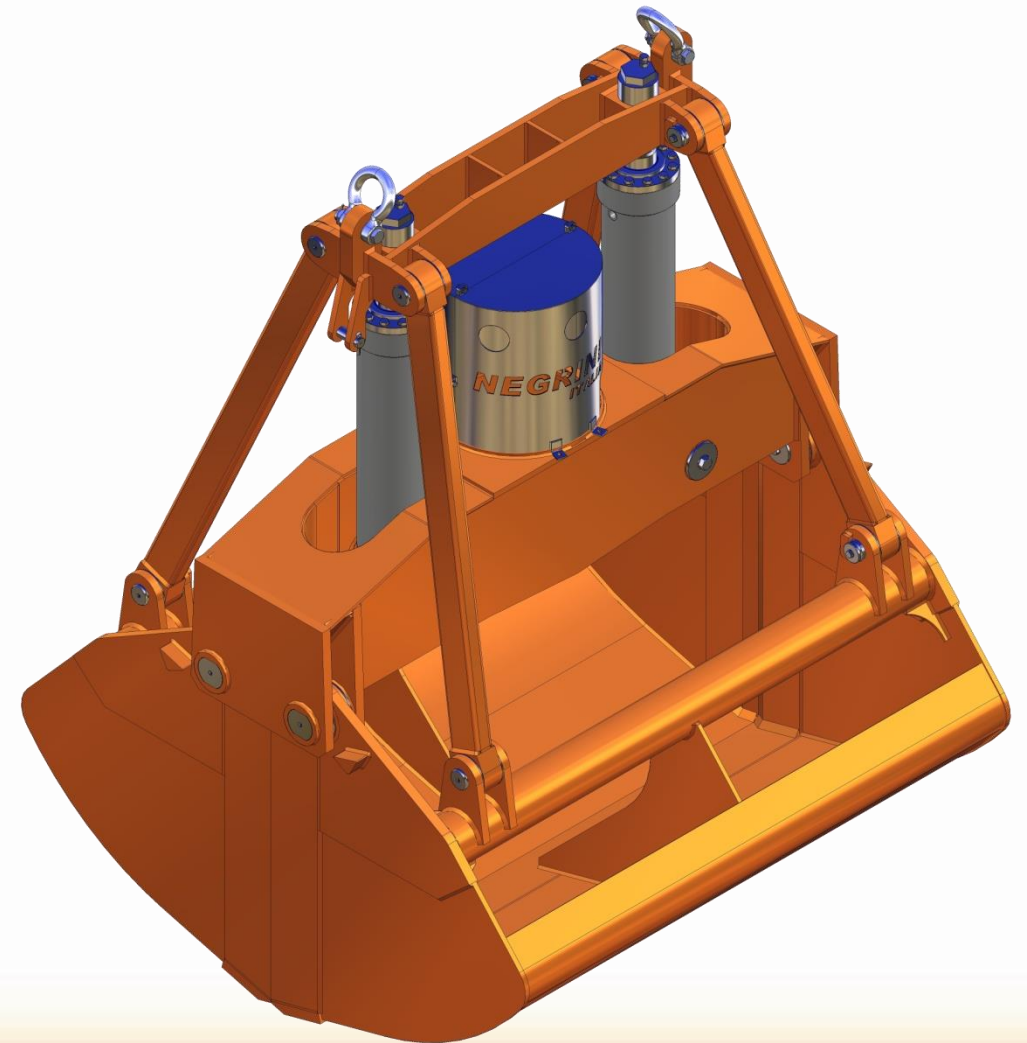


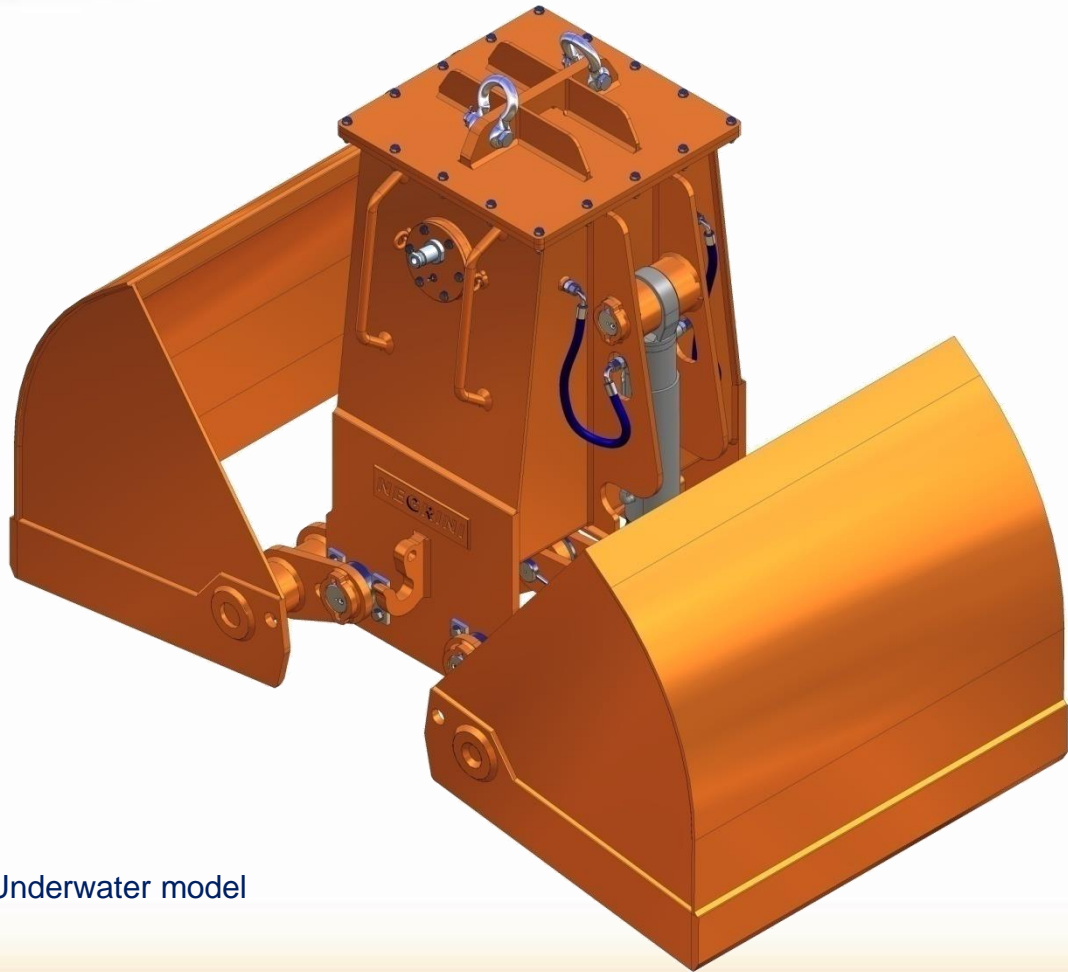
Low model



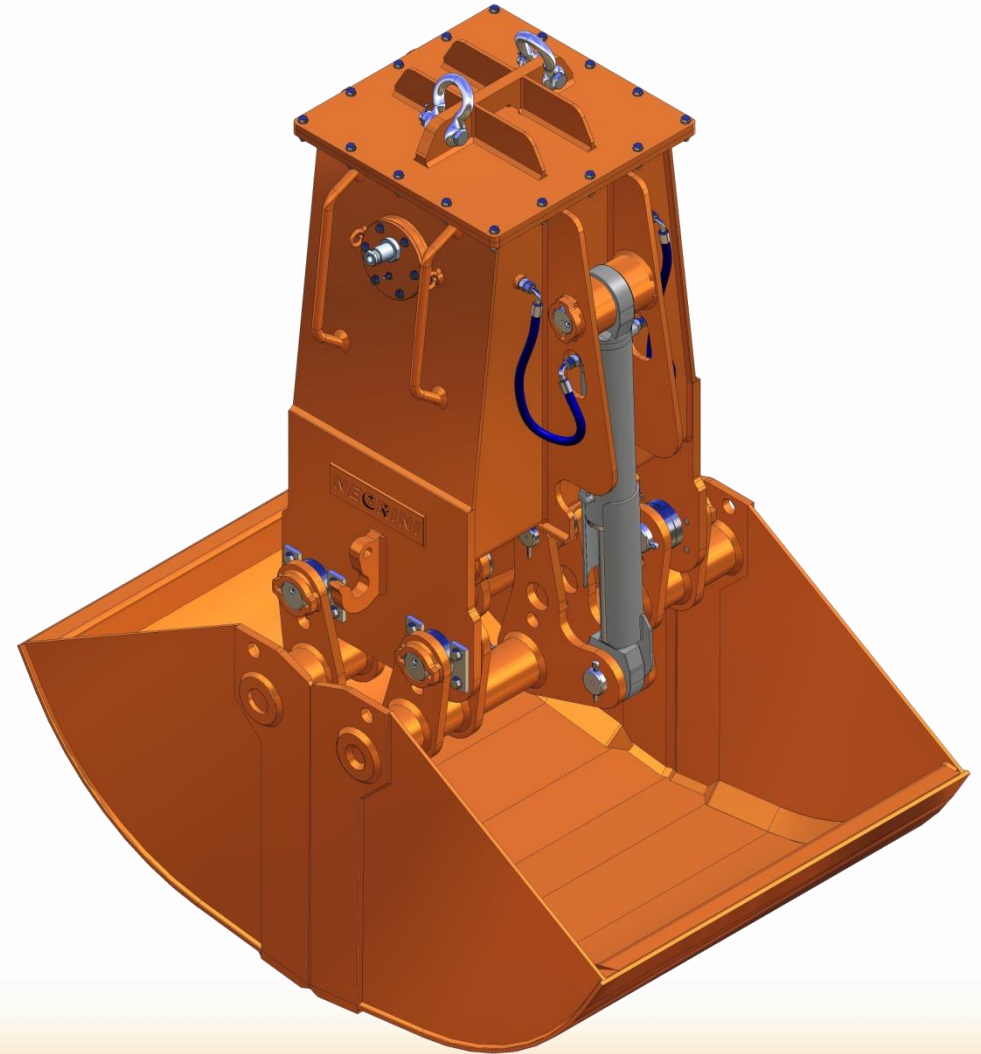


Model with arms

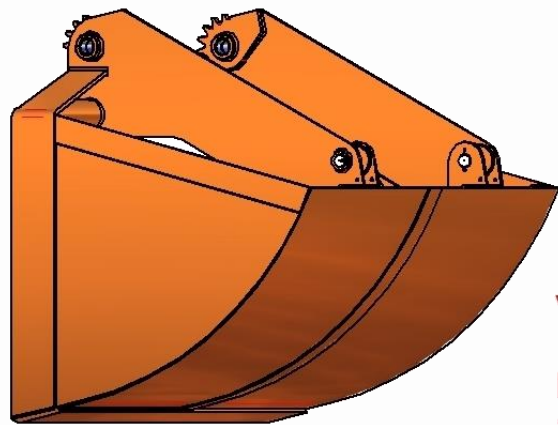




Underwater model

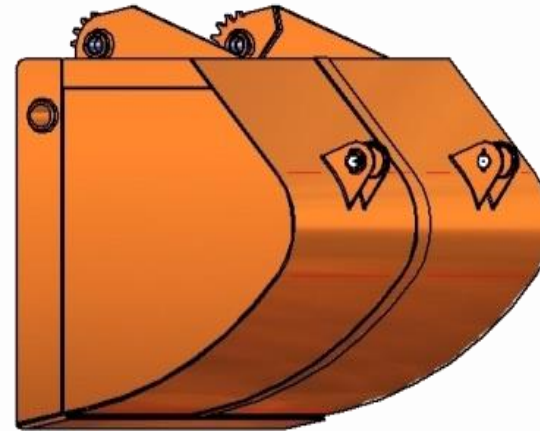


The bucket may be provided with valves of different shapes: standard or with windows for reduce the load capacity, instead contain valves are for reduce the losing material. You can apply metallic or rubber covers to reduce losing powders.



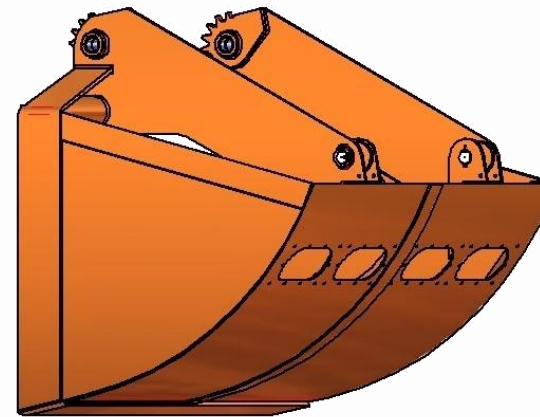
valve / shells "A"

Disegno standard
Standard design
Standardausführung



valve / shells "C"

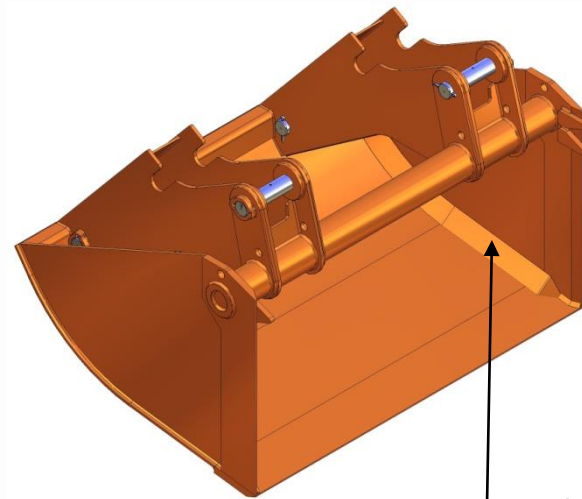
Con antispolverio
with dust protectioncover
Mit Staubschutzhaube



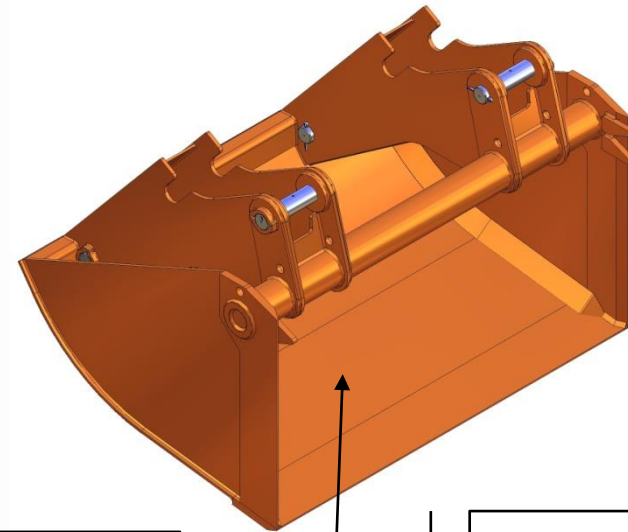
valve / shells "B"

Con riduzione di volume
for reduction of the grab volume
zur Reduzierung des Greifervolumens

The new shell conformation allows the transit of materials without impediment and helps continuous release when unloading, without sudden surges of materials

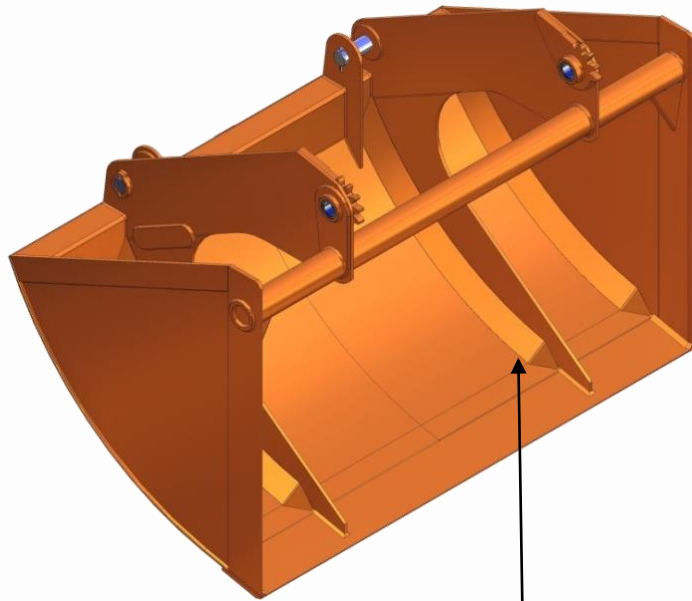


Plates are inclined at 45° to prevent materials from sticking

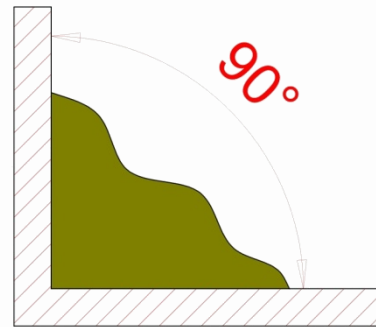


No steel sheet blocking the sliding of material

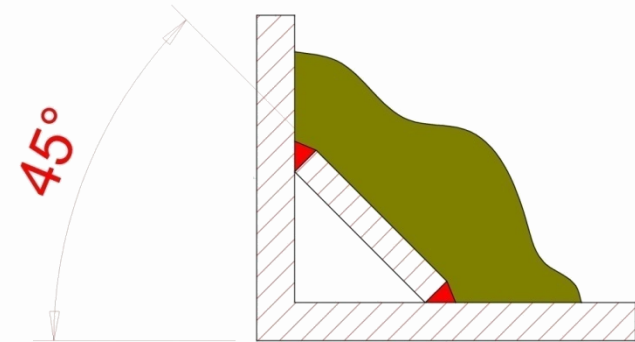
The new geometry of the valve allows the material to pass through without obstacles and allows constant evacuation into the drain without a violent release of the material. The traditional construction includes 90° welded sheets, in this case the material easily glues on the walls, the integration of a profile plate inclined at 45° considerably improves the structure and creates two 45° angles, making it easier to slip the material.



45° inclined plates prevent material from sticking

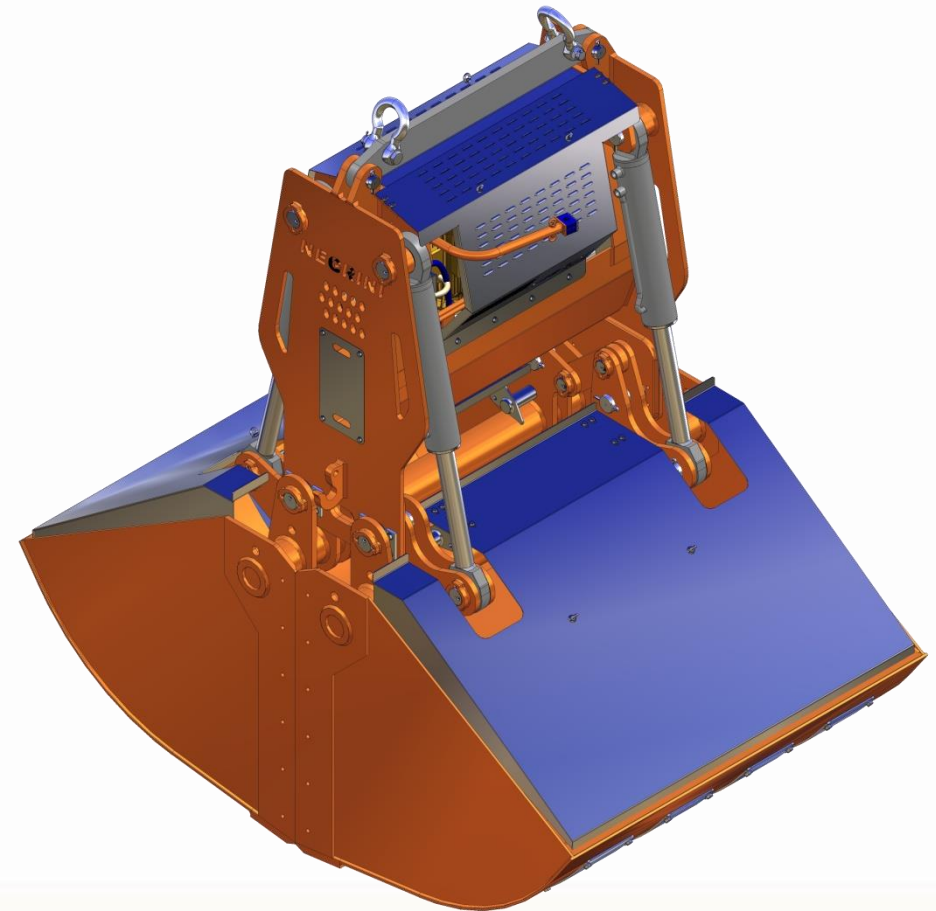
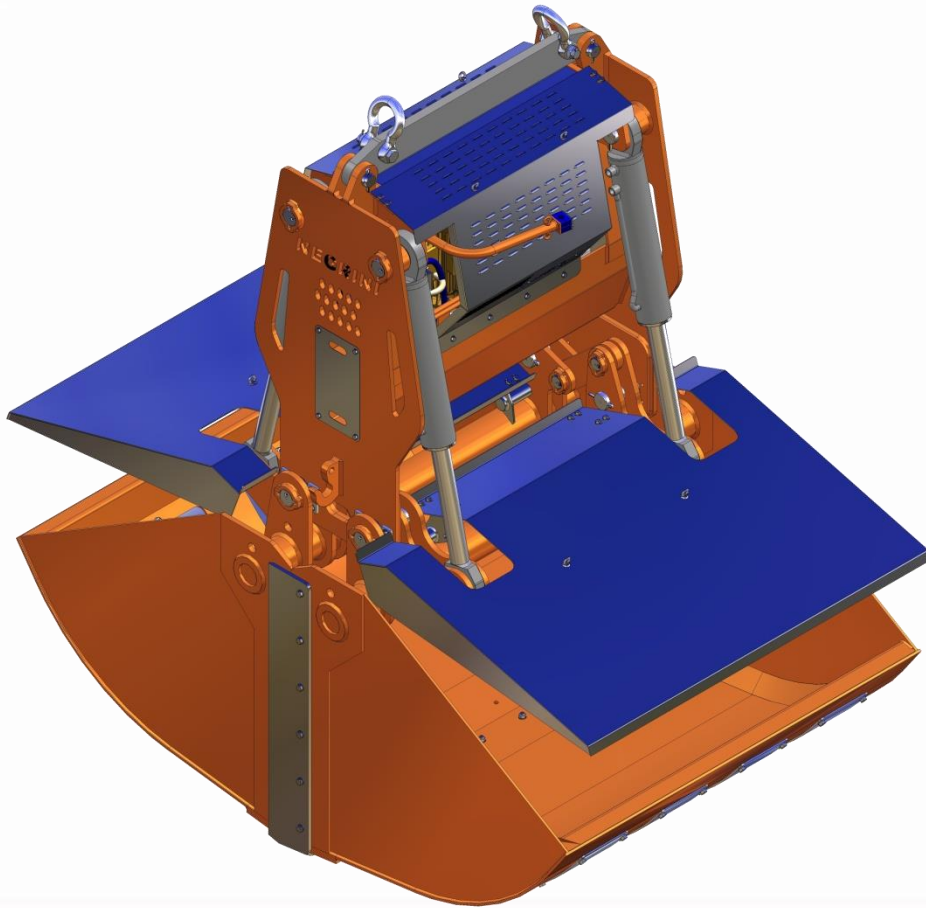


Traditional 90° welded

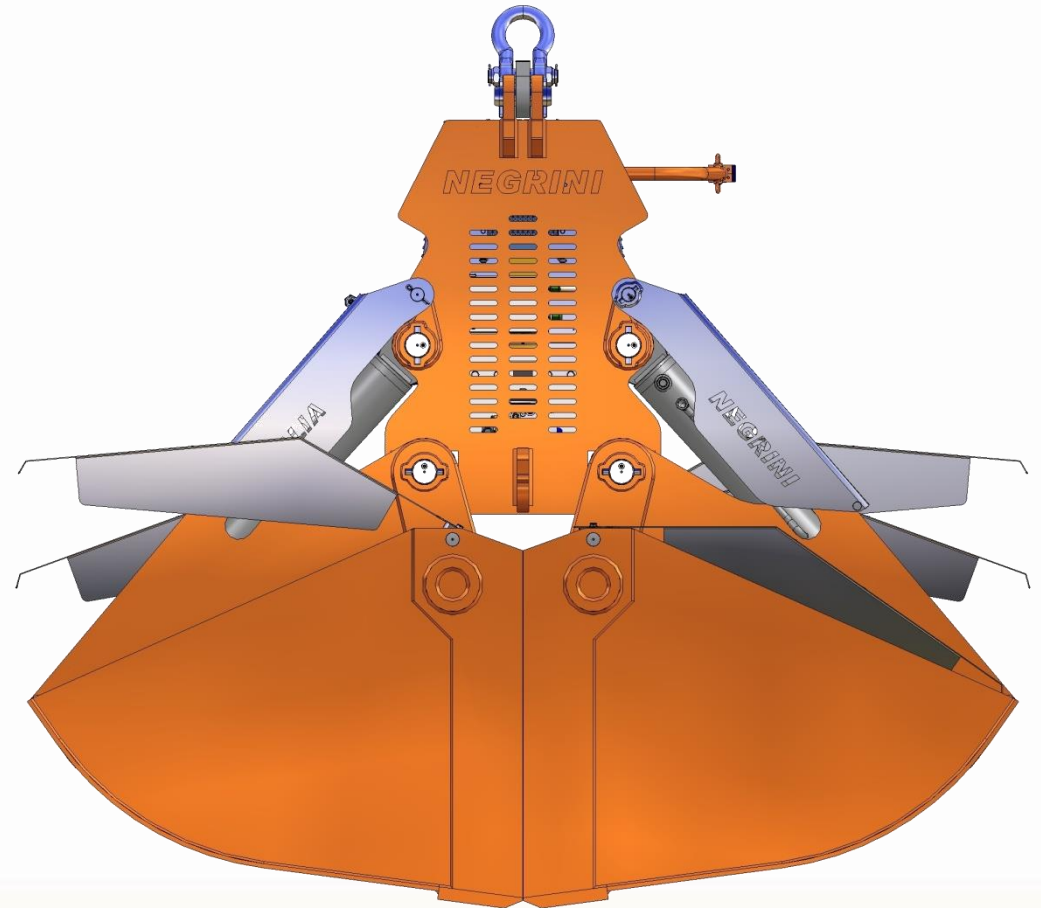
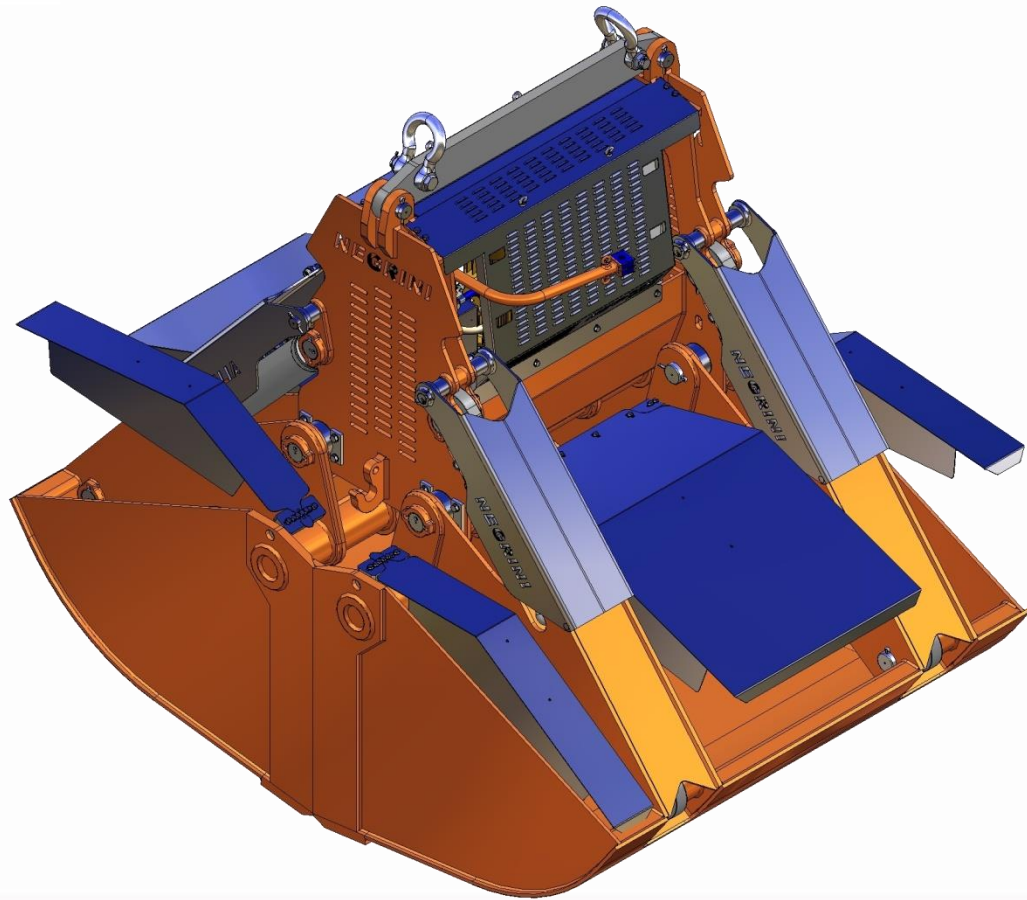


Plates inclined at an angle of 45° prevent the material from sticking.

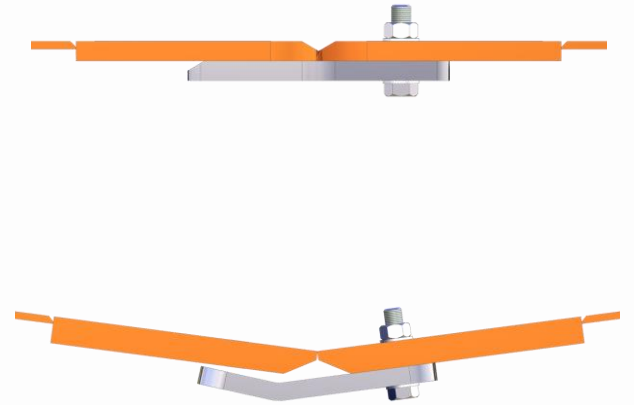
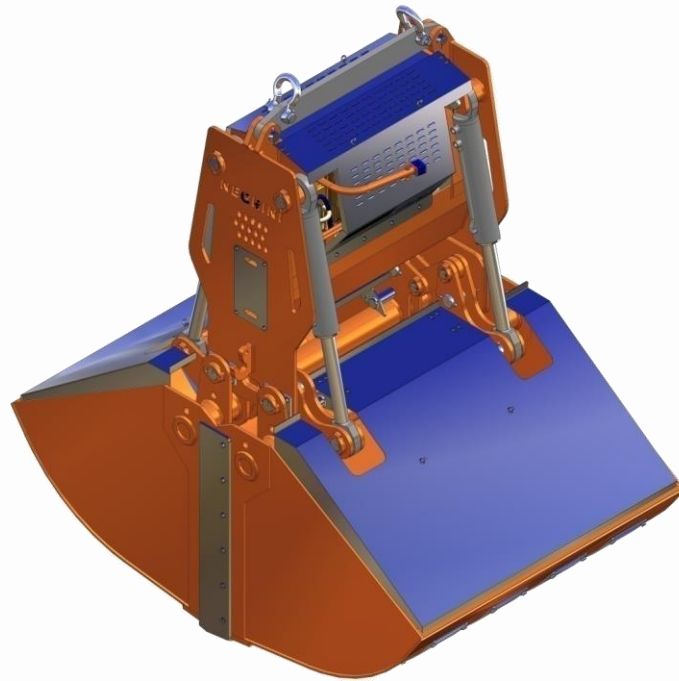
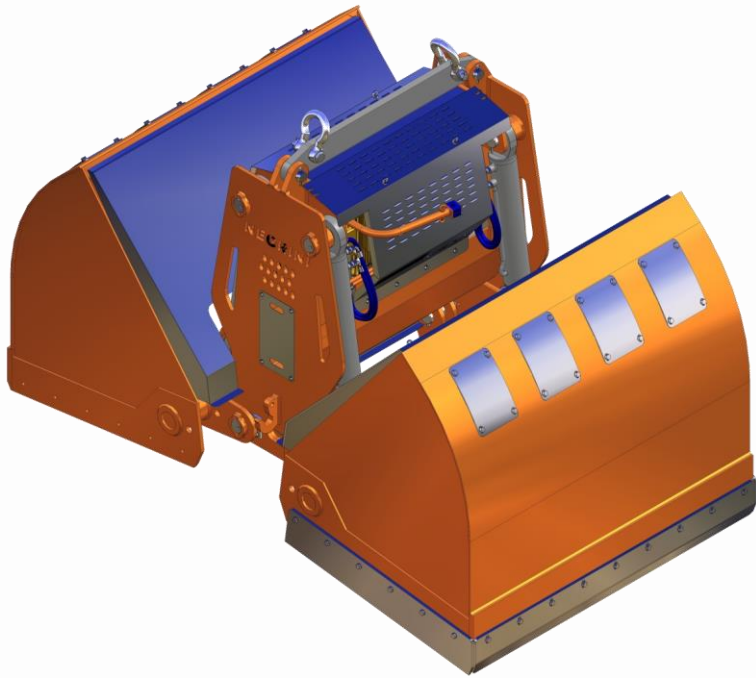
Covers to reduce the spread of powders

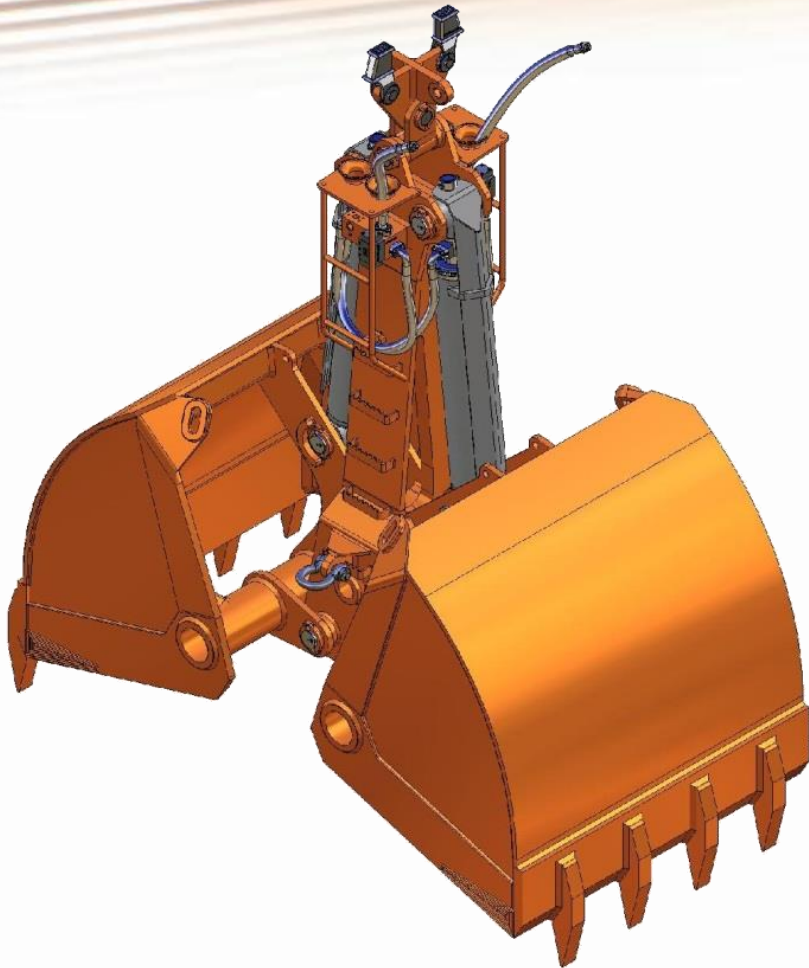


Covers to reduce the spread of powders

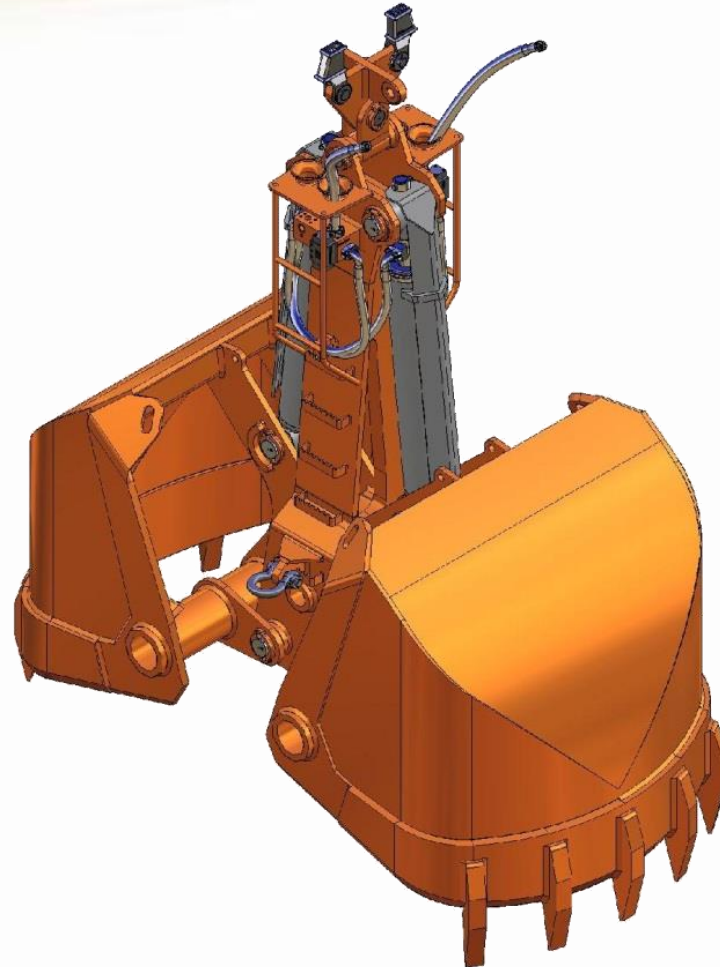


Additional blades to reduce the spread of powders





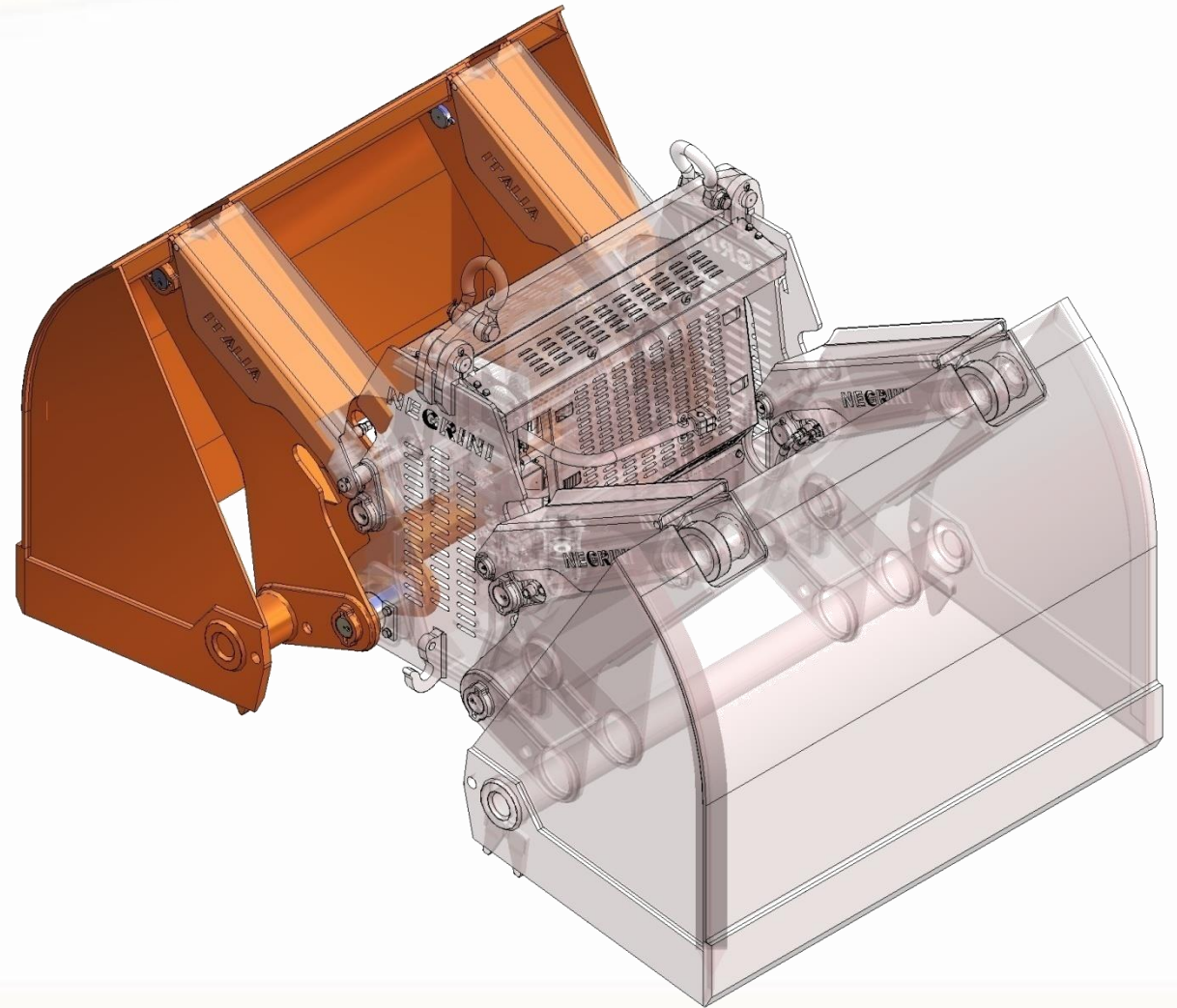
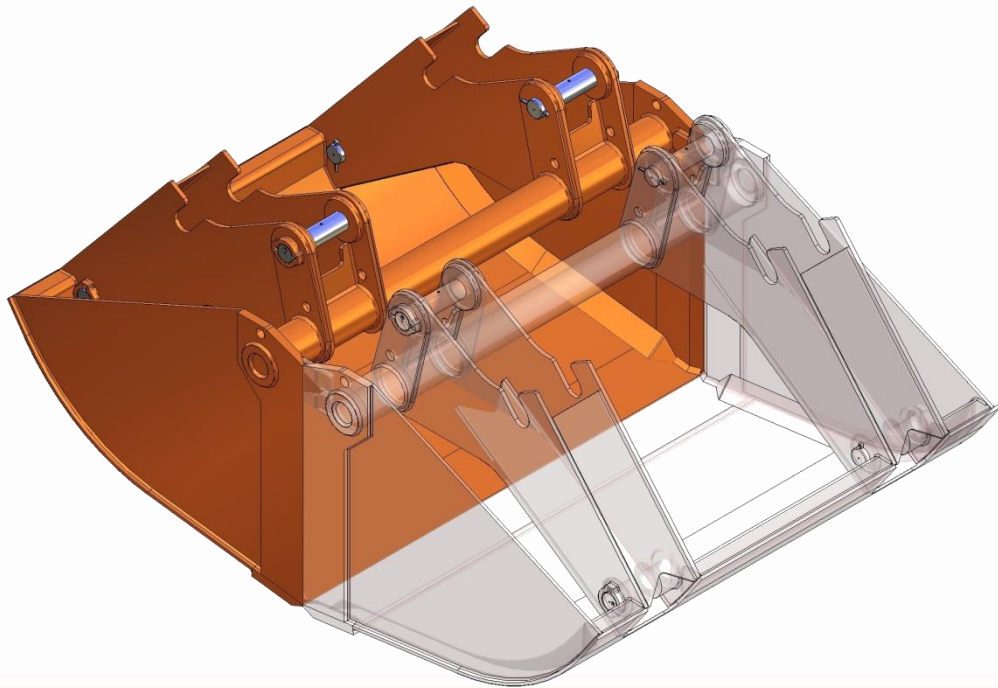
Standard with teeth



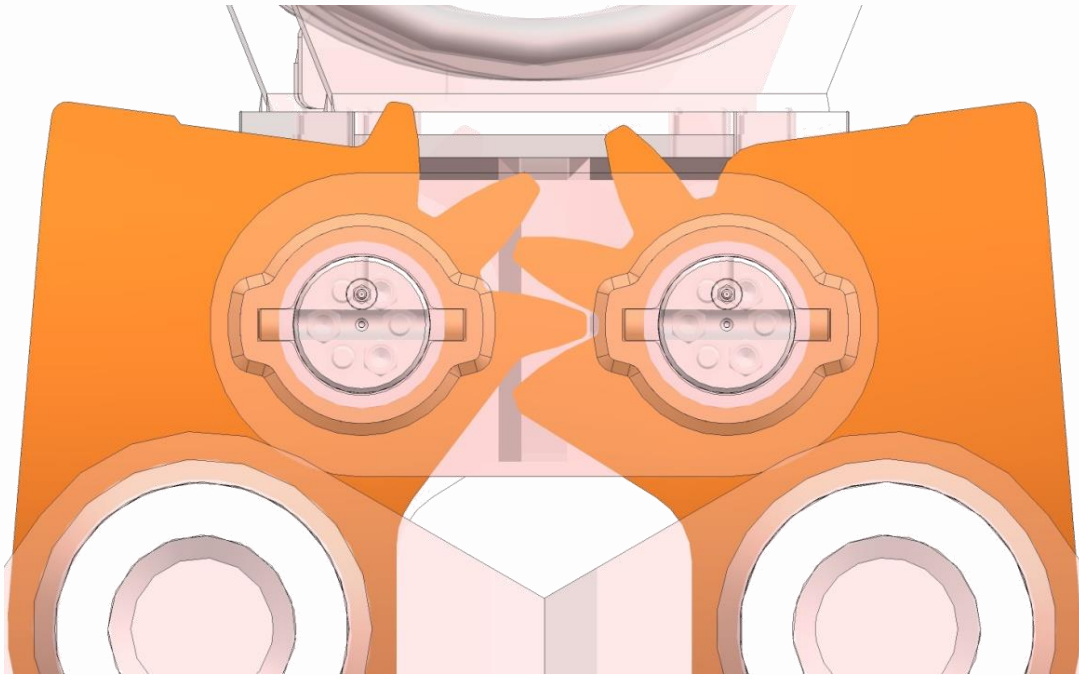
Dredging with teeth

Faced with difficult materials we can use long teeth called "ripper", special or commercial

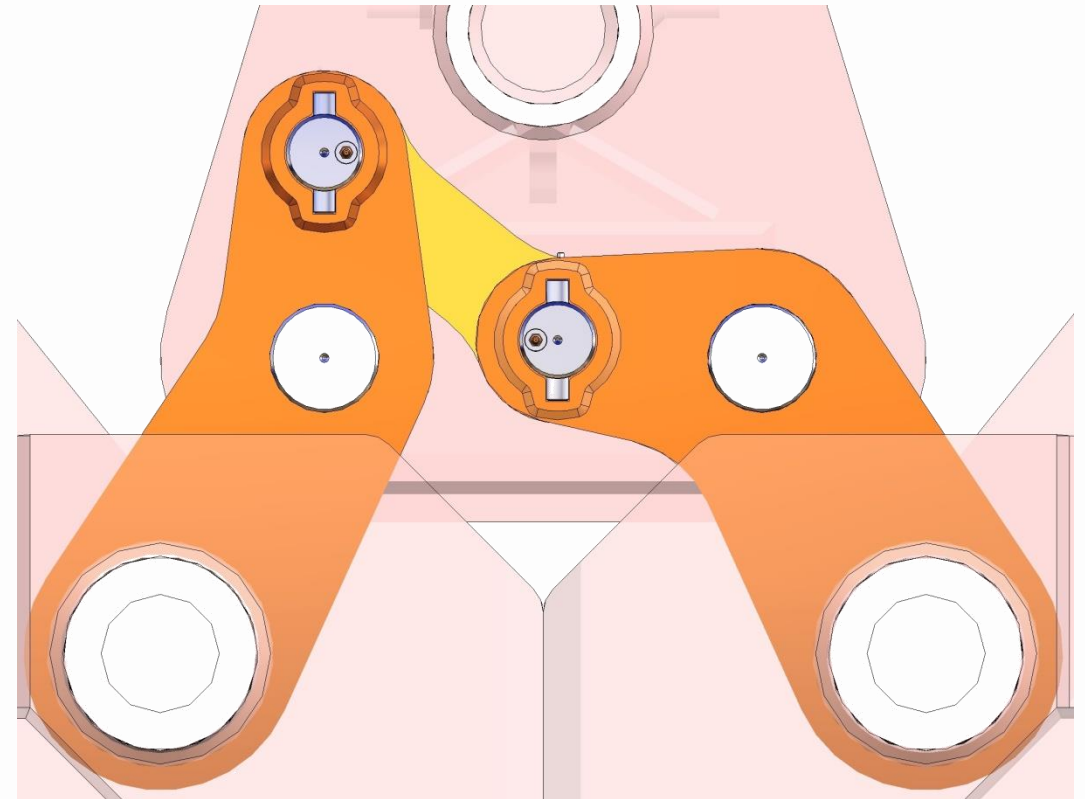
On customer request, the synchronization of the valves is achieved through innovative hydraulic device, teeth or rods are excluded eliminating wear, breakage and maintenance



On request, is possible to use the exclusive Negrini synchronization system avoids maintenance and mechanical failures

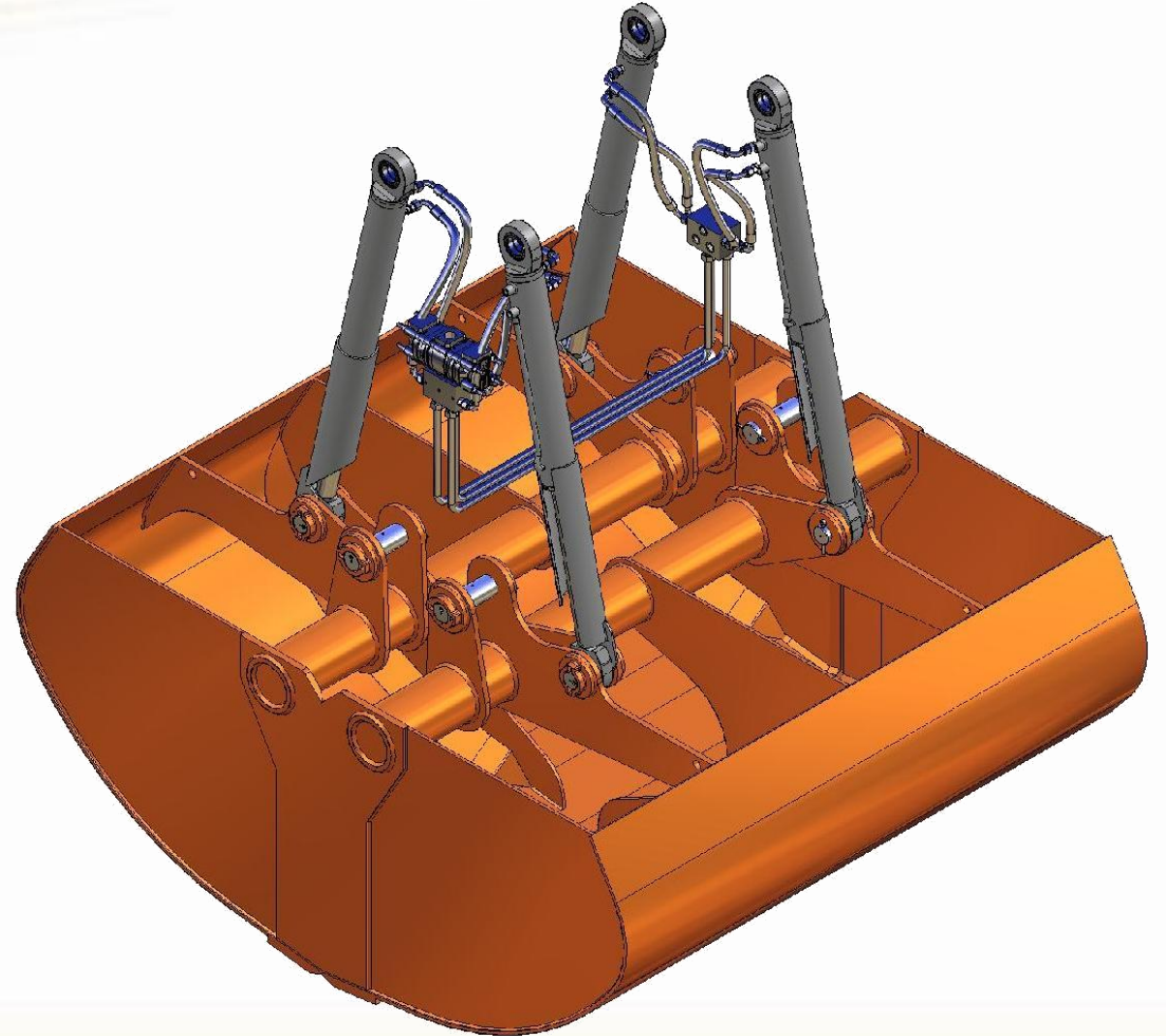


No gear

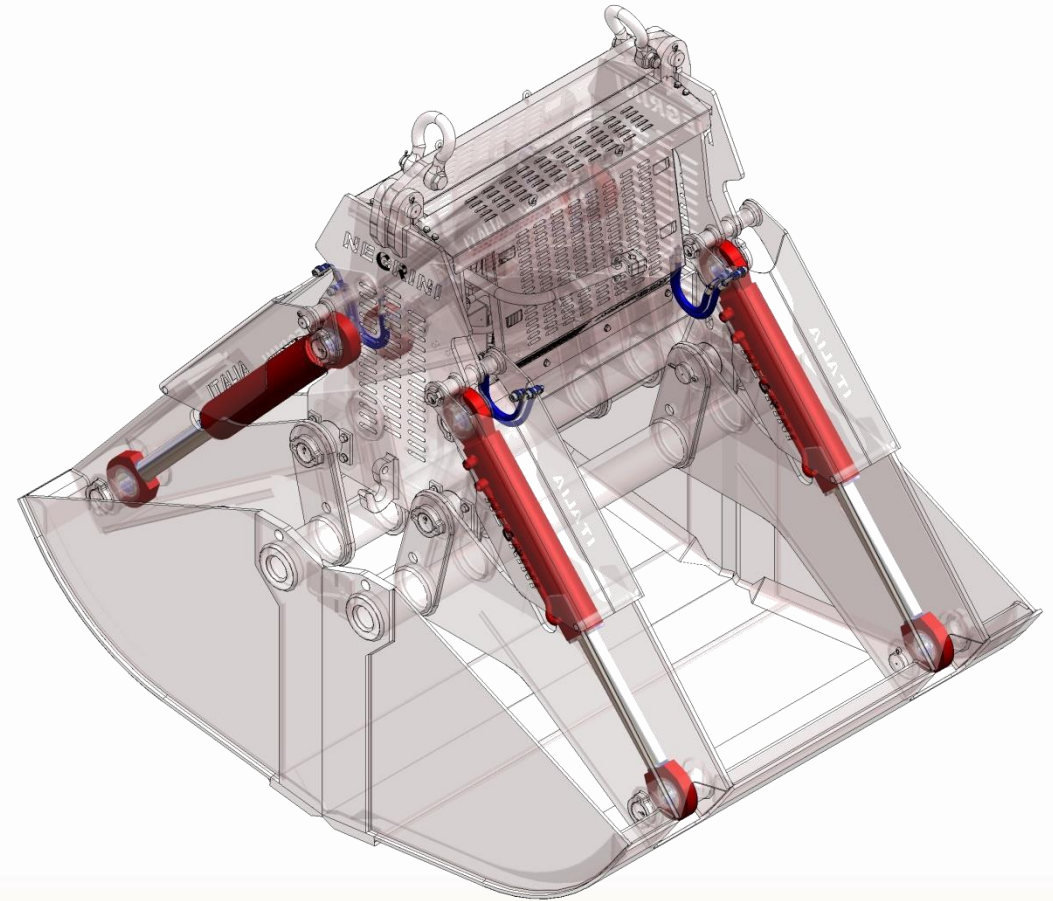
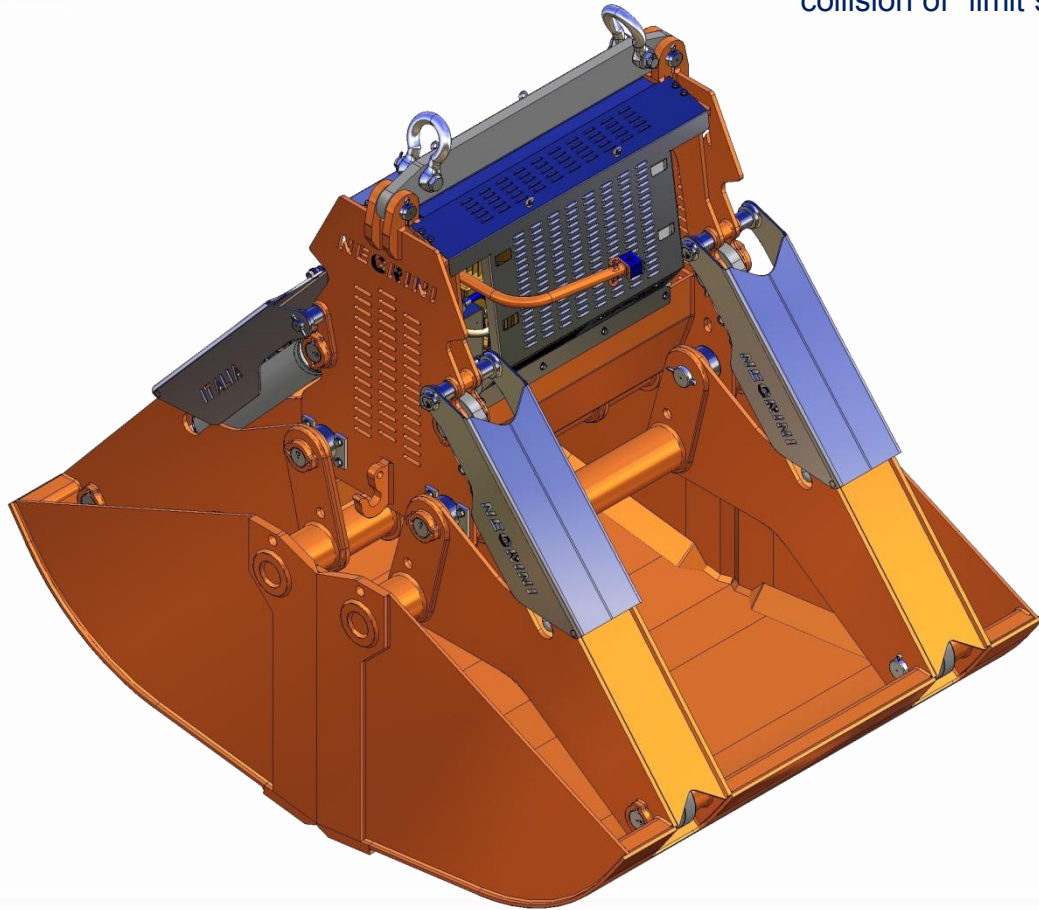


No lever

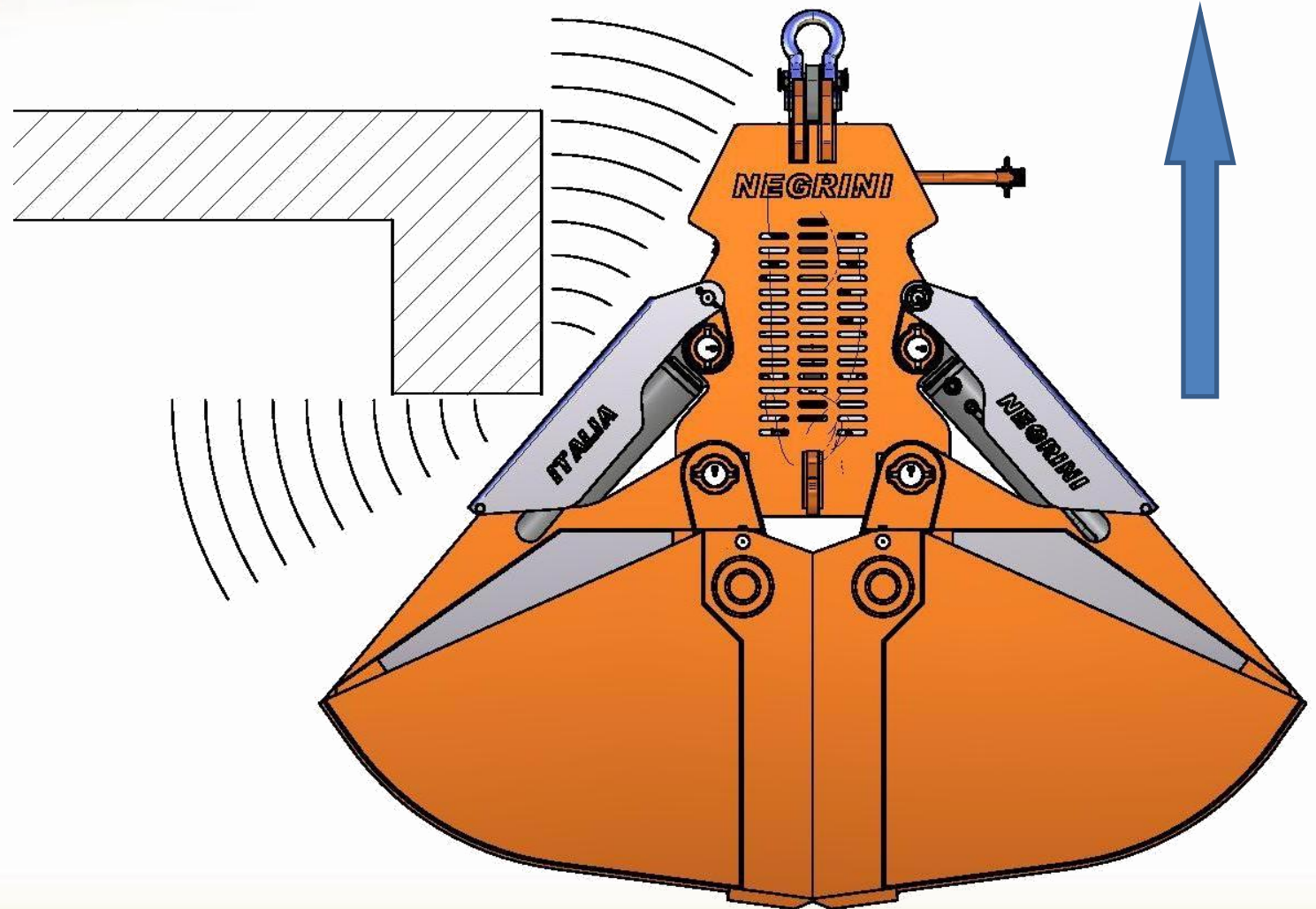
If required synchronization of valves can be achieved through the equitable division of oil to the cylinders, thanks to an innovative hydraulic system, the jacks receive the same amount of oil on both opening and closing obtaining a correct movement of the valve without using mechanical parts. All the jacks have a slowing device to avoid the collision of "limit switches" in the opening valve phase



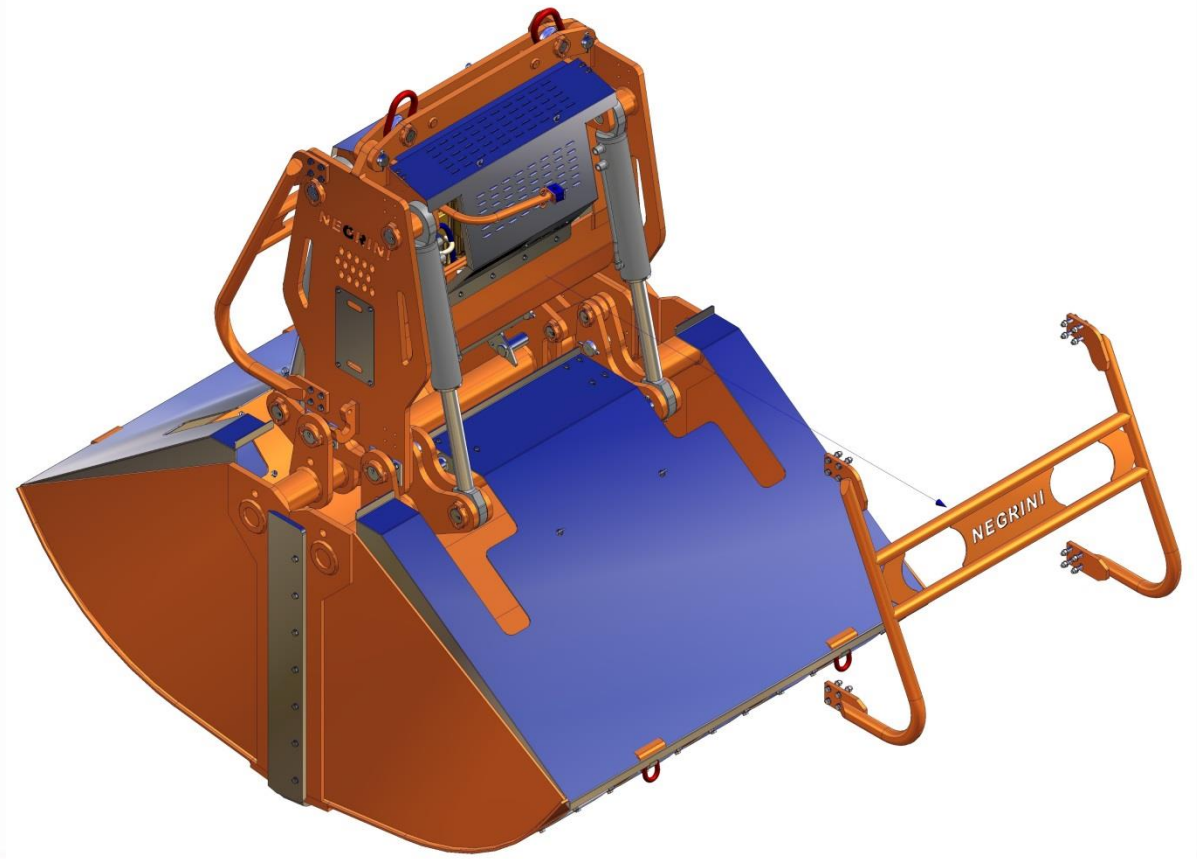
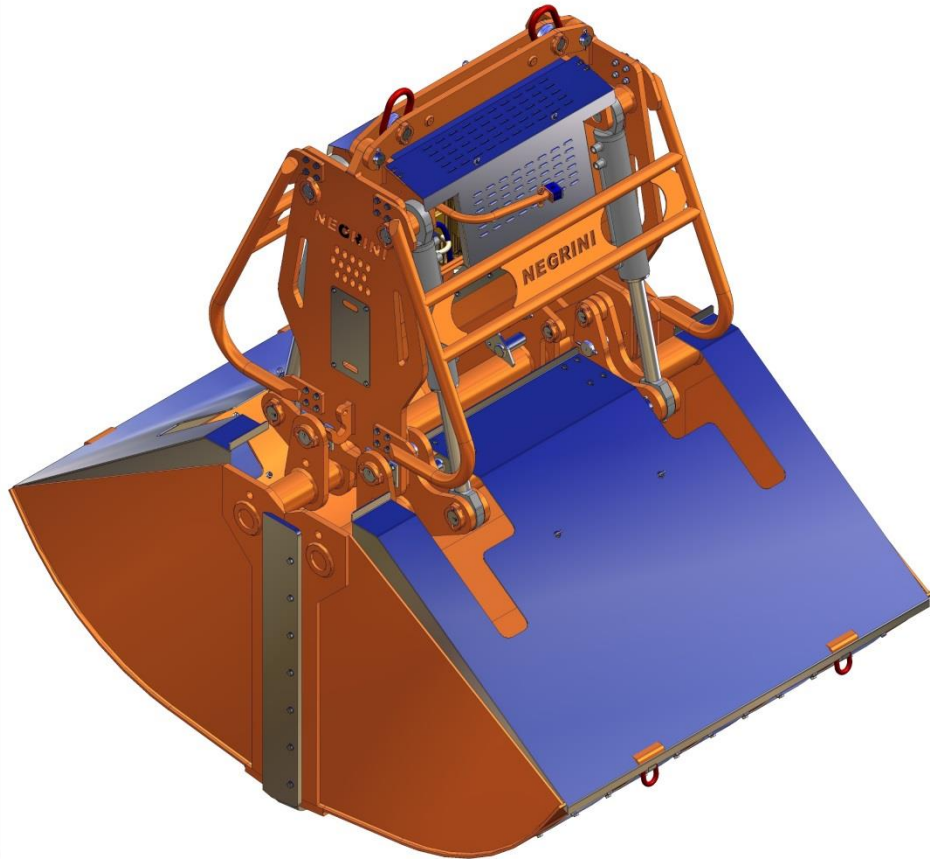
The pistons and the hydraulic hoses are protected from shock, all the jacks have a slowing device to avoid the collision of "limit switches" in the opening valve phase



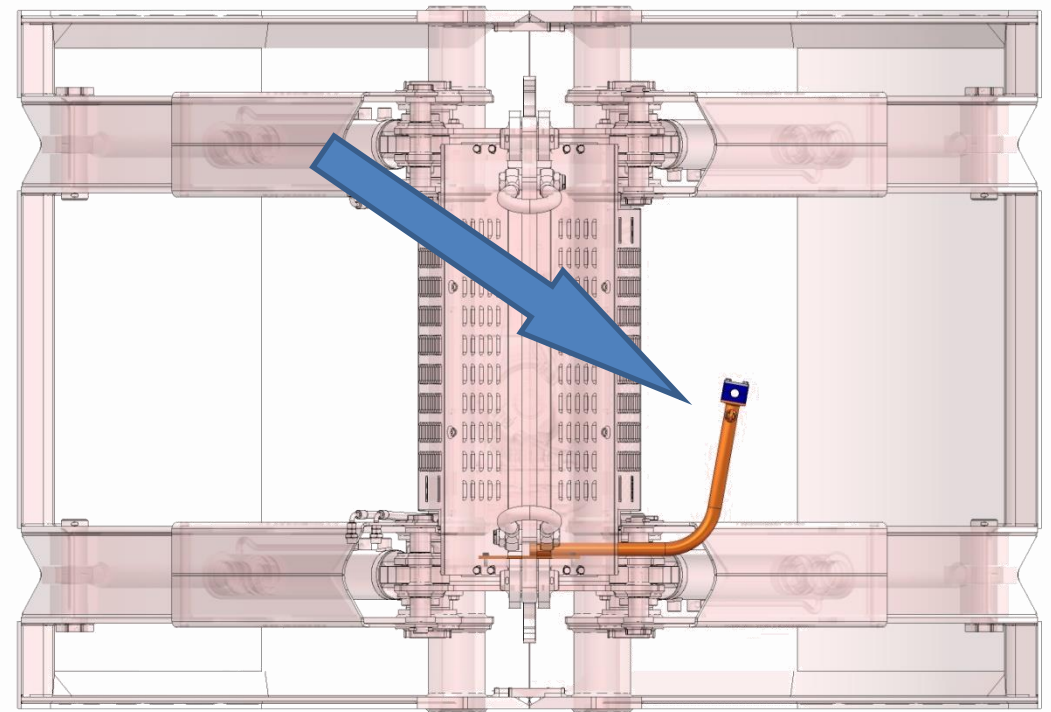
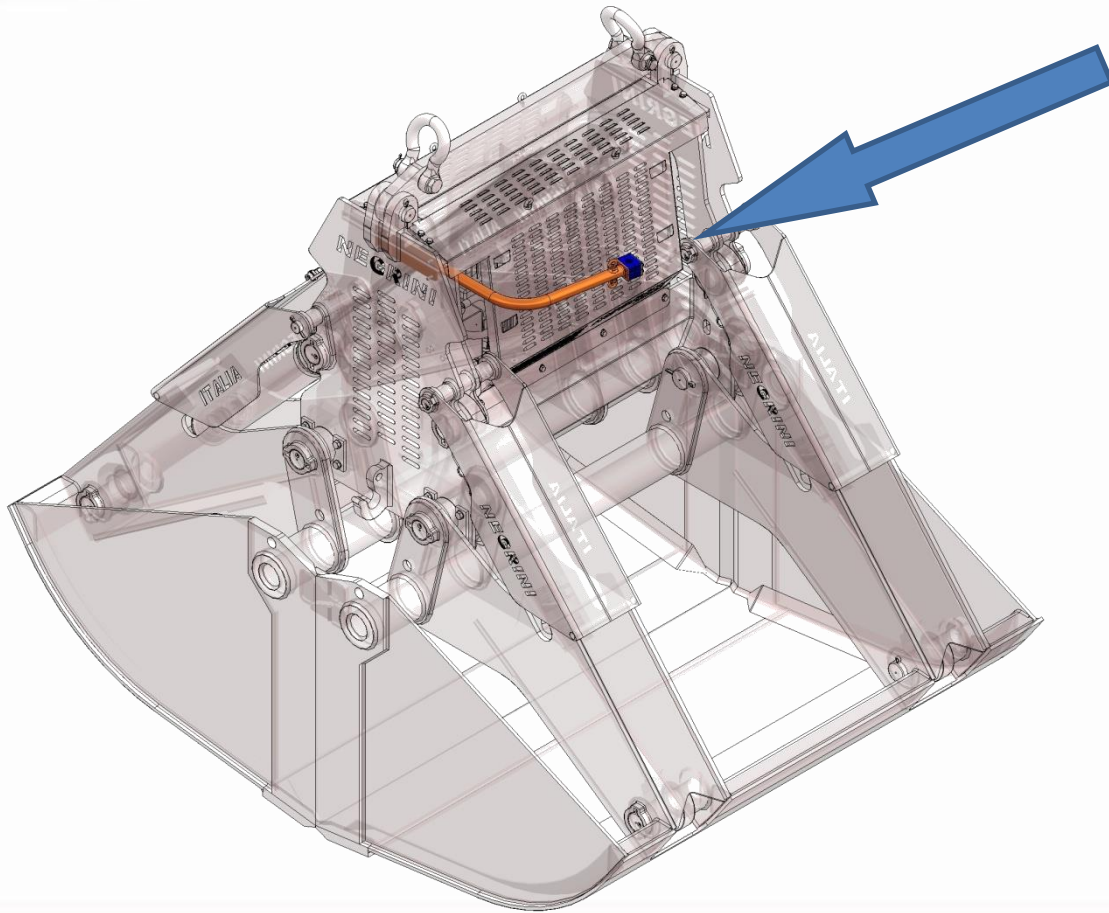
The total coverage of pistons and hydraulic pipes protects against accidents



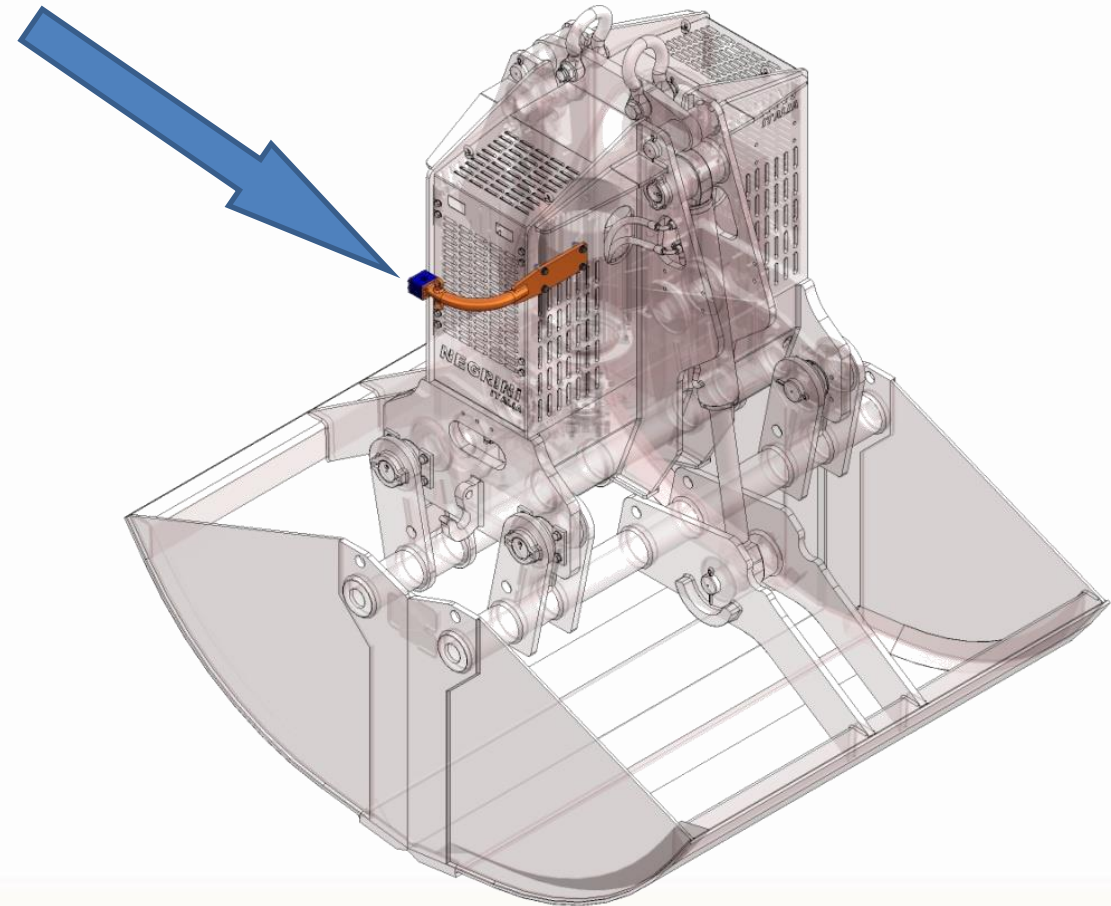
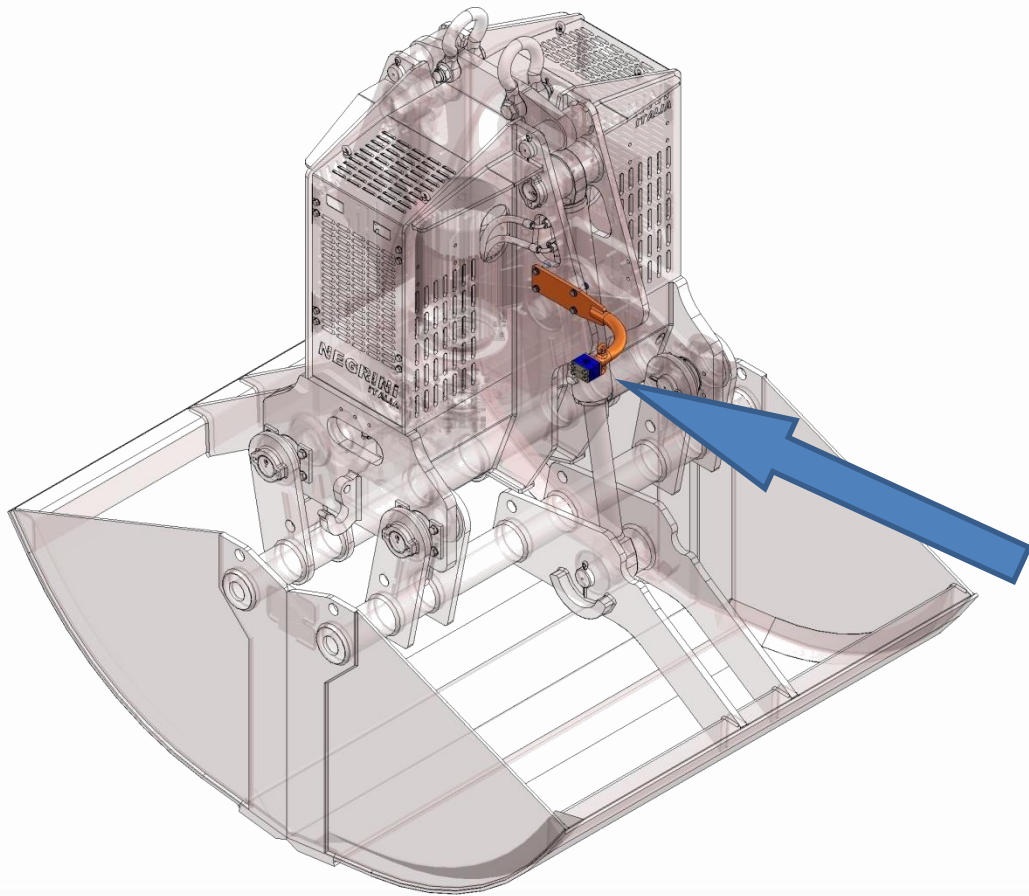
Steel cage for pistons protection

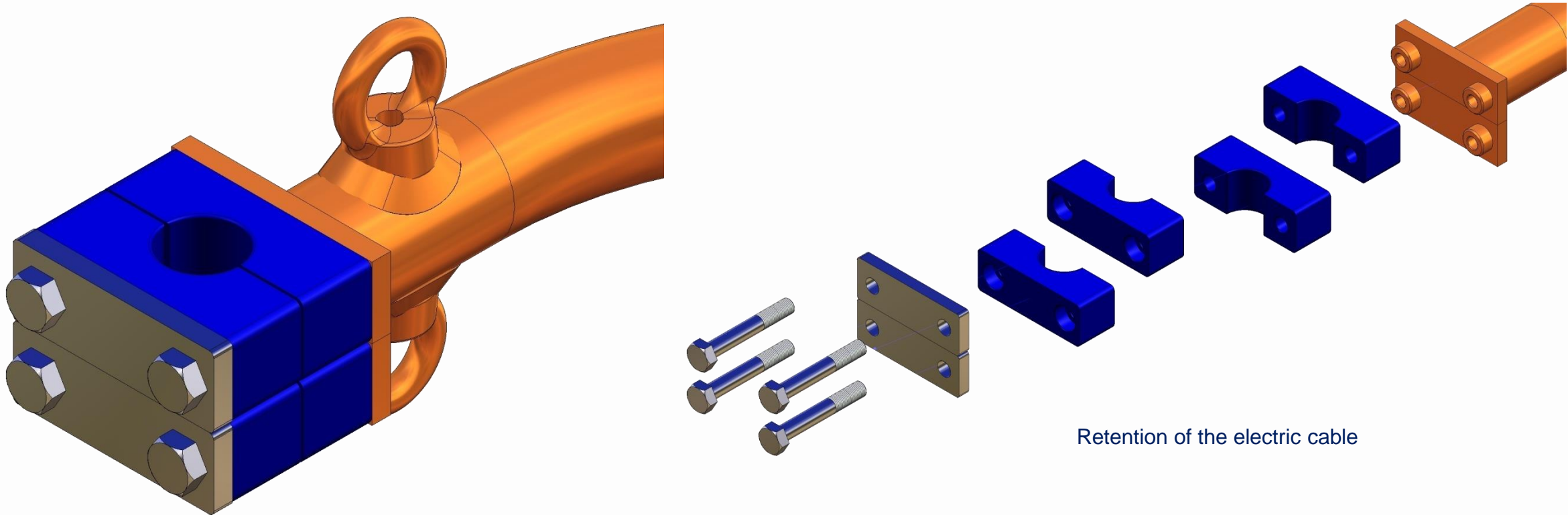


The arm place the electric cable away from dangerous mechanisms and in the same line with the pin of the hook



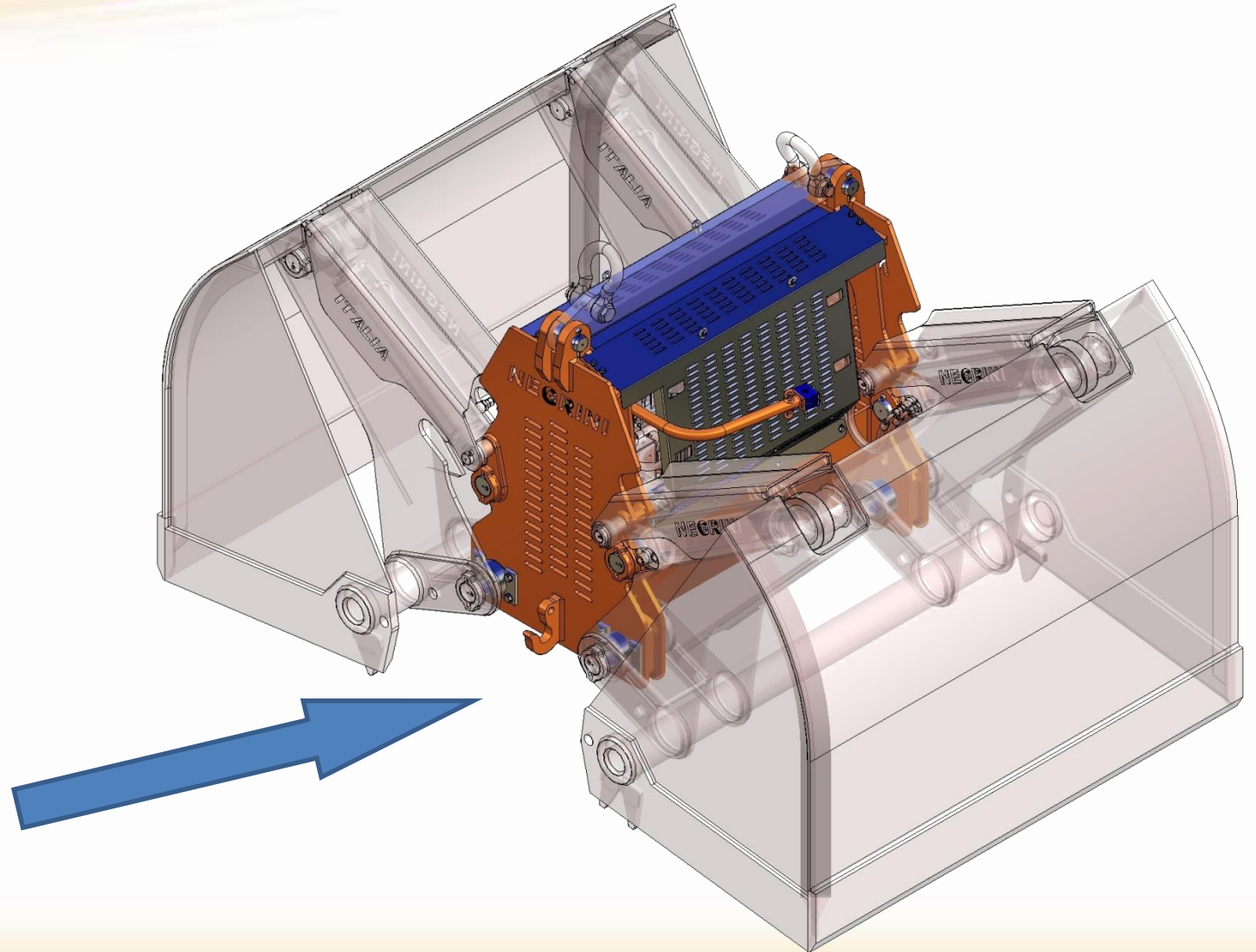
The arm place the electric cable away from dangerous mechanisms and in the same line with the pin of the hook



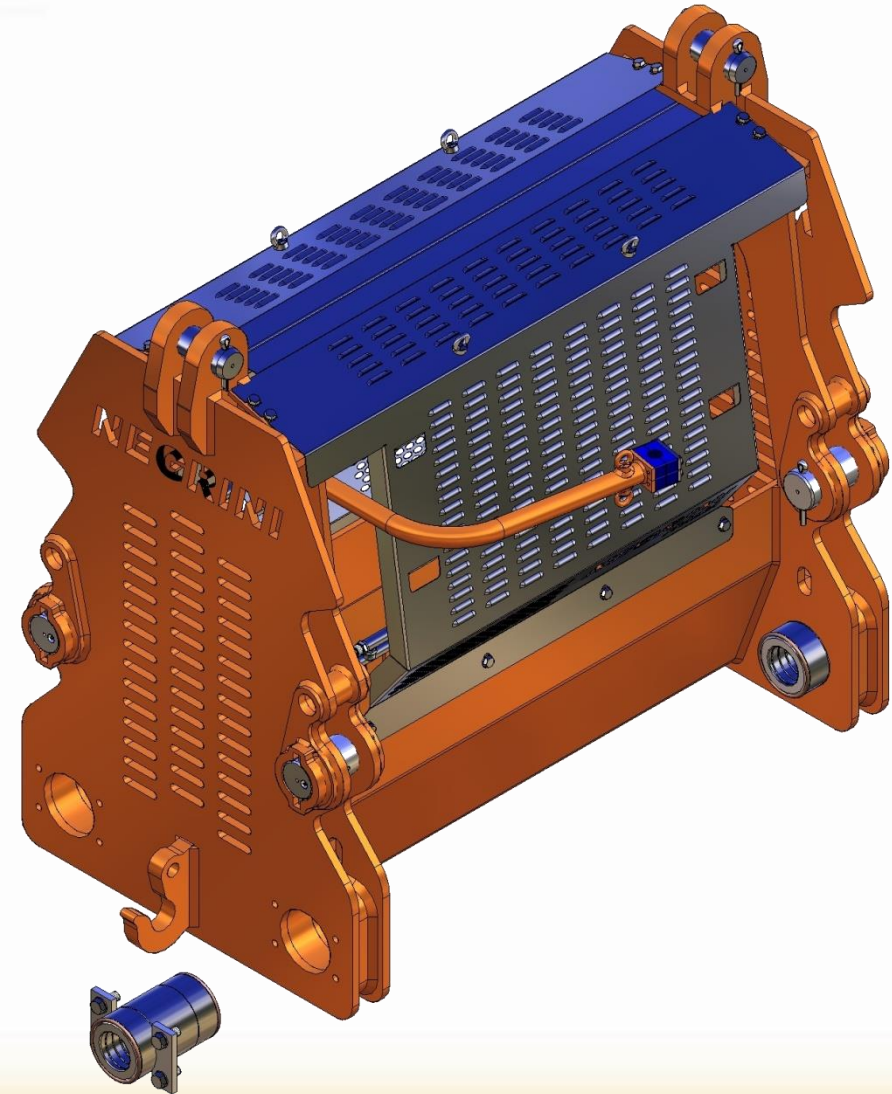


Retention of the electric cable

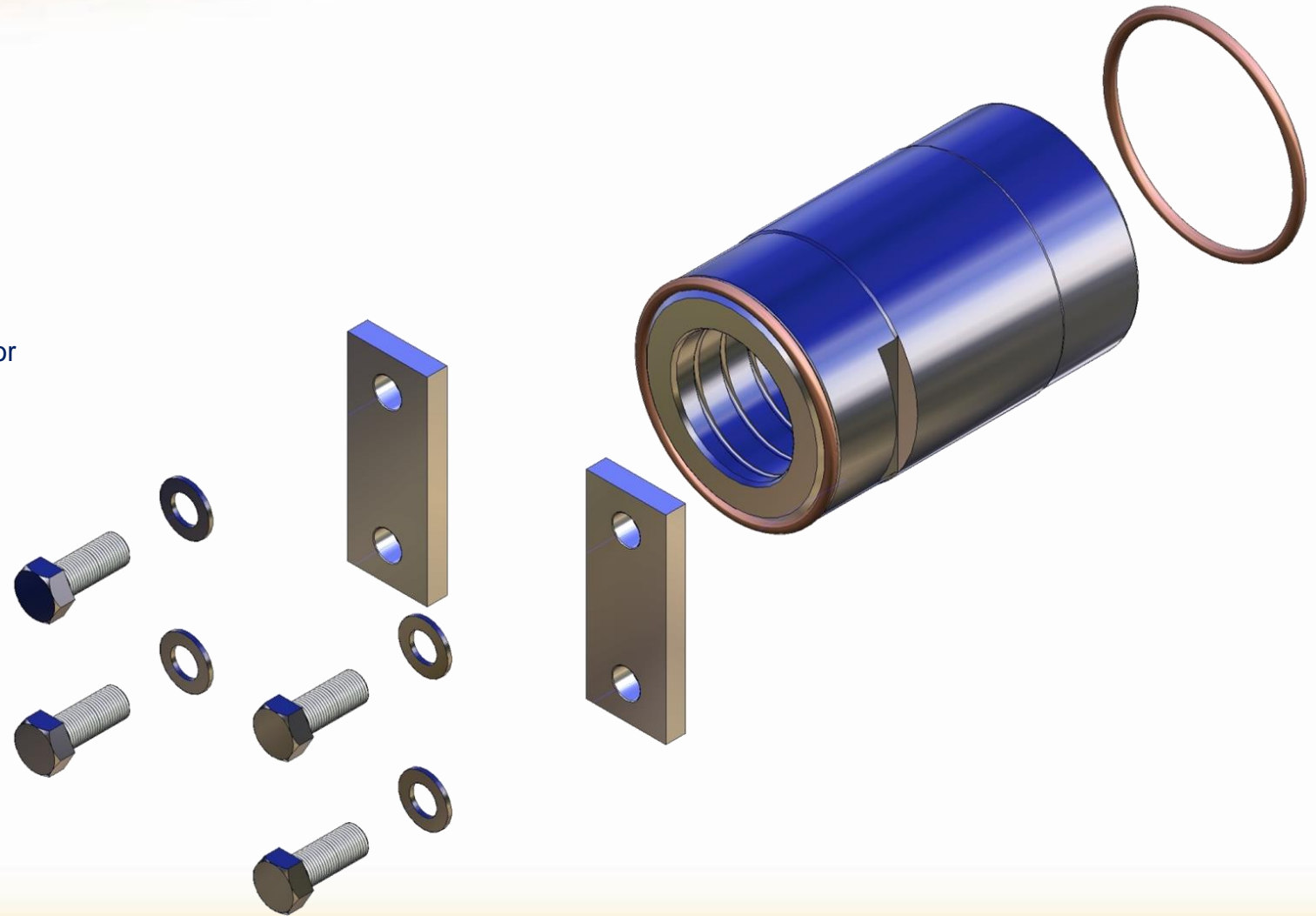
The most sensitive and most difficult area to review is the “bush valve attack”, we have included a large bush replaceable with easiness



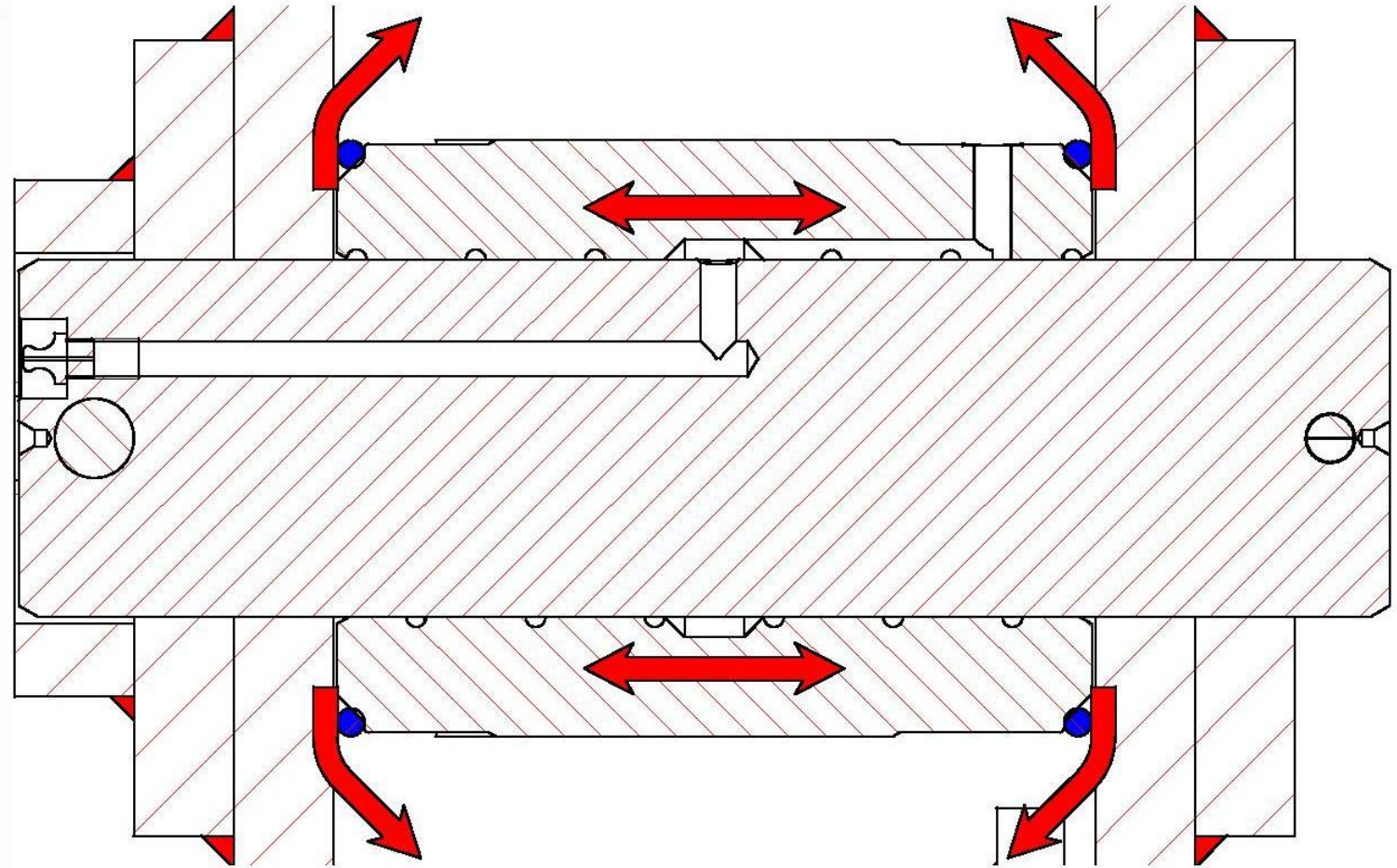
The big bush is held in place by some screws



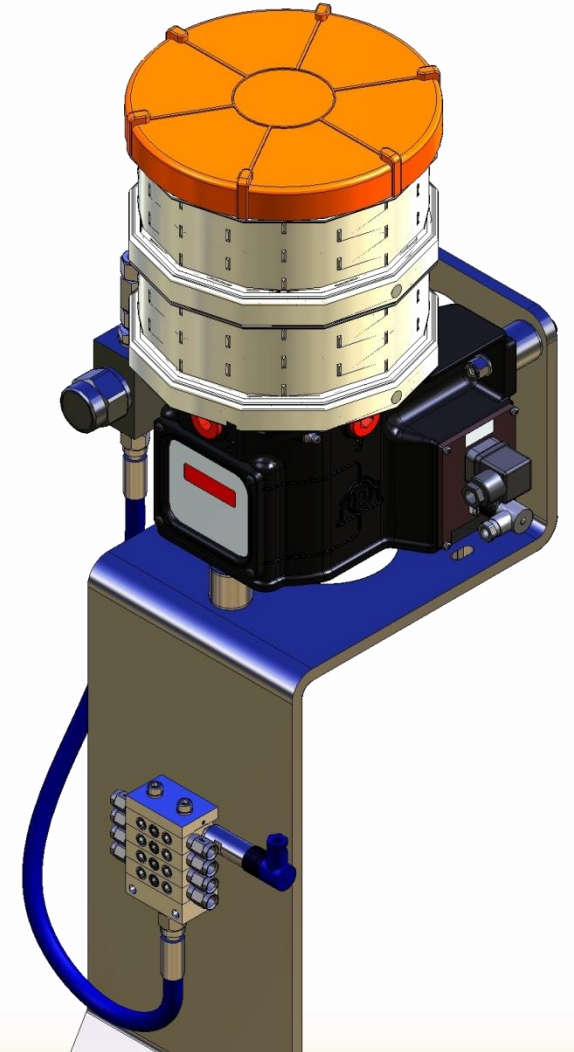
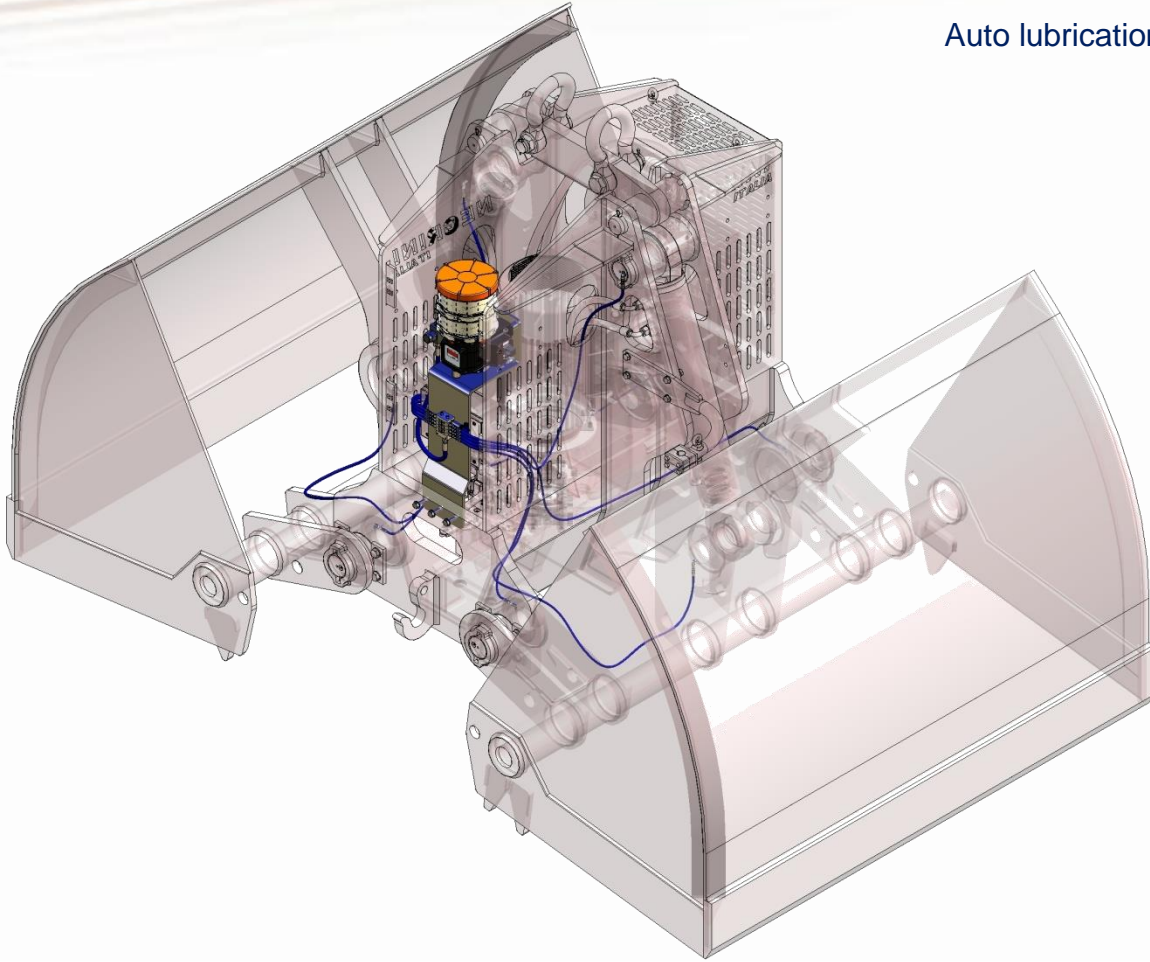
As demonstrated in the image, replacing the bush is extremely simple; inside it there is a helical channel for storage and distribute the lubricating grease



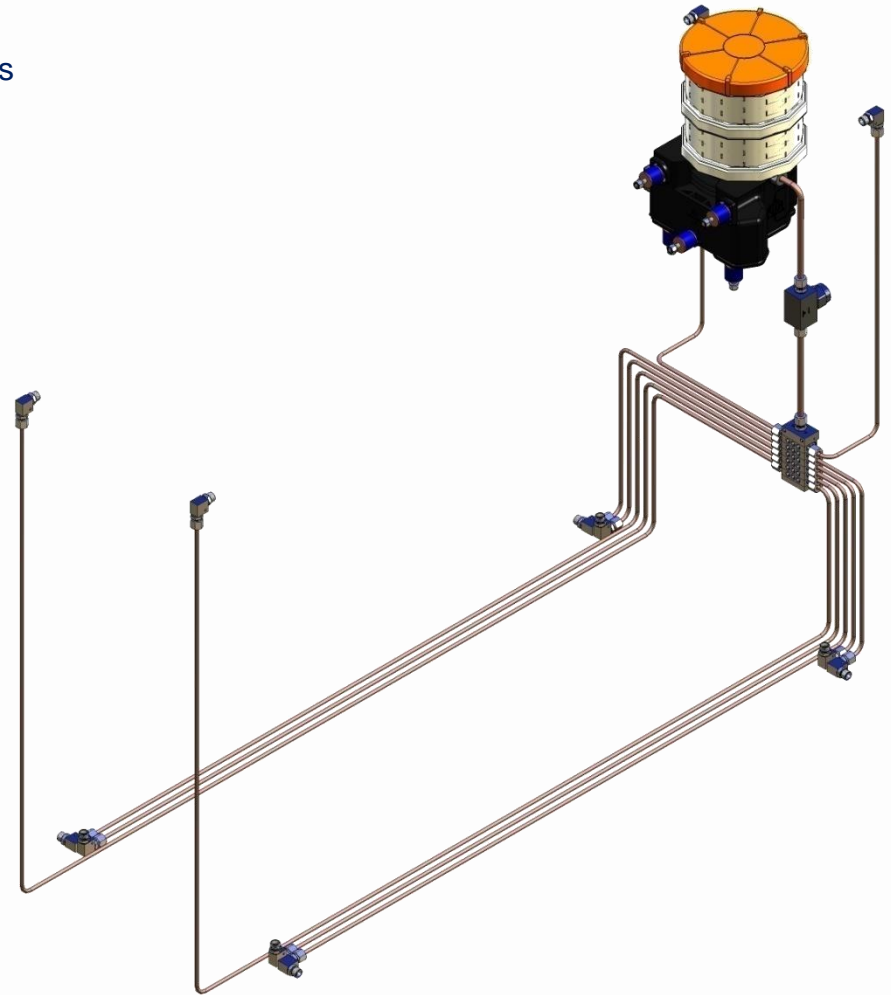
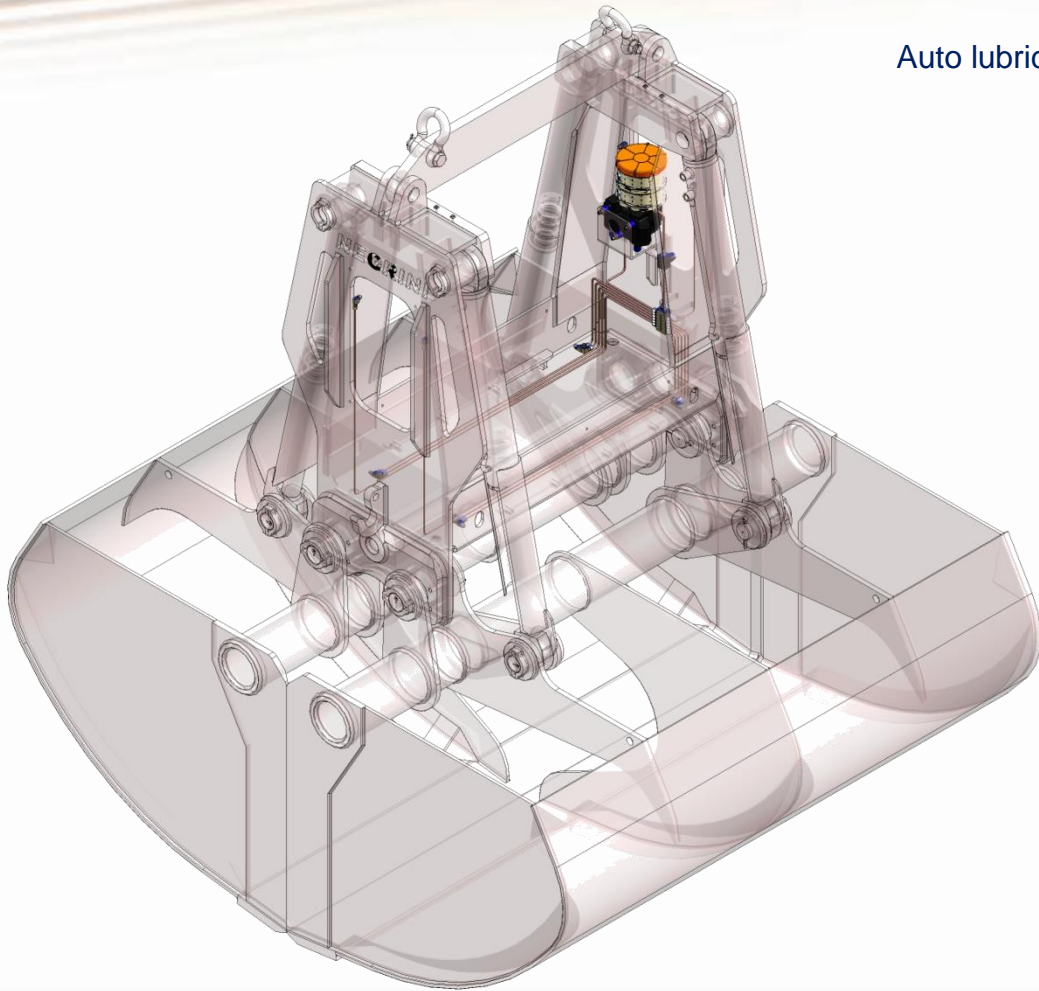
The bush is protected by two seals called “O-Ring”, these are retained in a hole and not allow the passage of dirt, the outward pressure of the grease raises the gasket easily until it comes out; exiting the grease lubricates the walls and the dirt moves away



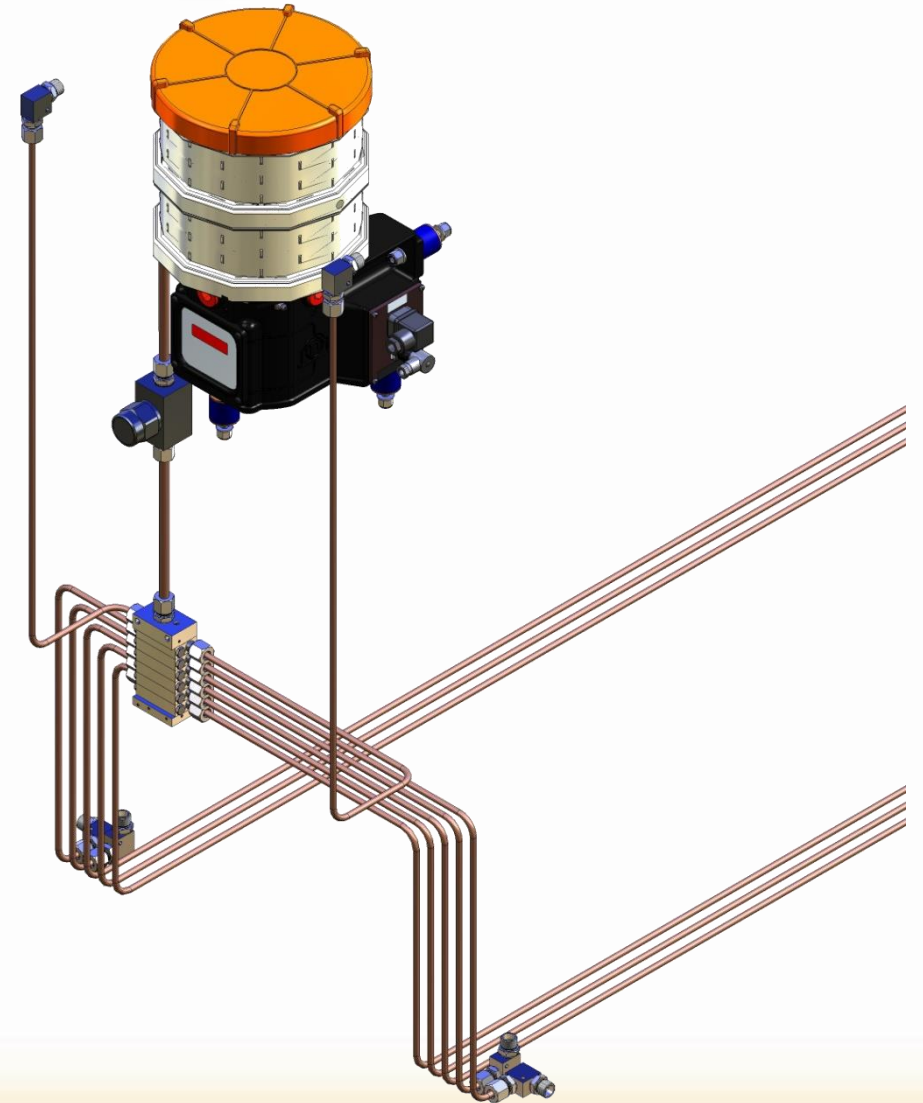
Auto lubrication pins



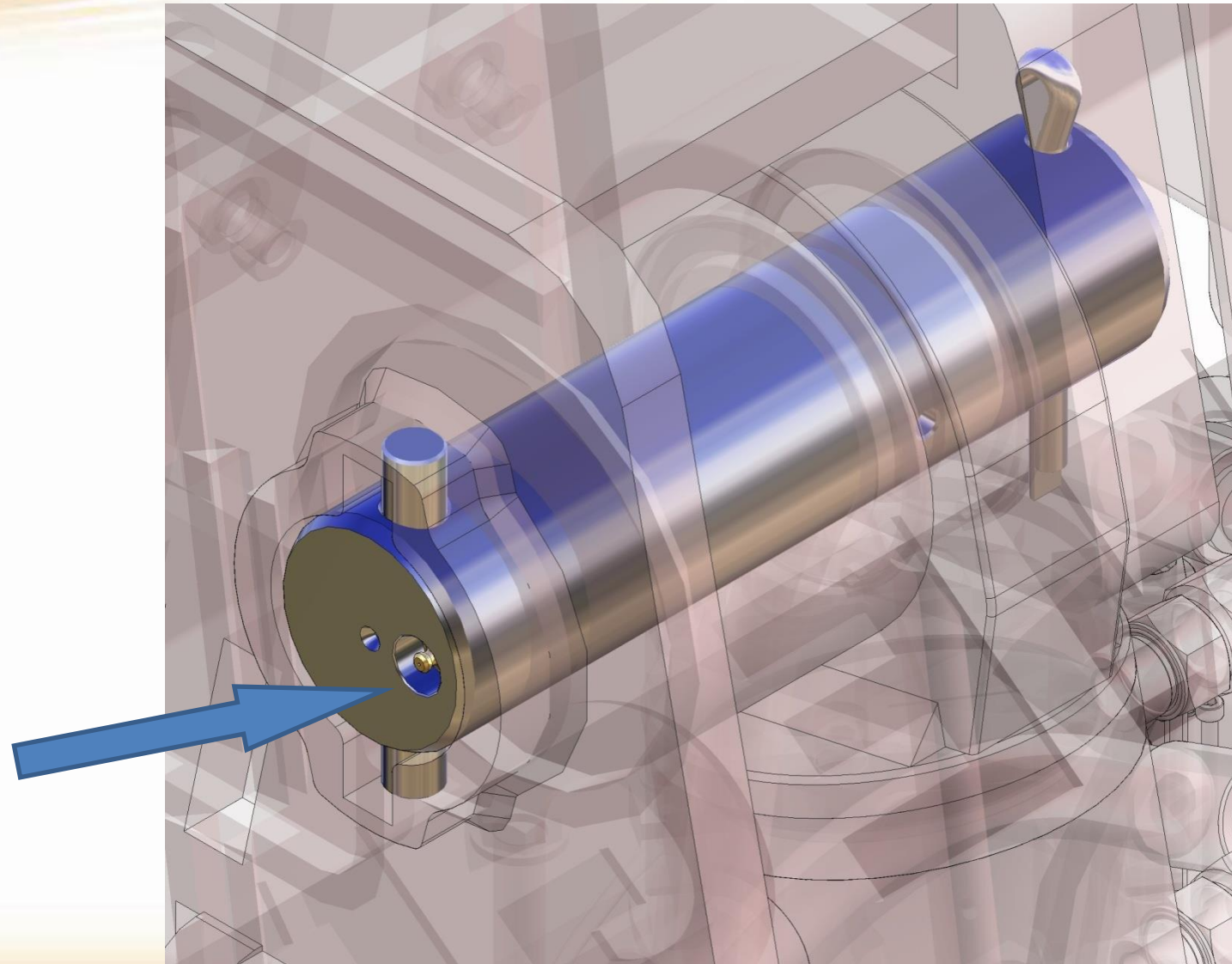
Auto lubrication pins



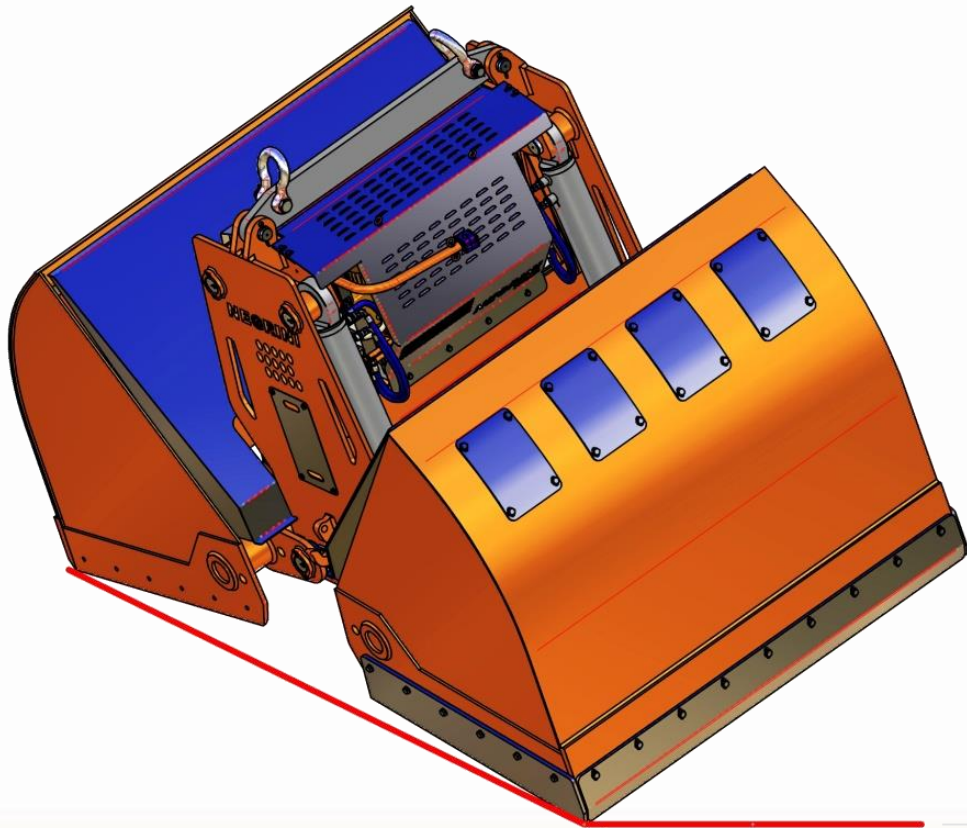
Through an electric pump and a dedicated distribution system, all the pins will automatically greased, to each pin will be send an amount of grease independently by the resistance created by dirt, distance and more.. Every pin will be lubricated as programmed. The operator will be check the grease level in the reservoir.



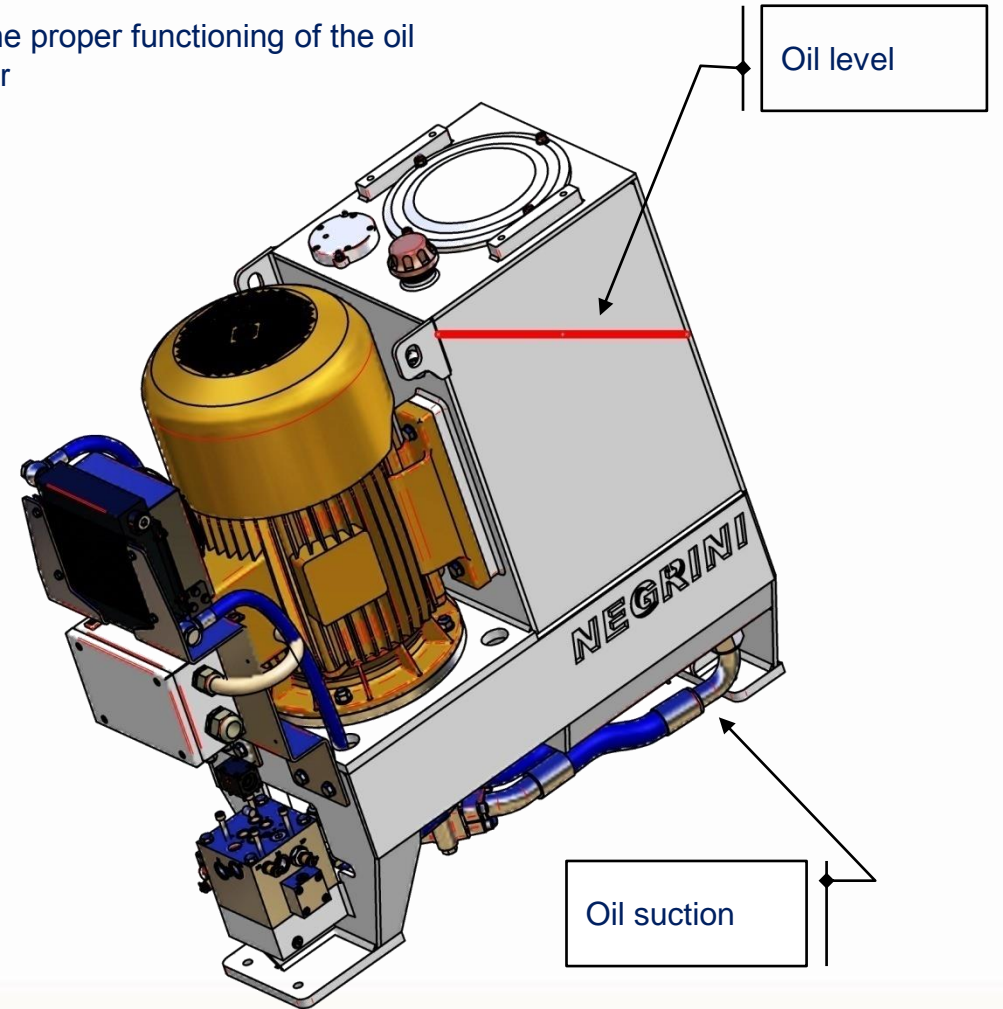
The pins will be lubricated by the automatic system but when we can, the pin keep the traditional greaser to allow an emergency manual greasing



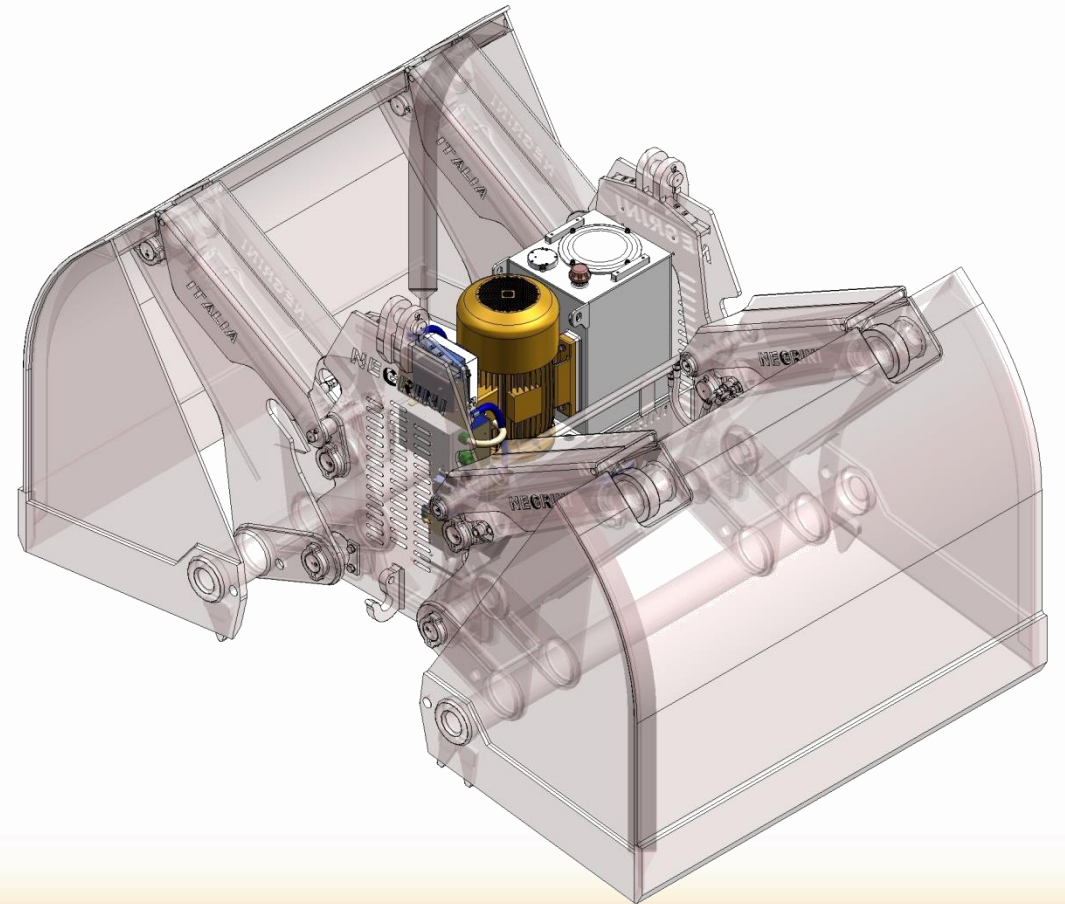
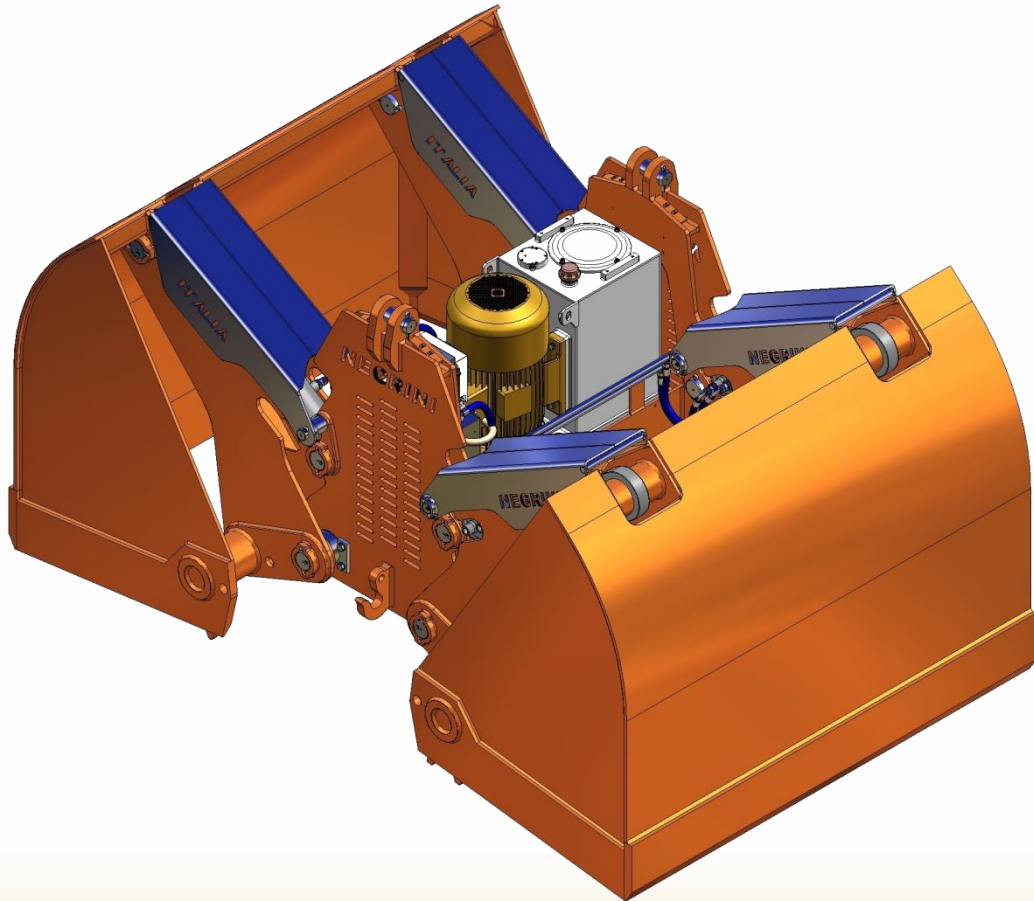
The “tower” tank allows an high inclination of the bucket without causing the proper functioning of the oil suction placed in the lower part of the tank that will never be reached by air



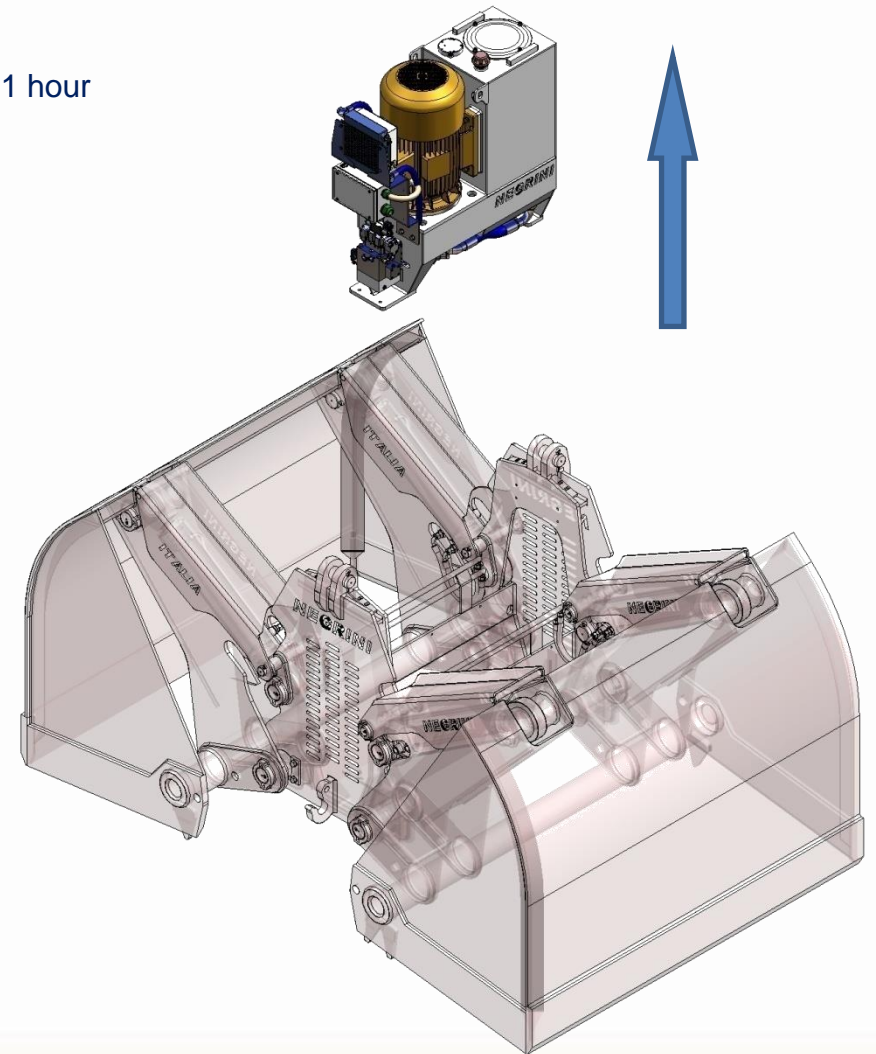
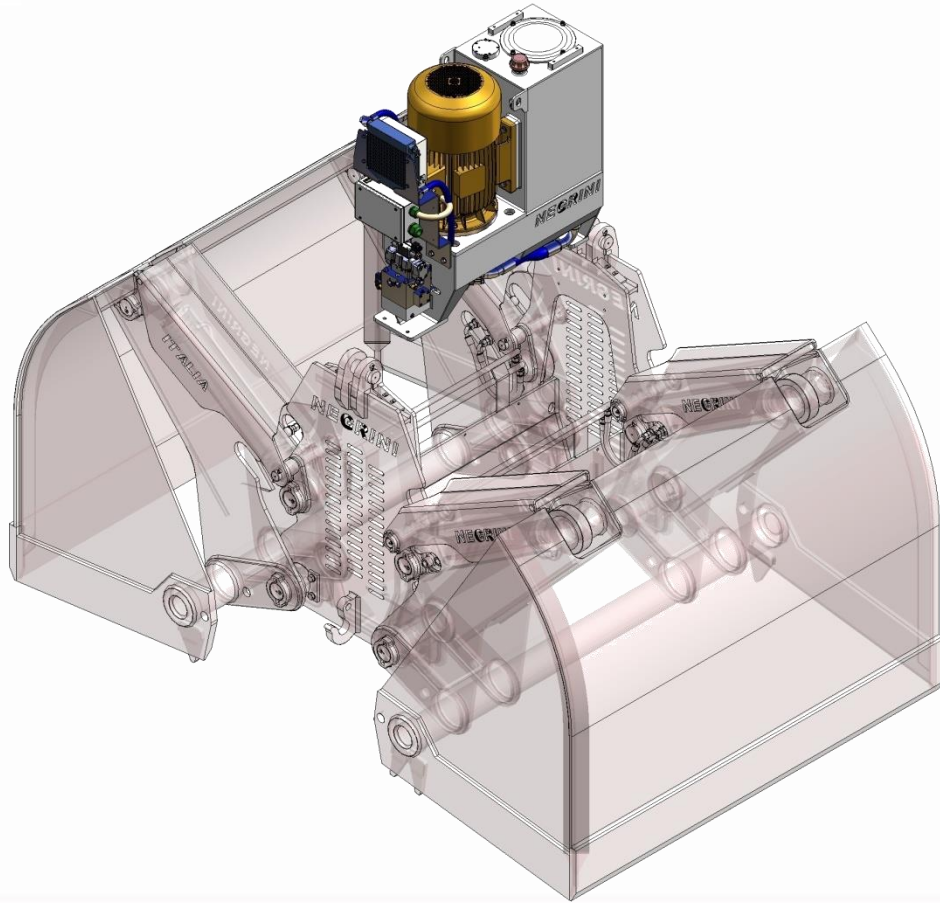
over 50°

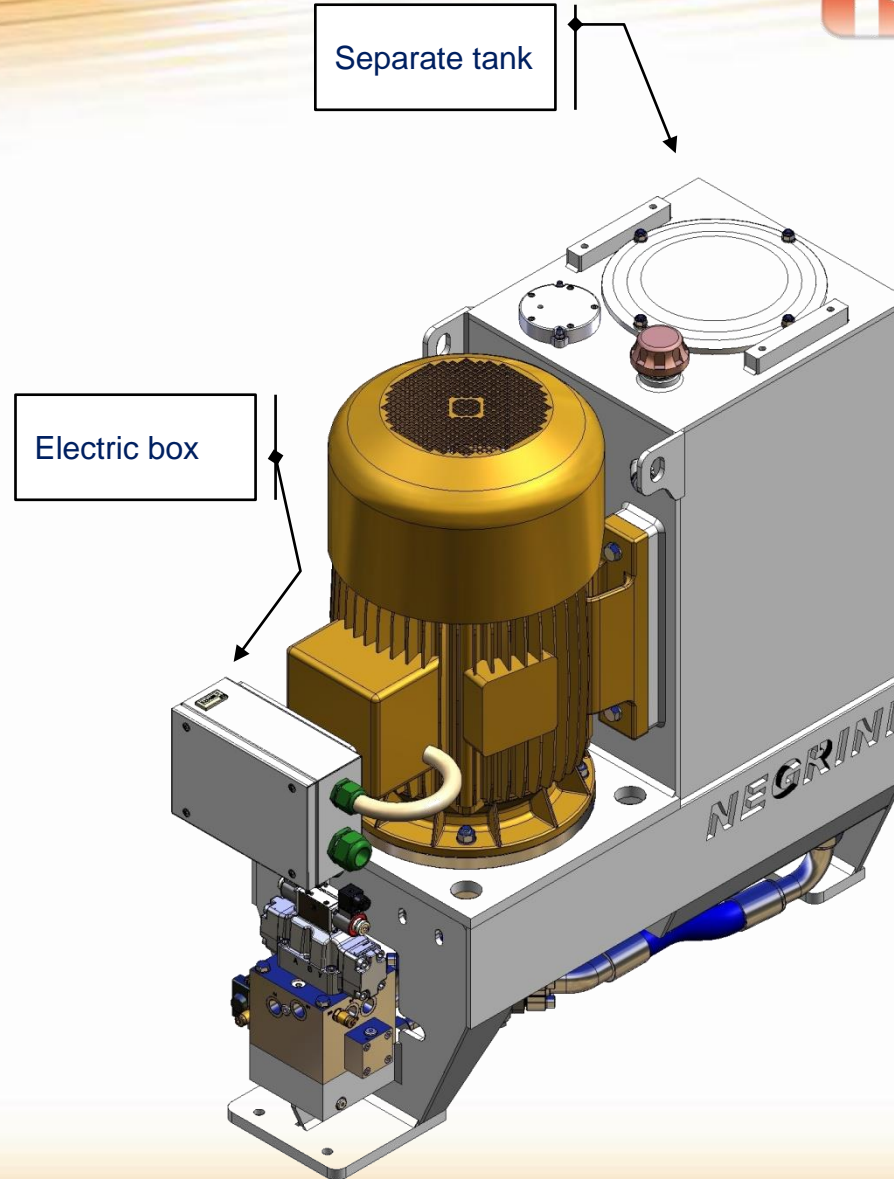
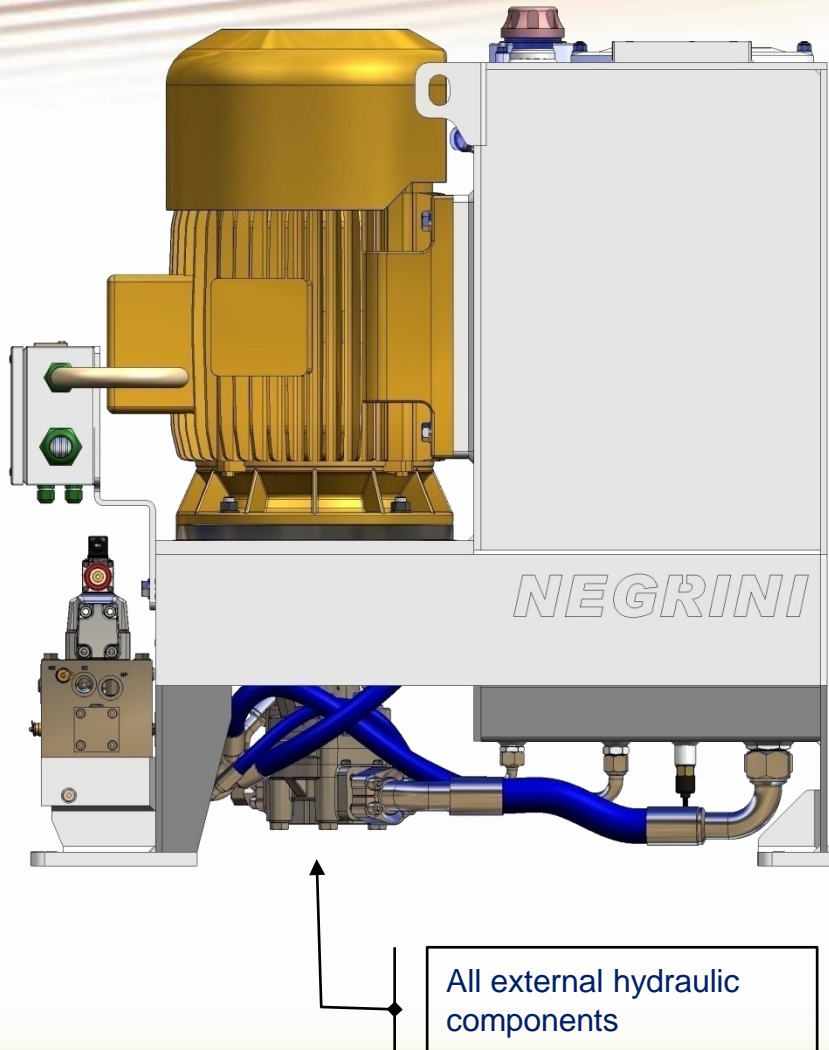


The hydraulic unit is independent and can be easily removed, the complete tank panel can be tested or repaired comfortably on the ground

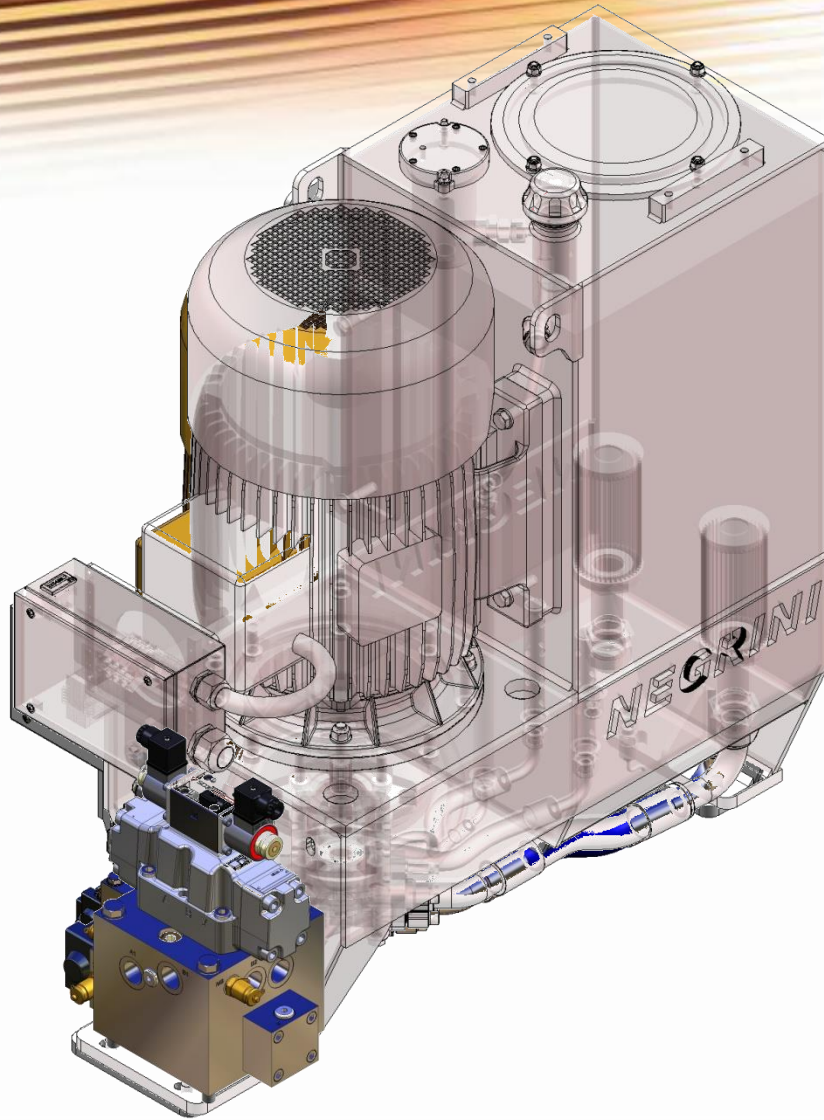


Full tank panel can be removed in about 1 hour

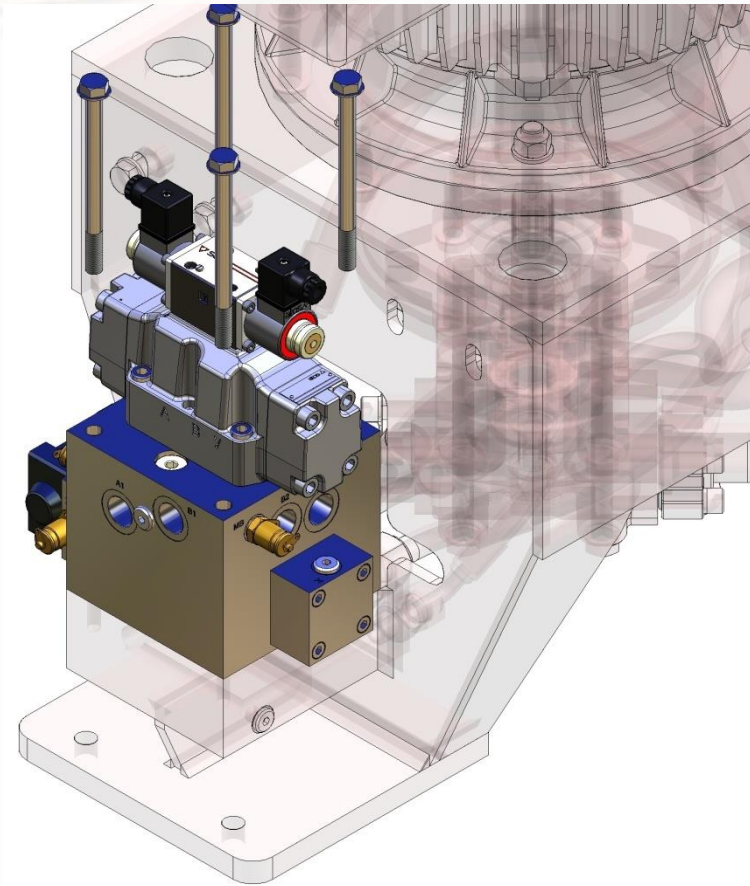




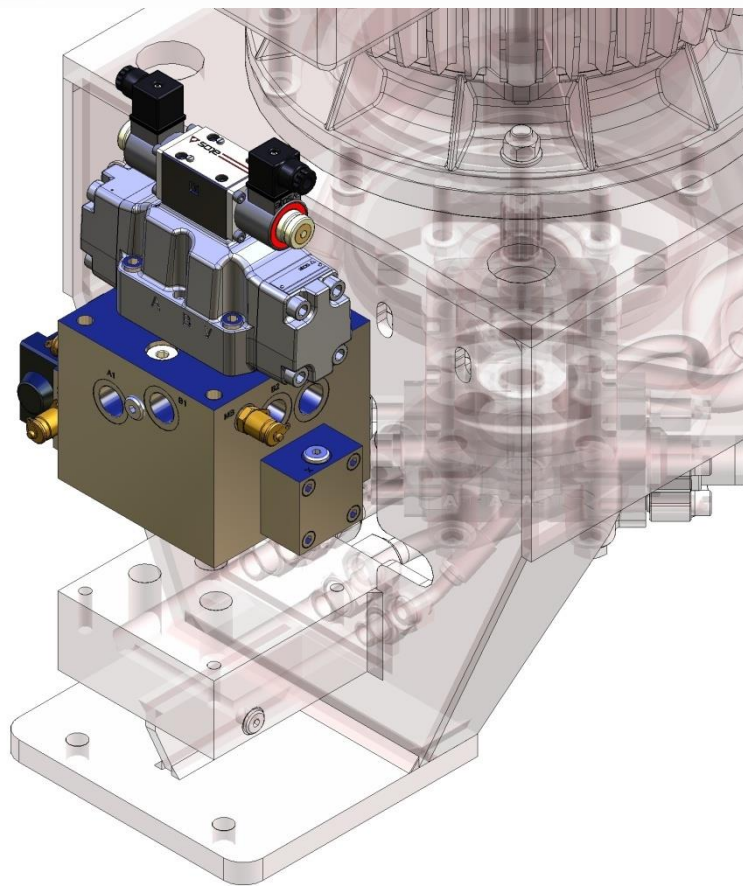
The hydraulic unit can be tested or repaired comfortably on the ground, will not need to unplug electrical or mechanical parts before the extraction, but only hydraulic connection, the operation of extraction can take about 1 hour



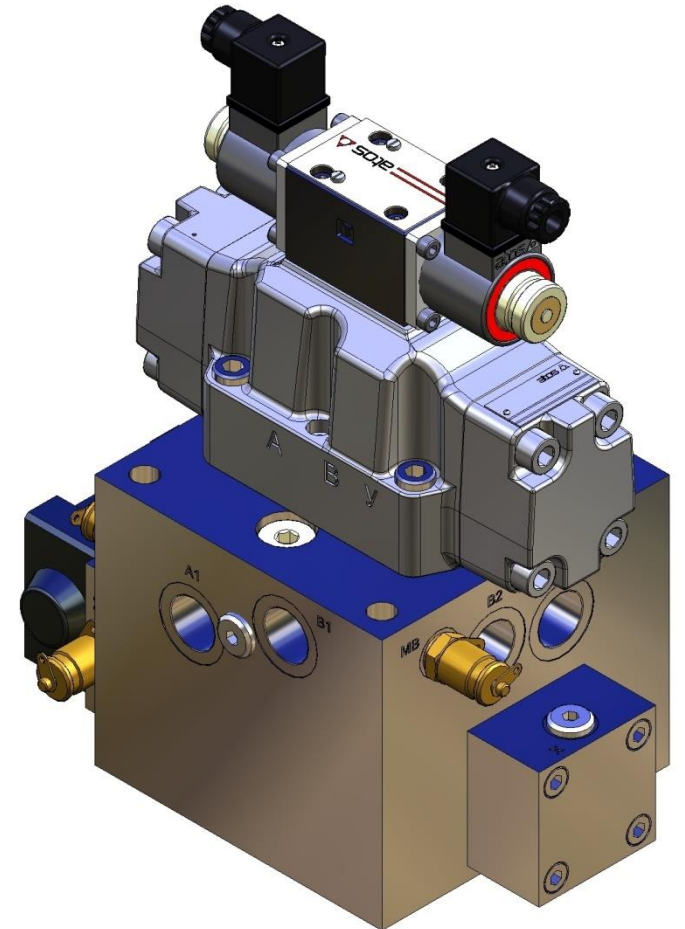
We put in a single metal block the heart of the hydraulic unit, simply by removing 4 screws is possible to replace the valves group. The operation is executable even from staff no particularly expert. Oil filtration until 3 microns (the normal filtrations are of 60 microns)



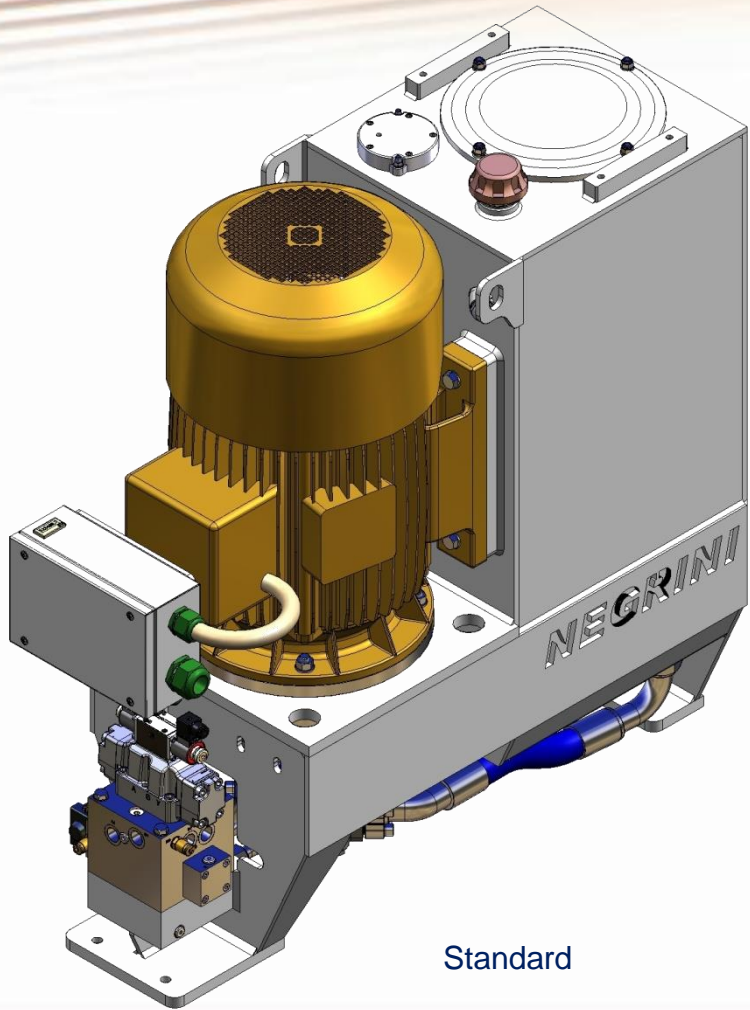
Remove the screws



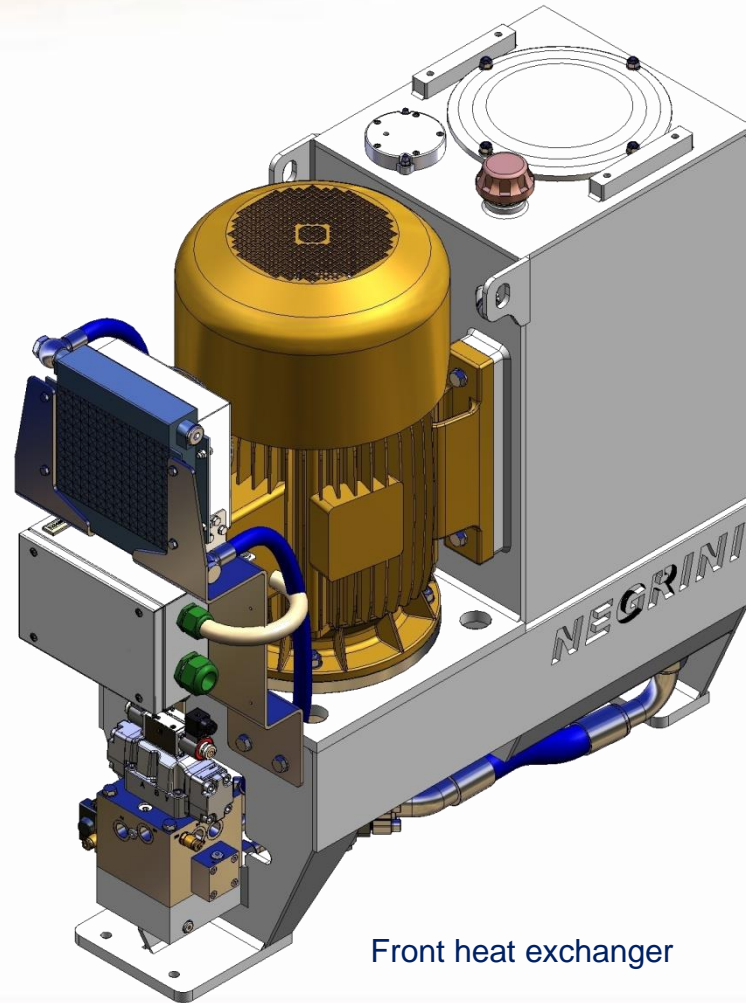
Free block valves



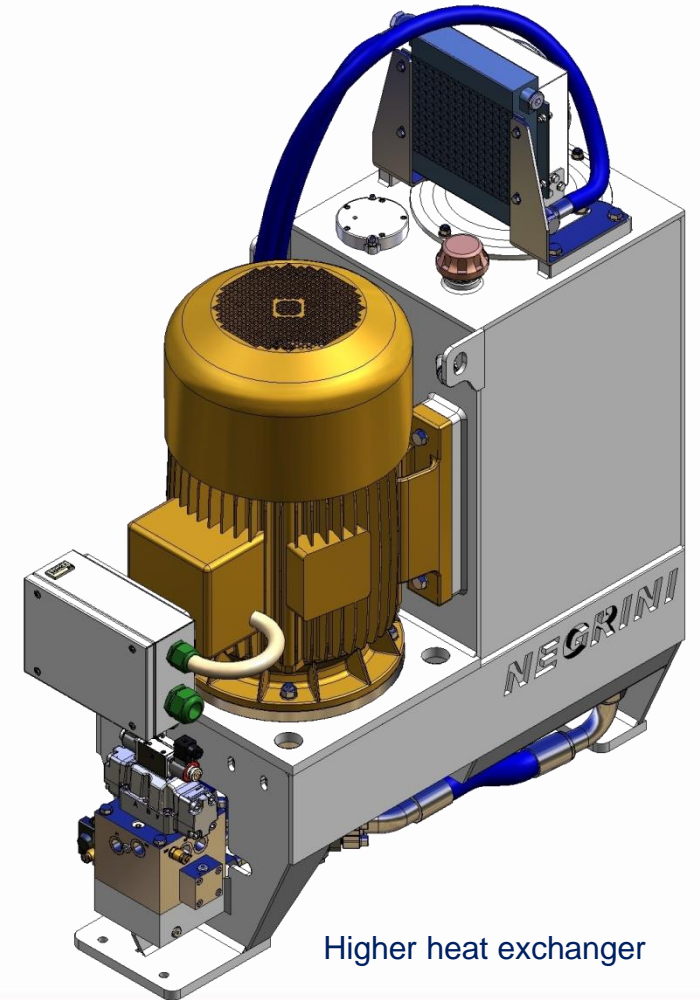
Hydraulic heart



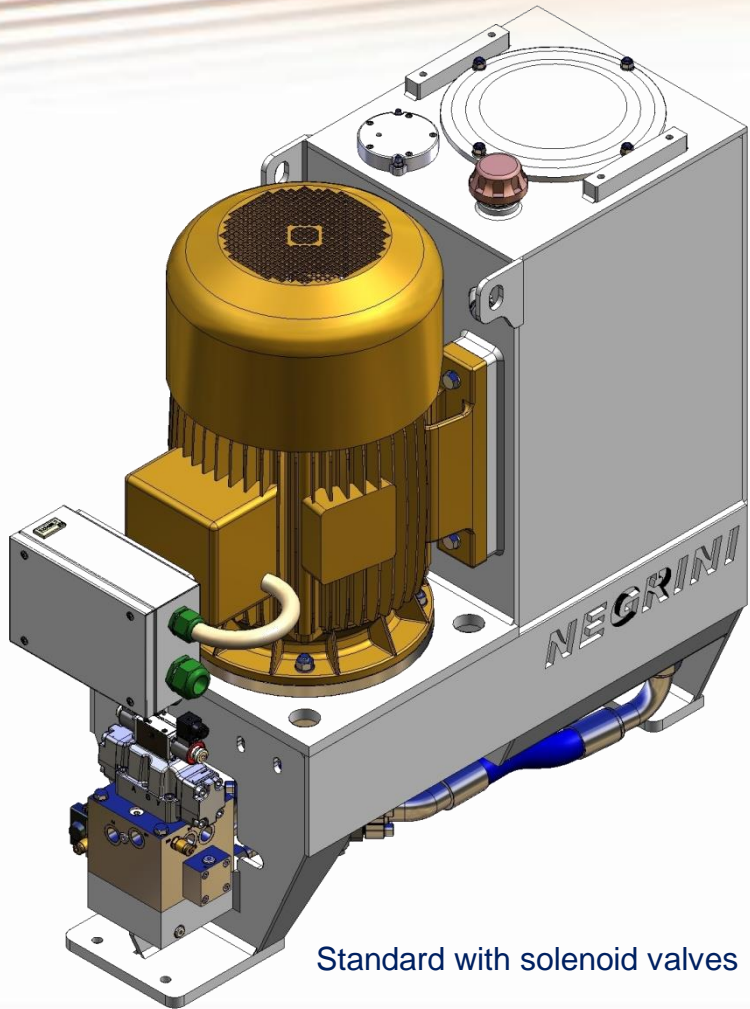
Standard



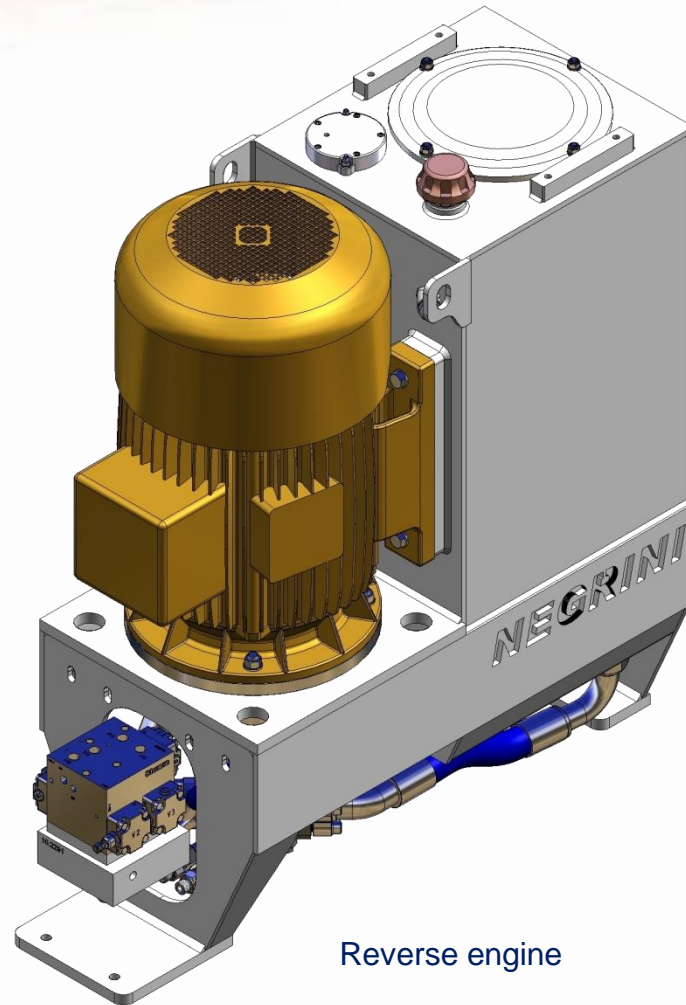
Front heat exchanger



Higher heat exchanger



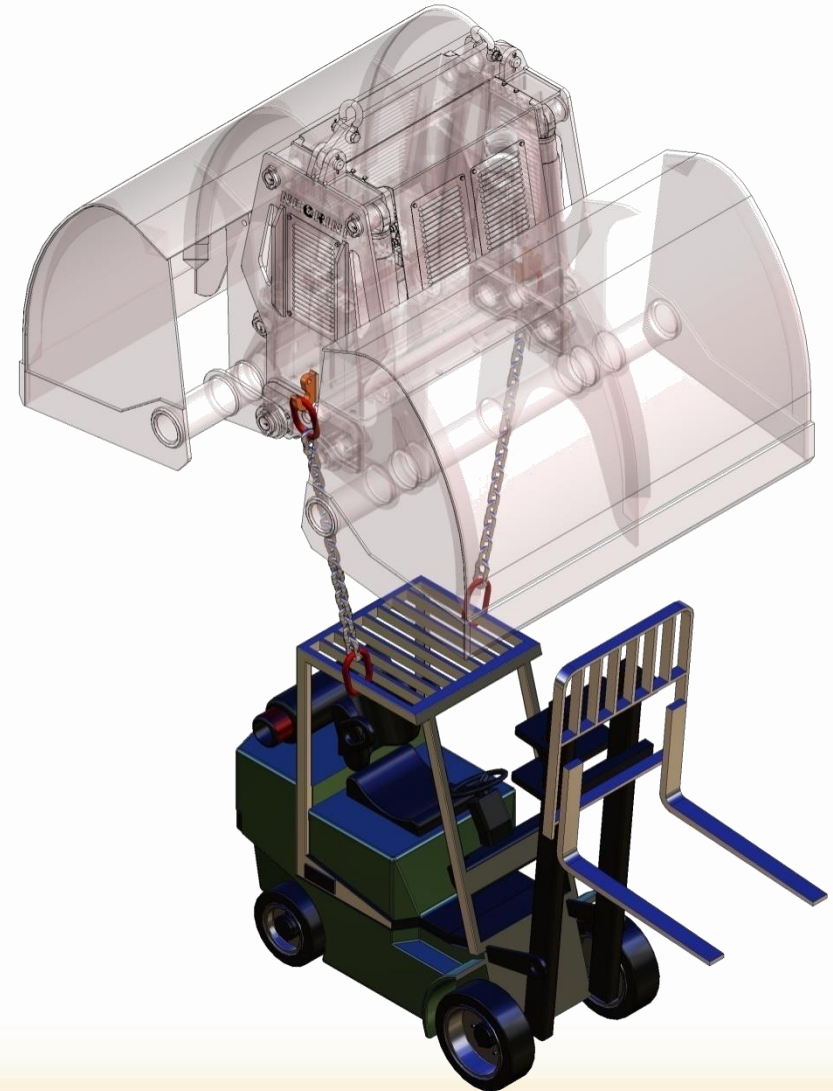
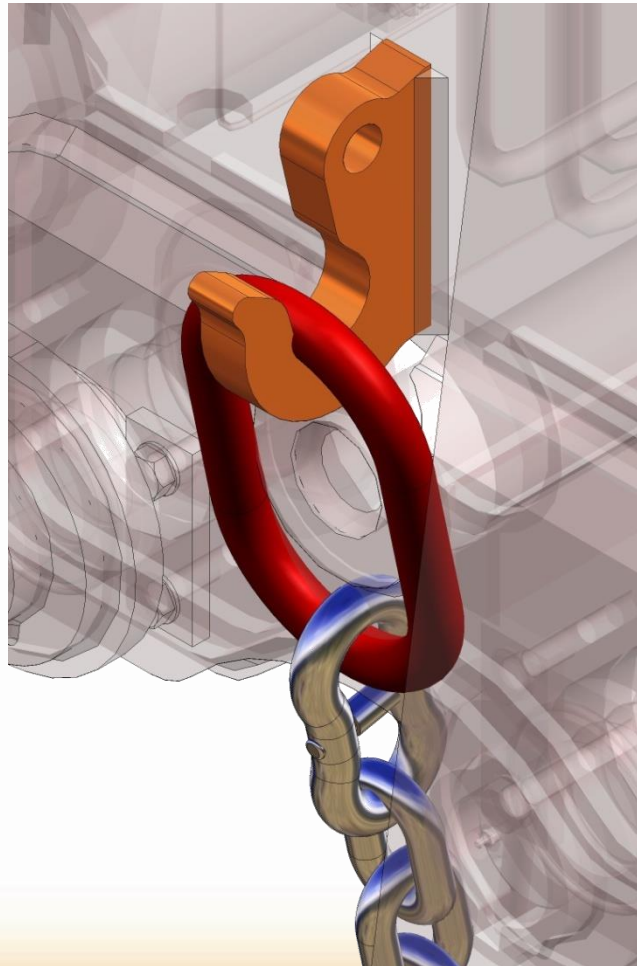
Standard with solenoid valves



Reverse engine

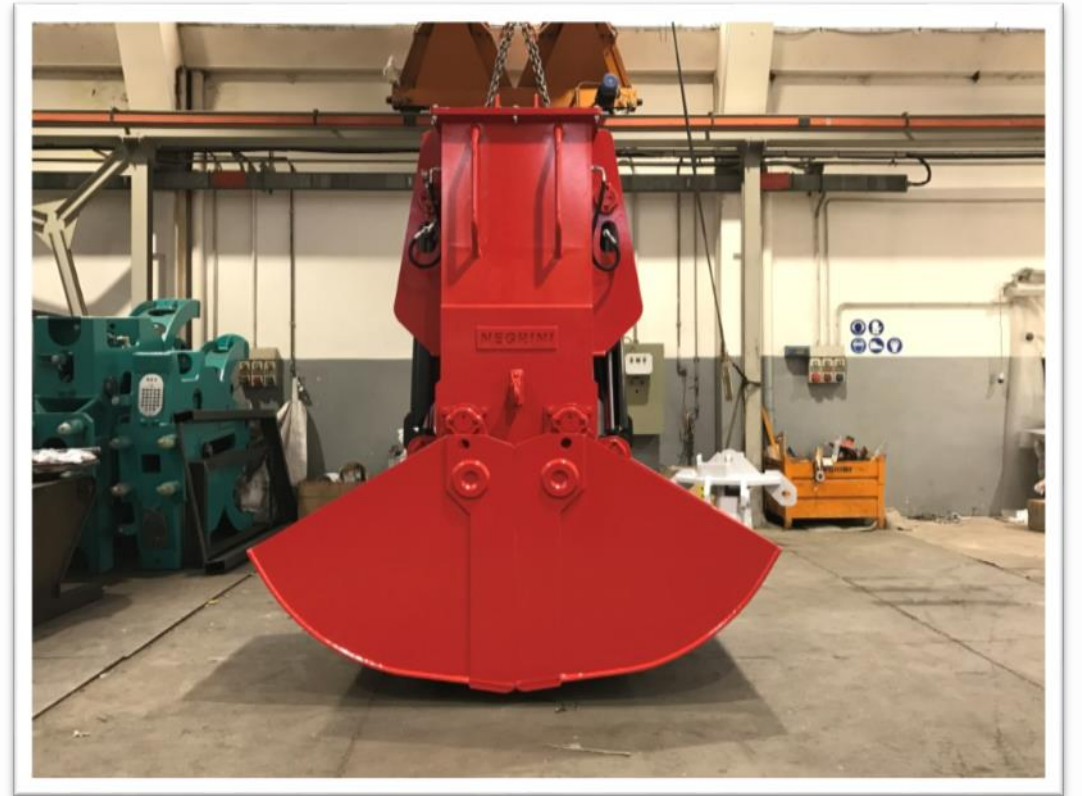
The bucket can be fitted with standard hydraulic box (with solenoid valves) or by reversing the motor, in this case the reversal rotation of the engine allows the opening or closing of the grab. In both the system the oil filtration can be happen until 3 microns (standard are of 60 microns). The versatility of the project will allow the bucket to install different box with different power from the standard, in many cases the box will be replaced by the user

Hooks for various lifting









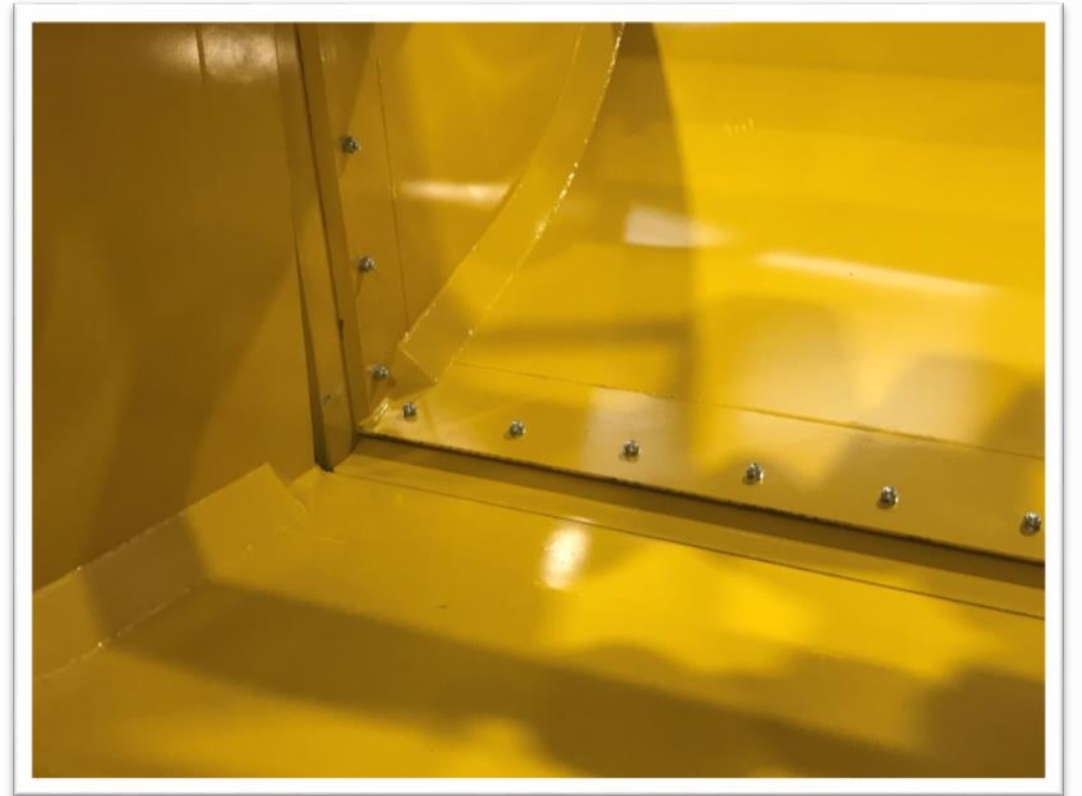
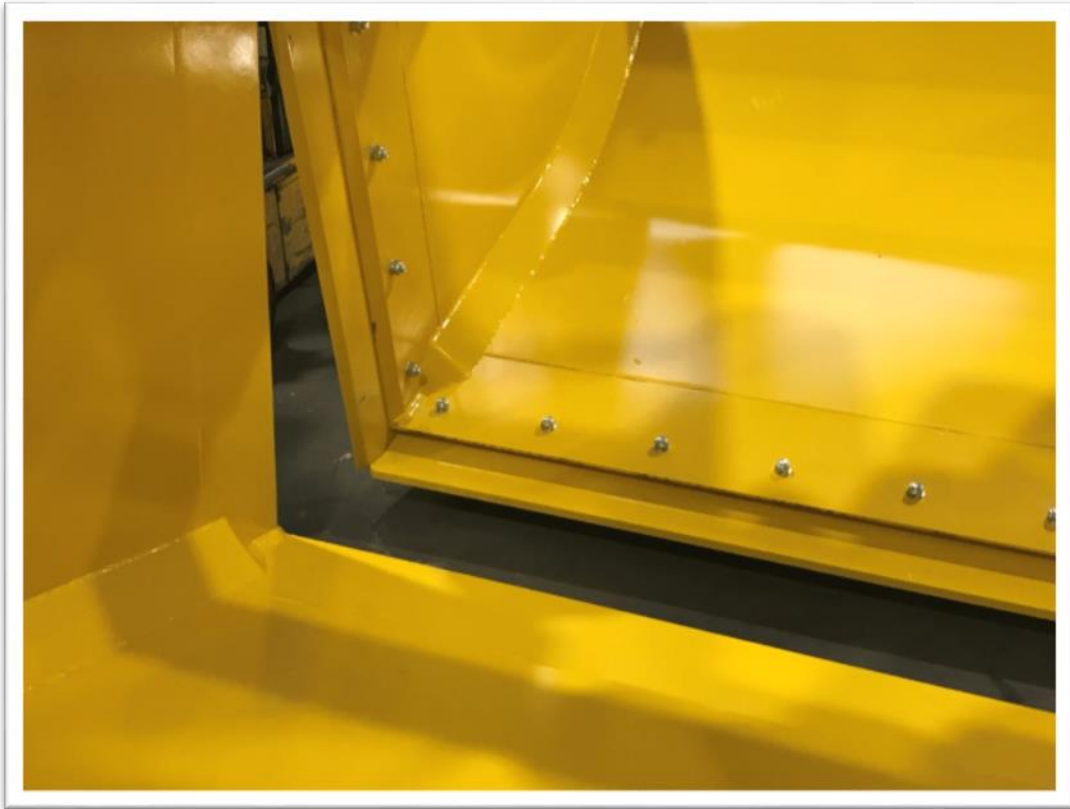








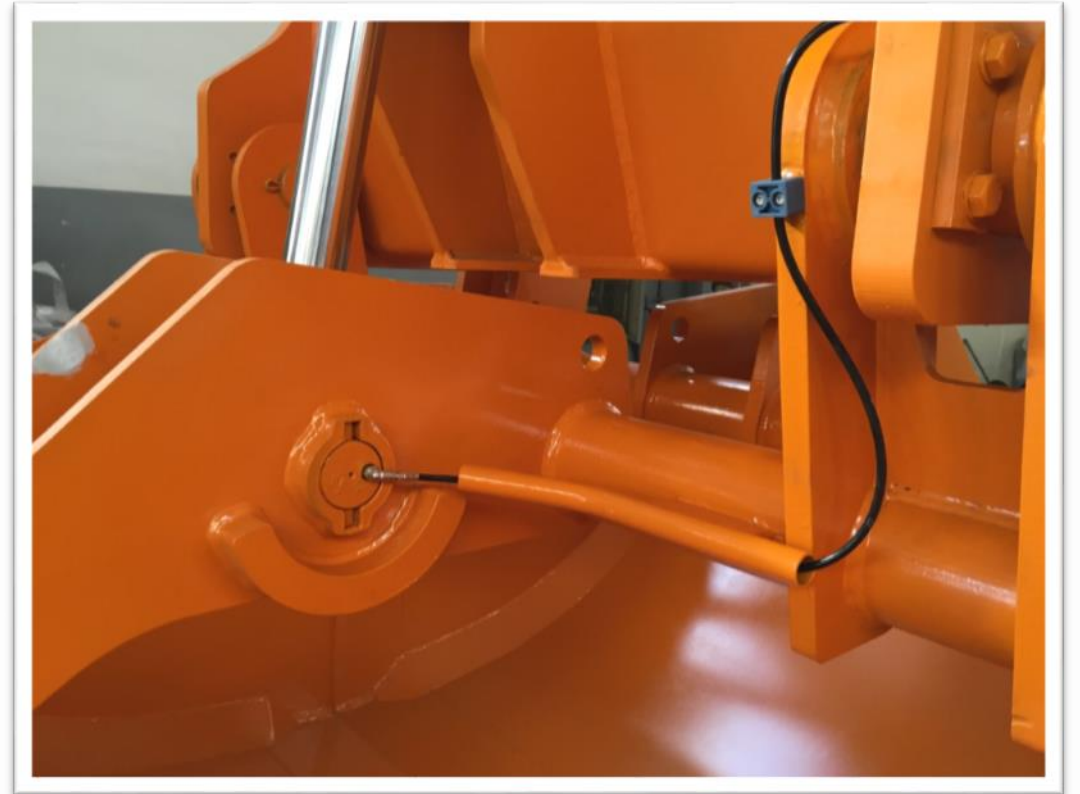
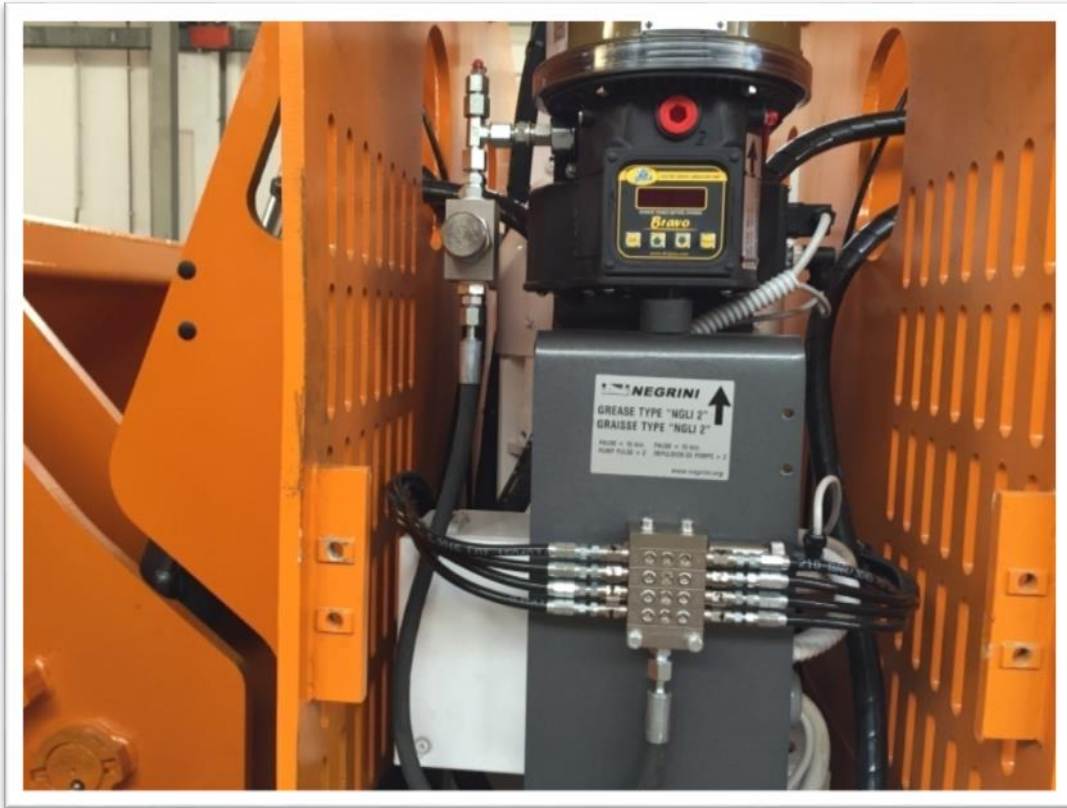




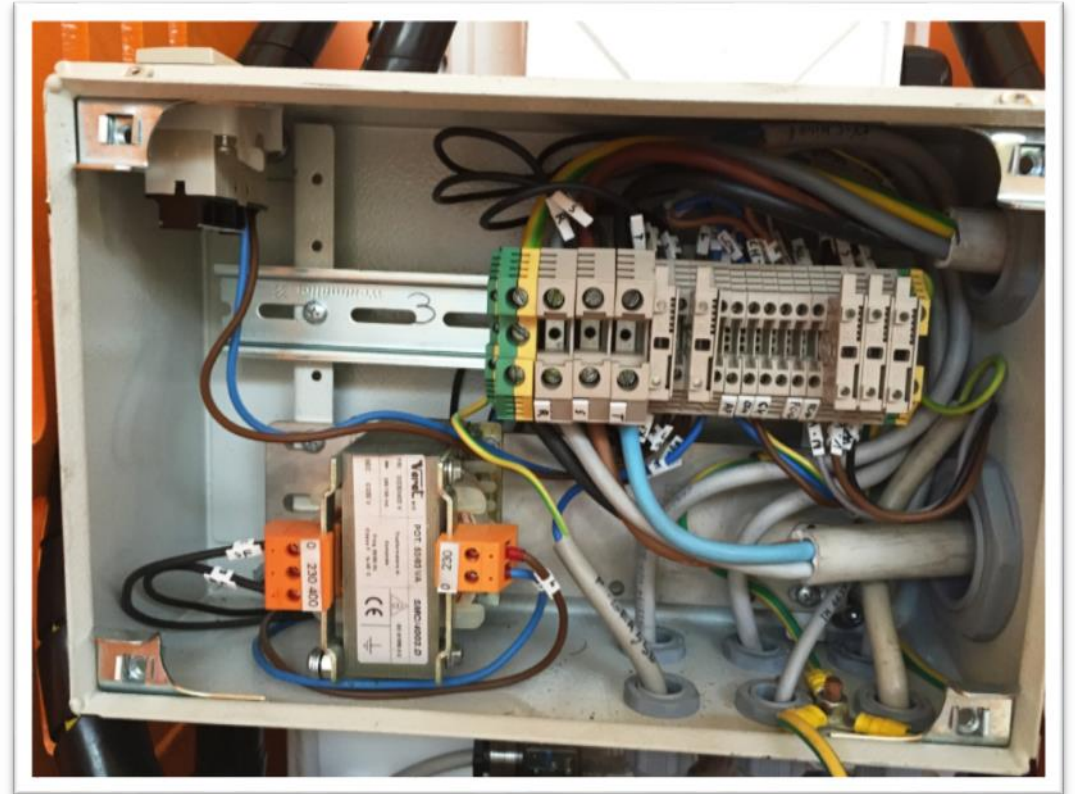




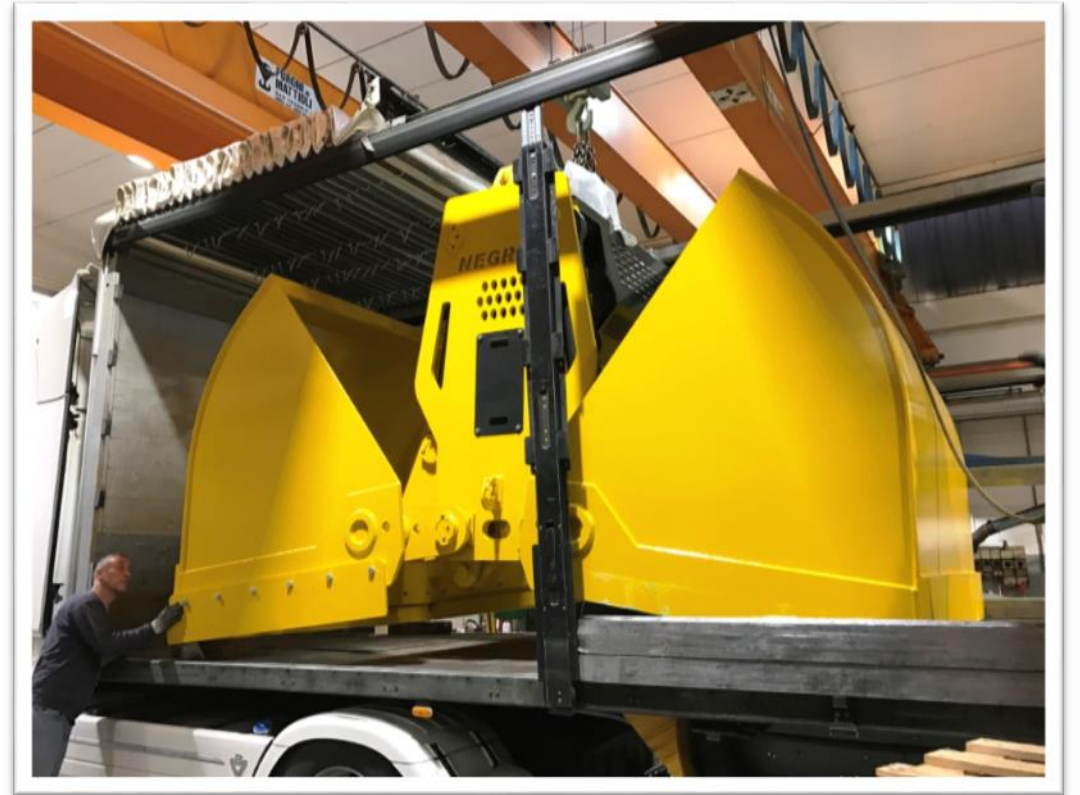














STANDARD OF MANUFACTURED					
CILINDRI / PISTONI / MARTINETTI		mat. Shirt Fe 510 internally turned and lapped mat. Stem 39Ni Crs Mo3 chromed to thickness and corrected Gaskets of the Type POLYPAC			
HOSES		SAE 100 R9 CERTEX			
CARRYING STRUCTURE		mat. Fe 510 construction in electric-welded carpentry and opportunely strengthened in the points of max. solicitation			
WELDING		Performed with continuous thread gives 1,2 protected with gas Argon.8 System approved by R.I.N.A. PRINCIPAL CHARACTERISTICS: - Tensile R = 520 N/mm ² s - Yeld point Rs = 348 N/mms - extension \dot{A} . = 38%			
GALVANIZATION		70 microns Inorganic			
FINISH		Orange tree ral to total coverage 120-150 microns c.a.			
Item	Material	M.B.L. N/mm	Yeld Point N/mm	hardness Brinnell HB Rockwel HRC	Heat treatment
Standard Carpentry	S355 JO S355 J2G3 FE.510	510	355	//	//
Special Carpentry	WELDOX.700	780 - 930	700	260	//
Parts subject usury (Blade, teeth, ecc.)	HARDOX.400 HARDOX .500 SIMILARE	1250 1550	1000 1300	360 – 440 450 – 560	//
Pin	39Ni Cr Mo3 Quenched and tempered	1000 – 1150	850	54	It tempers induction
Pistons Stems	39Ni Cr Mo3	1000 - 1150	850	54	It tempers induction chrome thickness Rectification
Pistons Shirts	S355 JO	510	355	//	Rectification / lapping inside

**DICHIARAZIONE DI CONFORMITA'
DECLARATION OF CONFORMITY
KONFORMITÄTSEKTLÄRUNG**

**DECLARATION DE CONFORMITE
DECLARACIÓN DE CONFORMIDAD**



E' costruita conformemente ai requisiti essenziali di sicurezza stabiliti dalla direttiva 2006/42/CE e successivi emendamenti. -
Entsprechend der grundlegenden Sicherheitsanforderungen laut EG-Richtlinie 2006/42/CE und folgenden Änderungen konstruiert wurde. -
Has been constructed in conformity with the basic safety requirements set down in EC Directive 2006/42/CE and subsequent amendments.
- - Est construit conformément aux conditions de sécurité essentielles établies par la directive 2006/42/CE CE et les amendements
successifs. - Está construido de acuerdo a los requisitos esenciales de seguridad establecidos por la directiva 2006/42/CE CE y sucesivas
enmiendas.

Per la verifica delle conformità di cui alle direttive sopra indicate, è stata consultata la seguente norma europea EN 292 parte 1 e parte 2. -
Zur Überprüfung der Konformität gemäß oben genannter Richtlinien wurde die folgende europäische Richtlinie EN 292 Teil 1 und Teil 2 zu
Rate gezogen. - In order to check conformity as per the Directive cited above, reference was made to European Norm EN 292 parts 1 and
2. - Pour la vérification des conformités dont à la directive ci-dessus mentionnée, la Norme Européenne EN 292 partie 1 et partie 2 a été
consultée. - Para el control de la conformidad con las directivas indicadas anteriormente, ha sido consultada la siguiente norma europea
EN 292 parte 1 y parte 2.

Si dichiara in oltre di avere apposto la marcatura CE e di aver corredato l'attrezzatura di manuale d'uso e manutenzione. - Zudem wird
erklärt, dass die CE-Kennzeichnung angebracht und das Gerät mit einer Gebrauchs-und Wartungsanleitung ausgestattet wurde. - It is
further declared that the EC mark has been attached to the equipment and a manual of use and maintenance has been provided for the
same. - Nous déclarons aussi avoir apposé le marquage CE et avoir muni l'équipement du manuel d'utilisation et d'entretien. - Se declara
además que se ha fijado la marca CE y que se ha acompañado el equipo con el manual de uso y mantenimiento.

GARANZIA: la nostra Società non si assume, salvo eventuali pattuizioni, alcuna responsabilità circa le applicazioni e comunque, operazioni a cui verrà sottoposto il materiale fornito, presso il compratore o chi per esso.

La garanzia ha durata di 12 mesi dalla data di consegna. La nostra Società si impegna a sostituire gratuitamente, franco nostro stabilimento, qualsiasi materiale ritornatoci per difetti di qualità e/o di fabbricazione.

Restano escluse dalla garanzia le parti soggette ad usura.

GUARANTEE: our company does not accept any responsibility, except in cases of agreement, regarding the applications or operations to which the materials supplied by us are subject by the buyer or on his behalf.

The guarantee is valid for 12 months from the time of delivery. Our company undertakes to replace free, ex works at our address, any materials returned to us for defects in quality or manufacturing.

Parts subject to wear and tear are excluded from the guarantee.

The guarantee does not apply if the parts in question have been tampered with in any way.

GARANTIE: Unser Unternehmen übernimmt, falls nicht anders vereinbart, keinerlei Haftung für die Anwendung und für Arbeiten, denen das gelieferte Material beim Käufer oder andernorts unterzogen wird.

Die Garantie gilt für 12 Monate ab Lieferdatum. Unser Unternehmen verpflichtet sich, kostenlos, frei ab Werk, an uns zurückgesandtes Material zu ersetzen, das Qualitätsmängel und/oder Fabrikationsfehler aufweist. Von der Garantie ausgeschlossen bleiben die Verschleiß unterliegenden Teile. Die Garantie ist ungültig, wenn mit den beanstandeten Teilen, in welcher Weise auch immer, unsachgemäß umgegangen wurde.

GARANTIE: ons bedrijf neemt, tenzij anders overeengekomen is, geen enkele verantwoordelijkheid op zich betreffende de toepassingen en, in ieder geval, handelingen waaraan het geleverde materiaal blootgesteld zal worden, bij de koper of degene die namens de koper handelt. De garantie is 12 maanden geldig vanaf de leveringsdatum. Ons bedrijf zal gratis het materiaal vervangen dat fabrieks- of kwaliteitsfouten heeft. Franco onze fabriek. Deze garantie is niet geldig voor onderdelen die aan slijtage onderhevig zijn.

ESCLUSIONI:

Sono esclusi dalla garanzia i guasti dovuti a:

- 1 utilizzi non previsti dal fabbricante;
- 2 non osservanza di quanto indicato nel presente manuale;
- 3 collegamento ad impianti tecnici non conformi con la normativa tecnica e legislativa vigente;
- 4 scarsa preparazione tecnica del personale (trascuratezza, negligenza, falsa manovra);
- 5 utilizzo di ricambi, lubrificanti o altri prodotti non consigliati dal Costruttore o non specificatamente menzionati nel presente manuale;
- 6 parti soggette ad usura
- 7 normale usura e deterioramento dovuti all'uso della macchina.

Sarà cura della **NEGRINI s.r.l.** accertare le buone ragioni del Cliente e sostituire le parti riconosciute difettose.

EXCLUSIONS:

Faults due to the following are excluded from the guarantee:

- 1 uses not foreseen by the manufacturer;
- 2 failure to respect what is indicated in this manual;
- 3 connection to technical systems not in compliance with technical regulations and legislations in force;
- 4 poor technical training of personnel (carelessness, negligence, false movement);
- 5 use of spare parts, lubricants or other products not recommended by the Manufacturer or not specifically mentioned in this manual;
- 6 parts subject to wear and tear;
- 7 normal wear and deterioration due to the use of the machine.

NEGRINI s.r.l. shall assess the information provided by the Customer and shall replace the parts it recognises as faulty.