



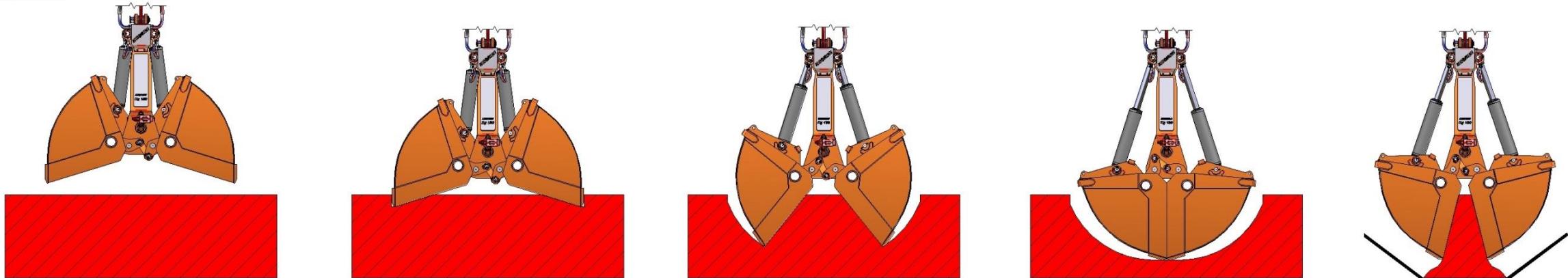
**NEGRINI**  
since 1967 S.R.L.

**Environmental Hydraulic clamshell bucket**

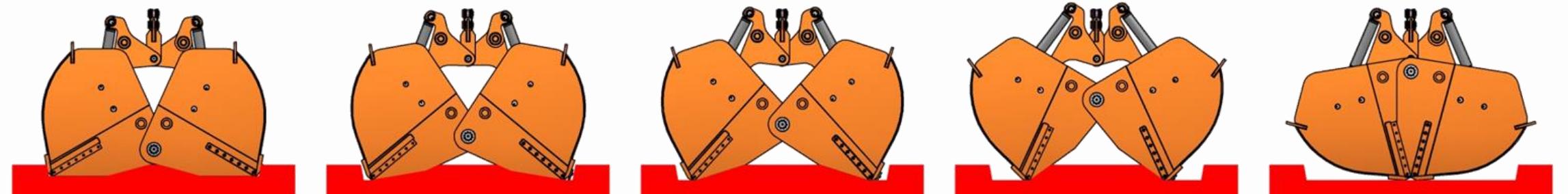
Equipment for handling sludge, muddy pollutants, etc. and suitable for underwater excavation in difficult contexts like quarries, rivers, seafronts, etc. Operation is driven by extra large hydraulic pistons. Environmental dredging is essential to evenly eliminate contaminating sediments.

The equipment leaves a large rectangular imprint to the required depth, without creating concave excavations and an uneven surface, as happens with traditional clamshell buckets. Each extraction is aligned with the previous one to ensure complete removal of sediments and improved excavation precision.

Traditional Cut (concave)



Linear Cutting (plane)

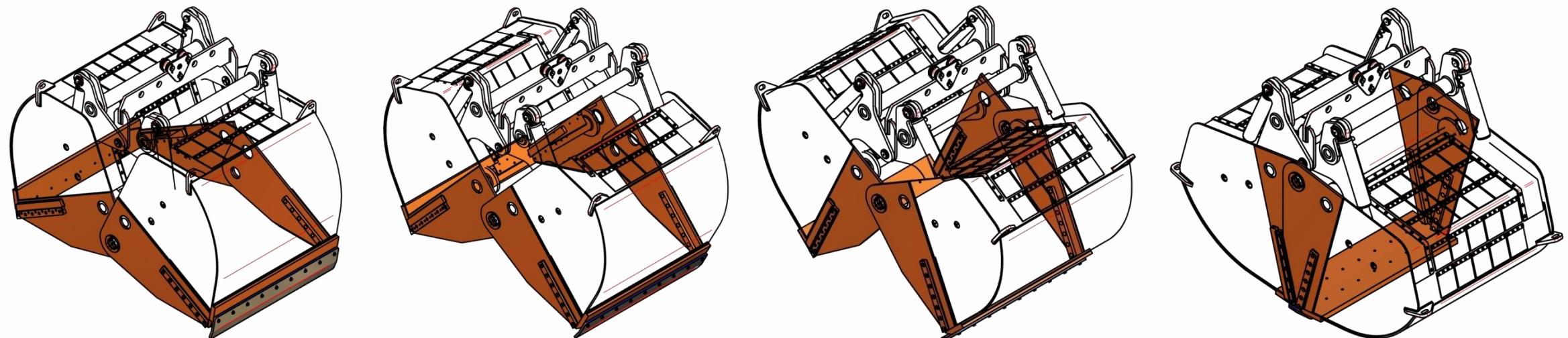


## CLOSURE SYSTEM

The equipment is fitted with a piloted V.R.D. hydraulic non-return valve to block the flow of hydraulic fluid, recommended for digging and handling work and fully compatible with Liebherr hydraulic systems. The V.R.D. hydraulic valve prevents the shells from opening even if the crane's hydraulic circuit is damaged. This valve, combined with the special shape of the containment clamshell, ensures maximum safety, all with total respect for the environment. This type of hydraulic digger has the characteristic of almost completely eliminating dispersion of pollutants, and this is why it is defined as "ECOLOGICAL".

## SIDEWALL OVERLAP

During closure materials tend to escape at the sides in a phenomenon known as “windrowing”. The special shape of the blades limit windrowing, preventing the dispersion of materials.



## VENTING SYSTEM

Each shell element of the bucket has a passive venting system. The vent system serves 3 purposes:

### Reduced suspension.

When the bucket is descending the vents open, permitting water to flow through the clamshell. This reduces buoyancy and limits water turbulence, reducing the suspension and movement of the materials.

### Draining out of materials

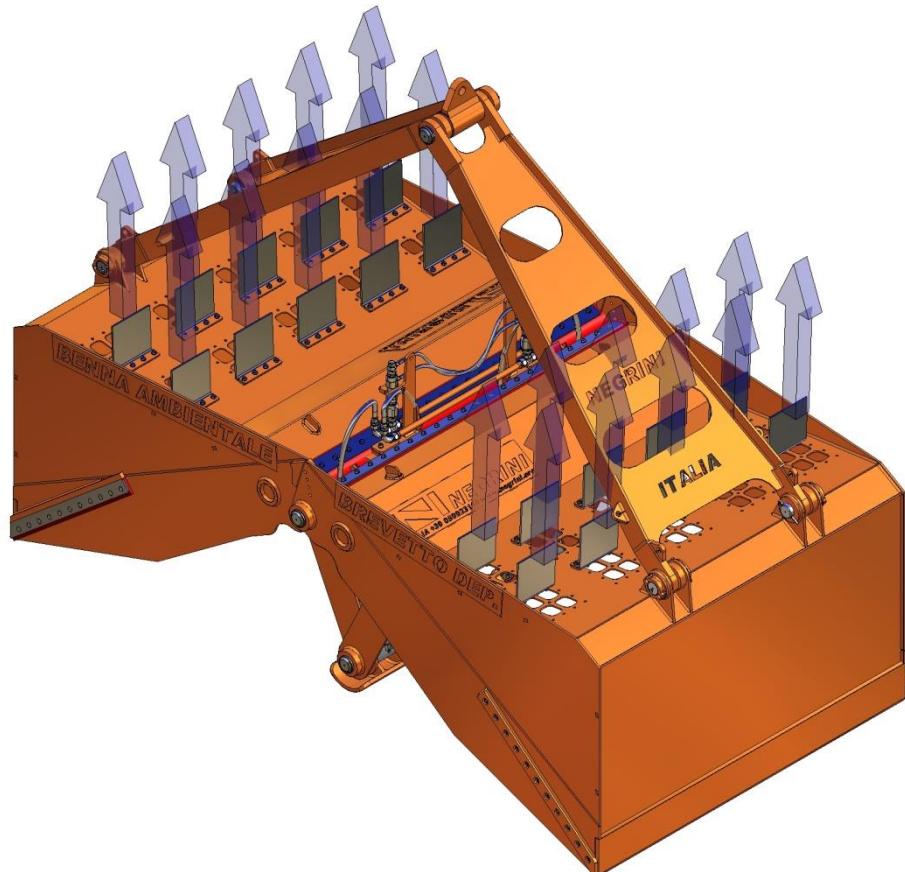
When raising the vents close automatically, avoiding the drainage and escape of the materials

### Excess water drainage

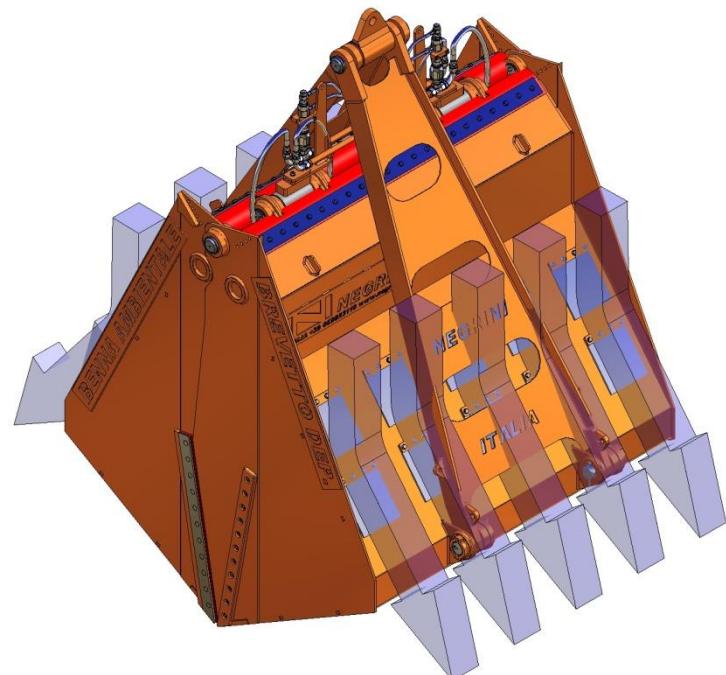
When the clamshell reaches the surface, excess water is drained through the venting system to avoid it being brought on board.

In order to prevent the materials being spilled from the sides of the clamshell, the lateral blades are specially profiled, opening initially at the lower section and then gradually proceeding towards the upper section. Robust rubber seals also help ensure better retention of materials.

When DESCENDING the vents open



When RISING the vents close



















**DICHIARAZIONE DI CONFORMITA'**  
**DECLARATION OF CONFORMITY**  
**KONFORMITÄTSERLÄRUNG****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 inoltre 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.