

In full Flow with Glass -

Racing forward

with further innovations!

OPTICAL APPEARANCE?

TEMPERATURE DISTRIBUTION UNDER CONTROL?

HEAVY PRODUCTS BASED ON LARGE GLASS MASS?

WALL THICKNESS VARIATIONS?

WEIGHT LIMITATIONS FOR THE SETTLE WAVE?

INCREASED PRODUCTION SPEED

SAVING ENERGY AND RAW MATERIALS

DESIGNER BOTTLES

THIN-WALLED AND LIGHT WEIGHT PRODUCTS

CONSISTENT GLASS DISTRIBUTION



PROCESS STABILISATION ON THE BLANK MOULD SIDE

As a glass man you are surely familiar with the challenges the industry is facing. It is necessary to focus on factors influencing the products quality and think about different approaches.

With re-development and specific enhancements of varying mechanisms and components, it is possible to ensure the stabilisation and consistent production process on the blank mould side.

Using this philosophy, innovative solutions are created, improving container glass production. Therefore modern production engineering is used, for example 3D metal printing.

From gob forming to transportation, repeatable gob loading and a consistent heat distribution within the mould, as well as constant unchanging production conditions and avoidance of negative influences in the quality of production. Glass in flow.



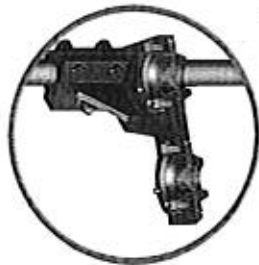
Shear with integrated Spraying System

Optimized knife edge cooling, improved gob quality, consistent cool down of the orifice ring, reduced cleaning, reduced coolant consumption, reduced friction



Camera System & Smart Control System

Consistent production conditions, central gob drop, improved gob offset time, work safety control and process relevant parameters, constant temperature monitoring of the piston avoids critical errors.



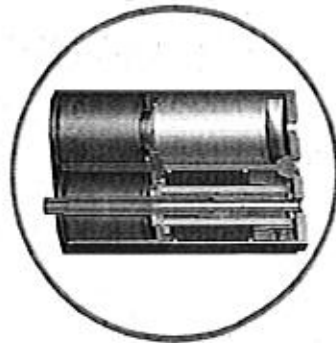
Automatic Blank Mould Lubrication System (indirect)

Repeatable gob loading and gob position, reduced lubricant consumption, less machine contamination, reduction of hazardous fumes, and improved work safety, no production downtime, less manhours



3D Mould Tools

Edge cooling enables uniform cooling, without hot-spots, and fewer errors, more article weight possibility, energy saving, specialised glass shape possibility, weight reduction by structure parts design



Hybrid Plunger Mechanism

Servo technology+ centered measurement and controlling element system for Smart Control, standard plugin



HMI and Learning System Usability and User Experience



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QUERUM
smart engineering

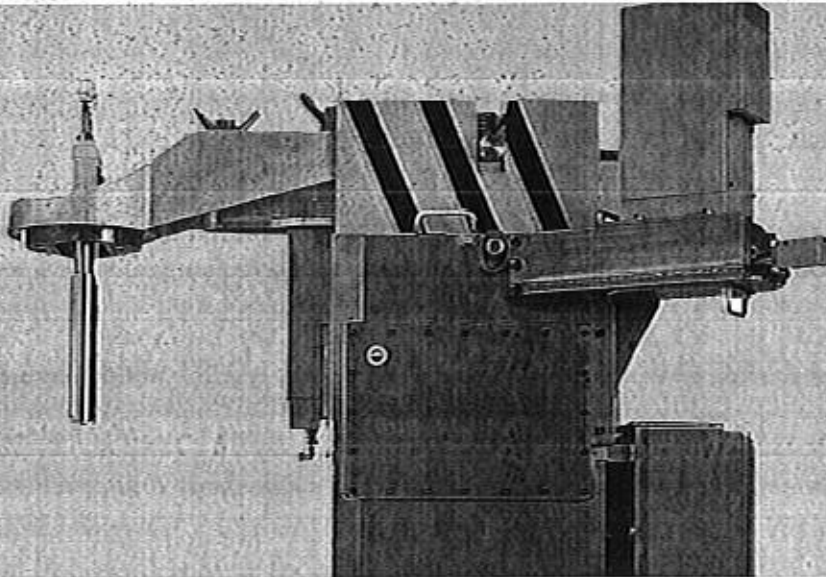
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SERVO FEEDER



EASY TO OPERATE – UNCOMPLICATED – COMPACT – PRECISE

These are the essential qualities of the new Servo Feeder that now makes production of the glass product more effective. The extensive properties, small, compact construction make the new Servo Feeder much more efficient and therefore more cost effective than the conventional feeder.

SERVO FEEDER

The new Servo Feeder provides:

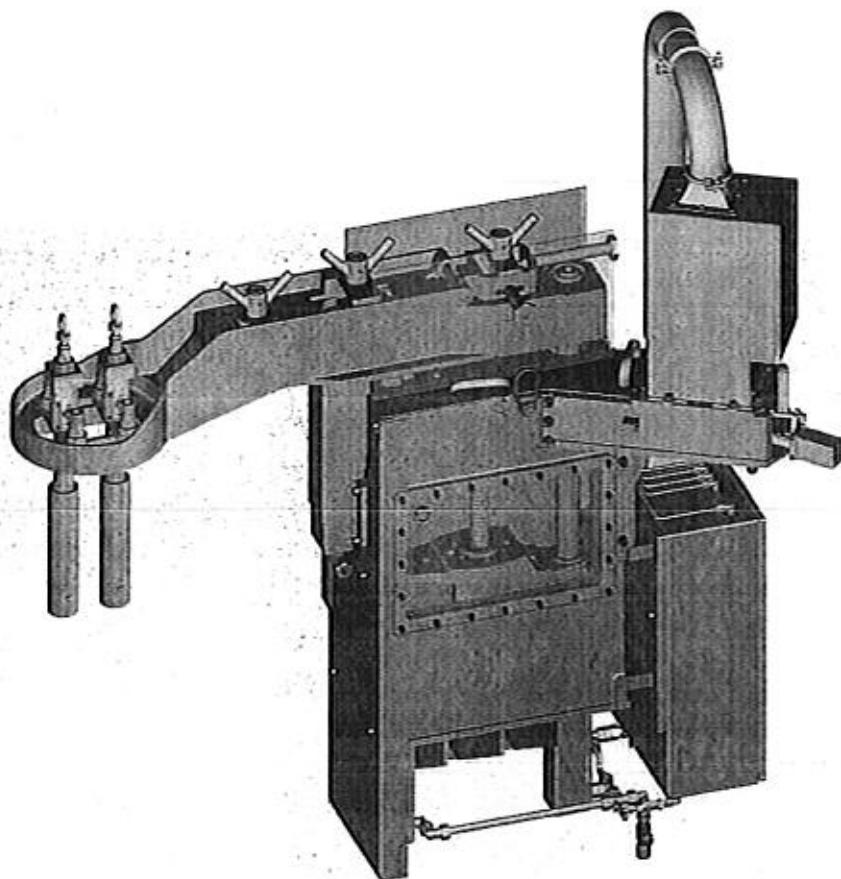
- Latest servo motor technology
- Integrated sensor analysis
- Very compact design/construction
- Considerably less wear on parts
- User friendly touchscreen instructions

Our Servo Feeder offers ...

- absolute precise reproducibility,
- constant plunger movement even at high cut speeds,
- greatly reduced machine downtime
- and considerably less abrasion/friction.

The GPS Servo Feeder can be ...

- installed on all equalizing sections and front plates,
- used with existing variables (e.g. plunger carrier),
- and used for single to quadruple gob operation.



CONSTANT QUALITY

Due to the mechanical components being servo motor driven, quality of the gob form and weight is guaranteed.

LESS EXPENSIVE

- Fewer parts – approximately a quarter of a conventional feeder without shears
- Fewer spare parts in stock required
- Smaller and more compact
- Lower maintenance costs
- Less wear and tear

INDIVIDUALLY ADAPTABLE

Qualified operation and easy handling of the Servo Feeder is possible even after brief instruction. The electronic control offers individual adaptation in every production situation.

UNIVERSALLY COMBINABLE

The Servo Feeder can be universally implemented – regardless of production tonnage or article program. Conversion time for article change or increase in cuts is no longer necessary.

ADVANTAGES IN COMPARISON WITH THE CONVENTIONAL FEEDER

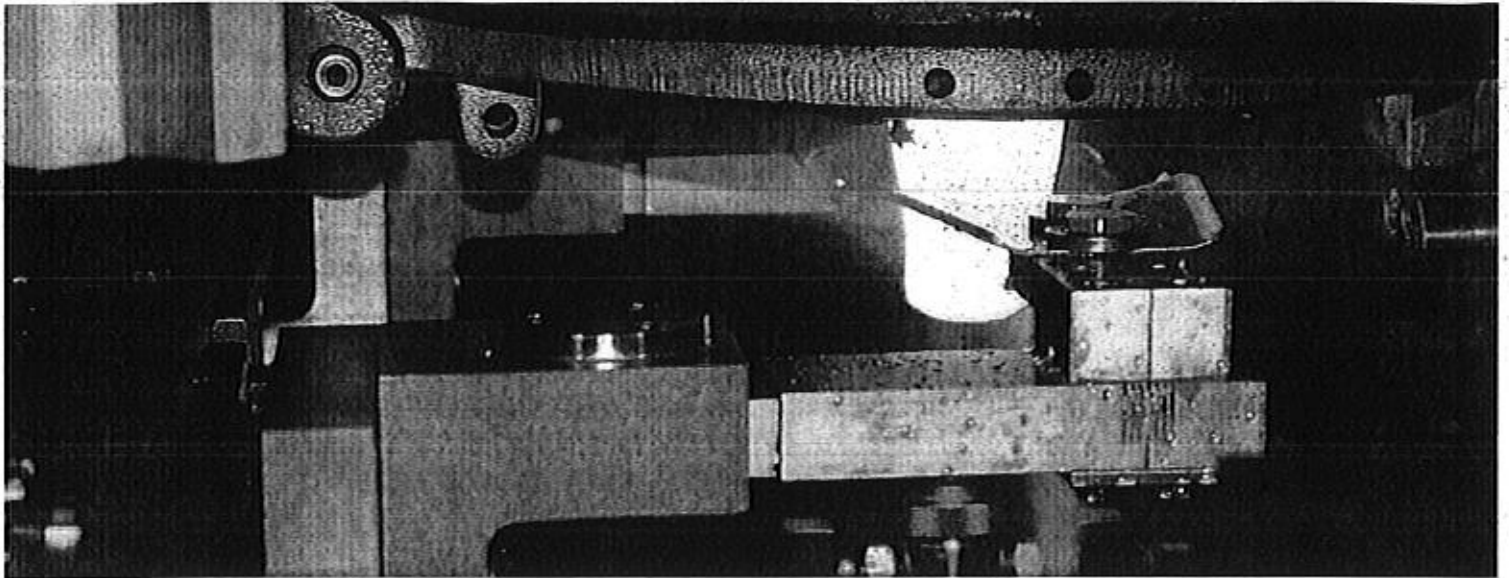
- Substantially easier to operate due to more and effective electronic adjustment possibilities on the touch screen
- All mechanical cams can be simulated via the electronic design of these cams
- Enhanced consistency
- Less glass contact ensuring less wear of the shears and improved productivity



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PARALLELSCHERE 83-3 PARALLEL SHEAR 83-3



PARALLELSCHERE MIT FOCUS AUF ERGONOMIE, SICHERHEIT UND PRODUKTQUALITÄT

- 5" Scherenhub bei 250 Schnitten/Minute, verringerte Besprühung des Tropfens bei 5" Hub; 3" Scherenhub bei 280 Schnitten/Minute
- Max. 6" möglich
- Minimale Glaskontaktzeiten ermöglichen max. Messerstandzeiten
- Kompaktere und leichtere Bauweise (ca. 200 kg)
- Direkt angetriebene, extra verstärkte und geführte Messerarme
- Jeweils eine Servo-Lineareinheit pro Scherenarm. Servo-Lineareinheit wie beim Tropfenverteiler und Feeder Plunger Mechanismus
- Optimierte Ersatzteilkosten durch Standardisierung
- TROPFENFÜHRUNG NICHT NÖTIG
- Ausschwenken ganzer Schere aus Glas erfolgt ohne Berührung
- Neue, hochqualitative Messerhalter und Tropfenführung mit maximalen Standzeiten erhältlich
- Verschiedene Motorkurven pro Scherenarm ermöglichen optimale Schnitte und Ladungen
- Ganze Linear-/Führungseinheiten pro Messerarme gegeneinander positionierbar, um Messerdruck einzustellen
- Alle gängigen Scherenbesprühungssysteme möglich

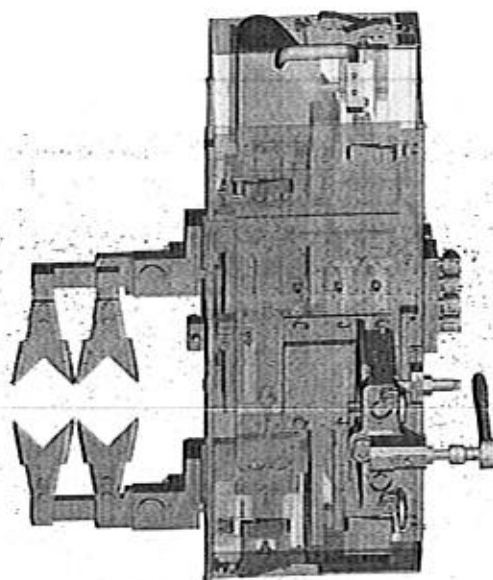
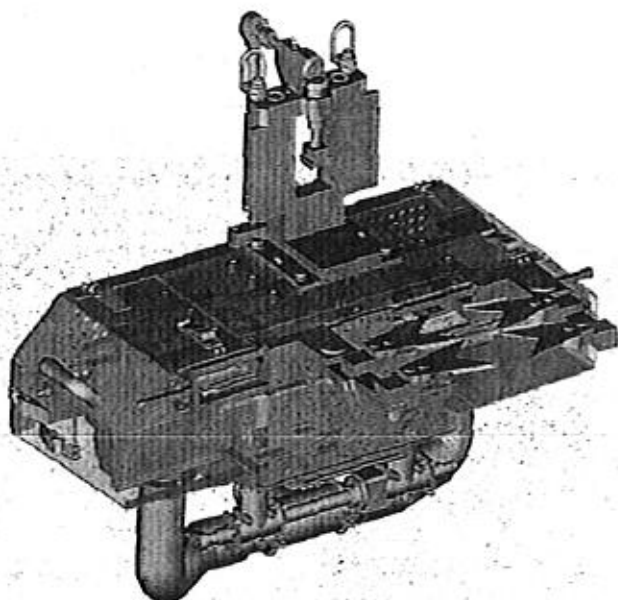
PARALLEL SHEAR WITH EMPHASIS ON ERGONOMICS, SAFETY AND PRODUCTION QUALITY

- 5" shear range at 250 cuts/minute reduced gob spraying at 5" range; 3" shear range at 280 cuts/minute
- Up to 6" possible
- Minimum glass contact ensures maximum service life of blades
- More compact and lightweight construction (approximately 200 kg)
- Direct drive, specially reinforced and guided blade arms
- One servo linear unit per shear arm. Servo linear unit identical to that of the gob distributor and the feeder plunger mechanism
- Reduced spare part costs
- GOB GUIDE NOT REQUIRED
- Swing out mechanism without glass contact
- Newly combined high quality blade holders and gob guide with maximum service life available
- Various motor curves per shear arm enables optimal cuts and loads
- Entire linear guide units can be positioned against each other for each blade arm in order to adjust the blade pressure
- Use of all standard shear mechanism spraying systems possible

motori Pinezzi



DESIGNED FOR THE WORLD
Made in Germany



ALLGEMEINE MERKMALE

- Schere 83-3 ausgelegt für SG-, DG- und TG-Anwendungen
- Kompatibel zu allen gängigen Feeder-Typen
- Schnitt nahe am Tropfenring, Messerdruck und Schnittpunkt einstellbar
- Auslegung, Kühlung und Schmierung unterstützen minimalen Verschleiß und maximale Standzeiten
- Integriert oder als Stand-Alone Steuerung
- Optimierte für Multiweight Produktion

GENERAL FEATURES

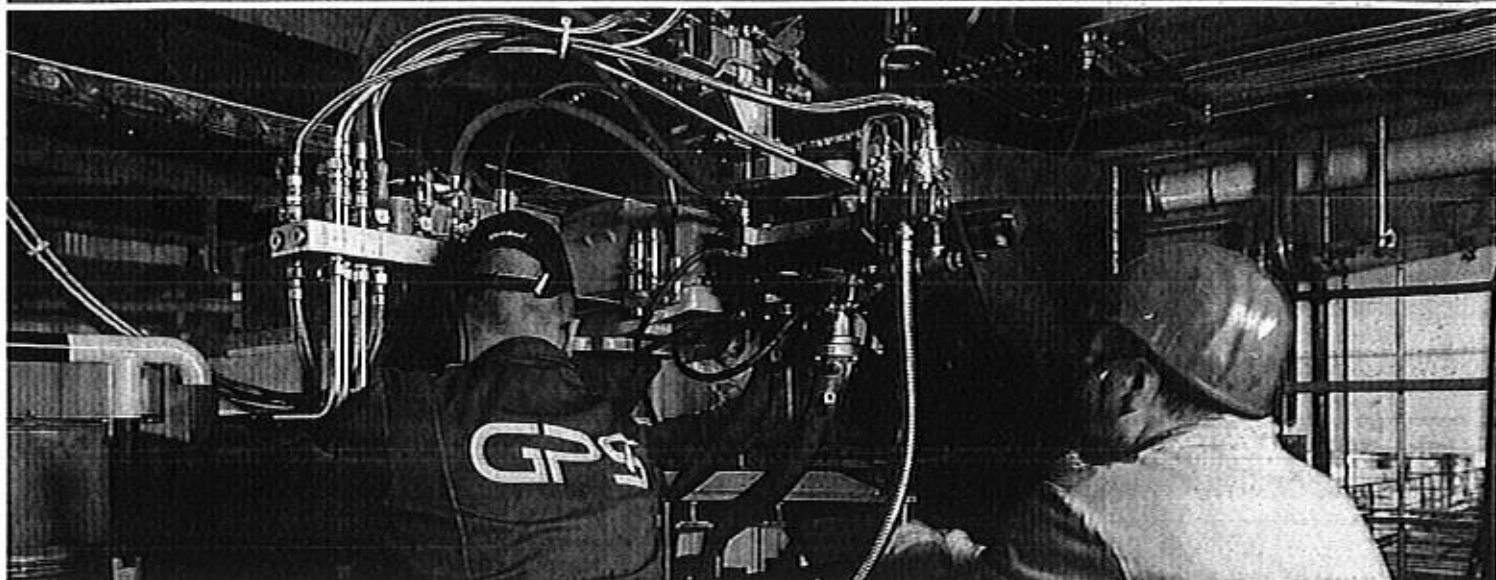
- *Shear Mech 83-3 designed for SG, DG and TG applications*
- *Compatible with all standard feeder types*
- *Cut near the gob ring, adjustable blade pressure and cut point*
- *Construction, cooling and lubrication supports minimal wear and maximum service life*
- *integrated or as stand alone control unit*
- *Optimised for multiweight production*



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TROPFENVERTEILER 71-4 GOB DISTRIBUTOR 71-4



TROPFENVERTEILER MIT FOKUS AUF SICHERHEIT, LANGER STANDZEIT UND KOSTENMINIMIERUNG

- » Gewichtsparnis
- » Direktangetrieben
- » Kompatibel
- » Kompakt

- Maximal 280 Schnitte/Minute
- Antrieb direkt mit Servo-Lineareinheit, wie bei Schere 83-3 und neuem Feeder Plunger Mechanismus
- Optimierte Ersatzteilkosten durch Standardisierung
- Kompakte Bauweise: Ausschwenkzylinder näher am Tropfenverteiler
- Gewicht ca. 190 kg
- Dank neuem Führungssystem, optimales Einstellen und Justieren von Antrieb zu Tropfenverteiler-Vorderteil
- Trichter bis max. 65 mm möglich, auch mit Luftunterstützung
- Verschleißoptimiert

GOB DISTRIBUTOR WITH AN EMPHASIS ON SAFETY, LONG SERVICE LIFE AND COST REDUCTION

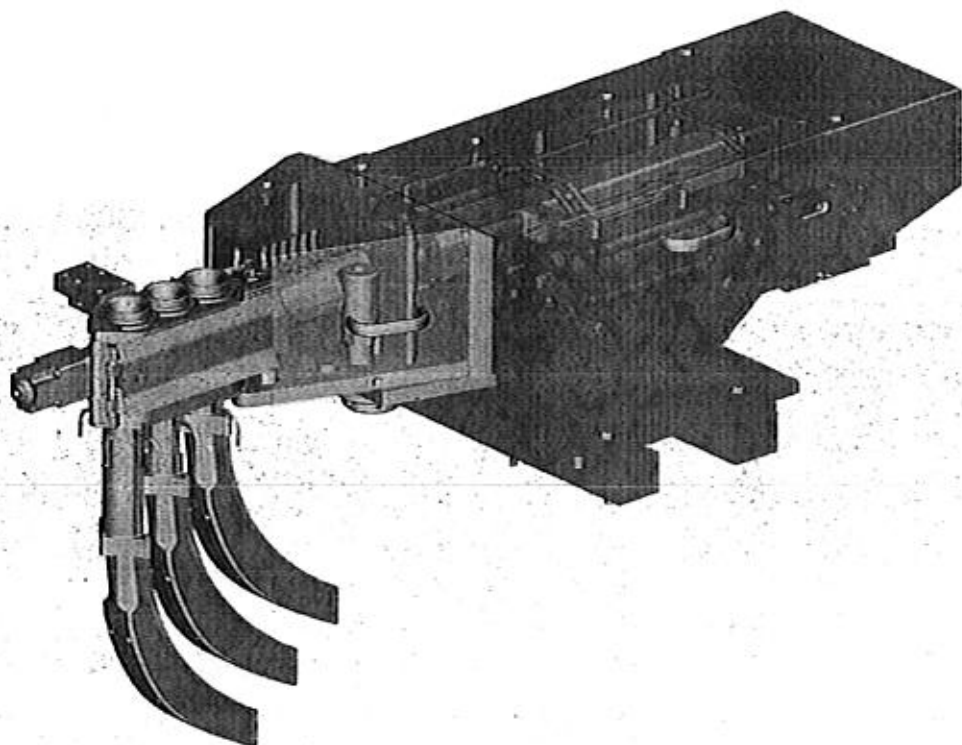
- » Lighter
- » Direct drive
- » Compatible
- » Compact

- Maximum 280 cuts/minute
- Direct drive with servo linear unit identical to Shear 83-3 and new feeder plunger mechanism
- Reduced spare part costs through standardisation
- Compact design: pivoting cylinder closer to gob distributor
- Approximate weight 190 kg
- New guide system gives optimal adjustment of drive to front of gob distributor
- Funnel up to 65 mm possible including air support
- Friction optimised

motori lineari



DESIGNED FOR THE WORLD
Made in Germany



ALLGEMEINE MERKMÄLE

- Ausgelegt für SG-, DG- und TG-Anwendungen
- Adaptiert auf den verschiedensten IS-Typen aller Hersteller
- Betrieb möglich mit allen gängigen Besprühungen
- Aufnahme aller gängigen und Special-Scoops und Spacer möglich
- Integriert oder als Stand-Alone Steuerung

Der Servo-Tropfenverteiler verteilt die vom Speiser kommenden Glastropfen mittels neuer Servo-Lineareinheit an die jeweiligen Troughs einer Stations der IS-Maschine. Diese lineare Bewegung wird an das Tropfenverteiler-Vorderteil weitergegeben, welches mittels höchpräziser Zahnstangen eine Drehbewegung und eine genaue Position des Scoops (obere Rinne) zu den Troughs einer Station ermöglicht.

Die Steuerung des Servo-Tropfenverters dient dazu, die Scoops exakt zu positionieren, damit die Tropfen individuell und nach gewünschter Tropfenfolge dem Rinnensystem zugeführt werden.

Dabei kann die Position jeder Station individuell und ohne mechanische Korrektur der Rinnen programmiert werden.

GENERAL FEATURES

- Designed for SG, DG and TG
- Adaptable to most IS types from of all manufacturers
- Possible to operate with all standard sprayers
- Accepts all standard special scoops and spacers
- Integrated or stand alone

The servo gob distributor distributes the gobs supplied by the feeder to the relevant troughs of each section of the IS machine via the new servo linear unit. Linear motion is transmitted to the front of the gob distributor enabling rotary movement of the exact positioning of the scoop relative to the troughs of a section via high-precision gear rack.

The control unit of the servo gob distributor controls the exact positioning of the scoops in order to feed the gobs to the delivery system individually and in the required order.

The position of each section can be individually programmed without mechanical correction to the delivery system.



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