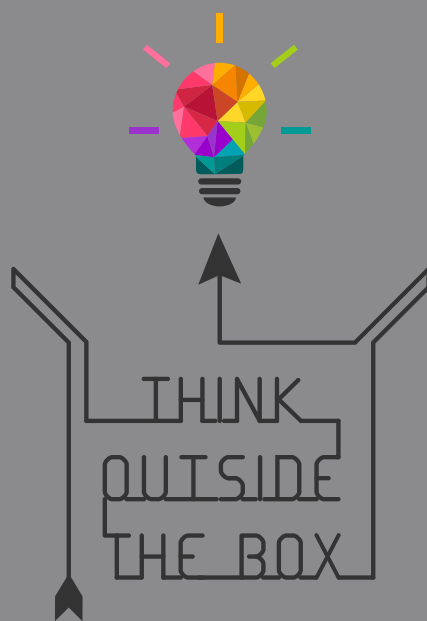




BISO 2D VARIO



 **BISO**
ERNTETECHNIK


immer einen Schritt voraus!

BISO ALWAYS ONE STEP AHEAD



For the modern farmer the most important thing is to harvest all crops efficiently and as fast as possible without losses. To achieve these goals we have focused our development around the following specific points:

- > **Weight optimization while increasing stability for cutting widths up to 18,5 m**
- > **Absolute continuous material flow to the threshing elements of the combine**
- > **Harvesting of different crops without setup times**
- > **Minimizing losses on the cutting table**
- > **Precise cutting of the crop to the desired height**
- > **Efficient and safe transport of the machines both on the road and in the field**
- > **Incomparable life time**

The development of BISO harvesting machines is comparable to tuning a car. The combine manufacturers supply the solid base model - We make it into a winning "racing machine", which fulfils specific customer requirements perfectly.

If we have aroused your interest, we look forward to your call or e-mail.

Your
BISO Team

VX CROP RANGER



2001

ULTRALIGHT 800



2009

3D VARIOFLEX•AIR•i



2019

CONTENTS

04

BISO 2D VARIO HEADER RANGES

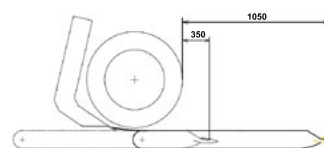
BISO 2D VARIO 770
BISO 2D VARIO 920
BISO 2D VARIO 1070
BISO 2D VARIO 1230
BISO 2D VARIO 1560



06

BISO VARIO CUTTER BAR

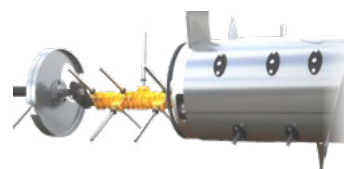
THE UNIQUE VARIO HEADER CONCEPT



07

POWERFULL AUGER

THE UNIQUE, INTELLIGENT REEL - CUTTER BAR
COLLISION CONTROL



10

GROUND BREAKING HYBRID LIGHTWEIGHT TECHNOLOGY

BISO HYBRID FRAME
VARIO
AUGER



12

OPTIONAL HIGHLIGHTS

RAPE SEED EQUIPMENT

15

ONE HEADER FOR ALL CROPS

17

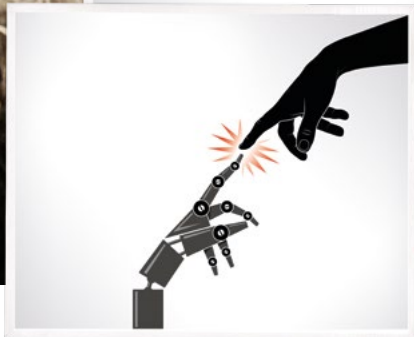
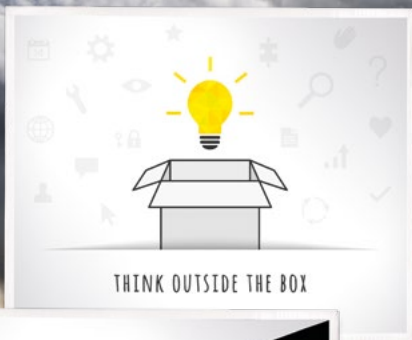
TECHNOLOGICAL HIGHLIGHTS AT A GLANCE

18

HEADER TRAILERS

- > PROFI
- > PROFI STEER





THE MODULAR BISO 2D VARIO HEADER RANGE

EFFICIENT, STRESS-FREE HARVESTING STARTS
WITH A PREMIUM VARIO HEADER.

The modular BISO 2D header range – built for your demands.

2D VARIO

- > Maintenance free 700 mm variable cutter bar & floor
- > Variable, cutter bar with header frame angle adjustment

The following models are available for your choice

- > 2D VARIO 770
- > 2D VARIO 920
- > 2D VARIO 1070
- > 2D VARIO 1230
- > 2D VARIO 1560





POWERFUL AUGER

INTEGRATED
WRAP PROTECTION
FOR REEL

FUNCTIONAL
SPLASH GUARD

REEL TINE ATTACHMENT
BRACKET

ELECTRICAL REEL TINE
ADJUSTMENT

PERFECT REEL
FOR FLAT CROPS

BISO OR SCHUMACHER KNIFE

700 MM CONTINUOUS
CUTTERBAR ADJUSTMENT
STAINLESS STEEL

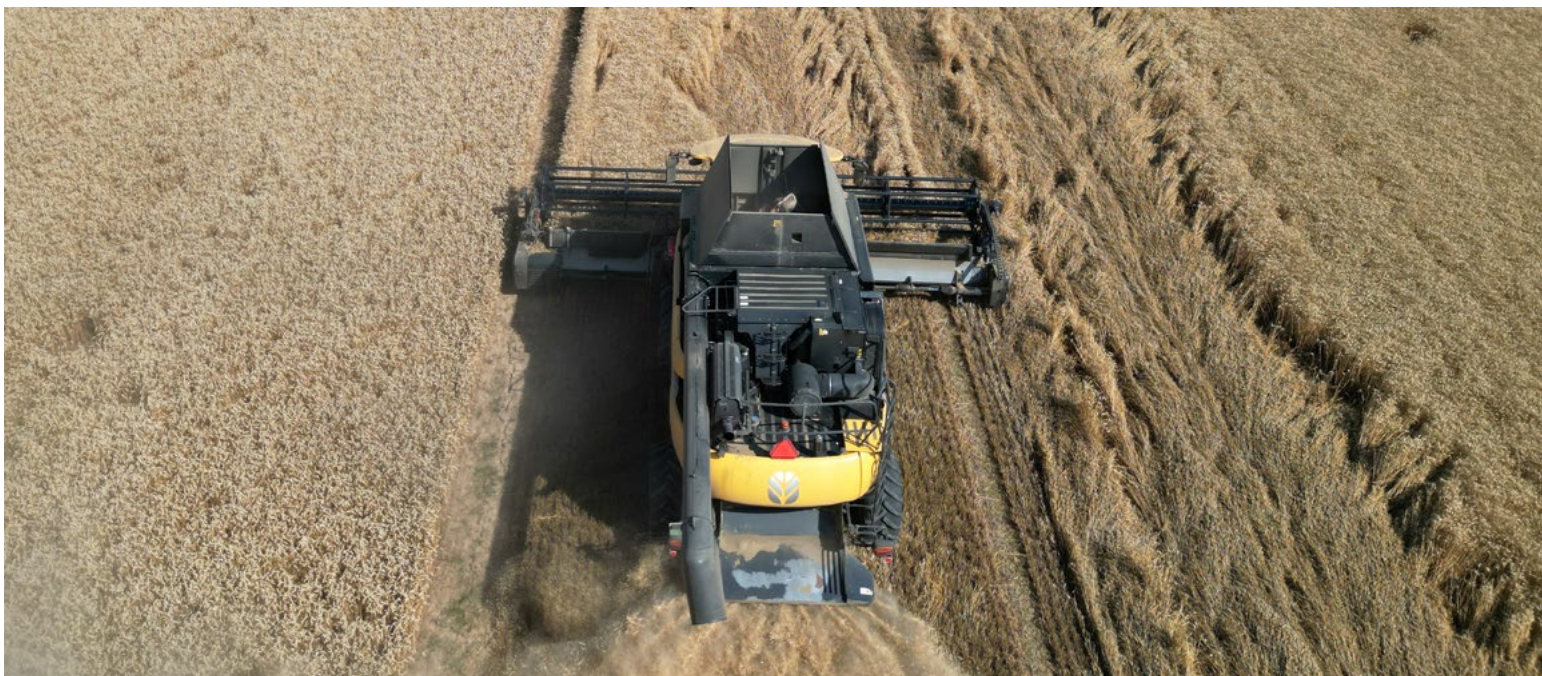
TOOLBOX

FOLDABLE SIDE KNIVES

OIL TANK
HYDRAULIC TANK
WATER TANK
LUBRICATION TANK FOR CHAINS

HYDRAULIC ANGLE
ADJUSTMENT

HYBRID LIGHTWEIGHT
FRAME 5,7M-18,5M



> UNIQUE THE BISO 2D VARIO CUTTER BAR

2D VARIO – THE UNIQUE VARIO HEADER CONCEPT

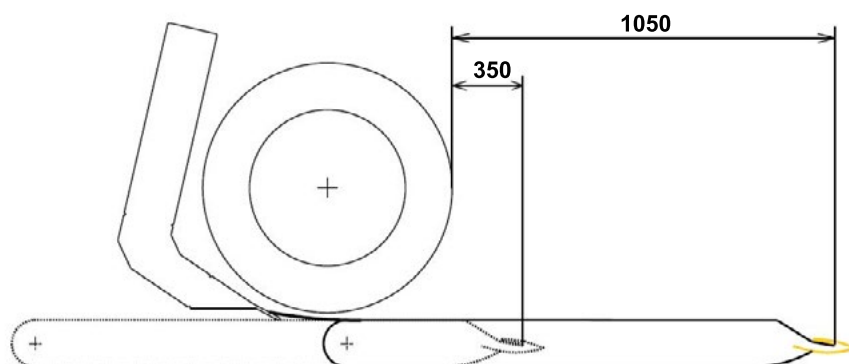
- > PROVEN
- > ROBUST
- > RELIABLE

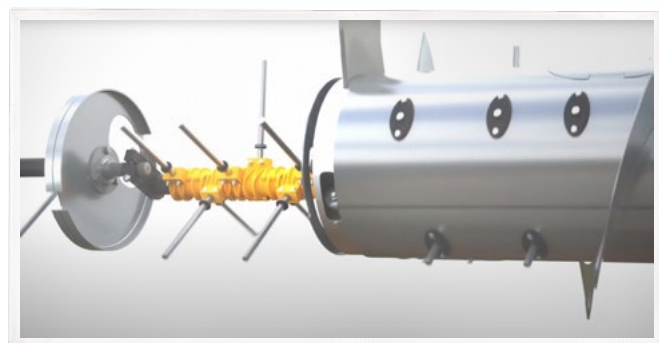
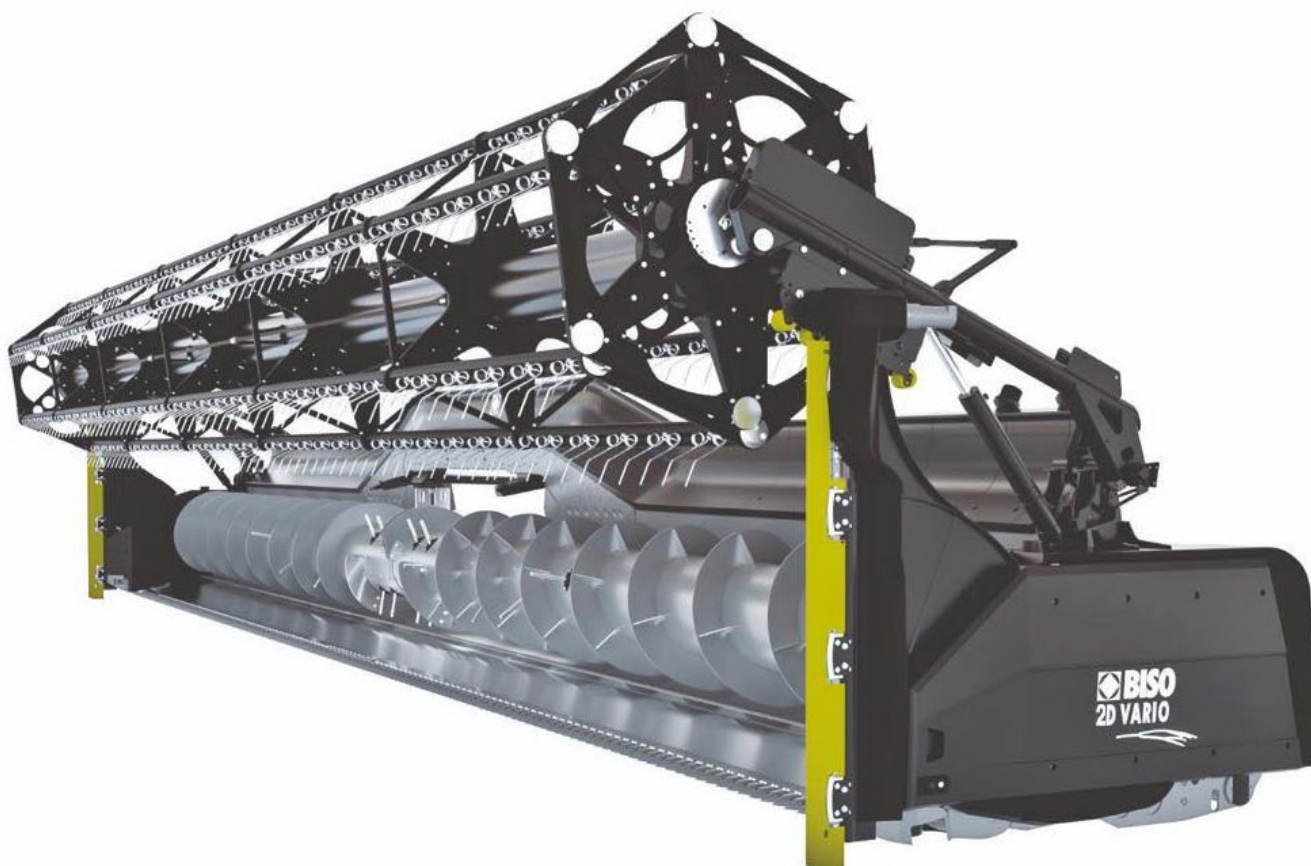
The **vario system** – a **successfully proved, maintenance-free system** for the **varied harvesting tasks** (different cereals and harvesting conditions as well as for different soil conditions).

To enable problem-free harvesting of short crops, the distance between the **auger and the knife** has been reduced to 180 mm.

Due to the **700 mm stepless** adjustable cutter bar crop flow into the BISO 2D is constantly transported **“head-first”** to the intake auger with very little use of the reel.

This uniform feeding increases the total output of the combine. When completely retracted the cutter bar is only 180 mm away from the intake auger, which results in huge advantages when harvesting a short crop, an unique selling point of the 2D header.





> POWERFULL AUGER

Why auger? It's the same like with vario table:

- > **PROVEN**
- > **ROBUST**
- > **RELIABLE**
- > **... AND VERY POWERFULL**

Auger is the perfect solution for European more wet regions. Very universal solution for small bales of green rapeseed. BISO developed a auger design with central console and drive from both sides up to 18m.

As an option, you can order stainless auger. On models 2D1230+ it is standard feature. The main advantage is the bigger strength and, of course, the lower friction and longer lifetime. On the 2D model line, the safety clutch is integrated in auger drive – a friction plate type.

The auger has the fingers in whole and a standard system of height adjustment in the sidewalls and in central console. Specific for BISO is the use of an openable plastic bearing of the auger fingers. Based on that, it is very easy to exchange the finger in the field including the bearing if it is damaged.

There is no need to remove the finger shaft. The auger has two rows of stripping blades. In the central area of the auger, you can fit one pair of removable auger wings in case of dry season and a very small volume of harvested material (the material flow is managed more in the center).

BISO VARIOSYSTEM SUPPLEMENTED BY THE ANGLE ADJUSTMENT

Vario and angle adjustment of the header during the drive is a typical feature for BISO headers. For many people, the BISO header comes in hand with the vario table and this point of view is correct. BISO is handling the key patent for the VARIO design and thanks to this our headers have the vario table under a vertical frame. The table moves back under the rear frame and thanks to this, the movement can be bigger (look at the schematics). Another important thing is that the hydraulic rams are fully covered and protected. The VARIO system is simple, maintenance is free and after 20 years we can say that this is a technology which is requested as a standard from European customers.

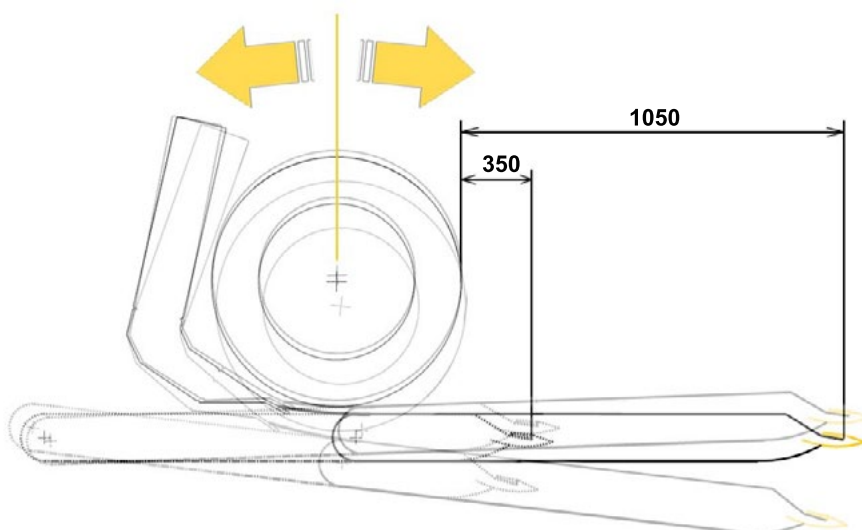
How angle adjustment works? Look on schematics below. It's good to mention, that the angle adjustment is so perfect, that the drivers are able to harvest the flat crops very well. They even say "to shave clean" the flat crops area. Thanks to this, they don't use the crop lifters too much.

In rapeseed, the VARIO is in the front and the side knives in vertical position. The dividers are removed and stored on the ProfiTrailer. In the wheat or barley, in hard conditions with green weed and heavily changing conditions, many drivers systematically work with the VARIO table with a clear target: to achieve the fluent feeding of the combine with the harvested crop. The BISO 2D VARIO is a header which gives drivers the possibility of choice between more driving strategies when in hard conditions. If we simplify the information from many professional BISO drivers, we get two strategies in wheat and barley.

The first is to go back to the auger with the knife and based on the height of the stand, the driver adjusts the position of the knife. It's very easy to do. The crop has to go fluently into the combine and the reel is only supporting the stalks in the moment of cut. We can say that it is a "conservative" approach, well known from the standard headers with the only advantage of possibility to adjust the position of the knife very precisely. For some drivers it is VERY important to go back with the knife and very near to the auger if the barley is very small during dry years.

The second strategy is to move the VARIO table more to the front (80% in normal wheat) and let the stalks fall down on the stainless VARIO table with the "ears front". It is perfect when the ears fall just in front of the auger. The material flow is very fluent, the driver has better overview of what is going into the feeder house and some drivers say the trashing is easier if the ears go first into the combine.

One thing is sure. The VARIO table is not only for rapeseed. The VARIO table with the auger technology gives drivers the flexibility during the harvest. The VARIO table is able to follow the high performance combines and feed them fluently. This is the way how to achieve the high quality of harvest and get money home.





> PRECISE AND POWERFUL BISO REEL 2D VARIO

For perfect working, the reel as well as the reel tines **must work underneath and close to the cutter bar (to lift the laid crop)**.
In reality the headers follow the ground contour.
Due to this a **collision** between the **reel tines and the cutting knife** can occur and this can **damage** the header (reel tines are cut or bent or, at worst, damage occurs to the drive).

Due to the **BISO Reel Kinematics** this is **prevented** and

- > **close work to the cutter bar is enabled**
- > **proven reel tines** (made of spring steel) can be used



integrated hydraulic reel drive **in the main tube, smooth crop floor**



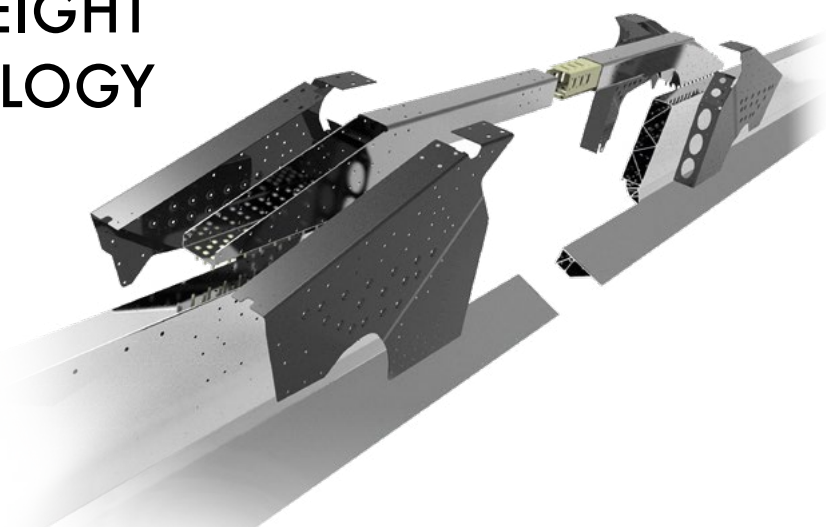
wrap protection – reels – quick change system



electric motor for reel tines angle adjustment



GROUND BRAKING HYBRID LIGHTWEIGHT TECHNOLOGY



THE BISO 2D HEADER RANGE OF 6,7–18,5 M

is the **"ultimate" feature for the professional** and sets new standards in harvesting technology.

It opens a new dimension in fast and loss-free harvesting in all soil- and crop conditions, and this is available for **cutting widths up to 18,5 m**. By using lightweight technologies from the airline- and car industries the **header frame** is made of **aluminium**, combined with **high strength steel and stainless steel**, which is the basis for this unique header range. In terms of torsion, bending stress and lifetime, the pure **steel construction reaches from 9 m to its limits**.

This unique combination of materials results in a **hybrid frame** that allows **weight reduction**, which is especially needed for large cutting widths whilst **increasing stability**. The hybrid frame also passed its endurance test easily, so future technologies used in the design process have also been confirmed in the laboratory.

These **high quality materials** are also used on the **moving parts** of the BISO 2D, the **intake auger** and the variable bed are made of stainless steel, achieving a **superior flow of material** into the combine.



> OPTIONAL HIGHLIGHTS

RAPE

BISO Vario headers are the only ones on the market where it is truly possible to **change from cereals to rape in less than five minutes**. Only the crop dividers have to be removed and put onto the bracket of the header trailer. The integrated side knives are folded up hydraulically and very easily – an absolute “highlight”. **Therefore lifting and mounting the side knives is now a thing of the past**. Something our competitors cannot match. Simply move the **cutter bar 700 mm forward** and you are able to start harvesting rape.



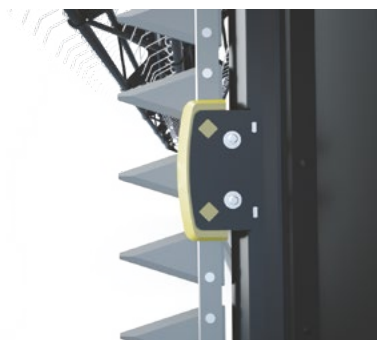
RAPE SEED HARVESTING POSITION



COMBINATION DIVIDER & SIDEKNIFE
PERFECT FOR MATTED CROPS



SIDE KNIFE IN PARKING POSITION



2-POINT SLIDING GUIDE



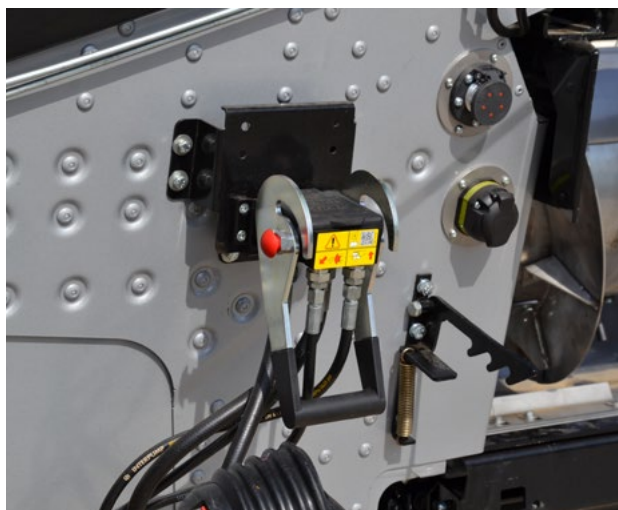
BISO 2D IN DETAILS



HARDOX HEADER FLOOR



STAINLESS AUGER AND VARIO TABLE



EASY TO CONNECT



HYBRID FRAME WITH ANGLE DJUSTMENT



KNIFE DRIVE FROM BOTH SIDES



CENTRAL CONSOLE OF THE AUGER



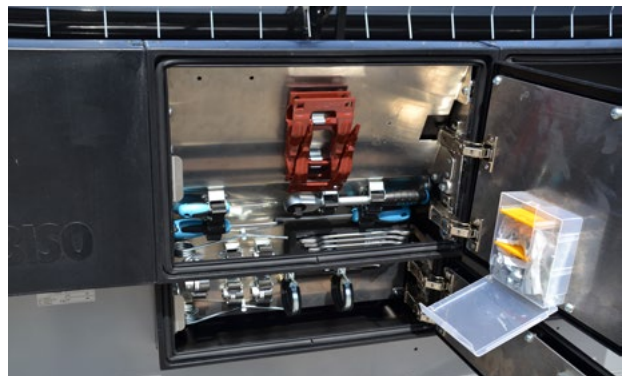
ELECTRO-HYDRAULIC VALVE BLOCK



AUGER DRIVE CHAIN



OIL AND WATER TANKS



TOOLBOX



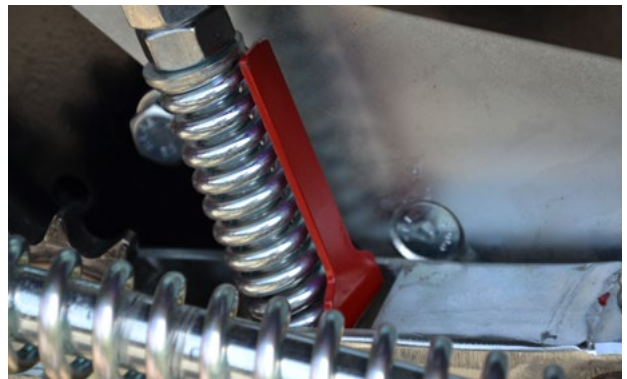
GEARBOX KNIFE BELT DRIVE



VARIO TABLE IN FRONT POSITION



NEW ADJUSTABLE ROLLERS ON VARIO TABLE



EASY ADJUSTMENT OF BELTS AND CHAINS



BASIC DIVIDER TYPE



KNIFE BAR READY FOR LIFTERS



> ONE HEADER FOR ALL CROPS

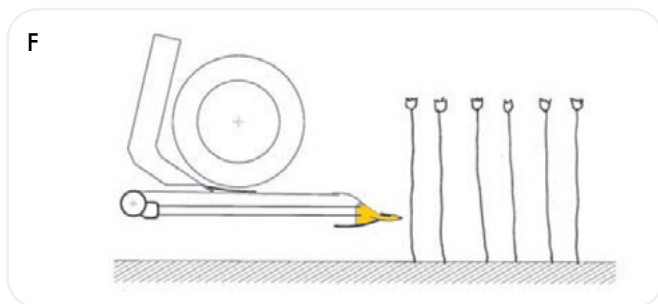
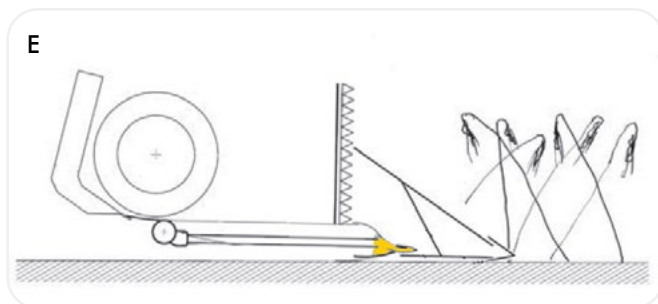
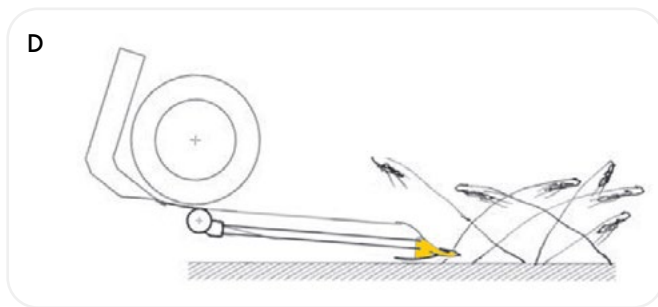
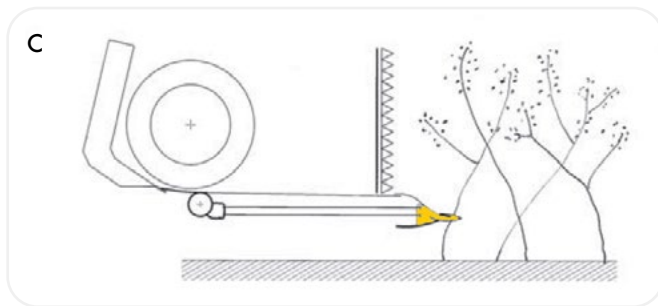
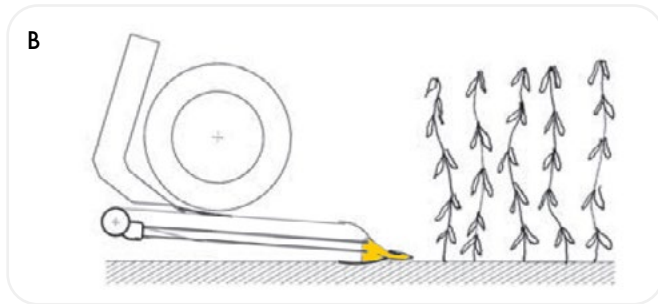
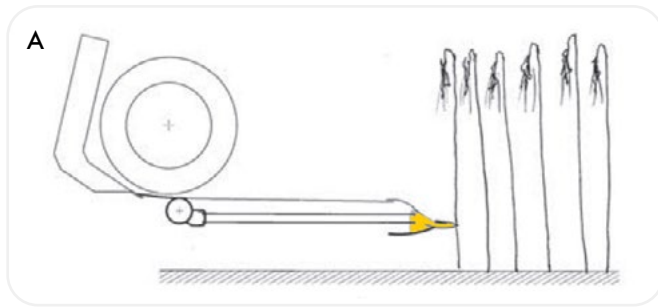
BISO 2D VARIO

Demands on header technology are increasing.

The number of different harvest crops are more than ever in some regions and extreme harvesting conditions or the influence of the weather increase the demands on header technology.

PRACTICAL FEATURES AT A GLANCE:

- > no additional header or attachments for special crops
- > harvesting different crops without time consuming adjustments of the header
- > no additional maintenance due to its simple, reliable floor structure – keeping the proven variosystem
- > no losses due to angle adjustment
- > the smallest distance for the auger – cutter knife – is only 180 mm, excellent for short crop harvesting
- > with correct application the ears of the grain come first to the threshing drum – excellent performance of the combine
- > practical application for all known crops
- > stress-free harvesting – clear relief of stress on the driver
- > extremely short barley
- > laid grain
- > harvesting of cereals and rape seed in same time window
- > extremely matted cereals
- > high demand on uniform stubble height (following soil cultivation)





> TECHNOLOGICAL HIGHLIGHTS AT A GLANCE

FOR ALL CEREALS AND CROPS

- > **uncompromising technology** – all functions for harvesting crops in one header
- > **no time-consuming adjustments**
- > **proven – robust – reliable**

POWERFULL AUGER

- > high capacity
- > easy to adjust
- > fluent feeding of the combines
- > low running costs

VARIO TECHNOLOGY

- > the **reliable, maintenance-free and proven** Vario floor technology enables **minimum harvesting losses at the cutter bar**
- > in the correct application the **ears** of the cereals **enter the threshing drum first** and increase the performance of the combine
- > **Vario floor 700 mm travel, minimum distance – cutting knife – auger 180 mm** – perfect for short crops

FRAME

- > **modular hybrid frame**, a combination of high strength steel, stainless steel- and aluminium profiles enable:
- > a much **longer lifetime**
- > **torsion-resistant** frame up to widths of 18,5 m

ANGLE ADJUSTMENT

- > perfect in flat crops
- > “to shave clean”
- > typical BISO feature

INTEGRATED SIDE KNIVES

- > no time-consuming adjustments for rape seed harvesting
- > the **use of side knives** is also perfect for matted crops
- > the **combination of side knives & crop dividers & angle adjustment** are ideal for harvesting laid crops
- > and so on

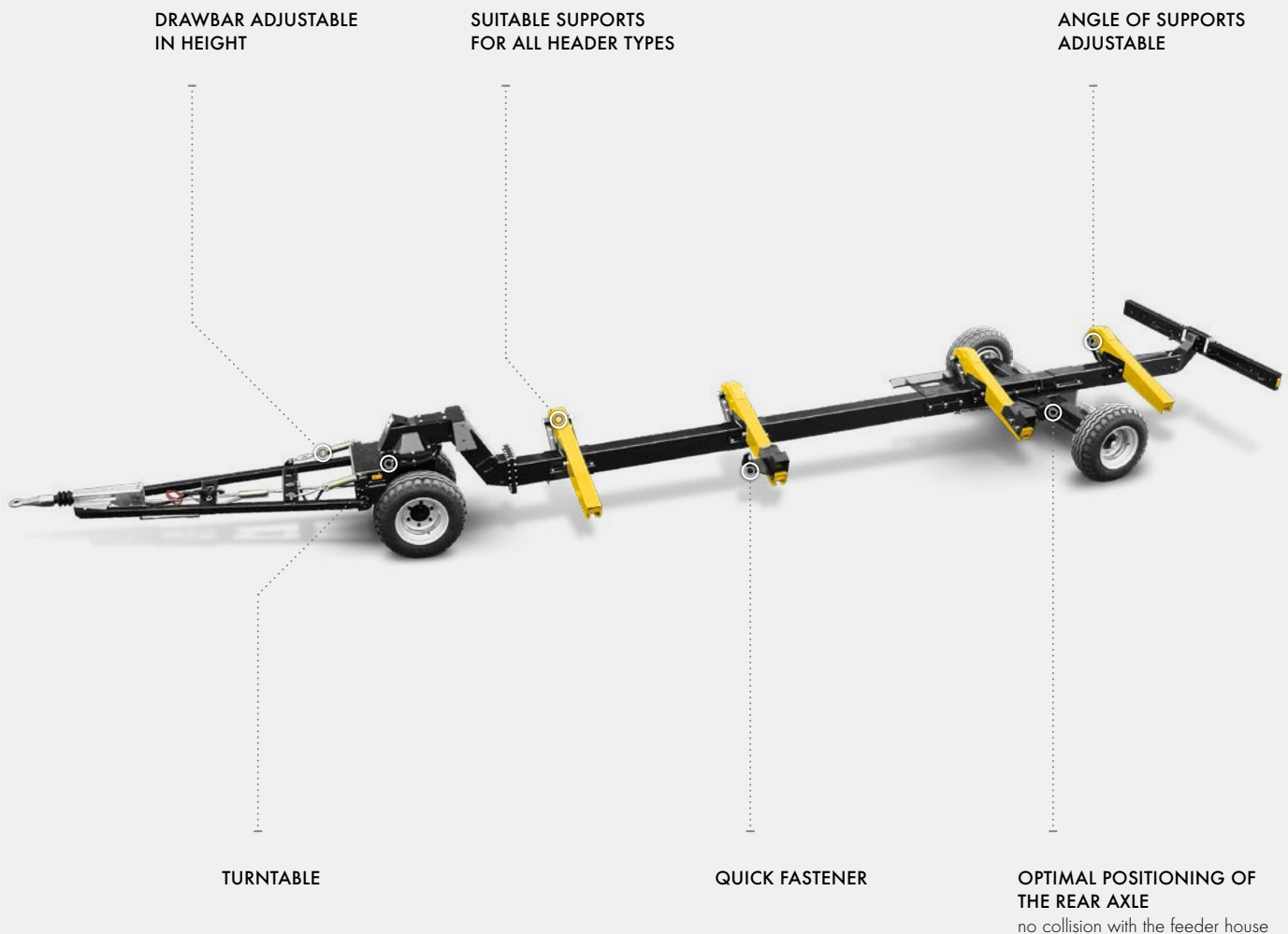


BISO PROFI TRAILER

The BISO PROFI trailer is suitable for cutting widths up to 10,7 m. The trailer is attractive for its smooth and comfortable manoeuvrability due to the two axles with a turntable at the front. The optimal positioning of the rear axle outside the feeder house prevents collisions when loading or unloading the header.

THE ADVANTAGES AT A GLANCE:

- > Suitable for header widths up to 10,7 m and 4.500 kg permissible total weight
- > Smooth and easy manoeuvrability
- > Optimal supports
- > Supports with angle adjustment
- > Overrunning- and parking brake
- > TÜV certification and type approval up to 25 km/h (40 km/h option)
- > 260/70/15,3 14 ply tyres
- > Reinforced brake up to 5.600 kg max. permissible total weight (option)





BISO PROFI STEER

PROFI STEER is the ultimate feature under the header trailers. The trailer is characterized by the hydraulic rear steering axle, which ensures **excellent manoeuvrability** even on tight corners or going around roundabouts, so the **moving of large headers with a combine or tractor is now easy.**

Further advantages are the front axle with full width for better driving comfort and the lower structure of the turntable, which shortens the total length of the trailer.

THE ADVANTAGES AT A GLANCE:

- > Suitable for header widths up to 18,5 m and 6.000 kg permissible total weight
- > Perfect manoeuvrability through the rear steering axle with integral hydraulic system
- > Optimal supports
- > Drawbar adjustable in height
- > Supports with angle adjustment
- > Overrunning and parking brake
- > TÜV certification and type approval up to 25 km/h (40 km/h option)
- > No hydraulic and brake lines under the frame
- > 260/70/15.3 14 ply tyres

ROBUST TURNTABLE

LEVER FOR LOCKING
THE REAR STEERING AXLE

LARGE DIMENSIONED
MAIN BEAM
for heavy headers

FRONT AXLE WITH
FULL WIDTH

LOWER STRUCTURE
OF THE TURNTABLE
shortens the total length

REAR STEERING AXLE USING
INTEGRAL HYDRAULIC SYSTEM
for perfect following





> BISO 2D VARIO HEADER RANGE

TECHNICAL PARAMETERS

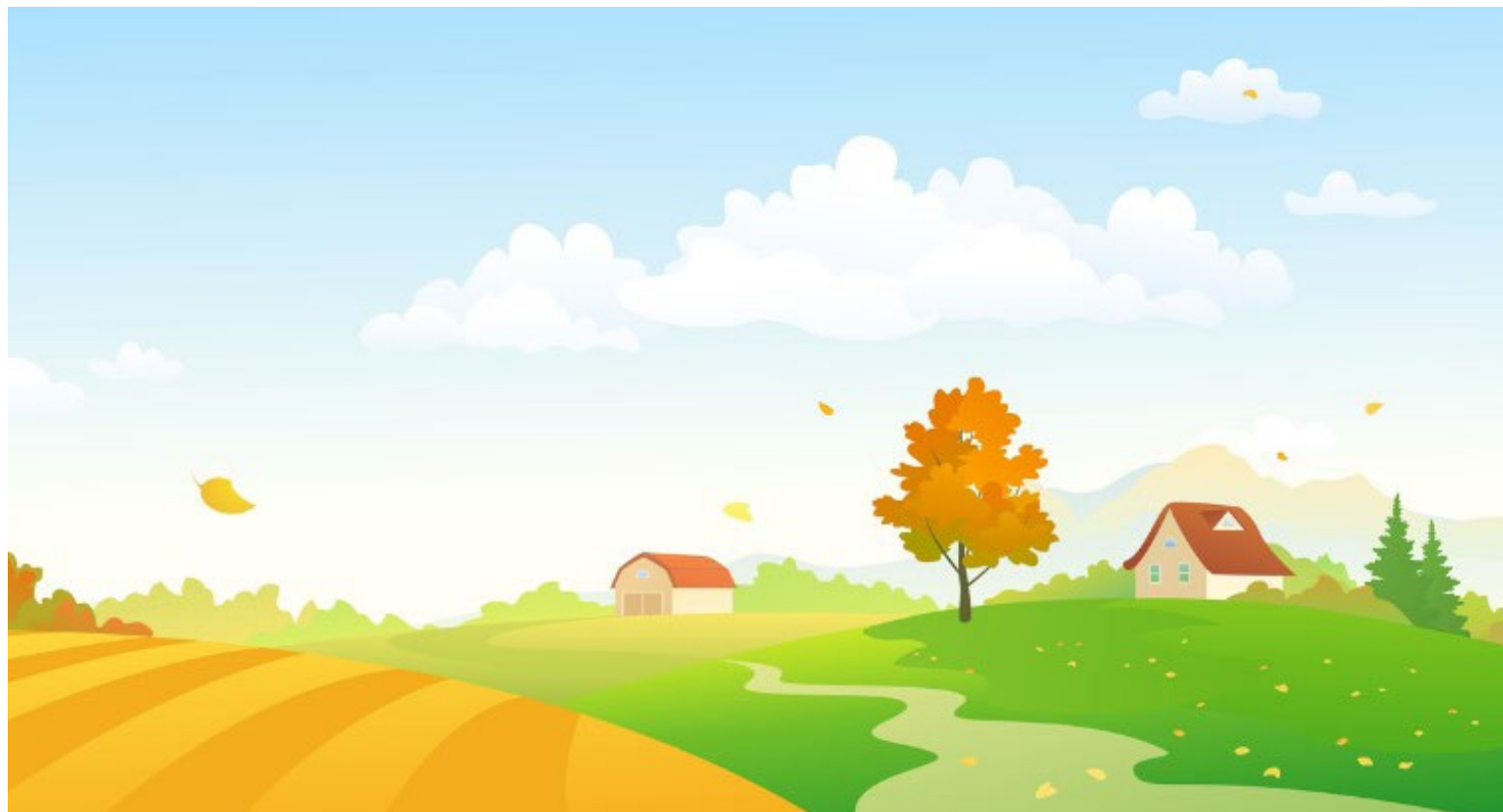
		BISO 2D VARIO 770	BISO 2D VARIO 920	BISO 2D VARIO 1070	BISO 2D VARIO 1230	BISO 2D VARIO 1560
Real cutting width (mt)		7,7	9,2	10,7	12,3	15,6
Vario <-> (mm)	min	350	350	350	350	350
	max	1050	1050	1050	1050	1050
	Δ	700	700	700	700	700
Auger ø (mm)	inner	535	535	535	535	535
	outer	660	660	660	660	660
Reel	ø	1070	1070	1070	1070	1070
	tubes	6	6	6	6	6
Drive system	single / dual	s	d	d	d	d
Cutting system	Speed (cuts / min)	1150	1150	1150	1150	1150
Dividers (foldable / tool free)	y/n	y	y	y	y	y
Multifinger auger	y/n	y	y	y	y	y
Crop lifters	y/n	y	y	y	y	y
Rape knives	Integrated	•	•	•	•	•
	spare					
Weight (kg)		2750	3000	3390	3700	4560

BISO 2D VARIO HEADER RANGE

SPECIFICATIONS

	BISO 2D VARIO 770	BISO 2D VARIO 920	BISO 2D VARIO 1070	BISO 2D VARIO 1230	BISO 2D VARIO 1560
hybrid header frame	o	o	o	o	o
header angle adjustment hydraulic	o	o	o	o	o
header angle adjustment with intelligent autonomous adaption	-	-	-	-	-
splash guard	*	*	*	o	o
water tank integrated	o	o	o	o	o
oil & hydraulic tank with indicator (integrated)	o	o	o	o	o
central lubrication for chain	o	o	o	o	o
integrated foldable side knives with deflectors right & left	*	*	*	*	*
side knives with 2-point slide bearing	o	o	o	o	o
headlights left and right	*	*	*	o	o
automatic hose reel 11m for air pressure in combination with air compressor	*	*	*	*	o
toolbox with tool - and wear package	o	o	o	o	o
800mm variomovement (distance knife - auger 180mm)	o	o	o	o	o
parallelogram controlled flexarms - constant cutting angle	-	-	-	-	-
air suspension for Flexmode	-	-	-	-	-
air compressor with air dryer, compressed air tank & air filter	*	*	*	*	o
intelligent ground contour Flexarm control 0-50 kg	-	-	-	-	-
automatic locking rigidmode-Flexmode	-	-	-	-	-
high wear resistant flex skids with rapid change system	-	-	-	-	-
left & right hand knife drive (gear box)	-	o	o	o	o
stainless steel vario floor covering	o	o	o	o	o
stainless steel flex area covering	-	-	-	-	-
integrated hydraulic reel drive	o	o	o	o	o
springsteel reel tines with rapid change system	o	o	o	o	o
intelligent collision control knife / reel tines	-	-	-	-	-
mechanic collision safety for knife / reel tines	o	o	o	o	o
wrapping protection for reel tine tube	o	o	o	o	o
reel tine angle adjustment	o	o	o	o	o
stainless steel auger Ø660 instead of steel	*	*	*	o	o
intake auger with rapid height adjustment	o	o	o	o	o
display for cab with real time flex movement	-	-	-	-	-
wifi communication - cab/header	-	-	-	-	-
2 in 1 swath deposit	*	*	*	*	*
crop lifters	*	*	*	*	*
dividers with rapid adjustment	o	o	o	o	o
row independent sunflower kit	*	*	*	*	*
BISO Profi header trailer 2-axle	*	*	*	*	
40 km/h version for Profi	*	*	*	*	
BISO Profi Steer 2-axle four-wheel steering	*	*	*	*	*
40 km/h version for Profi Steer	*	*	*	*	*

o - standard equipment - not available * contact us for price offer



BISO GmbH
Edenaichet 21
A-4773 Eggerding
Phone: +43/7767/217-0
e-mail: sales@biso.at

www.biso.at

 **BISO**
ERNTETECHNIK


immer einen Schritt voraus!