



TAURUS

BLACK LINE



RELIABLE ALL THE WAY

INCLINED SHEARS THAT
NEVER STOPS

WHY CHOOSE TAURUS INCLINED SHEAR

TAURUS BLACKLINE INCLINED SHEARS are built with the same care, detailed attention and technical expertise that have made TAURUS a leading brand in the scrap metal processing market.

From TAURUS standpoint, they represent an interesting and often invaluable solution when particularly high productivity needs to be reached in processing large quantity of long, high density material: that why particular attention has been put on the design of the machine features that affect cutting and feeding parameters.

The open box guarantees a continuous feed system because gravity is integrated by a fast oscillating floor therefore perfect for shearing high-density voluminous mixed scrap, long collected and demolition scrap, like pipes, bars, etc with a leading price/productivity ratio.

TAURUS BLACKLINE INCLINED SHEARS come in two different families of products. **TRH**, available with shear force from 750 to 950 tons, compact, robust, capable to guarantee the best absolute performances in its class. As an option, all TRH models can be equipped with our custom designed lifting jacks to be easily moved around the yard, if needed. They do not require to be lifted to operate.

TRS, all stationary models, provided with a solid supporting frame (no civil work or foundations needed!), are available from 1100 up to 1600 tons of shear force, with powerful side flaps and a three stages compression lid.

TRS line offers a machine built with excellent technical standards and extremely robust materials, guaranteeing first rate performance and very long operational life.

All models of **TAURUS BLACKLINE INCLINED SHEARS** are designed and built to resist the complex and high stresses placed on them during the different phases of the operational cycle and use only quality certified steel sheet metal combined with high strength wear-resistant Hardox steel in areas where it is most needed.

The submerged arc welding used throughout the production process creates consistent and uniform welding seams which have a much higher resistance to fatigue stress than more traditional forms of welding.

All mechanical parts are machined on high precision Computer Numerical Control (CNC) centres. The use of CNC machines guarantees a precise coupling of key components and removes the need for subsequent post assembly adjustments which in turn ensures the correct and easy interchangeability of replacement parts.

TAURUS BLACKLINE INCLINED SHEARS are designed and manufactured to perfectly meet the new specifications and requirements demanded by the operators of electric arc furnaces. Electric arc furnaces require that the processed scrap completely complies with precise supply conditions set down by the steel mills. Taurus inclined shears process scrap in such a way that they easily reach these high quality standards as well as the atmospheric emissions requirements during the melting phase. Slag reduction requirements are met while simultaneously lowering production costs by producing a cleaner feed stock more efficiently than other machines on the market.



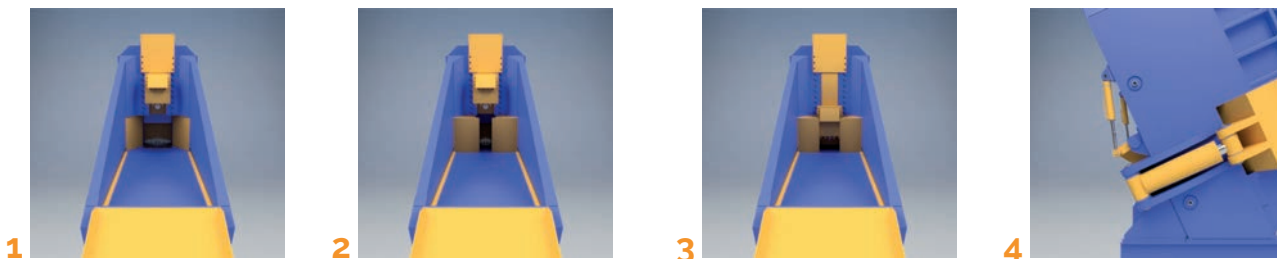
TAURUS BLACKLINE INCLINED SHEARS

- The length of scrap to be processed is not restricted by the length of the compression box, and with the optional extension base very long and bulky material can be easily processed.
- A simpler, compact design means less moving parts and lower maintenance costs.
- Robust, precisely assembled, high quality materials. As the shear works autonomously and automatically there is no need for a dedicated operator. This means lower operator costs.
- Smaller footprint, and no need of civil work or foundations.
- Fast continuous operation.

TWO FAMILIES OF PRODUCTS

The **TRH** and **TRS** series scrap shears are open boxed, inclined shears with continuous feeding function. Designed for shearing large quantities of mixed, high density, bulky, over dimensioned or demolition scrap. The purpose of inclined shears is to reduce the scrap length while increasing its density. Increasing the density of scrap optimizes space and provides a homogeneously sized "raw material" for metal furnaces.

One of the main features of **TAURUS BLACKLINE INCLINED SHEARS** is the powerful hydraulically powered lid and lateral flaps system, which provides the vertical and lateral compression needed to reduce the material to the size required by the cutting.



STAGE 1

A three-stage compression clamp creates a powerful downward pressure in three stages to compress and increase the density to the scrap. (1)

STAGE 2

Two side compression flaps (2 & 4) Hinged on the outside front of the shear compress the material horizontally while simultaneously feeding it towards the cutting shear.

STAGE 3

The three-stage compression clamp further compresses the material and holds it in place while the shear cuts the scrap into pre set sizes (3). Loading: the shear is loaded from above while gravity slides the scrap towards shear head. The floor of the feed box slides back and forth automatically aiding in the downward flow of scrap. The side compression FLAP s provides further assistance in feeding the scrap towards the shear. The cutting length of the material is variable and can be pre set by the operator. The inclined shear compresses and cuts scrap in a continuous autonomous manner which means only one operator is required to load the shear.

TRS series inclined shears are built extra solid at critical wear and stress points are made of Hardox. They are economical to run, space-saving and can be loaded from both sides.



- Telediagnostic
- Remote control
- Touch screen
- Operational program to organize the work cycle suitable for different scrap categories



- Open box and continuous feed system
- Loading scrap on both sides
- Inclined floor box
- Oscillating vibrating floor box



- 2 cylinders on the shear head
- Vertical clamp three-stage
- Compression
- Automatic grease system
- Cutting length control



The unique lateral flap geometry has been designed so that the flap will develop a progressive compression, capable of very high-pressure loads, effectively compressing material from both sides, retaining it at the same time thanks to the strong grip.

EXTRA FEATURES

- Clamp protection
- Hydraulic unit protections
- No need of civil work or foundations
- Soundproofing system
- Assial piston pump "load sensing"
- Less consumption/high performances
- 4 filtering system
- Diesel and electric engine

TRH INCLINED SHEARS

		TRH7	TRH8	TRH9	TRH7J	TRH8J	TRH9J
Shearing force	t	750	850	950	750	850	950
Box length	mm	6500	6500	6500	6500	6500	6500
Box length with extendable floor	mm	8500	8500	8500	8500	8500	8500
Box width	mm	2000	2000	2000	2000	2000	2000
Box inclination	°	20	20	20	20	20	20
Flaps on the side	n	2	2	2	2	2	2
Max side compression force each flap	t	150	150	150	150	150	150
Main electric motor	Kw	160	200	200			
Diesel engine power	Hp	250	350	350	250	350	350
Number of clamp cylinders	nr	1	1	1	1	1	1
Clamp cylinder force	t	150	150	150	150	150	150
Output	t/h	<15	<20	<25	<15	<20	<25
Indicative weight	t	75	80	85	75	80	85

TRS INCLINED SHEARS

		TRS1	TRS2	TRS3	TRS4	TRS6
Shearing force	t	1100	1200	1300	1400	1600
Box length	mm	7500	7500	7500	7500	7500
Box length with extendable floor	mm	9500	9500	9500	9500	9500
Box width	mm	2400	2400	2400	2500	2500
Box inclination	°	20	20	20	25	25
Flaps on the side	n	2	2	2	2	2
Max side compression force each flap	t	200	200	250	250	250
Main electric motor	Kw	1x200	2x132	2x160	4x110	4x110
Diesel engine power	Hp	350	350	450		
Number of clamp cylinders	nr	1	1	1	1	1
Clamp cylinder force	t	200	200	250	250	250
Output	t/h	<25	<30	<35	<60	<60
Indicative weight	t	90	100	135	265	275

TAURUS

SINCE 1964 ALWAYS ONE STEP AHEAD

TAURUS is one of the oldest and most widely recognized brands in the metals recycling industry. With over 50 years of experience, **TAURUS** knows how to design and build machineries which deliver maximum performance without compromising on safety and environment-friendliness.

In addition, **TAURUS** machines are tested to work efficiently and effectively in any condition, climate or application, as proven by more than 700 machineries deployed and operative all over the world.



Postfach 55, CH-3700 **Spiez**
Telefon (0041)33 437 47 44
Fax (0041)33 437 70 73
iut@iutbeyeler.com
www.iutbeyeler.com
Mitglied ■ BDSV