

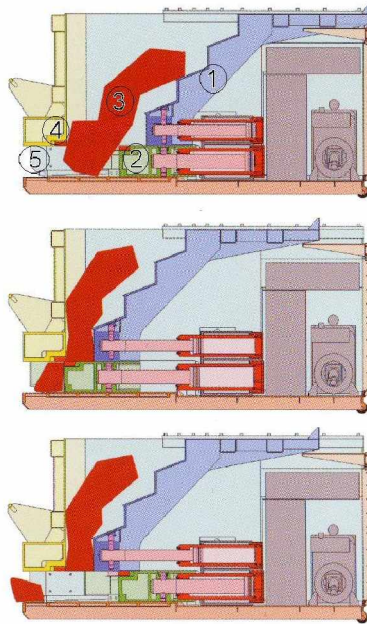
Container Shears CNS 320K and CNS 400K

Compared to standard guillotine shears the container shear CNS offers a new shearing principle by its horizontal moving blade sledge on the bottom of the bin. This new shearing principle allows a compact design within the shear's transport container shape including a diesel engine.

By feeding the material directly into the cutting area, without it passing through a compression chamber, the container shear can be filled continuously. The shear is operated directly from the cover device using remote control.



Pic. 1: CNS 400K with feed bin



Pic. 2: Working principle of the container shear

Like standard bulk containers the shear can be lifted up and transported by a hook lift truck (according to DIN 30722). For installation only a flat floor is required. The shear can be delivered with a diesel engine or an electrical drive motor.

The scrap is fed into the feed bin from the top. By the horizontal movement of a pusher (1) and its own weight, the scrap (3) is falling to the bottom of the bin and into the cutting area. As the scrap is pressed against the front wall, the blade carriage (2) cuts the scrap by its horizontal move on the bottom against the front wall blade (4).

With the horizontal move of the carriage the cut off material is pushed out through a front opening of the container (5).

The high availability of the shear is guaranteed by the use of well-known components from Bosch-Rexroth (Hydraulic), Siemens (control), John-Deere (Diesel engine). These sub-supplier offer world-wide service.

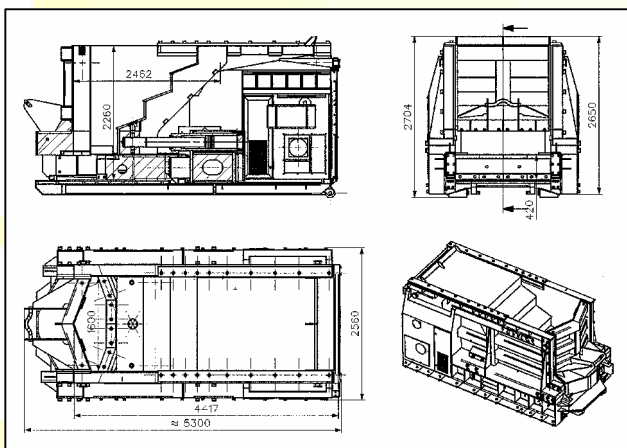
The company ZDAS put over 50 years of experience with heavy machinery for scrap processing into designing the container shear. The machine is designed for heavy duty, high availability and easy maintenance.

The Container Shear is available in two sizes either with diesel or electric drive:

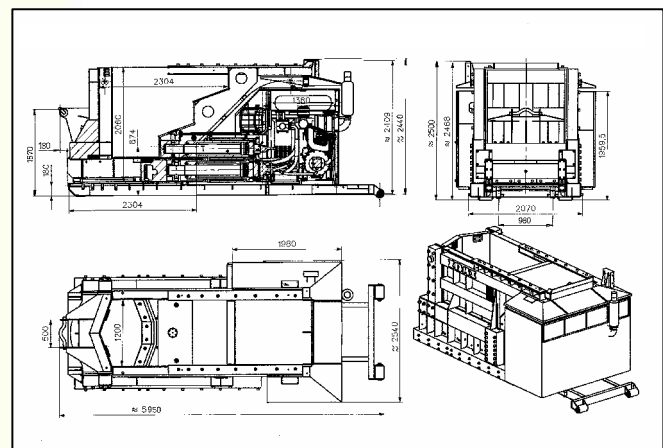
	Unit	CNS 400 K	CNS 320 K
Outer dimensions (L x W x H):	m	5.3 x 2.5 x 2.7	5.9 x 2.5 x 2.45
Production:	t/Std.	6 – 10	4 – 7
Cutting force:	kN	4,000	3,100
Cutting width:	mm	1,600	1,200
Cutting height:	mm	~ 420	~ 420
Blade/Holder stroke:	mm	800	800
Cycle time:	Sec.	20 - 33	17 – 27
Diesel consumption per t scrap:	l/t	1.0 – 1.4	1.2 – 1.6
Tank volume (Diesel):	L	140	140
Diesel/Electro drive power:	kW	84/75	84/75
Total weight:	t	25	18



Pic. 3: sheared cupola scrap sorting on the front discharge

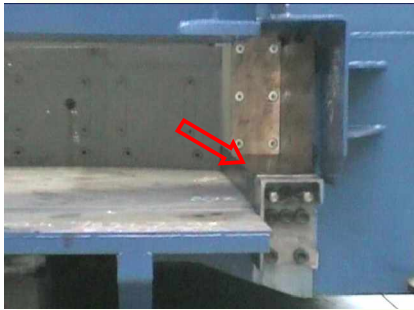


Drwg. 1: Dimensions Container Shear CNS 400K



Drwg. 2: Dimensions Container Shear CNS 320 K

Advantages of the Container Shear design



Pic. 3: exact carriage guides allows the perfect transmission of the cutting force into the material (view from the front discharge).



Pic. 4: View of the carriage blades covering the entire width.

With more than 100 container shears in operation the design has proven its reliability for over 7 years.

The container shear has the following design features in comparison to simpler machines:

- § machined guides allow an exact carriage movement and full exertion of the cutting force;
- § blades along the entire carriage width ensure maximum cutting force;
- § no sticking of the pusher or carriage due to exact guides which also act as hydraulic cylinders with a high repelling force;
- § two parallel installed cylinders to avoid lateral twist of the blade carriage;
- § high cutting performance of up to 10 t per hour for the CNS 400 K;
- § high loading capacity of up to 5 m³ by the use of a feed bin;
- § Siemens control system installed in a large cabinet with signal lights for error messaging.
- § low diesel consumption due to an effective diesel-hydraulic drive system (~ 1.2 liters/t scrap);
- § complete enclosure of the machine for safety and protection reasons;
- § machined joint surfaces of the construction for a gap-free load transmission;
- § long life of the hydraulic components through an operating pressure of max. 315 bar and use of multiple pressure pumps to avoid hydraulic hits.
- § use of a water cooled diesel engine for operation at summer temperatures.



Pic. 5: View behind the protection door on the control cabinet



Pic. 6: View of the rear side of the shear with opened protection grid.

Customer recommendations of the Container Shear:

Detlef Meyer, managing director of Alba Metall GmbH, Berlin-Hoppegarten, Germany, owner of a CNS 400K since August 2005

„Before deciding to buy the container shear we looked at several mobile scrap shears, including some of Italian manufacture. We then chose the container shear of type CNS 400K thanks to its sturdy design and good cost/performance ratio. We have now been using the container shear for 1 ½ years with a variety of scrap without any problems worth mentioning. We are very satisfied with the cutting performance of up to 1,200 t per month and with the container shear’s reliability. We can certainly recommend the container shear as we also have experience with stationary and semi-mobile shears from other manufacturers.“

Marcel Nijs, managing director of Nijs M & J bvba, Riemst, Belgium
Owner of a CNS 400K since October 2007

" We were looking for a mobile scrap shear in order to process the increasing amount of scrap we have in the relatively limited amount of space we have available. After some market research we found the container shear. We were offered the use of a demonstration machine for testing purposes. Since we doubted the shear’s performance at first we tested it for two weeks, but within a few days the compact and stable design and the cutting capacity had convinced us."

Anton Eigl, managing director of Eigl Schrott, Ötztal Bahnhof, Austria
Owner of a CNS 400K since August 2006

„The container shear was the first processing unit we acquired with which we were able to cut all scrap, from light to medium-heavy scrap as well as containers and cast iron. We are very satisfied with the cutting capacity of 10 t/hour and the great reliability and can only recommend it. We are already planning the purchase of a second container shear for a new location.“

Further information on the container shear can be found online at www.containershear.com.