



# ByTrans Cross

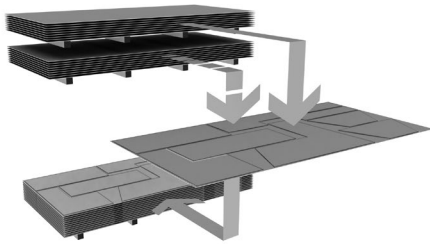
## Modular automation for loading and unloading laser cutting systems

### Customer benefits

- Automation tailored for every need. The ByTrans Cross loading and unloading system can be expanded in modular fashion at any time
- Great flexibility and availability. Short loading cycles move a lot and unburden the operator
- Complete accessibility of the laser cutting system, for ByTrans Cross enables automated material handling in the smallest space
- Everything on a touch screen. Integrated operation of the automation via operator terminal of the laser cutting system
- Handle material gently and sort it cleanly. Automatic large parts removal and selection of residual sheets



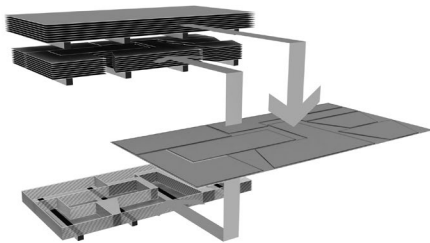
Two cassettes for raw material



Cassettes 1 and 2: raw material

Storage: cut sheets

Large parts and sheet skeletons separated

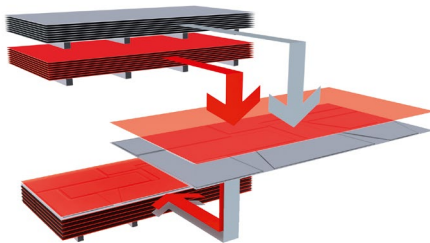


Cassette 1: raw material

Cassette 2: large parts storage

Storage: scrap

Cut sheets with plastic sheet separators



Cassette 1: raw material

Cassette 2: intermediate storage

Storage: cut sheets with plastic sheet separators

	ByTrans Cross 3015	ByTrans Cross 4020
Nominal sheet size	3,000 × 1,500 mm	4,000 × 2,000 mm
Load sheet metal thickness	0.8–25 mm	0.8–20 mm
Unload sheet metal thickness	0.8–25 mm	0.8–20 mm
Maximum sheet weight	980 kg	1,340 kg
Loading carriages	2	2
Large parts removal	■	■
Insert protective separators	■	■



# ByTrans Cross Technical Data





	ByTrans Cross 3015	ByTrans Cross 4020
Nominal sheet size	3,000 × 1,500 mm	4,000 × 2,000 mm
Maximum sheet metal size	3,048 × 1,524 mm	4,064 × 2,080 mm
Variable sheet metal sizes	■	■
Loading carriages	2	2
Sheet thickness (loading and unloading)	0.8–25 mm	0.8–20 mm
Maximum sheet weight	980 kg	1,340 kg
Raw material, stacking height max. (incl. pallet)	240 mm	240 mm
Cut sheets, stacking height max. (incl. pallet)	350 mm	350 mm
Maximum raw material stacking weight on pallet	3,000 kg	3,000 kg
Maximum raw material stacking weight in cassette **	3,000 kg	3,000 kg
Material	Construction steel, Stainless steel, Aluminum	
Loading	with forklift truck or overhead crane	
Unloading	with forklift truck	
Standard cycle time *	60 s / 64 s / 70 s / 78 s	84 s / 98 s
Cycle time for big part removal *	143 s / 153 s	195 s / 204 s
Cycle time with insertion of protective material *	160 s / 169 s	204 s
Operation	Via touch screen of the operating terminal of the laser cutting system	
Module weight (net)	7,000 kg	11,000 kg
Maximum electrical consumption ByTrans Cross (supplied via cabinet of the laser cutting system)	7.6 kW	8 kW
Compressed air consumption (max)	10 m <sup>3</sup> /h	10 m <sup>3</sup> /h

\* One cycle definition: The ByTrans Cross and the machine are in the automatic mode of >2 short cutting plans (<20s) with thin sheet metal and enabled sheet thickness measurement/ sheet separation (3x).

- Cycle start is the release of the shuttle table before the removal of the cut sheet/parts.
- Cycle stop is the release ByTrans Cross to the machine after loading the raw material sheet.

Remark: Cycle time also depends on the loading/unloading position

\*\* for ByTrans Cross 4020: more stacking weight on request.

The right to make changes to dimensions, construction, and equipment is reserved. ISO-9001-certified.

The technical data can vary in the different countries, according to local security rules and configuration of the machine.



# ByTrans, ByTrans Extended

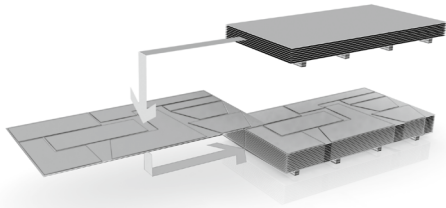
Intelligent solutions for loading and unloading laser cutting systems

## Customer benefits

- Fast job processing because automatic loading and unloading decreases set-up times
- Much higher machine utilization for only a slightly higher investment
- The ByTrans Extended design has not just one but two cassettes, thereby making the machine system even more autonomous
- Flexible use. Not just for storage/return transfer but also for large parts removal as well as the preparation of plastic protective separators, which are placed between the metal sheets by the system (ByTrans Extended)
- Entry into lightly-manned parts production
- ByTrans Extended is optionally available in 3 × 1.5 meter and 4 × 2 meter formats



One cassette for raw material

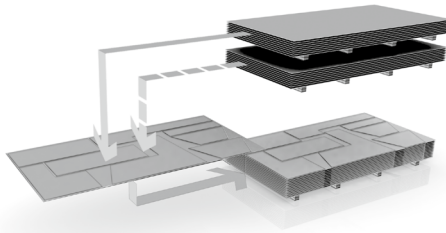


Cassette 1: raw material

Storage: cut sheets

ByTrans 3015

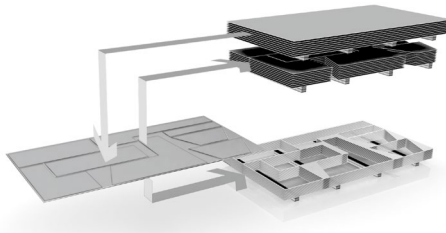
Two cassettes for raw material



Cassettes 1 and 2: raw material

Storage: cut sheets

Large parts and sheet skeletons separated

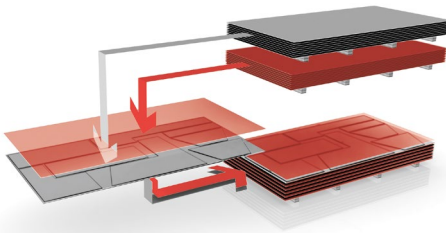


Cassette 1: raw material  
Cassette 2: large parts storage

Storage: scrap

ByTrans 3015 / 4020 Extended

Cut sheets with plastic sheet separators



Cassette 1: raw material  
Cassette 2: intermediate storage.

Storage: cut sheets with plastic sheet separators

	ByTrans 3015	ByTrans 3015 Extended	ByTrans 4020 Extended
Nominal sheet size	3,000 × 1,500 mm	3,000 × 1,500 mm	4,000 × 2,000 mm
Load sheet metal thickness	0.8–25 mm	0.8–25 mm	0.8–20 mm
Unload sheet metal thickness	0.8–25 mm	0.8–25 mm	0.8–20 mm
Maximum sheet weight	890 kg	890 kg	1,300 kg
Number of cassettes	1	2	2
Large parts removal		■	■
Insert protective separators		■	■
Cassette Changer			■



# ByTrans, ByTrans Extended Technical Data





	ByTrans 3015	ByTrans 3015 Extended	ByTrans 4020 Extended
Nominal sheet size	3,000 × 1,500 mm	3,000 × 1,500 mm	4,000 × 2,000 mm
Maximum sheet metal size	3,048 × 1,524 mm	3,048 × 1,524 mm	4,064 × 2,080 mm
Sheet metal sizes	3,000 × 1,500 mm 2,500 × 1,250 mm 2,000 × 1,000 mm		
Variable sheet metal sizes		■	■
Number of cassettes	1	2	2
Sheet thickness (loading and unloading)	0.8–25 mm	0.8–25 mm	0.8–20 mm
Maximum sheet weight	890 kg	890 kg	1,300 kg
Raw material, stacking height max. (incl. pallet)	240 mm	240 mm	240 mm
Raw material, stacking weight max.	3,000 kg	3,000 kg	3,000 kg
Cut sheets, stacking height max. (incl. pallet)	350 mm	350 mm	350 mm
Material	Construction steel, Stainless steel, Aluminum		
Loading	with forklift truck or overhead crane		
Unloading	with forklift truck		
Standard cycle time	60 s	60 s	75 s
Cycle time for big part removal		140 s	190 s
Cycle time with insertion of protective material *		155 s	210 s
Operation	Via touch screen of the operating terminal of the laser cutting system		
Module weight (net)	4,500 kg	5,000 kg	7,200 kg
Maximum electrical consumption ByTrans Cross (supplied via cabinet of the laser cutting system)	6 kW	6 kW	6 kW
Compressed air consumption (max)	10 m <sup>3</sup> /h	10 m <sup>3</sup> /h	10 m <sup>3</sup> /h

\* without table change machine; for a normal cutting plan with a cutting time > cycle time.

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The technical data can vary in the different countries, according to local security rules and configuration of the machine.