

FORMING THE FUTURE



TWINSERVO TECHNOLOGY – ADVANCED SERVO PRESSES

INNOVATION FUELS GROWTH. INTO THE FUTURE WITH TWINSERVO TECHNOLOGY.

Schuler stands for efficient, commercially-driven solutions in forming technology.
For innovations that are unique in the industry. For revisiting and refining ideas time and time again.
For setting new standards.



Transfer press with TwinServo Technology in the Schuler Forming Center at Erfurt.

2007 – SUCCESS CAN BE PROGRAMMED.

The year 2007 saw the birth of a new technology that would revolutionize the market over the years to come. It has represented a class of its own ever since: ServoDirect Technology from Schuler. A new era has dawned. Whether single presses, press lines, tryout systems or blanking lines – ServoDirect Technology opens new perspectives for press shops in the automotive and the tier industry.



ServoDirekt Technologie

2012 – THE SUCCESS STORY CONTINUES.

The year 2012 has been characterized by the ongoing development of Schuler Servo technology. We now introduce an innovation that is capable of writing a new chapter in the success story of advances with SDT. The start-up of the first TwinServo Technology transfer press at the Schuler Forming Center in Erfurt, with decentralized TwinServo drive, is setting a new standard.



TwinServo Technologie

Press	
Decentralized	TwinServo drive
Press capacity [kN/US tons]	16,000 / 1,800 US
Main motors	2 × AC servo torque motors 503 kW
Connection points	4
Bolster dimensions [L × B] [mm/in.]	5,000 × 2,200 / 197 × 87
Slide stroke [mm/in.]	600 / 24
Slide adjustment [mm/in.]	300 ± 0,1 / 12 ± 0.004
Stroke rate	controllable 3 – 30 spm or 3 – 40 spm in pendular mode without transfer
Coil feed line	Schuler coil feed line with decoiler and leveling machine, Coil-end welding device, PowerFeed roll feed unit and spraying system, can be used with aluminum
Coil width [mm/in.]	120 – 1600 / 4.7 – 63
Coil thickness [mm/in.]	0.5 – 6 / 0.2 – 0.24
Flow limit [N/mm²]	240–750
Number of leveling rolls	9
Blankloader	Schuler blankloader with removal feeder and shuttle device in the press
Blank shape	round
Blank diameter [mm/in.]	200–450 / 7.9 – 17.7
Blank thickness [mm/in.]	2–5,5 / 0.08 – 0.22
Transfer	Electronic 3-axis rhombus transfer from Schuler
Additional equipment	Two moving bolsters and part conveyor
Dimensions	
Total length of the machine [m/ft.]	25 / 82
Press height over floor [m/ft.]	6.50 / 21
Required foundation depth [m/ft.]	5.30 / 17

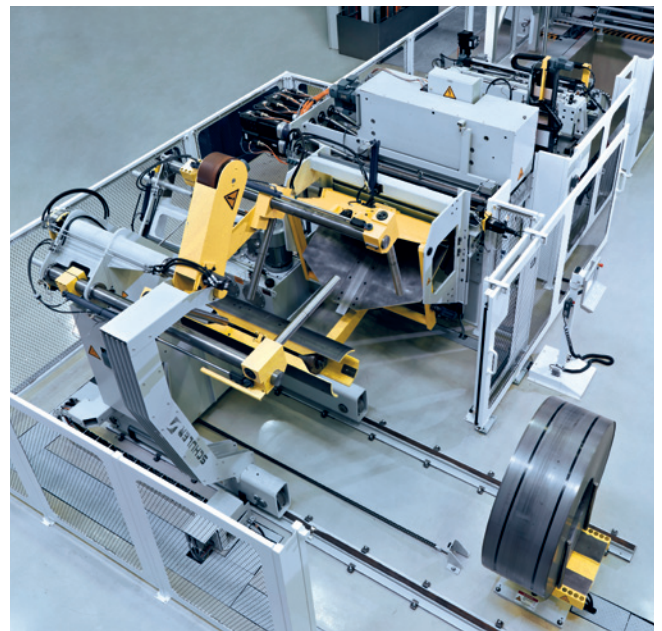
THE FUTURE BEGINS WITH SCHULER.

AUTOMATED TRANSFER PRESS WITH TWIN SERVO TECHNOLOGY.

Now you can get to know TwinServo Technology - and see at Schuler Umformcenter Erfurt how your production can benefit from TST.



TWINSERVO TECHNOLOGY REPRESENTS AN IMPROVEMENT IN THE FORMING PROCESS; IT IS GREENER, HAS A SMALLER FOOTPRINT AND IS USER-FRIENDLY.



We demonstrate the advantages at our Schuler Forming Center in Erfurt, where the first transfer press is in operation using this new technology. The press has a capacity of 16,000 kN, and is fully automated using components made by Schuler. Come and see the innovation with amazing performance and benefits!

OVERVIEW OF TECHNICAL DATA

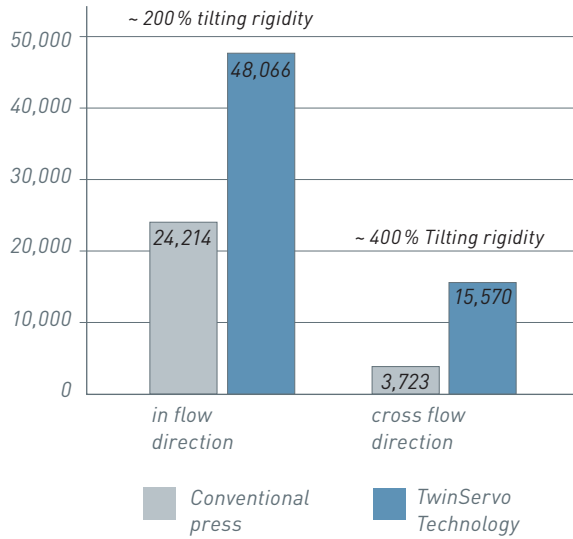
Press force [kN/US tons]	10,000/1,125	16,000/1,800	20,000/2,250	25,000/2,810	30,000/3,300	35,000/3,850
Bolster length [mm/in.]	Bolster width [mm/in.] standard and option*					
5.000/196.8	2,200/86.6	2,200/86.6*	2,500/98.4*	3,000/118		
			2,200/86.6*	2,500/98.4*		
6.000/236.2		2,500/98.4	2,500/98.4	3,000/118	3,000*	3,000/118*
			2,200/86.6*	2,500/98.4*	2,500/98.4*	
7.000/275.6				3,000/118	3,000/118	3,000/118*
				2,500/98.4*	2,500/98.4*	
8.000/315					3,000/118	3,000/118
					2,500/98.4*	
Slide stroke [mm/in.]	600/23.6	600/23.6	600/23.6	750/29.5	750/29.5	750/29.5
Press capacity millimeter before BDC [mm / in.]	6/0.24	6/0.24	6/0.24	6/0.24	6/0.24	6/0.24
Pressure points	4	4	4	4	4	4
Stroke rate at max. stroke** and constant speed [spm] / rated capacity [kJ]	40/400	35/500	40/900	30/1200	25/1500	25/1500
Pendular stroke rate at 1/3 stroke** [spm] / rated capacity [kJ]	50/250	50/250	60/400	40/650	35/700	30/900

* Option / ** Deviations possible depending on the motion curve and the force profile.

We reserve the right to modify specifications

COMPARISON OFF-CENTER LOAD

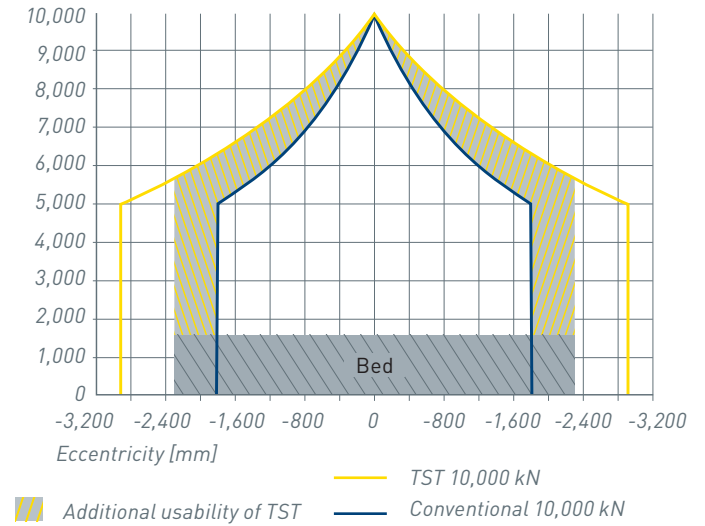
Tilting rigidity
[kNm/(mm/m)]



TwinServo technology offers increased flexibility in die configuration. New possibilities for methodological planning are created by greater permitted forces in individual stations, as well as significantly greater off-center loading capability of the machine. The extremely high tilting stability, combined with a smaller springback, increase parts quality of the components, help to reduce die wear and will shorten die start-up times.

OFF-CENTER LOAD

Admissible
press force [kN]

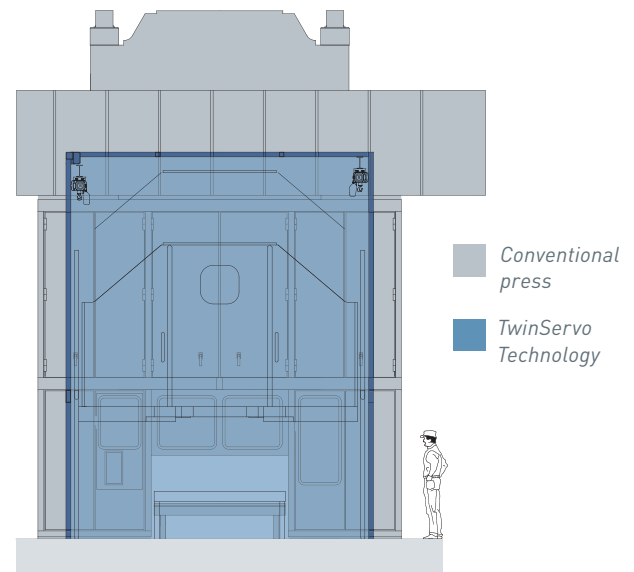


The active slide parallel motion control is further boosted by the aforementioned effects, in that asymmetries resulting from the process forces can be proactively compensated using the TwinServo controllers.



Environmentally-friendly aspects of complete sound protection enclosure and absence of oil in the work area combined with significantly improved visibility into the working area make the TST press a user-friendly machine.

COMPARISON TST TO CONVENTIONAL PRESS



The small footprint and lower hall height, combined with savings from in hall air conditioning are additional advantages of TST technology.

SCHULER SERVICE – OPTIMUM SERVICE FOR MORE PERFORMANCE

EXPERTISE

PARTNERSHIP

PRODUCTIVITY

SAFETY

FUTURE

Schuler Service offers a tailored portfolio of services covering the entire life cycle of your equipment. Over 900 service employees worldwide provide expert support 24/7 in close cooperation with you – our partners. Our main priority is always to ensure the ultimate productivity and safety of your production equipment in order to secure your company's continued success.

Find out more. www.schulergroup.com/service





www.schulergroup.com/automotive

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