

SCHMIDT® TorquePress

Precise dynamic

A number of special features characterizes the **SCHMIDT® TorquePress** in addition to the ServoPress series. Among other things, a hollow-shaft torque motor is used, which enables very high pressing forces due to the high motor torque without additional mechanical ratios.

Noise levels also remain remarkably low at all load conditions compared to other electric presses. The spindle nut, which is driven directly without the use of additional gears, enables very high efficiencies. Thanks to the hollow-shaft motor, the TorquePress is particularly compact and allows short overall lengths.

SCHMIDT® TorquePress are EC type approved in combination with the safety technology options SmartGate, SmartGuard and light curtain as well as optionally with the particularly economical 2-hand operation.

The solid, unparalleled mechanics of the **SCHMIDT® TorquePress** are a basic prerequisite for precise joining results, even in the toughest industrial environments.

Bench test

Before series production, new modules are subjected to a stress test under the toughest conditions. Not least, these tests result in many properties that benefit the applications.

Test over 20 million load cycles over the full working stroke with nominal force and lateral force components at full travel speed with a cycle time of approx. 2 seconds.

Absolute, direct stroke measurement system

- Precise repeatability due to high system resolution
- Compensation of mechanical compressions under full load
- Compensation of pitch errors of the spindle
- Material length changes are eliminated as far as possible

Full load resistant modules

- With nominal force at 100 % duty cycle
- Over the complete ram stroke
- With short process times
- Via precise, low-backlash guidance of the ram
- Peak force in S3 mode

Machine self-protection

- Fully automatic spindle lubrication
- Mechanical clutch as overload protection of the ServoPress in case of "crash"
- Active cooling with thermal monitoring of mechanics and electronics
- Current limitation when exceeding permissible load capacities
- Destruction by faulty operation is impossible

Service friendly

- Low maintenance
- Easy module change due to a high precision ram 0-position.
- Module is automatically detected
- No changes to existing data sets

Built-in safety in the light curtain system, workplace protection with SmartGate or equipped with protective enclosure SmartGuard and of course EC type approved.

TorquePress 560 with **integrated energy management**, intermediate storage of braking energy

As a result, this means the following for your application:

- ✓ highest efficiencies
- ✓ maximum machine availability
- ✓ very high production reliability



TorquePress 520



TorquePress 560

Modules

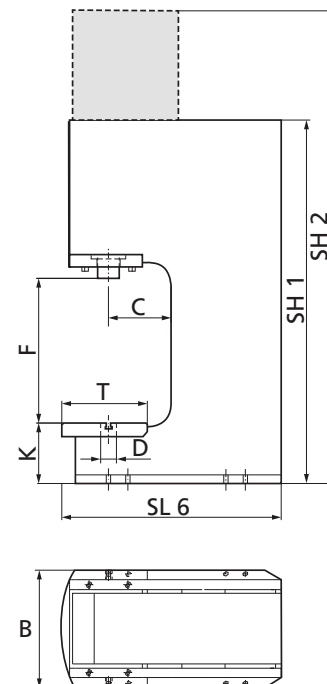
With force outputs of 20 kN to 100 kN

Pressentyp		TorquePress 520	TorquePress 560
Force F max. S3 25%, 20 s	kN	20	100
Force F 100 % continuous run	kN	10	50
Ram stroke	mm	250	300
Resolution position control	µm	< 1	< 1
Ram speed	mm/s	0 – 260	0 – 200
Resolution PDA force	N/inc	6,25	30
Resolution PDA stroke	µm	4	4,6
Overload protection		electrical	mechanical
Drive		ball screw	planetary roller screw
Weight appr.	kg	95	230
Tool weight max.	kg	25	100
Power supply (50 – 60Hz)	VAC	400 – 480, 3~ / 16 A	400 – 480 V 3~ / 32 A
Dimension H / W / D	mm	1132 / 163 / 315	1438 / 304 / 255
Ram bore	mm	ø 20 ^{H7}	ø 20 ^{H7}
Ram dimension	mm	ø 50 ^{H6}	ø 60 ^{H6}



TorquePress 560 with SmartGuard and PressControl 7000 RT/HMI on PU40

Overall dimensions with frame			TorquePress 520	TorquePress 560
Throat depth	C	mm	160	160
Table bore	D	mm	ø 40 ^{H7}	ø 40 ^{H7}
Working height	F	mm	340	420
Table height	K	mm	132	180
Table size	B x T	mm	300 x 230	370 x 230
Frame depth	SL 6	mm	530	620
Frame height	SH 1	mm	670	880
Total height	SH 2	mm	1662	2098
Weight approx.		kg	222	584



Detailed dimensional drawings can be downloaded:
www.schmidttechnology.de