PST
Press Solutions

Powerful, durable and accurate

Full commonality

Built on the industry proven QST fixtured spindle, the PST is the toughest and most versatile electric servo press available on the market. Together with all Atlas Copco smart connected products and software solutions, PST supports you to reduce costs, increase productivity and quality.

PST Press System

Features

A Planetary Roller Screw.
Lean, compact, durable and optimized to handle high speeds, accelerations and decelerations.

B Load cell on outgoing shaft giving accurate and precise load readings.

C Thanks to a mechanical gear unit a high level of durability will be achieved. Installations are easier due to the compact design.

D PSTs can be ordered with a brake as an option.

E Press motor chip. Unique tool parameters, serial numbers and amount of cycles are stored in the PST motor chip.

F Common standard QST motor with the smart cable connector which can be turned in 2 directions enabling flexibility.

G Stand alone designed controller which is covering the complete force range with high safety level STO Cat 3 PLe.

H Reset E-stop button.

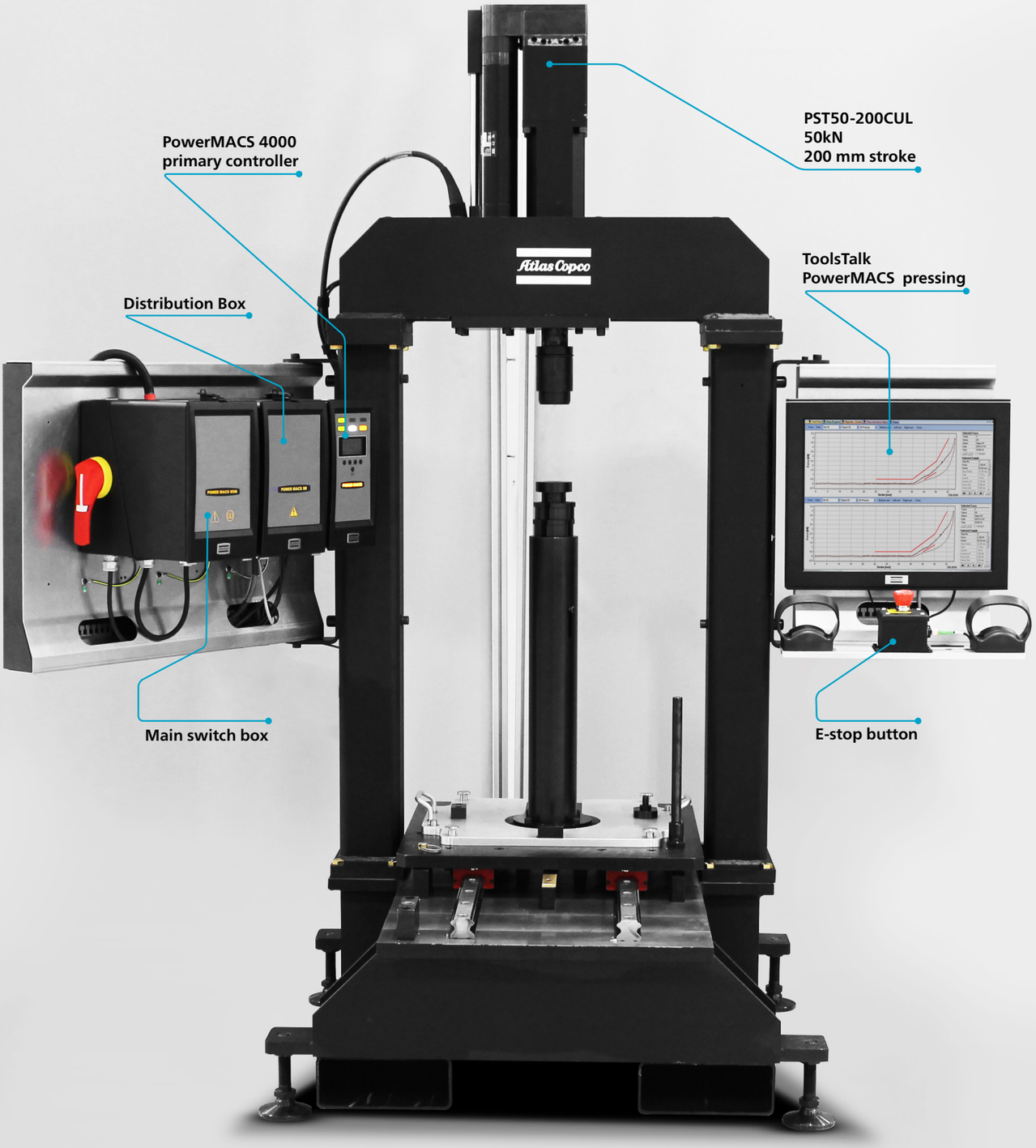
I Push buttons. Toggles between displayed information.

J Text display. TC node address, IP-address, event code, software version, cycle data.

K Indicator lights. ALL OK, OK, NOK ALARM, E-stop.

L Ethernet switch, internal redundant, E-stop relays, digital in/output, opto isolated, 24V for external use, anybus slot, double ethernet.

Productivity cut costs



Smart and reliable controller

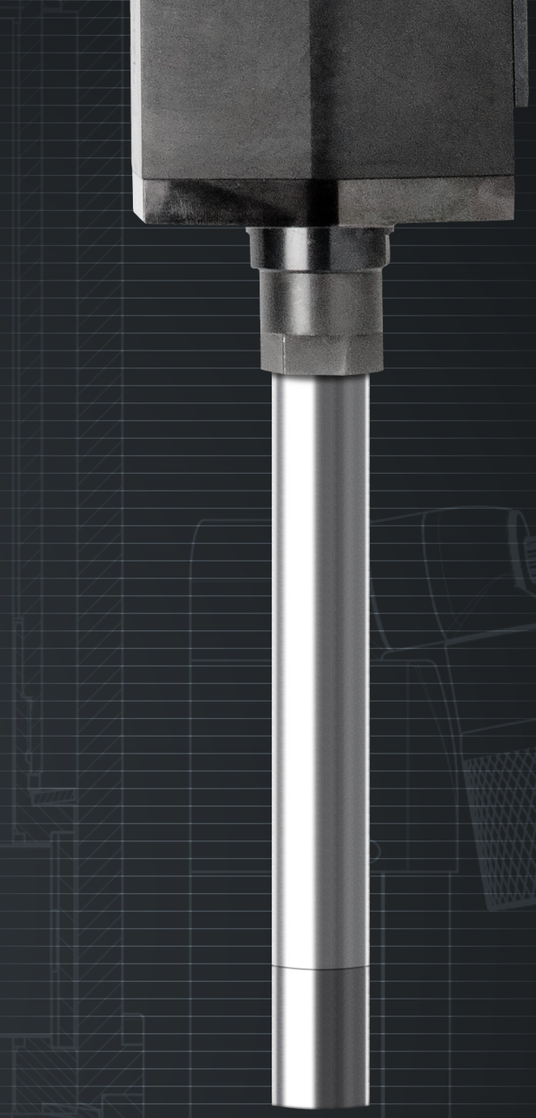
PST is the new electric servo press and family member to the already proven and well known PowerMACS 4000 system.

The PST which is running on the PowerMACS 4000 controller is using the same tool cable and motor as the tightening and gauging spindle QST. The software, ToolsTalk Press, looks identical to ToolsTalk Tightening and ToolsTalk Gauging and is loaded with smart pressing strategies and functions to give you full control of your pressing process.

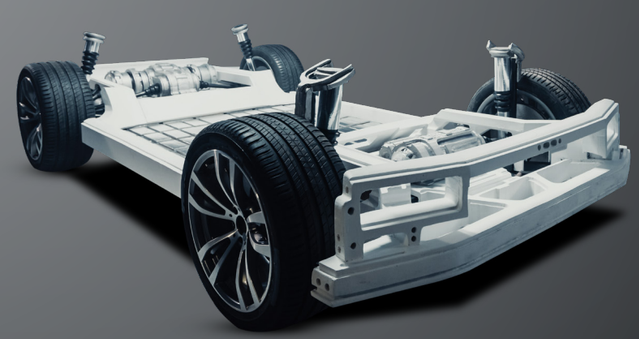
The PST has a remarkable compact design in relation to what press forces it can deliver. This is mainly explained by it's powerful motor (QST), slim mechanical gearbox and its high efficient planetary roller screw which has the function to transform the rotational motion from the gearbox to a powerful and accurate linear motion.

Fast and accurate

PST is using the same powerful motor as the QST tightening spindle as well as the same servo in the PowerMACS 4000 controller. With very accurate load cell readings and advanced monitoring and control parameters in the software, the PST press system can achieve controlled and very fast rundown speed. As well as very accurate pressing results.



Pressing applications are frequently used in the automotive and in the general industries. The PST press system will make your process run accurate, productive and clean.



One platform
Tightening, gauging and pressing

Easy to order and integrate. Single controller, single cable, one of a kind press unit and you are ready to produce. No extra hardware, cables or cabinets, lowering your total cost of ownership.

Advanced process control and monitoring functions make it easy to view and collect data.

Same ToolsNet

Same PLC

Same QIFs

Same Solution

Full commonality – One high end solution

Our high-end solution for gauging, tightening and pressing is one of a kind. It's completely unique. Through commonality we reduce programming and verification costs, reduce cost of spare parts and service and offer one common platform for your operators. Thus also reducing time and cost for training.

Stand alone controller

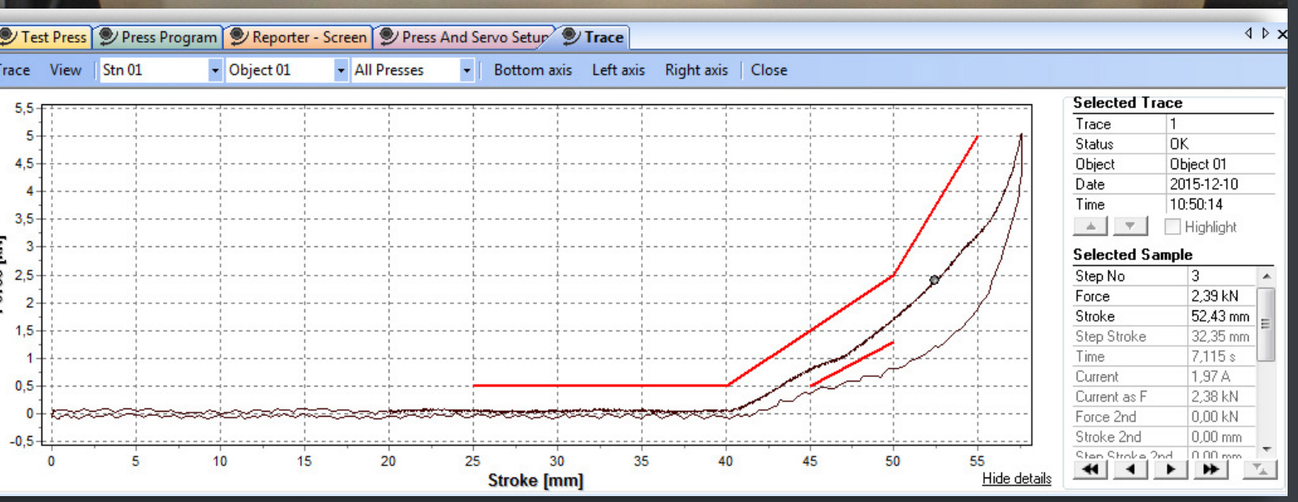
The PowerMACS 4000 has a stand alone and compact design, this means there is no need to mount the PowerMACS 4000 into an electric cabinet. This will save you floor space as well as the need for external cooling e.g. air conditioner is no longer needed. Further on PowerMACS 4000 has a wealth of tested pressing strategies, meaning every pressing joint can be pressed in the best possible way in terms of cycle time and quality.

SoftPLC – No need for external PLC

It couldn't be more convenient! The advanced PowerMACS 4000 has an integrated SoftPLC. This provides PLC functionality as an integratd part of the controller. This means easier integration and no need for additional hardware.

ToolsTalk PowerMACS

The ToolsTalk software for PowerMACS 4000 has been developed with user friendliness and customer adaptation in mind. This Windows-based program can be installed on a station PC, a laptop or a back office PC. ToolsTalk supports off-line programming; to edit or upload programs, simply connect the PC to the PowerMACS 4000 controller using an Ethernet cable.



ToolsTalk Press provides you with all you will ever need.

PST

Two technologies – One simple choice

Hydraulic and servo presses are two rather common technologies when it comes to pressing technique. Between them there are several differences. It does not only come down to pressing performance, there is also economic and environmental issues. Below comparison displays the obvious differences, and why one technique always comes out on top.

Function	Hydraulic press	PST
Force Management	✗ External sensors are needed	✓ Integrated load cell
Position Management	✗ External sensors are needed	✓ Integrated position sensor
Speed Control	A controlled speed change during movement is difficult to perform.	✓ Full control of the speed.
Acceleration Control	✗ Not Possible	✓ Full control of acceleration and deceleration.
Hold the Force	✗ Difficult due to pressure leakage	✓ DYNA Force
Stop Control	It is difficult to stop promptly	✓ Process can be stopped at any position during the movement
Data Collection	✗	✓ ToolsNet
Drive Equipment	A pump and a controller unit are needed	PowerMACS 4000
Maintenance Cost	Frequent maintenance of the drive equipment is needed. Pumps and other accessories also need service.	LOW.
Running Cost	The power consumption of the pump is high.	LOW.
Floor Space Occupation	HIGH.	LOW.

ToolsNet 8 dashboard widgets are personalized views for your specific needs

The ToolsNet 8 dashboard is modular giving you a direct overview of the production in the plant. Extracting and visualizing the information you find most interesting and important to monitor – any time. Every user can configure the dashboard in a way that best suits their needs.

Maybe you want a complete overview of the assembly line to analyze productivity. Or you need to monitor a certain station to improve on quality.

ToolsNet 8 will:

- Boost your productivity with reduced rework and less bottlenecks
- Improve your quality by avoiding recalls tracking changes an finding the problems before they occur
- Reduce service costs with preventive maintenance for your tools, reduced down time and faster reaction time with alert notices

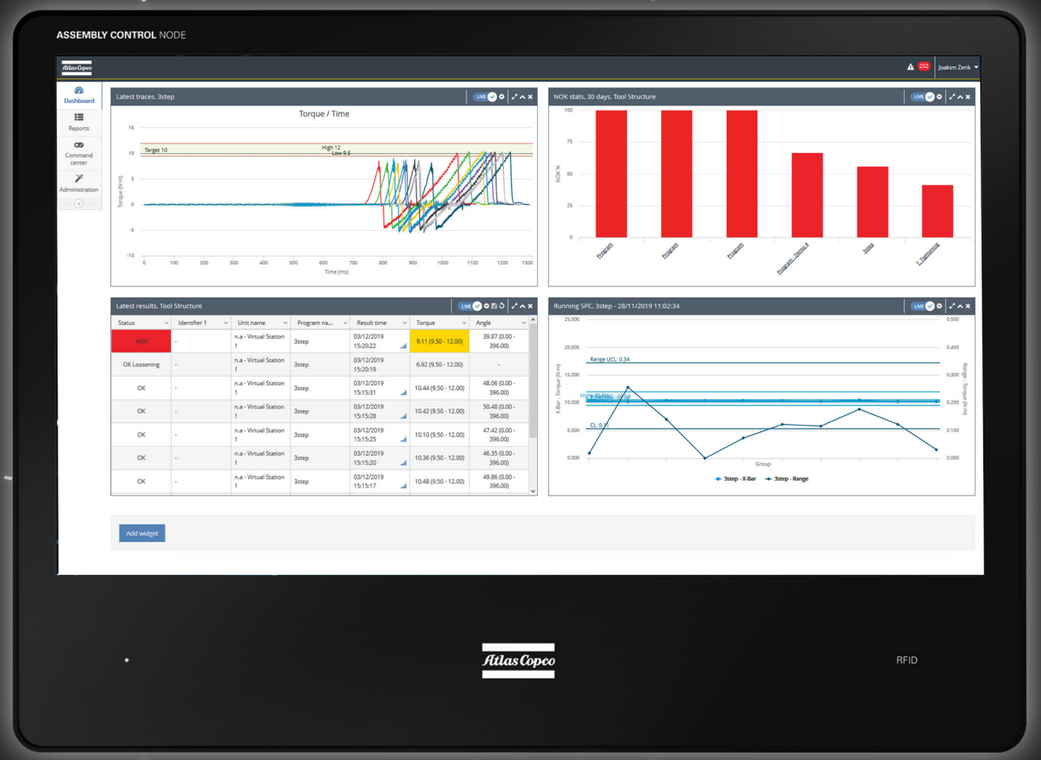
New license or upgrade?

If you currently are working with ToolsNet 4000 you can install an upgrade to ToolsNet 8. Users of previous versions and first time users need to do a full installation of ToolsNet 8.

Get in touch with your Atlas Copco contact today.
Learn more on www.atlascopco.com

Latest traces
Overlay and compare multiple traces for easy diagnostics

Top NOK applications
Highlight the application with the highest failure rate



Latest results
See an overview of the latest results with advanced filtering functionalities

Running SPC
Shows the real-time X-bar and range chart for a specific application

AC Node 21.5 Basic	8434 2301 10
ToolsNet 8 Analysis L1	8092 1910 01

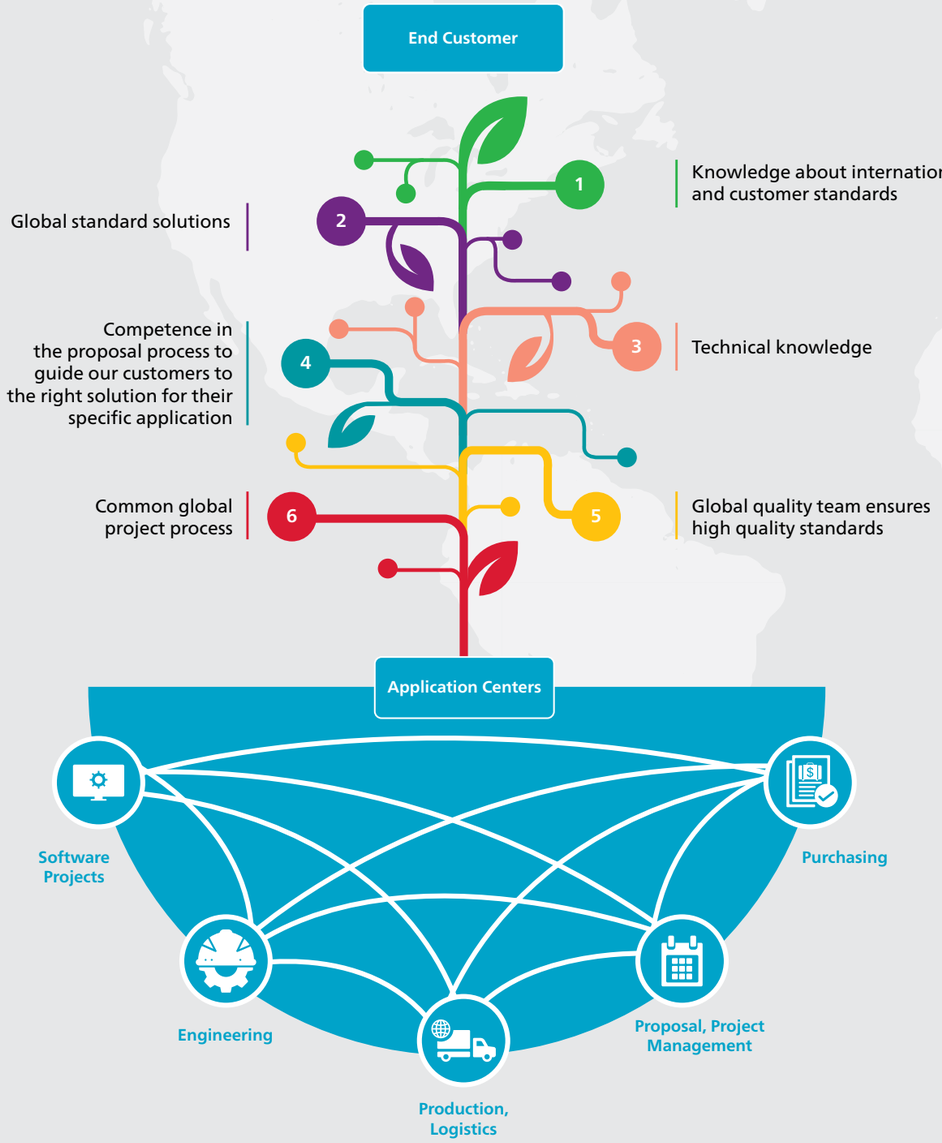
Global projects

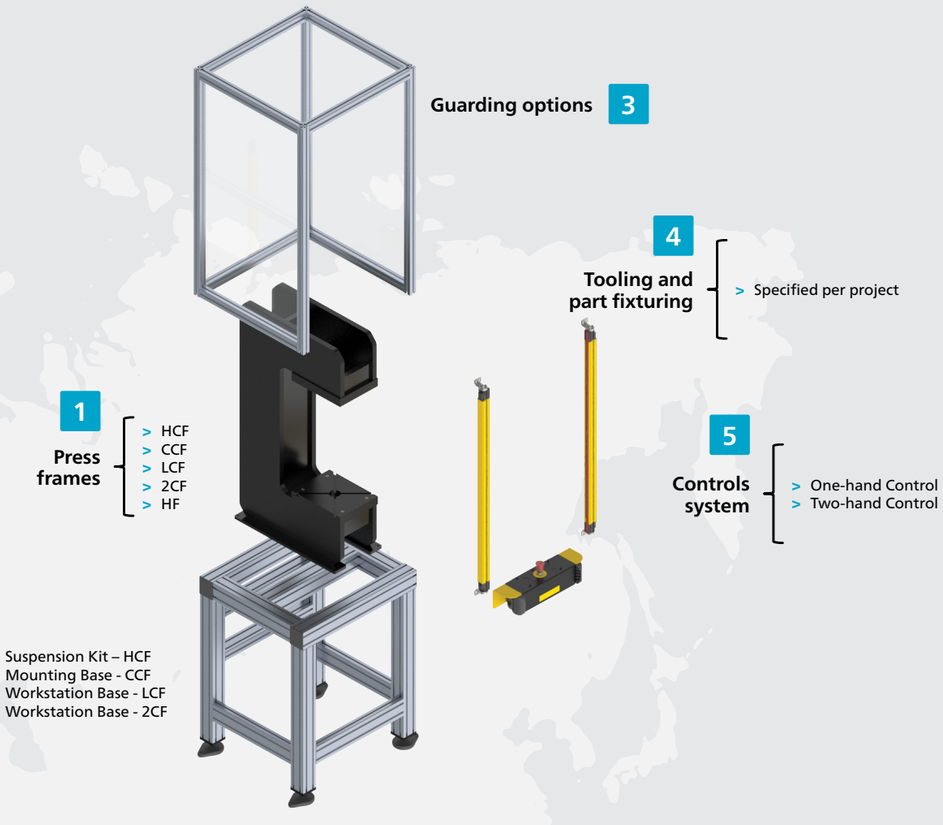
As a global partner, we efficiently manage projects providing proven, innovative solutions to meet global and local customer needs

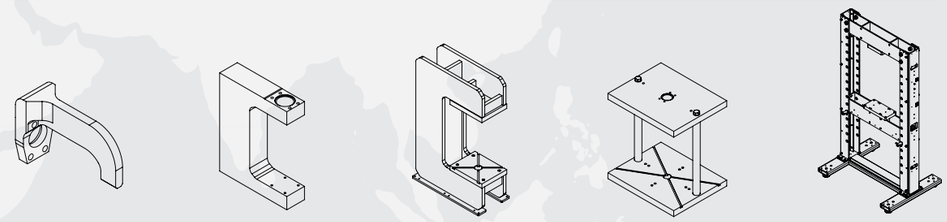
5
Applications Center

30
project offices

3000
projects per year







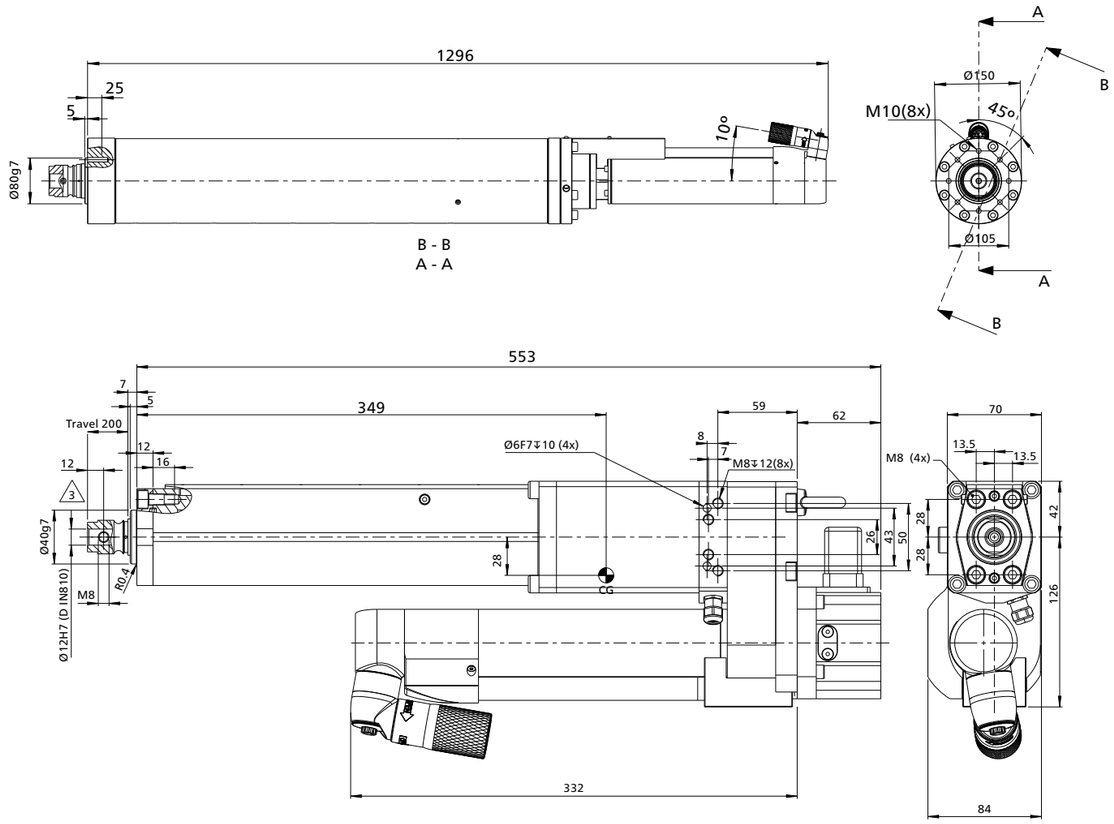
	Handheld C-Frame	Compact C-Frame	Large C-Frame	2-Column Frame	H-Frame
Description	Lightweight, ergonomic, low capacity	Compact footprint, high part accessibility	Large working envelope, high part accessibility	Large working envelope, limited side-access, concentric deflection	Adjustable part height, concentric deflection
Working Envelope	•	••	•••	••••	•••
Part Accessories					
Front	✓	✓	✓	✓	✓
Rear					
Sides	✓	✓	✓	✓	✓
Fixturing					
Suspended	✓				
Tabletop		✓	✓	✓	
Workstation		✓	✓	✓	
Self-supported					✓
Press Range (kN)					
	PST 5 & 10	PST 5, 10, 20, 35 & 50	PST 5, 10, 20, 35 & 50	PST 5, 10, 20, 35, 50 & 100	PST 5, 10, 20, 35 & 50

PST Press

Model	Max push force kN	Max push force LBS	Max pull force kN	Max pull force LBS	Stroke mm	Speed mm/s	Weight kg	Weight lb	Min C-C distance mm	A mm	B mm	AB mm	C mm	D mm	DB mm	E mm	Ordering No.
Straight press																	
PST60-400CL-S	60	13500	12	2700	400	165	66	145	150	-	-	1296	-	150	105	56	8435 4069 51
PST60-400CBL-S	60	13500	12	2700	400	165	67	148	150	-	-	1376	-	150	105	56	8435 4069 52
Compact press																	
PST5-200CUL-S	1-5	220-1120	4	900	200	250	21,0	46,30	77	508	390	(-)	198	76	(-)	28,5	8435 4069 31
PST5-200CBUL-S	1-5	220-1120	4	900	200	250	23,0	50,71	88	508	390	570	198	76	87	28,5	8435 4069 32
PST5-400CUL-S	1-5	220-1120	4	900	400	250	25,0	55,12	77	708	390	(-)	198	76	(-)	28,5	8435 4069 33
PST5-400CBUL-S	1-5	220-1120	4	900	400	250	27,0	59,52	88	708	390	770	198	76	87	28,5	8435 4069 34
PST10-200CUL-S	2-10	450-2250	4	900	200	250	21,0	46,30	77	508	390	(-)	198	76	(-)	28,5	8435 4069 62
PST10-200CBUL-S	2-10	450-2250	4	900	200	250	23,0	50,71	88	508	390	570	198	76	87	28,5	8435 4069 78
PST10-400CUL-S	2-10	450-2250	4	900	400	250	25,0	55,12	77	708	390	(-)	198	76	(-)	28,5	8435 4069 64
PST10-400CBUL-S	2-10	450-2250	4	900	400	250	27,0	59,52	88	708	390	770	198	76	87	28,5	8435 4069 67
PST20-200CUL-S	4-20	900-4500	4	900	200	250	21,0	46,30	77	508	390	(-)	198	76	(-)	28,5	8435 4069 60
PST20-200CBUL-S	4-20	900-4500	4	900	200	250	23,0	50,71	88	508	390	570	198	76	87	28,5	8435 4069 77
PST20-400CUL-S	4-20	900-4500	4	900	400	250	25,0	55,12	77	708	390	(-)	198	76	(-)	28,5	8435 4069 63
PST20-400CBUL-S	4-20	900-4500	4	900	400	250	27,0	59,52	88	708	390	770	198	76	87	28,5	8435 4069 66
PST35-200CUL-S	7-35	1570-7870	10	2250	200	255	44,0	97,00	105	612,5	498	(-)	245	105	(-)	56	8435 4069 48
PST35-200CBUL-S	7-35	1570-7870	10	2250	200	255	59,0	130,07	105	612,5	498	763	245	105	178	56	8435 4069 42
PST35-400CUL-S	7-35	1570-7870	10	2250	400	255	48,0	105,82	105	812,5	498	(-)	245	105	(-)	56	8435 4069 49
PST35-400CBUL-S	7-35	1570-7870	10	2250	400	255	64,0	141,09	105	812,5	498	963	245	105	178	56	8435 4069 45
PST50-200CUL-S	10- 50	2250-11240	10	2250	200	170	50,0	110,23	105	612,5	498	(-)	245	105	(-)	56	8435 4069 84
PST50-200CBUL-S	10- 50	2250-11240	10	2250	200	170	58,0	127,87	105	612,5	498	763	245	105	178	56	8435 4069 43
PST50-400CUL-S	10- 50	2250-11240	10	2250	400	170	57,0	125,66	105	812,5	498	(-)	245	105	(-)	56	8435 4069 44
PST50-400CBUL-S	10- 50	2250-11240	10	2250	400	170	65,0	143,30	105	812,5	498	963	245	105	178	56	8435 4069 79
PST100-200CUL-S	20-100	4500-22500	20	4496	200	130	180,0	396,83	192	869	476	(-)	350	192	(-)	85	8435 4069 40
PST100-200CBUL-S	20-100	4500-22500	20	4496	200	130	200,0	440,92	192	869	476	953	350	192	192	85	8435 4069 39
PST100-400CUL-S	20-100	4500-22500	20	4496	400	130	200,0	440,92	192	1069	476	(-)	350	192	(-)	85	8435 4069 35
PST100-400CBUL-S	20-100	4500-22500	20	4496	400	130	220,0	485,01	192	1069	476	1153	350	192	192	85	8435 4069 36
Special press																	
PST5-200CUL	1-5	220-1120	2	450	200	500	14,5	31,97	70	491	329	(-)	168	70	(-)	27	9831 4069 31
PST5-200CBUL	1-5	220-1120	2	450	200	500	15,5	34,17	70	491	329	553	168	70	85	27	9831 4069 32
PST5-300CUL	1-5	220-1120	2	450	300	500	16,5	36,38	70	591	329	(-)	168	70	(-)	27	9831 4069 33
PST5-300CBUL	1-5	220-1120	2	450	300	500	17,5	38,58	70	591	329	653	168	70	85	27	9831 4069 34
PST10-50CUL	2-10	450-2250	2	450	50	500	12,0	26,46	71	341	329	(-)	168	70	(-)	27	9831 4069 82
PST10-100CUL	2-10	450-2250	2	450	100	500	13,0	28,66	71	391	329	(-)	168	70	(-)	27	9831 4069 81
PST10-200CUL	2-10	450-2250	2	450	200	500	14,5	31,97	71	491	329	(-)	168	70	(-)	27	9831 4069 62
PST10-200CBUL	2-10	450-2250	2	450	200	500	15,5	34,17	86	491	329	553	168	70	85	27	9831 4069 78
PST10-300CUL	2-10	450-2250	2	450	300	500	16,5	36,38	71	591	329	(-)	168	70	(-)	27	9831 4069 64
PST10-300CBUL	2-10	450-2250	2	450	300	500	17,5	38,58	86	591	329	553	168	70	85	27	9831 4069 67
PST35-200CUL	7-35	1570-7870	7	1574	200	255	44,0	97,00	90	612,5	498	(-)	244	90	(-)	56	9831 4069 48
PST35-200CBUL	7-35	1570-7870	7	1574	200	255	59,0	130,07	90	612,5	498	732	244	90	178	56	9831 4069 42
PST35-400CUL	7-35	1570-7870	7	1574	400	255	48,0	105,82	90	812,5	498	(-)	244	90	(-)	56	9831 4069 49
PST35-400CBUL	7-35	1570-7870	7	1574	400	255	64,0	141,09	90	812,5	498	932	244	90	178	56	9831 4069 45

PST10-200CBUL

10	Maximum Pushing Load in kN	B	Brake
200	Maximum Stroke length in mm	U	U-shaped gear set
C	Commutation Sensor	L	Load Cell

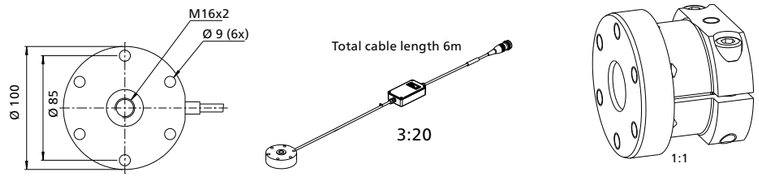


ToolTalk PowerMACS 4000 Pressing

License	Designation	Ordering No.
1 User	English	8092 1310 01
5 Users	English	8092 1310 05
10 Users	English	8092 1310 10
Plant License	English	8092 1310 97

Brake control module

Model	Ordering No.
Brake control module	4232 5952 80



Force transducers

Model	Ordering No.
Force Transducer 5 kN	4232 8211 90
Force Transducer 10 kN	4232 6390 90
Force Transducer 20 kN	4232 6391 90
Force Transducer 50 kN	4232 6392 90
Force Transducer 100 kN	4232 7401 90
Force Transducer 200 kN	4232 7402 90
Force Transducer 500 kN	4232 7403 90

Tool adapters

Model	Ordering No.
Press Tool Adapter PST5,10 and 20 all version	4232 0125 90
Press Tool Adapter PST35	4232 0125 92
Press Tool Adapter PST35 -S and 50 -S	4232 0125 93

9833 2062 01 – EN © Atlas Copco AB, Stockholm, Sweden. April 2020

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