

[P4Xe]

Eurolech meet-IN 2010



salvagnini

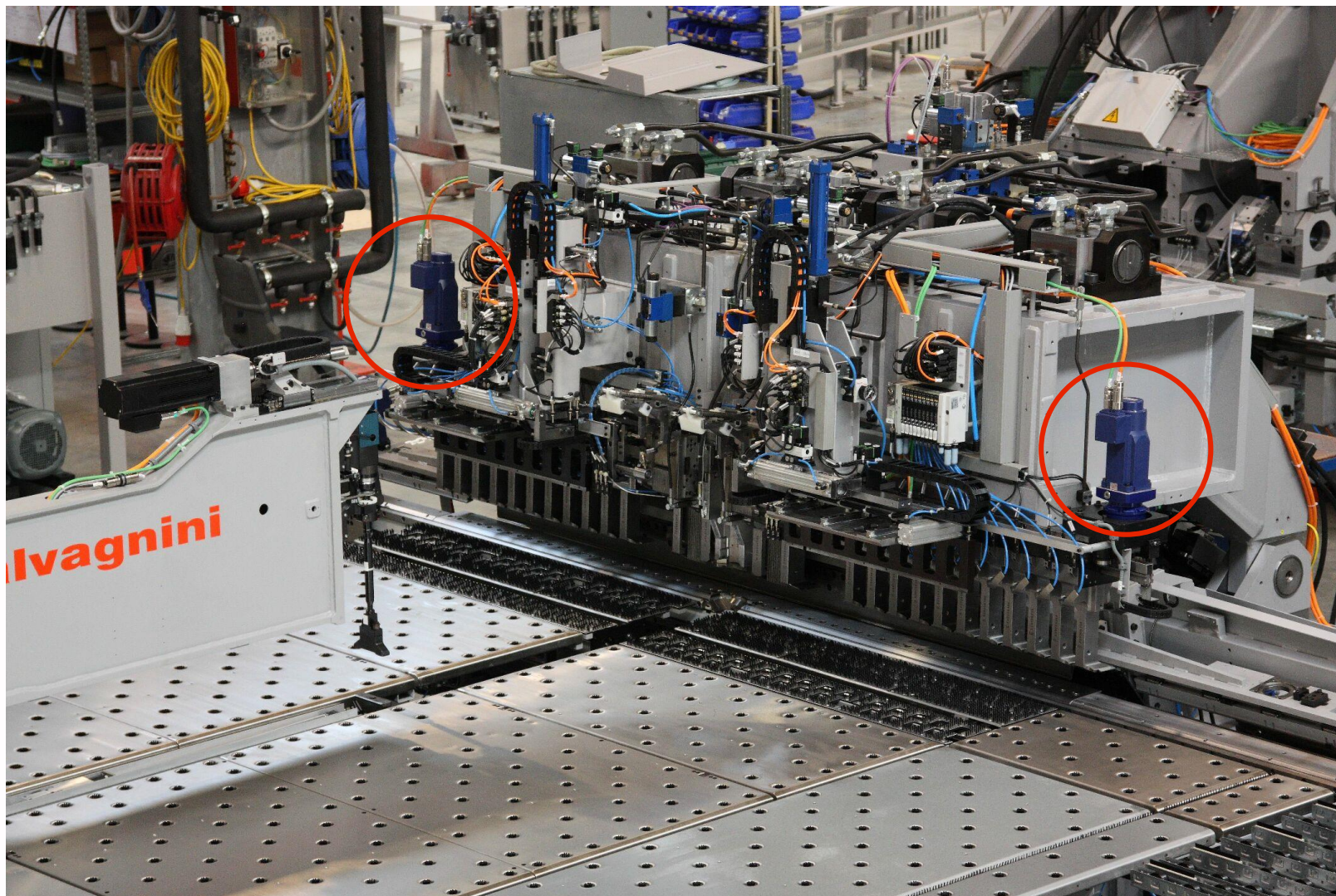
, e Means:

- **e**conomical
- **e**cological
- **e**fficient
- **e**lectric
- **e**xact
- **e**asy

P4Xe-16**

- **New ABA**
 - electrically activated blankholder tools

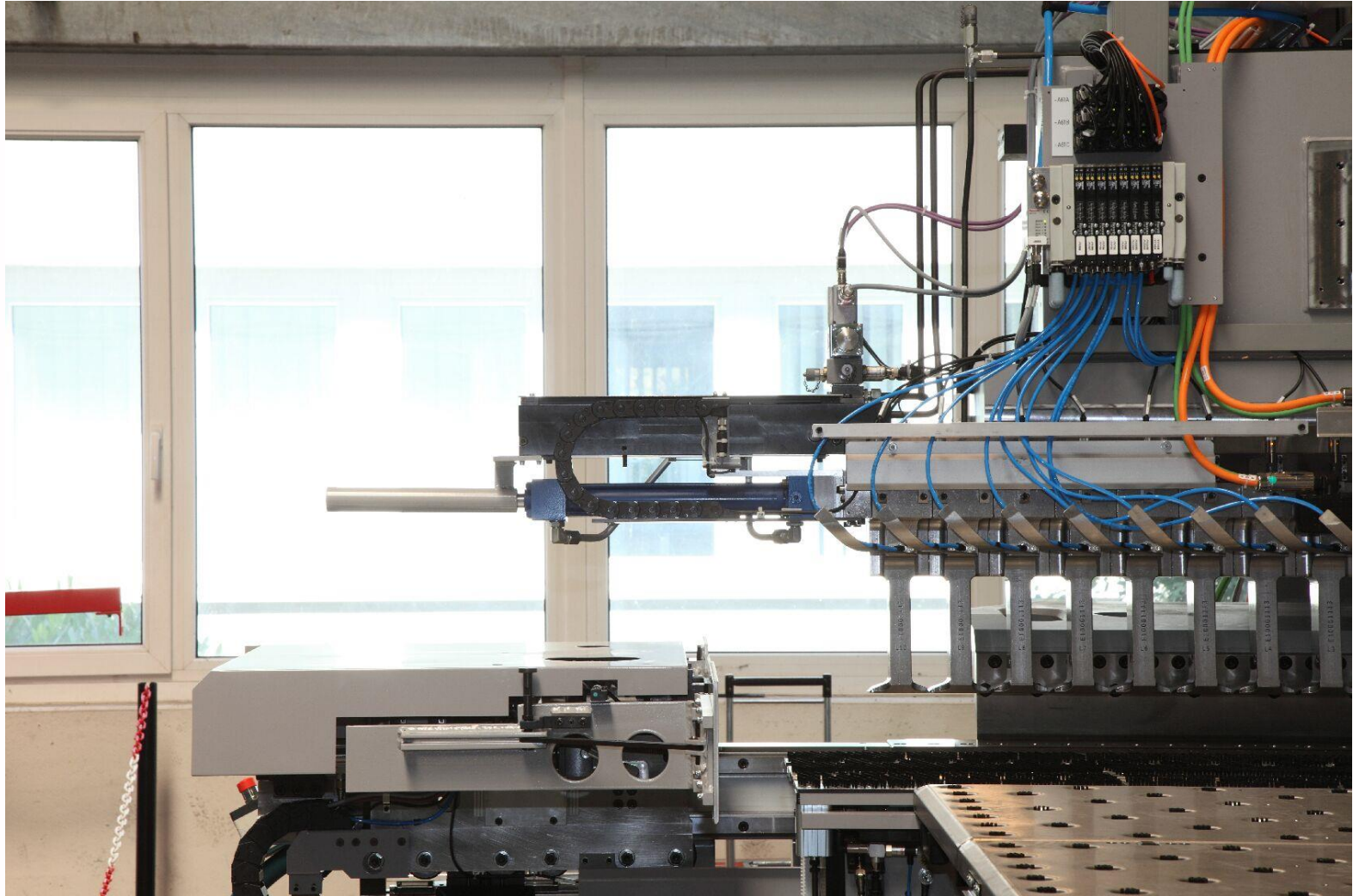
New ABA: Electrically Activated Blankholder Tools



New ABA: Electrically Activated Blankholder Tools



Before: Hydraulically Activated Blankholder Tools

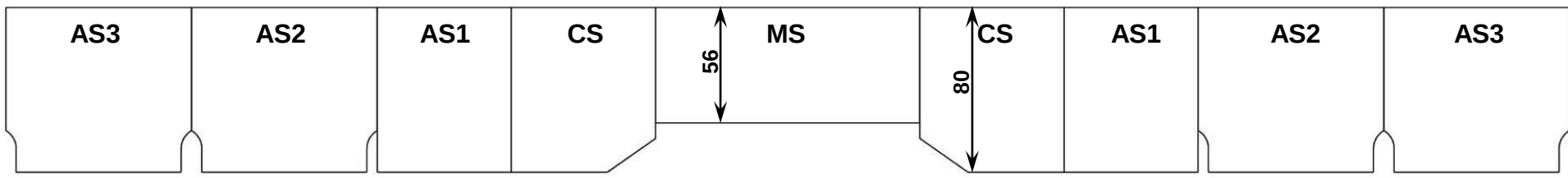


P4Xe-**16

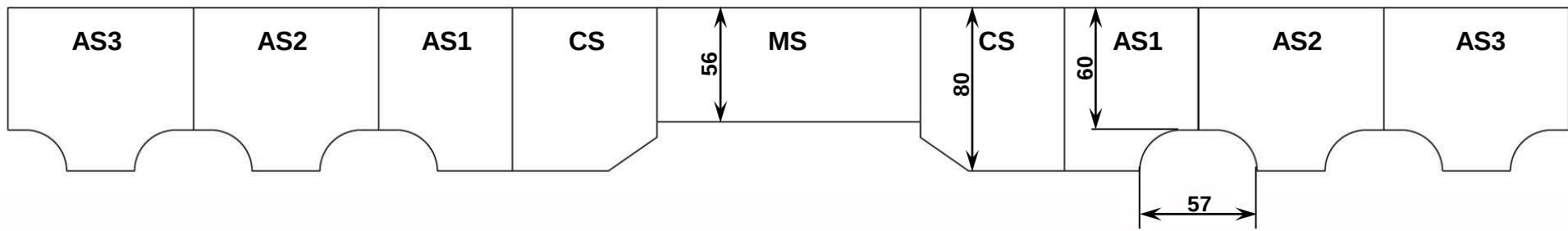
➤ New ABA

- electrically activated blankholder tools
- new footprint

P4X: ABA Footprint

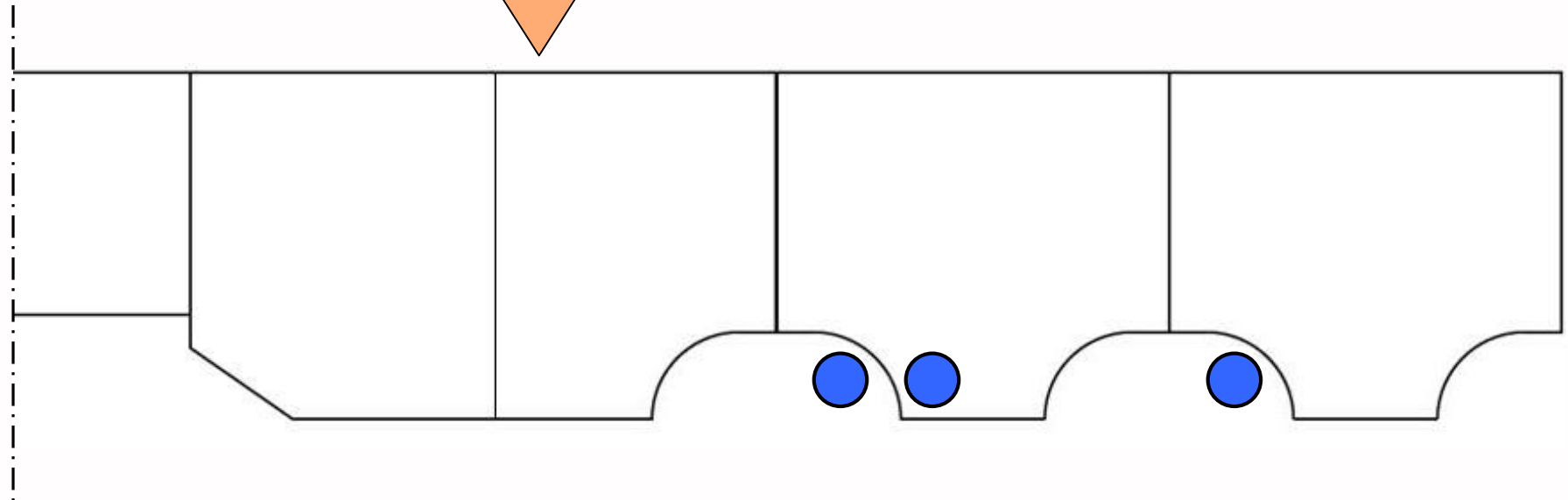
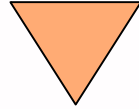


P4Xe: ABA Footprint

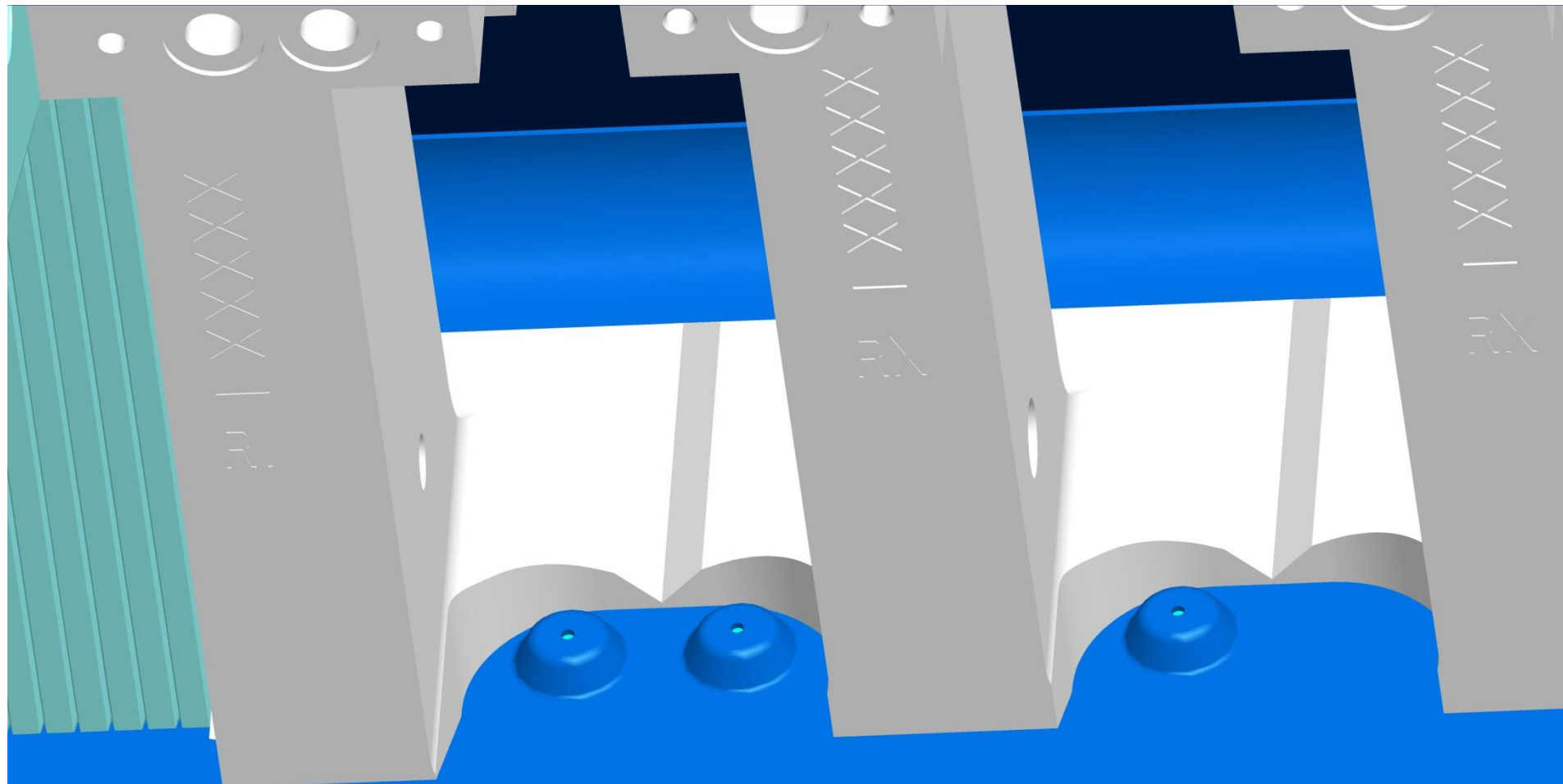


New Solution for Embossings

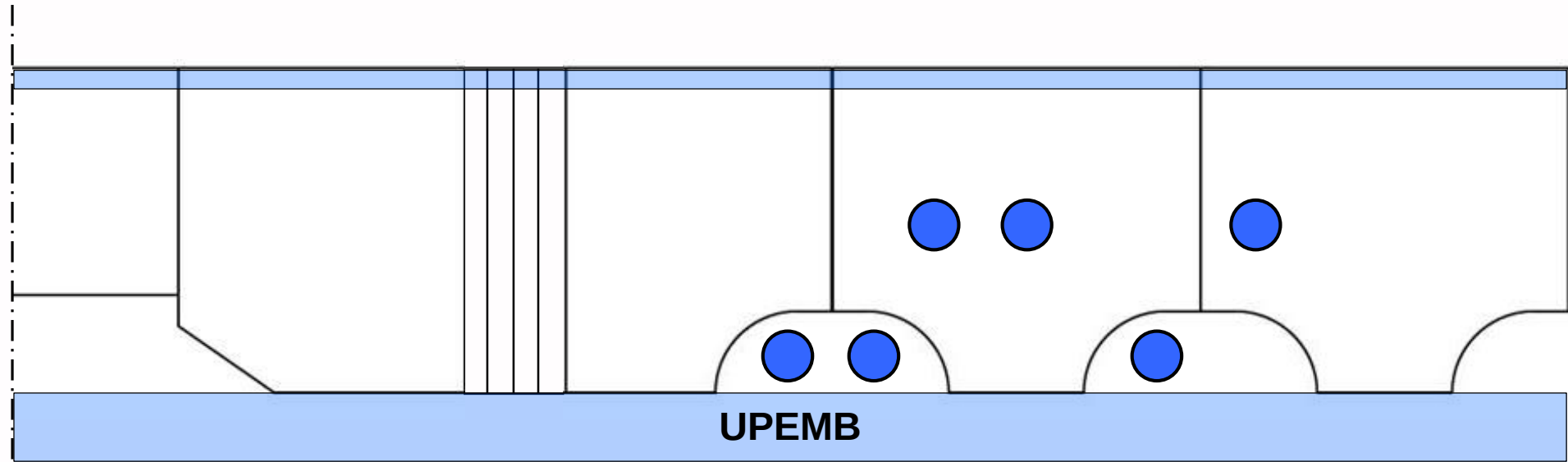
Composition
segments



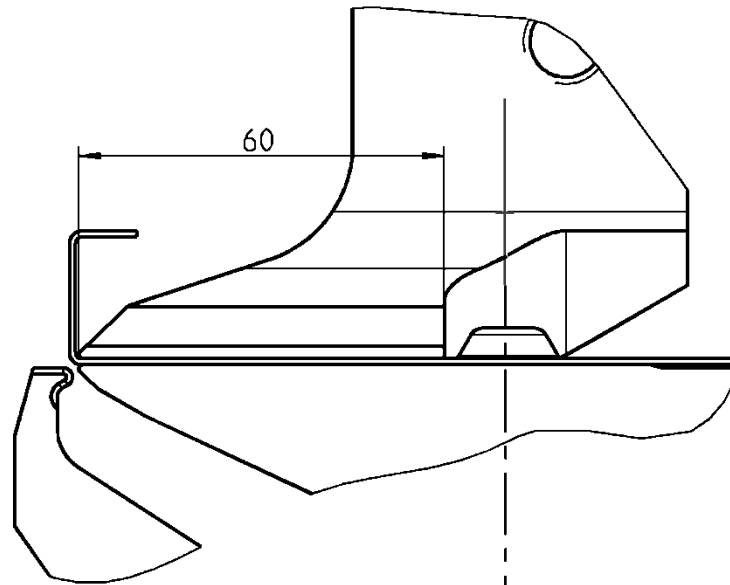
New Solution for Embossings



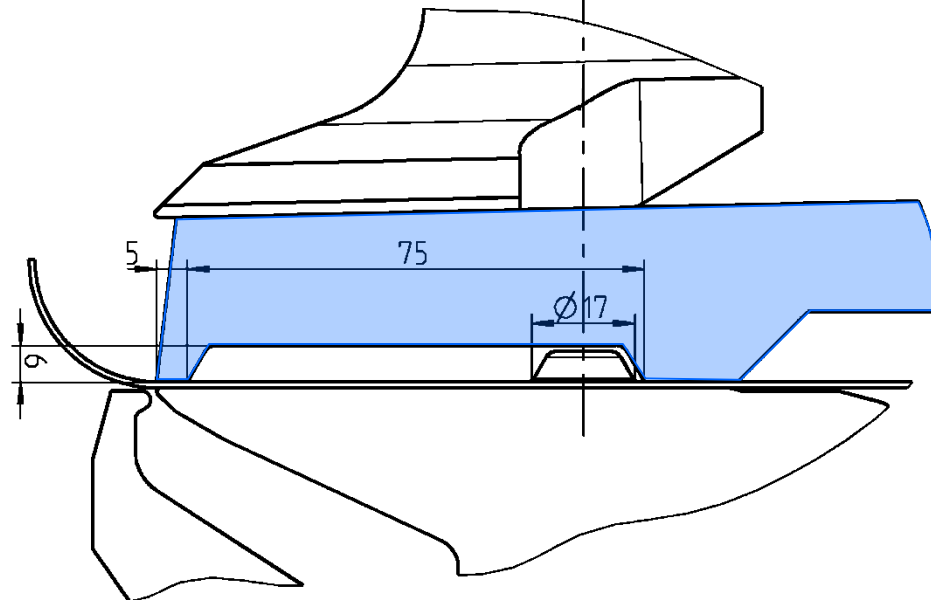
New Solution for Embossings



ABA



ABA+UPEMB



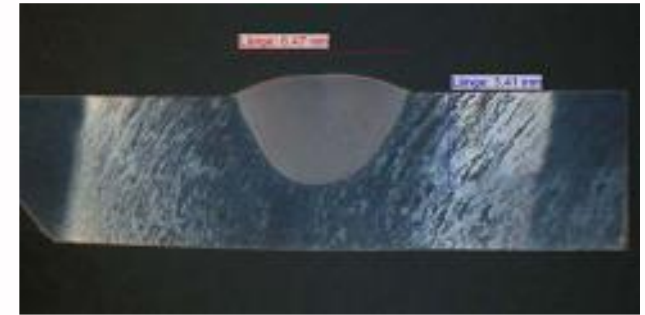
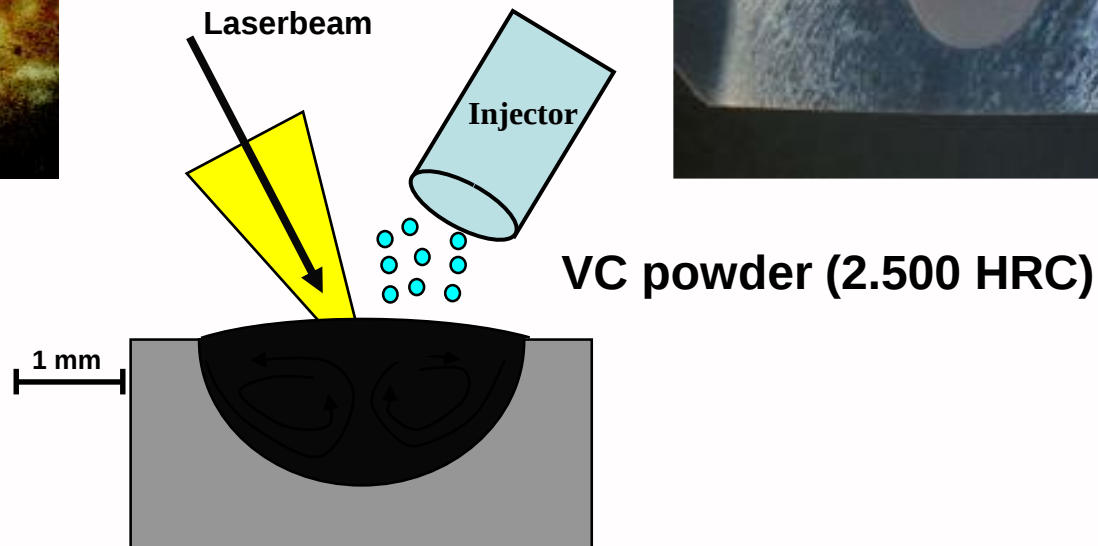
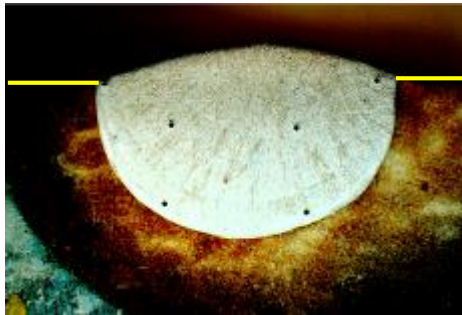
P4Xe-**16

➤ New ABA

- electrically activated blankholder tools
- new footprint
- laser alloyed bend line

Laser Alloyed Bend Line

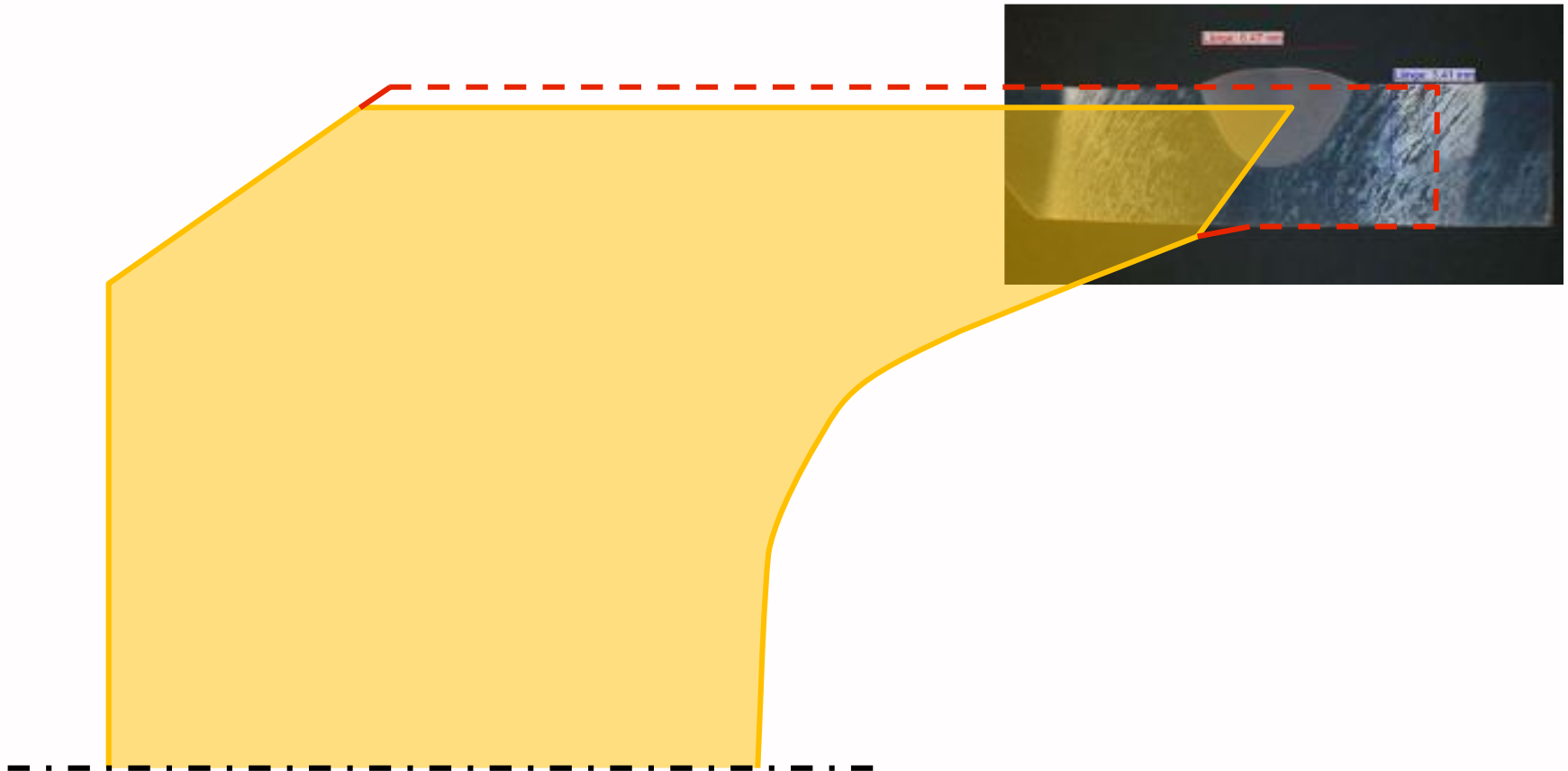
Principle of surface modification by laser alloying



Laser Alloying



Laser Alloyed Bend Line

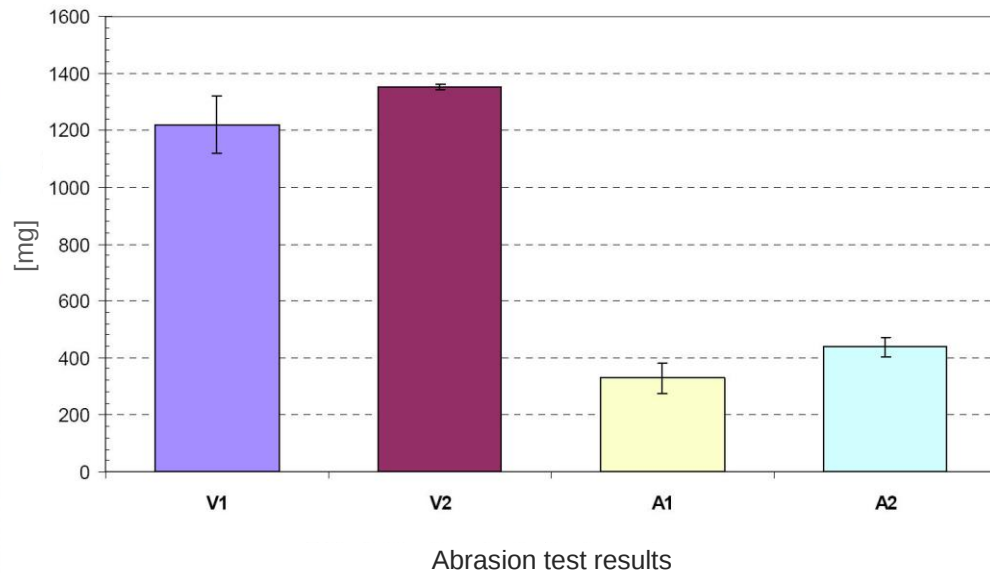
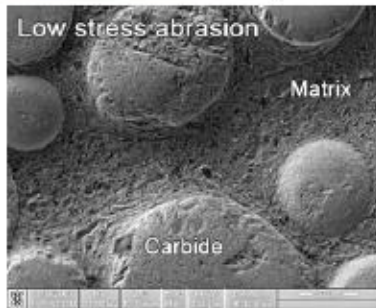


Laser Alloyed Bend Line

CAT - Continuous Abrasion Test



- ASTM-Standard
- 3-body low stress abrasion
- 3-body high stress abrasion
- Silica sand: 212 - 300 μm
- Load: 45...130 N
- Distance: 1436, 4309 m



Laser Alloyed Bend Line

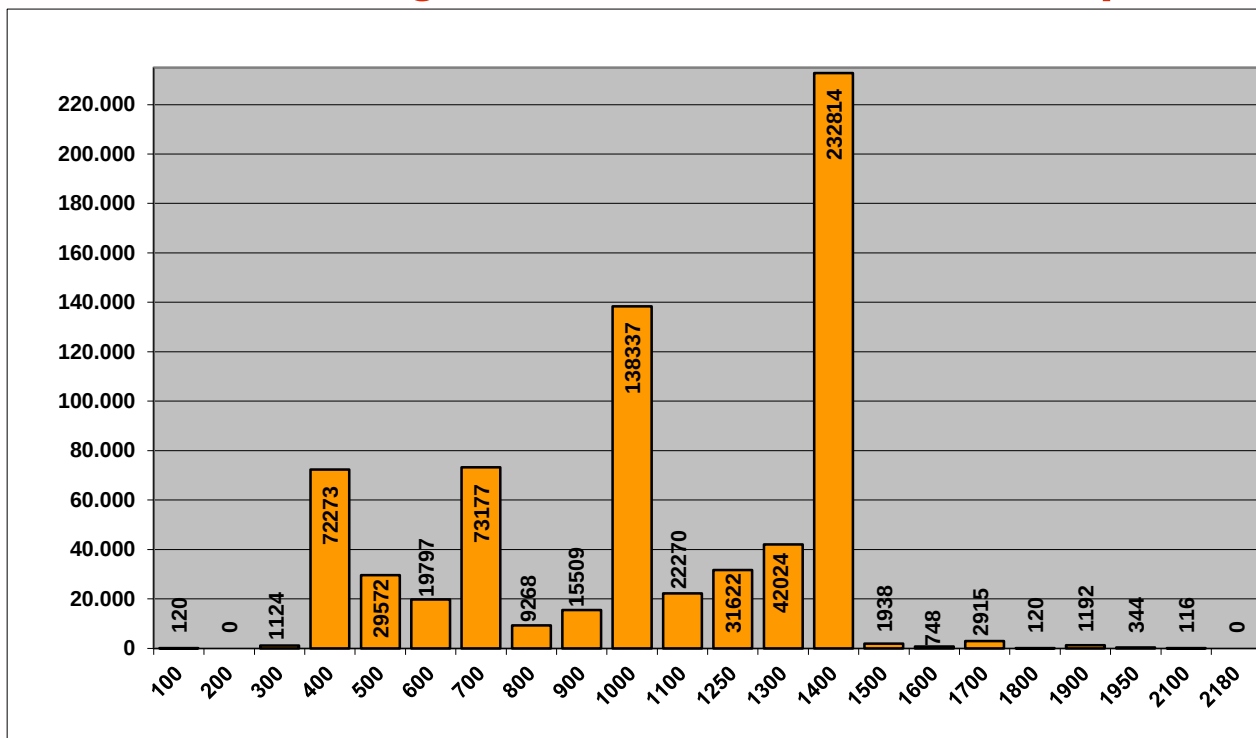


**Laser alloyed bend line provides minimum
double tool lifetime compared to conventional hardening**

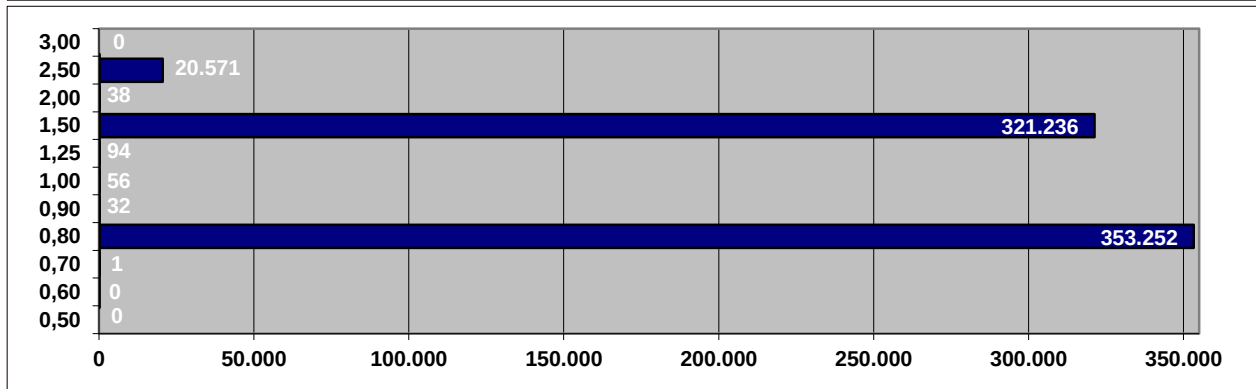
P4-1916

length distribution on 695.280 panels

Length mm	Pieces	Percent	Cumulated
0-100	120	0,02%	0,02%
101-200	0	0,00%	0,02%
201-300	1124	0,16%	0,18%
301-400	72273	10,39%	10,57%
401-500	29572	4,25%	14,83%
501-600	19797	2,85%	17,67%
601-700	73177	10,52%	28,20%
701-800	9268	1,33%	29,53%
801-900	15509	2,23%	31,76%
901-1000	138337	19,90%	51,66%
1001-1100	22270	3,20%	54,86%
1101-1250	31622	4,55%	59,41%
1251-1300	42024	6,04%	65,45%
1301-1400	232814	33,48%	98,94%
1401-1500	1938	0,28%	99,22%
1501-1600	748	0,11%	99,33%
1601-1700	2915	0,42%	99,75%
1701-1800	120	0,02%	99,76%
1801-1900	1192	0,17%	99,93%
1901-1950	344	0,05%	99,98%
1951-2100	116	0,02%	100,00%
2101-2180	0	0,00%	100,00%



Thickness mm	Pieces	Percent	Cumulated
0,41- 0,50	0	0,00%	0,00%
0,51- 0,60	0	0,00%	0,00%
0,61- 0,70	1	0,00%	0,00%
0,71- 0,80	353252	50,81%	50,81%
0,81- 0,90	32	0,00%	50,81%
0,91- 1,00	56	0,01%	50,82%
1,01- 1,25	94	0,01%	50,83%
1,26- 1,50	321236	46,20%	97,04%
1,51- 2,00	38	0,01%	97,04%
2,01- 2,50	20571	2,96%	100,00%
2,51- 3,00	0	0,00%	100,00%

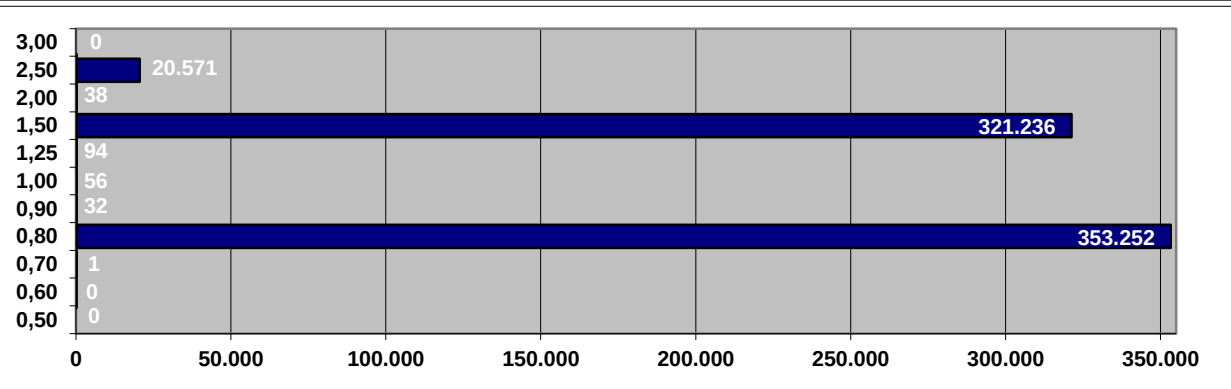
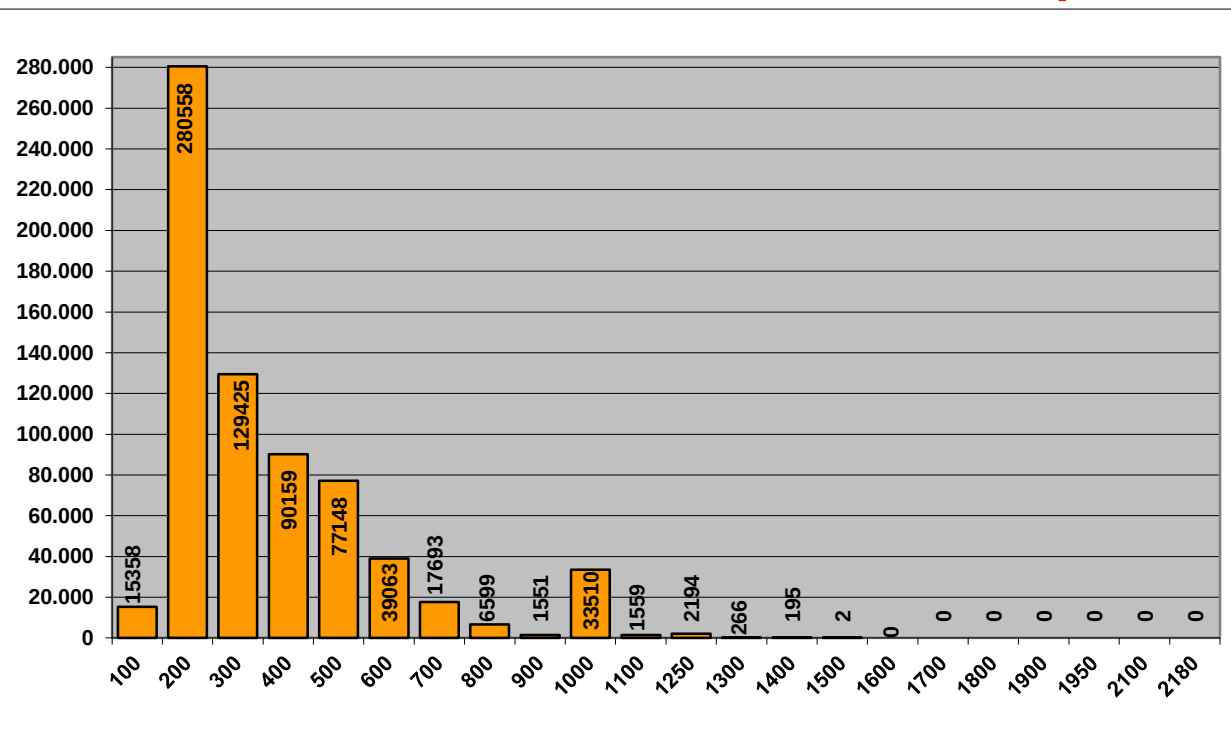


P4-1916

Length mm	Pieces	Percent	Cumulated
0-100	15358	2,21%	2,21%
101-200	280558	40,35%	42,56%
201-300	129425	18,61%	61,18%
301-400	90159	12,97%	74,14%
401-500	77148	11,10%	85,24%
501-600	39063	5,62%	90,86%
601-700	17693	2,54%	93,40%
701-800	6599	0,95%	94,35%
801-900	1551	0,22%	94,57%
901-1000	33510	4,82%	99,39%
1001-1100	1559	0,22%	99,62%
1101-1250	2194	0,32%	99,93%
1251-1300	266	0,04%	99,97%
1301-1400	195	0,03%	100,00%
1401-1500	2	0,00%	100,00%
1501-1600	0	0,00%	100,00%
1601-1700	0	0,00%	100,00%
1701-1800	0	0,00%	100,00%
1801-1900	0	0,00%	100,00%
1901-1950	0	0,00%	100,00%
1951-2100	0	0,00%	100,00%
2101-2180	0	0,00%	100,00%

Thickness mm	Pieces	Percent	Cumulated
0,41- 0,50	0	0,00%	0,00%
0,51- 0,60	0	0,00%	0,00%
0,61- 0,70	1	0,00%	0,00%
0,71- 0,80	353252	50,81%	50,81%
0,81- 0,90	32	0,00%	50,81%
0,91- 1,00	56	0,01%	50,82%
1,01- 1,25	94	0,01%	50,83%
1,26- 1,50	321236	46,20%	97,04%
1,51- 2,00	38	0,01%	97,04%
2,01- 2,50	20571	2,96%	100,00%
2,51- 3,00	0	0,00%	100,00%

width distribution on 695.280 panels



Blankholder Load Diagram

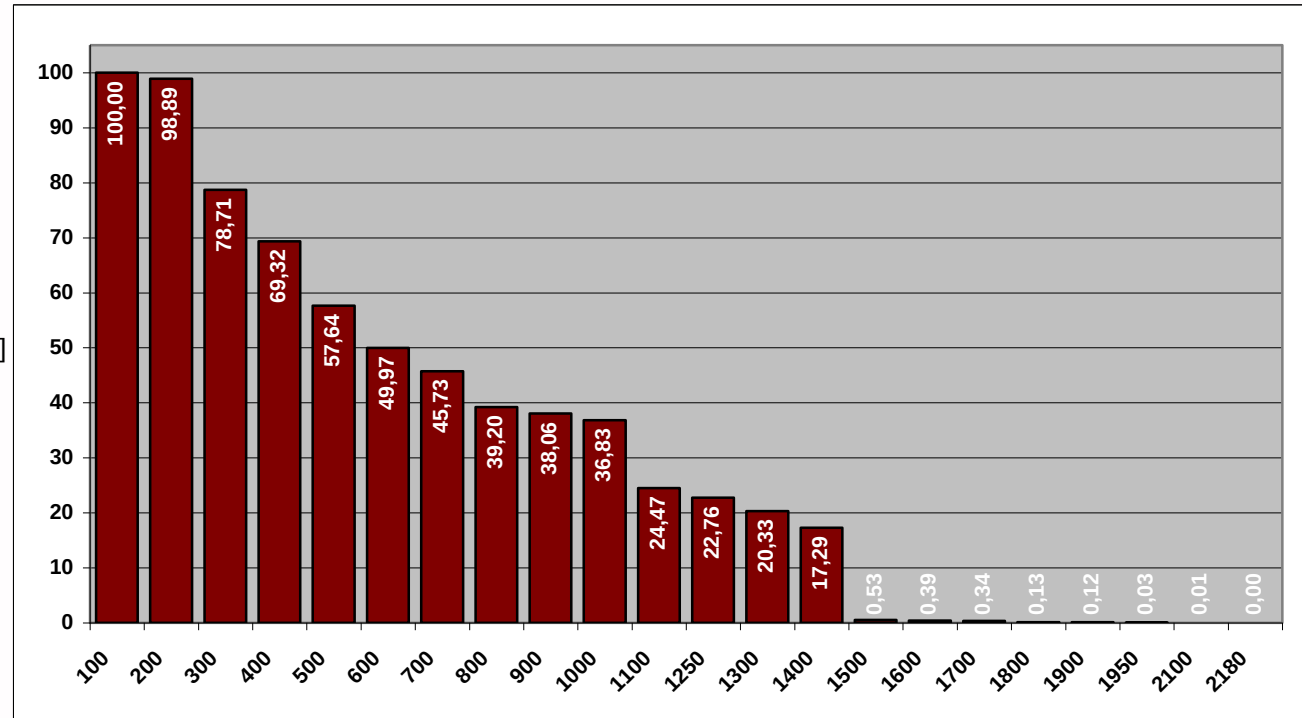
P4-1916

LOAD DIAGRAM

695.280 panels

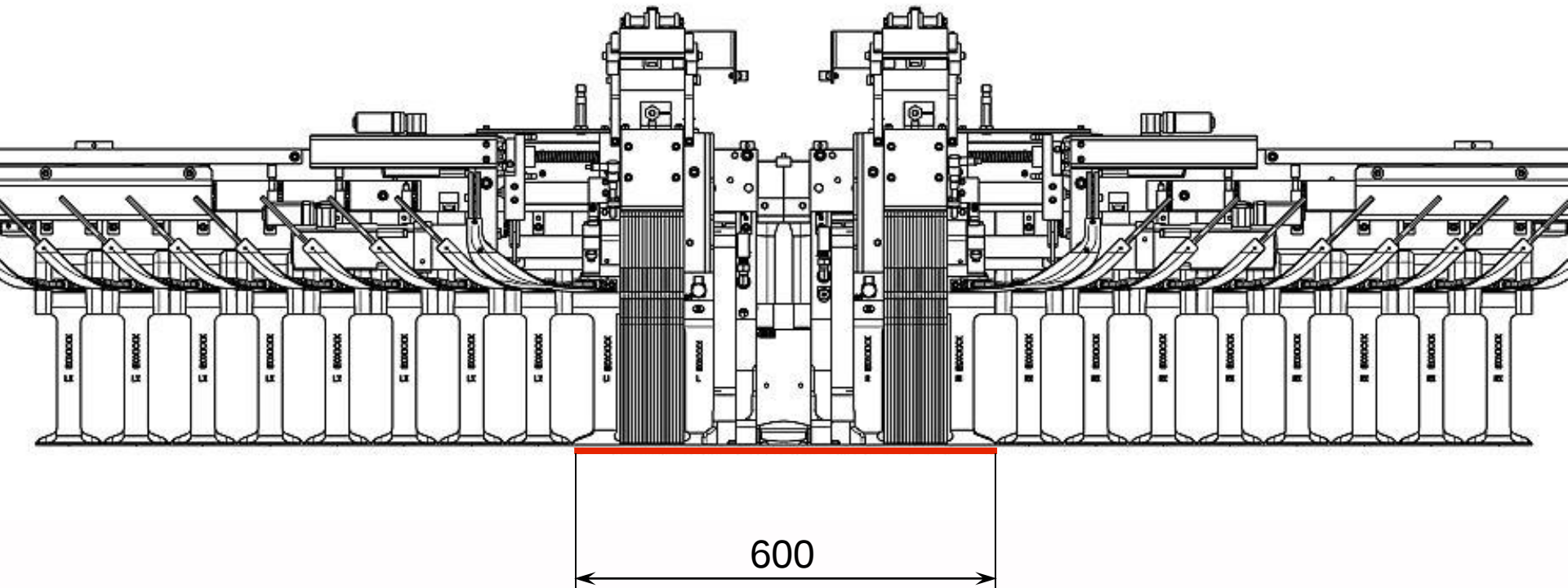
Length mm	Load	Percent
0- 100	15478	100,00
101- 200	280558	98,89
201- 300	130549	78,71
301- 400	162432	69,32
401- 500	106720	57,64
501- 600	58860	49,97
601- 700	90870	45,73
701- 800	15867	39,20
801- 900	17060	38,06
901- 1000	171847	36,83
1001- 1100	23829	24,47
1101- 1250	33816	22,76
1251- 1300	42290	20,33
1301- 1400	233009	17,29
1401- 1500	1940	0,53
1501- 1600	748	0,39
1601- 1700	2915	0,34
1701- 1800	120	0,13
1801- 1900	1192	0,12
1901- 1950	344	0,03
1951- 2100	116	0,01
2101- 2180	0	0,00

[%]



Length [mm]

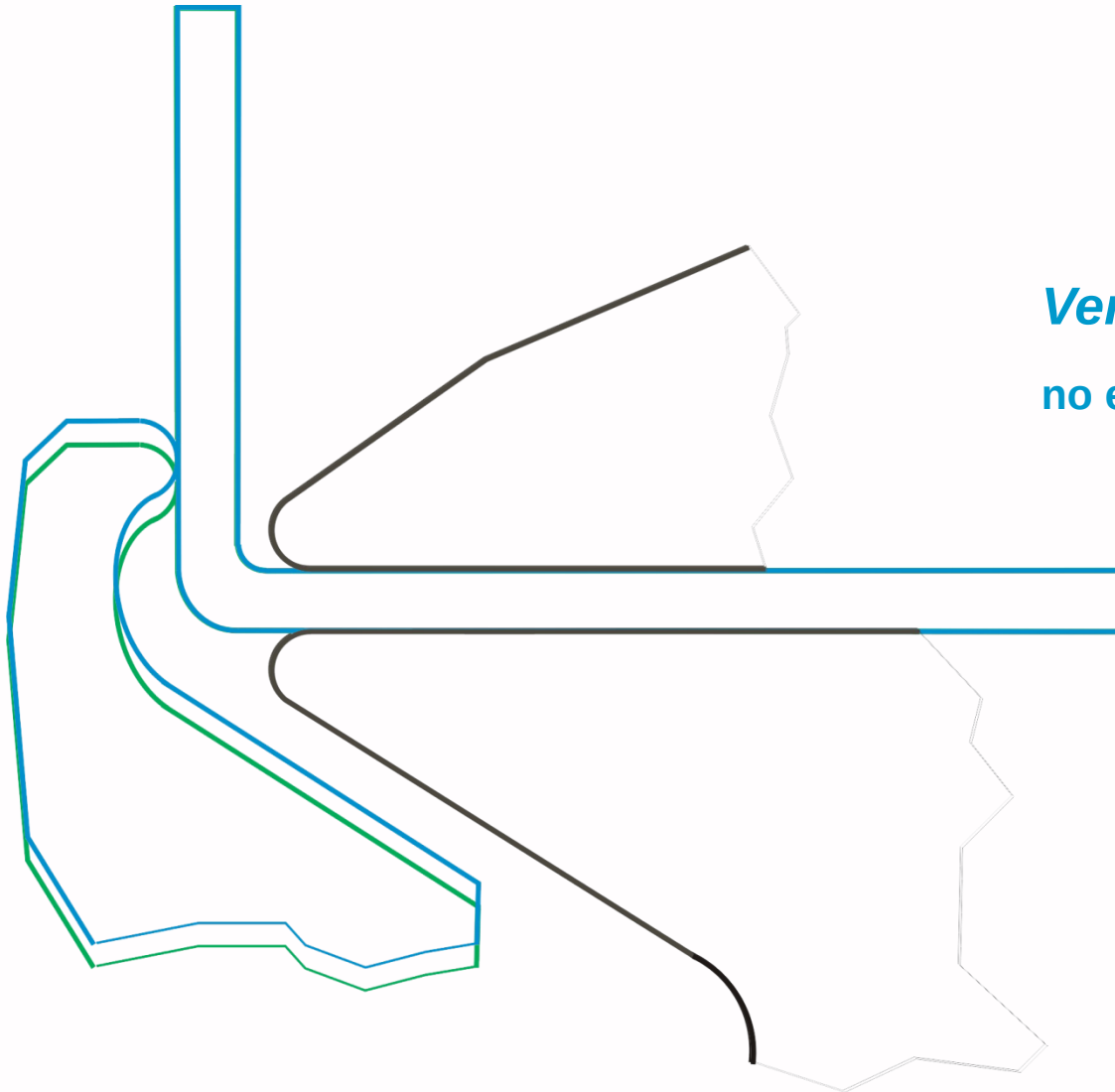
As a Consequence: 600mm Partial Laser Alloying (deliveries starting from 5/2011)



P4Xe-**16

- **New ABA**
 - electrically activated blankholder tools
 - new footprint
 - laser alloyed bend line
- **New „smart“ Bladeholder**

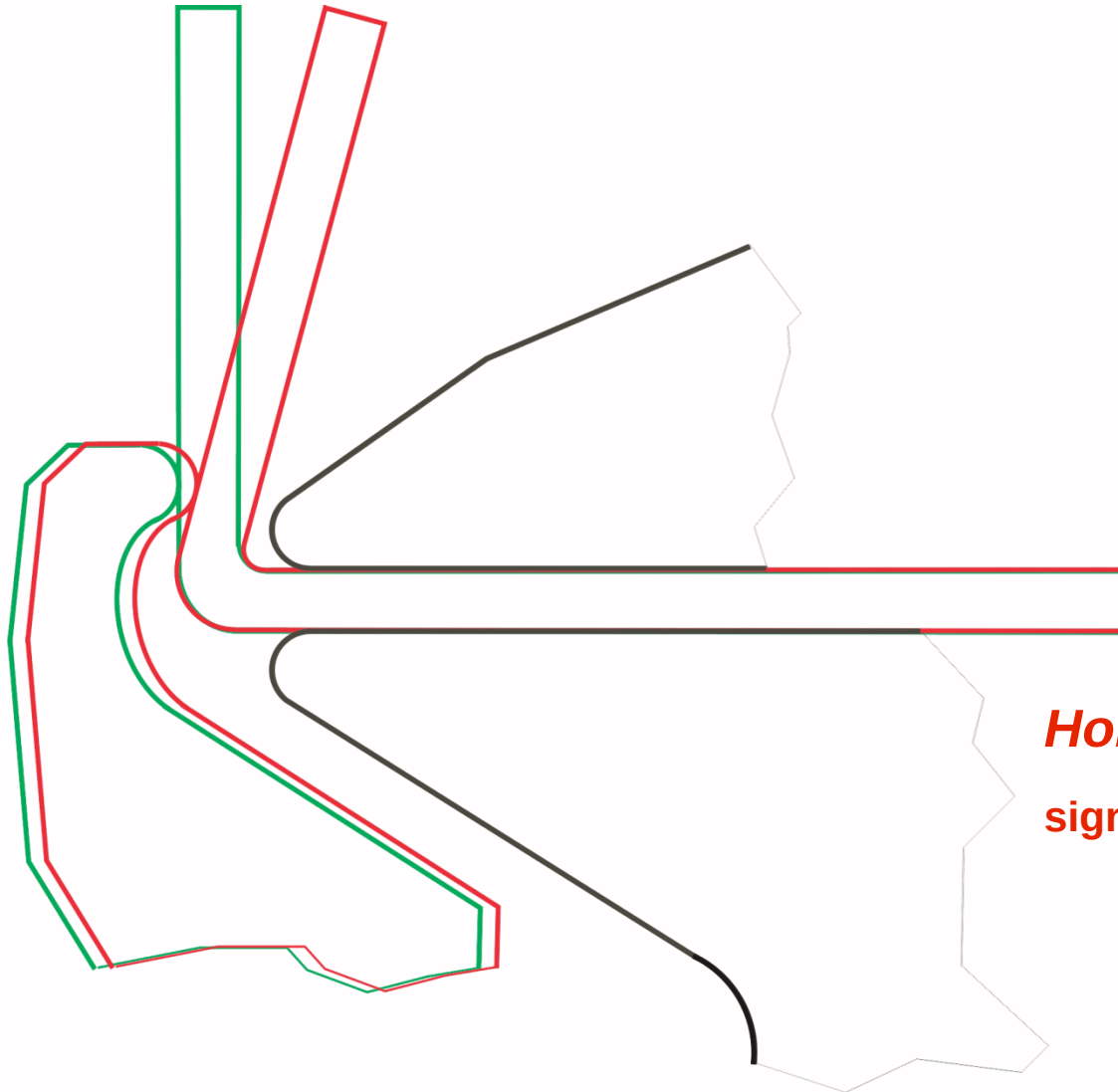
Effect on Bending Angle Due to Bending Blade Tool Wear



Vertical Tool Wear:

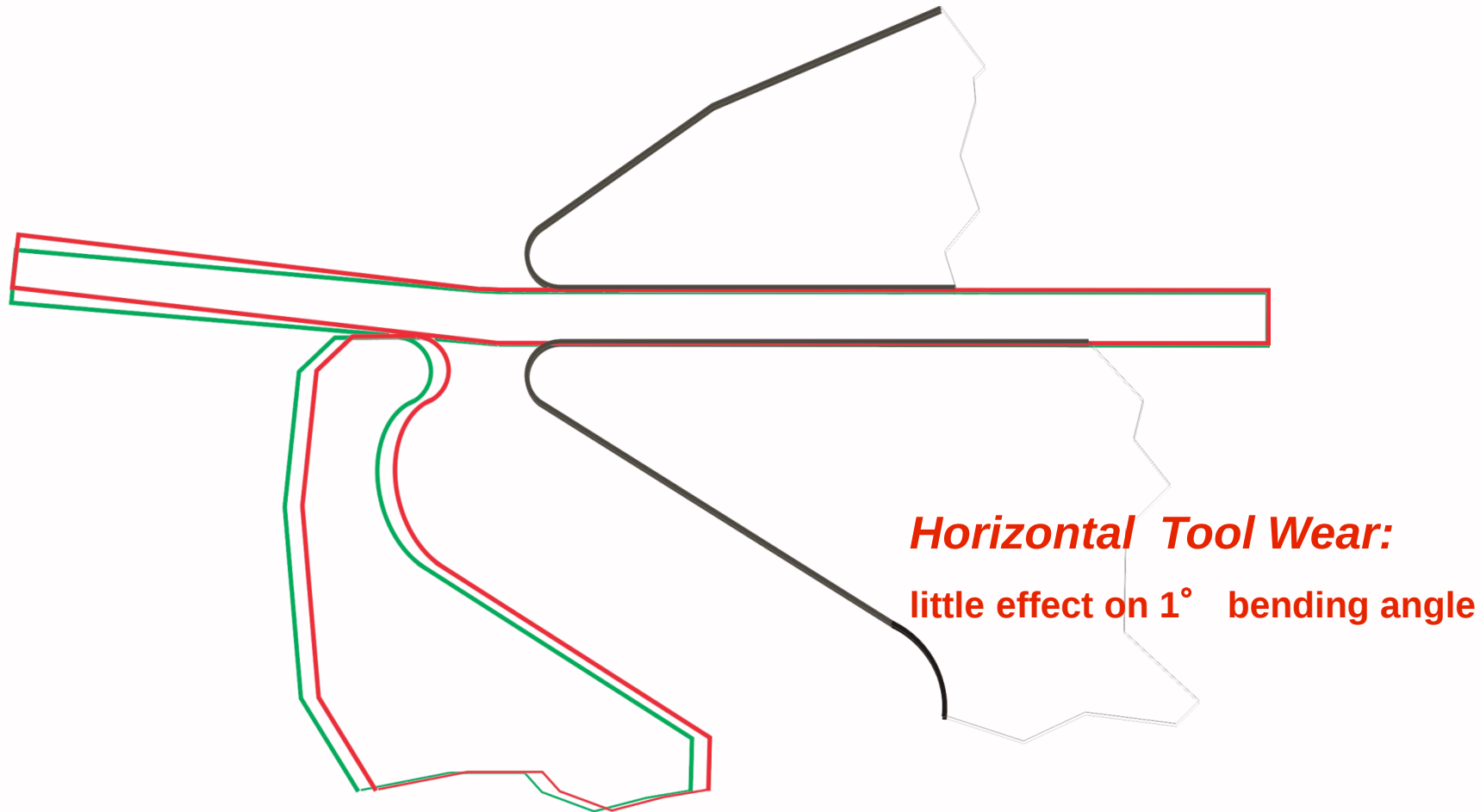
no effect on 90° bending angle

Effect on Bending Angle Due to Bending Blade Tool Wear

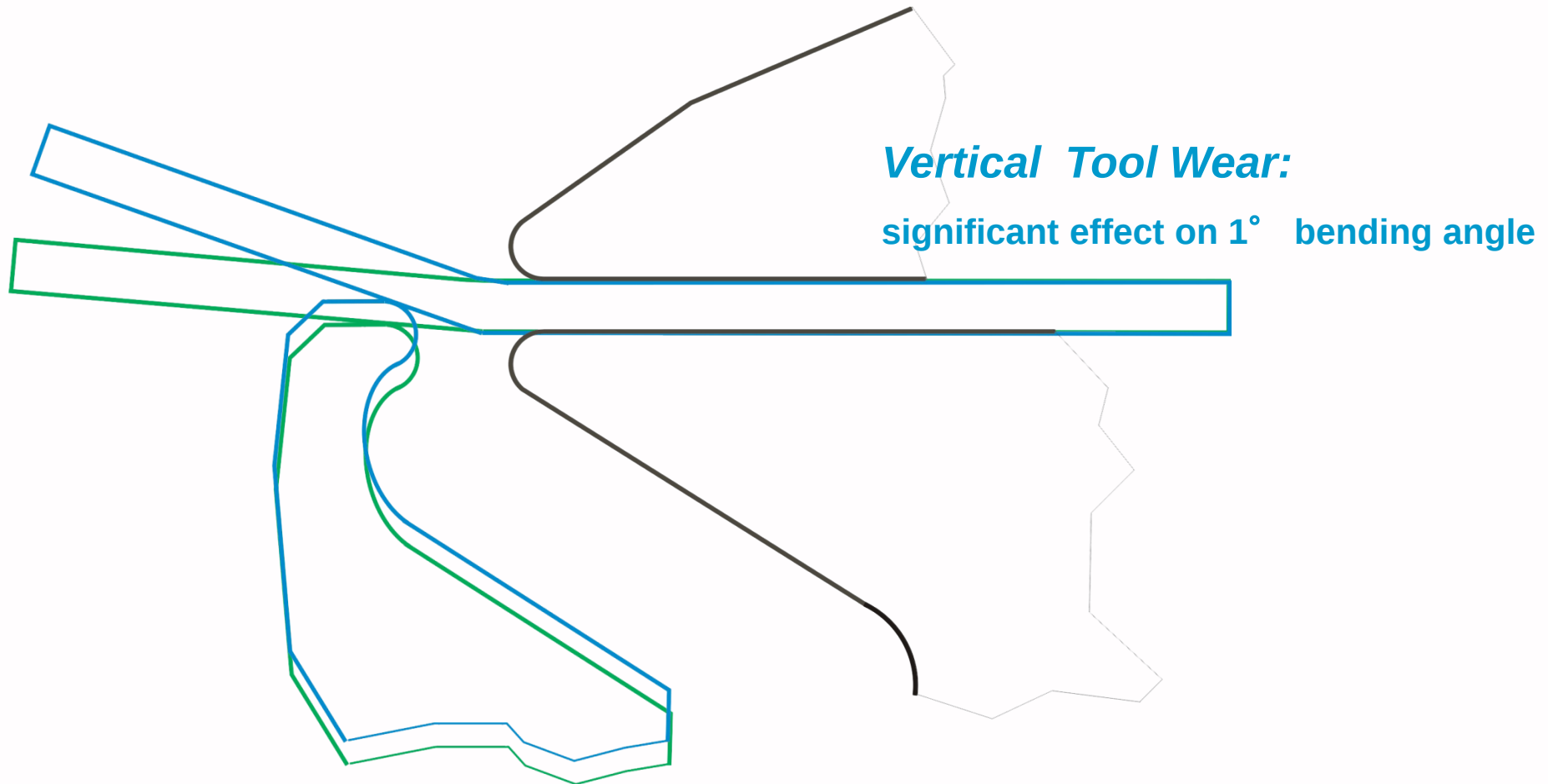


Horizontal Tool Wear:
significant effect on 90° bending angle

Effect on Bending Angle Due to Bending Blade Tool Wear

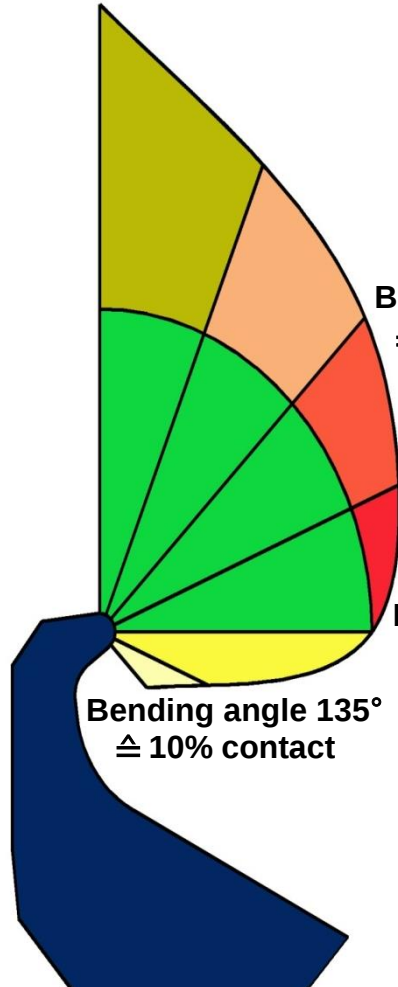


Effect on Bending Angle Due to Bending Blade Tool Wear



Bending Tool Contact Diagram

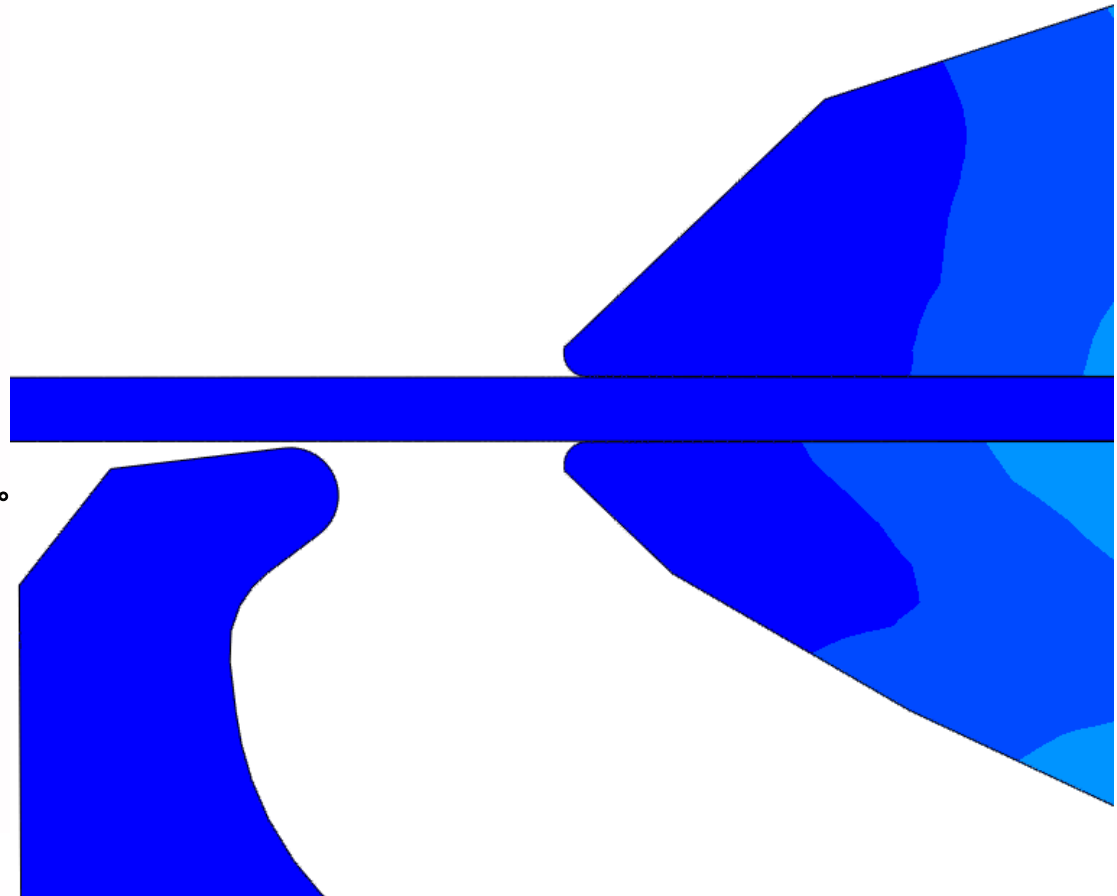
Starting Point
 $\triangleq$ 100% contact



Bending angle 45°
 $\triangleq$ 75% contact

Bending angle 90°
 $\triangleq$ 50% contact

Bending angle 135°
 $\triangleq$ 10% contact



P4Xe-**16

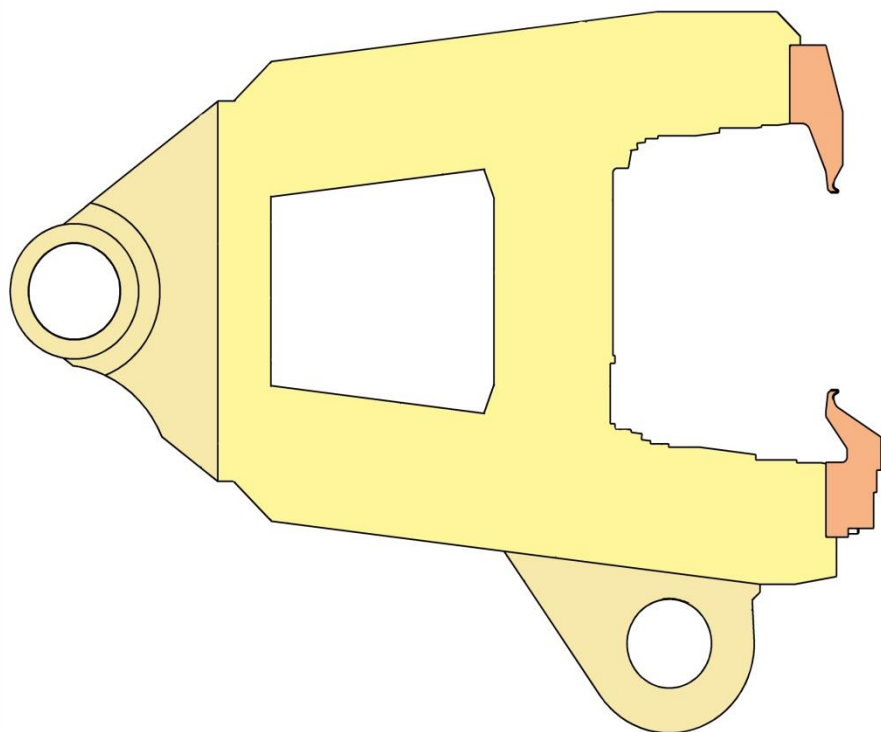
➤ New ABA

- electrically activated blankholder tools
- new footprint
- laser alloyed bend line

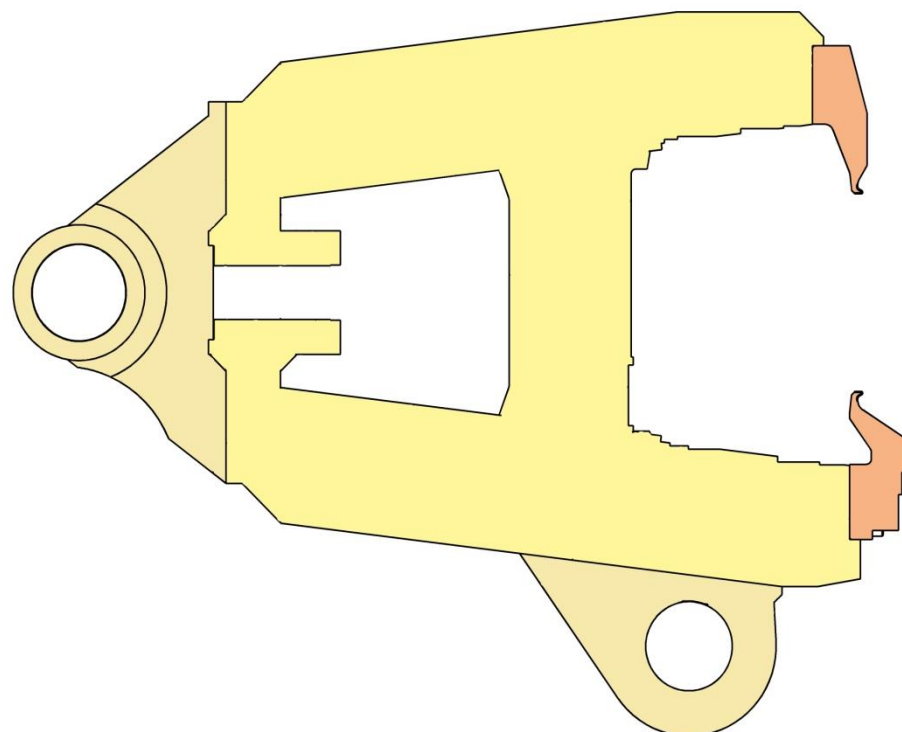
➤ New „smart“ Bladeholder

- MBC (Manual Bladeholder Crowning) for all machines for tool wear compensation

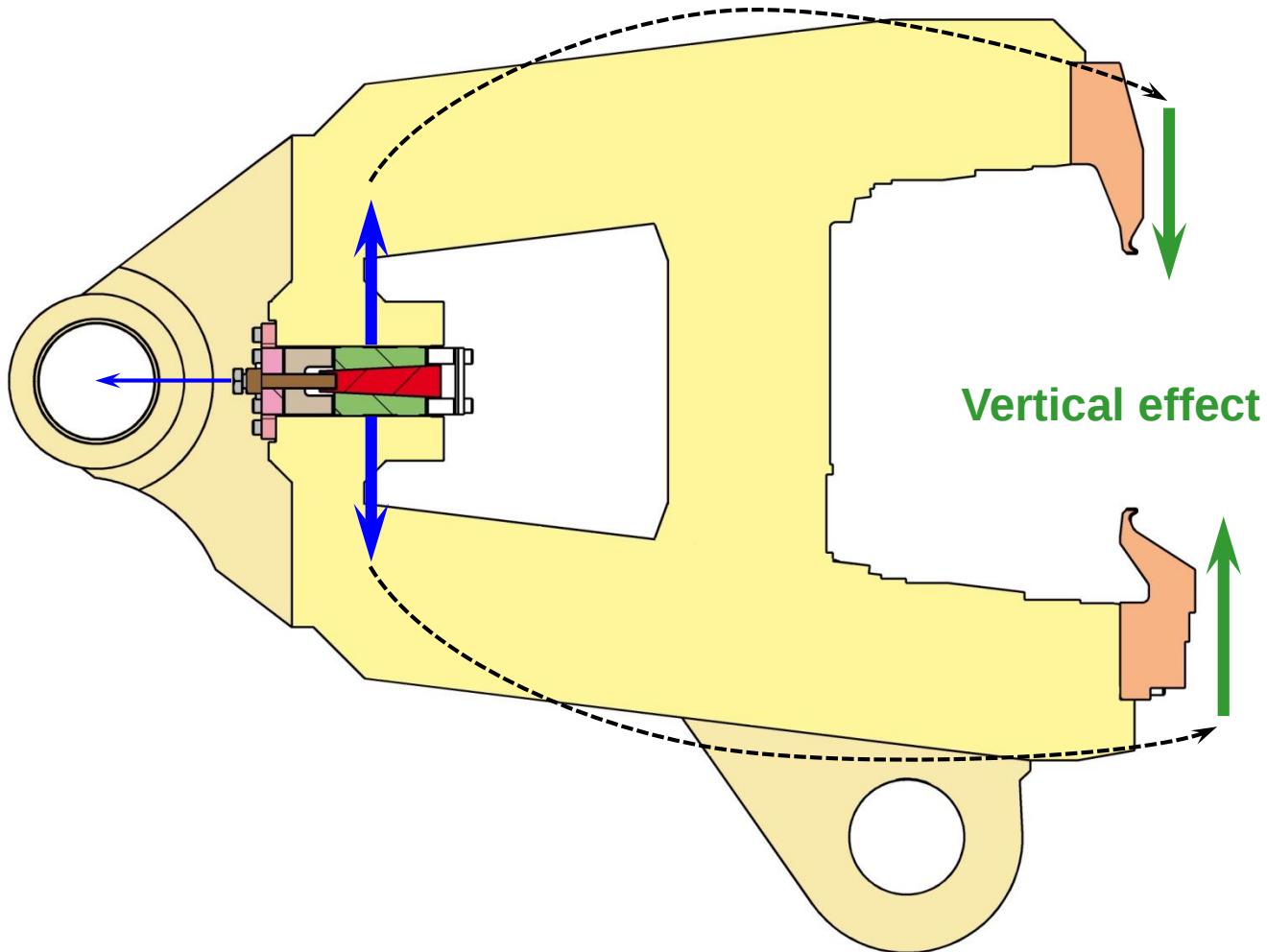
P4X Standard Bladeholder



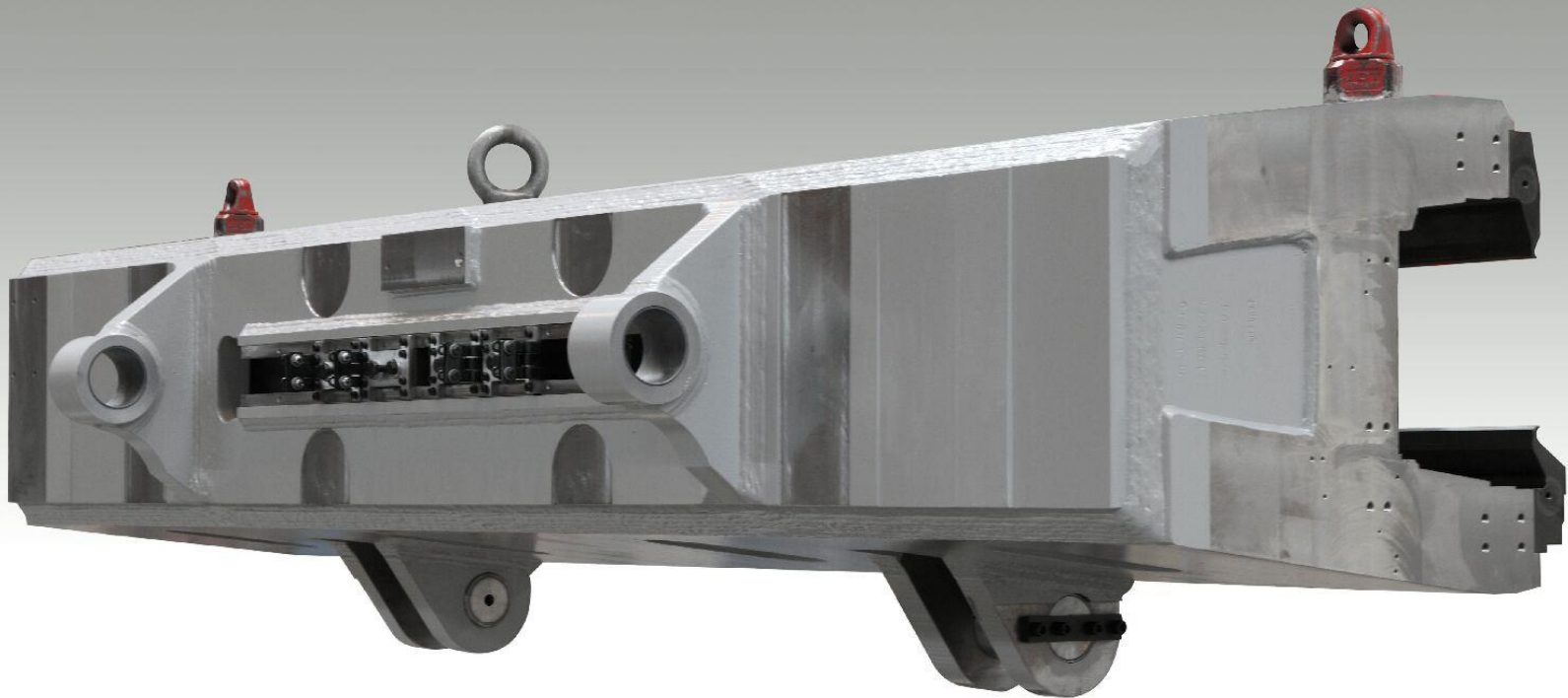
P4Xe New Standard Bladeholder



MBC Manual Bladeholder Crowning



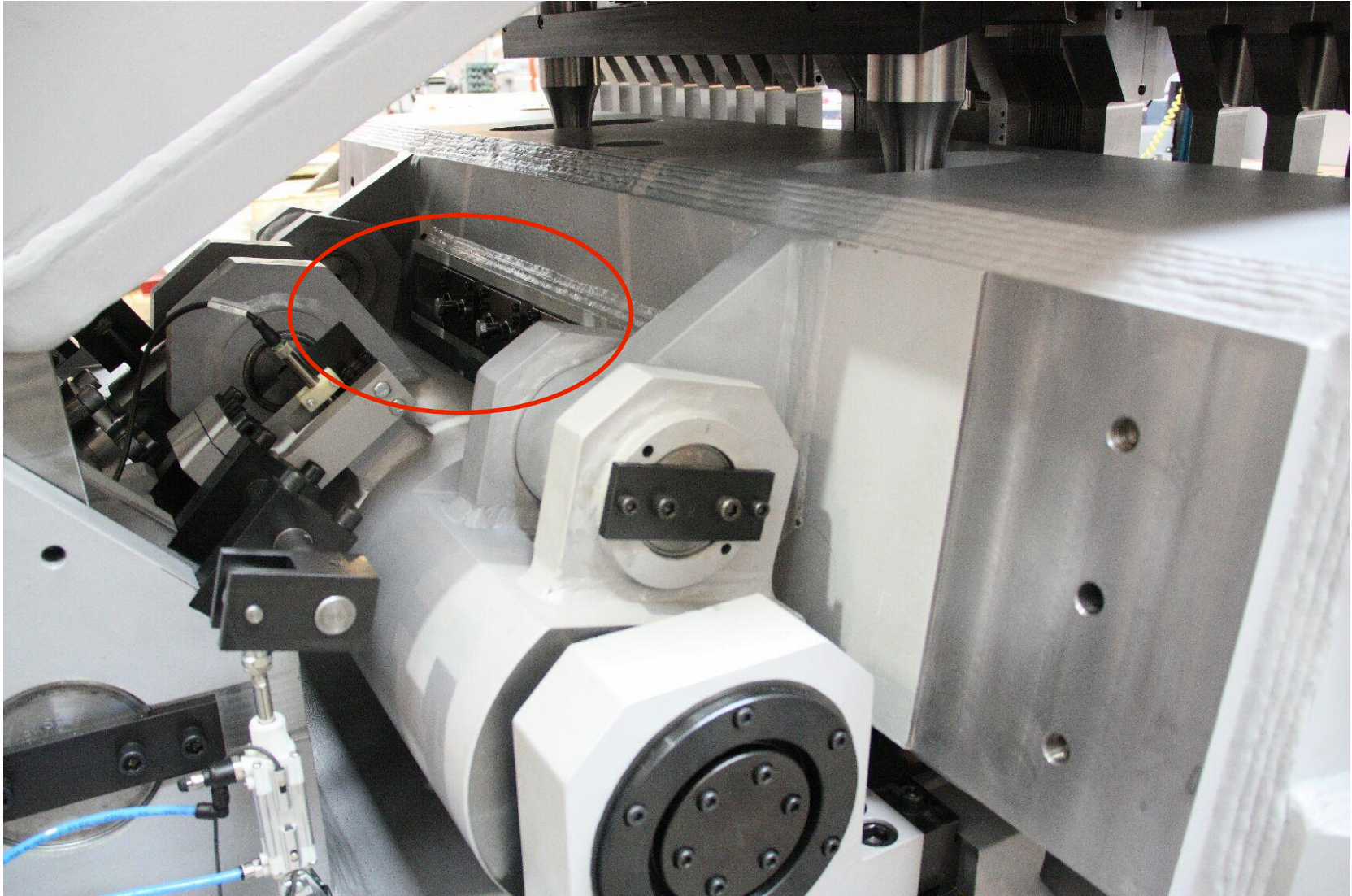
P4Xe-25/32/38 MBC-Bladeholder



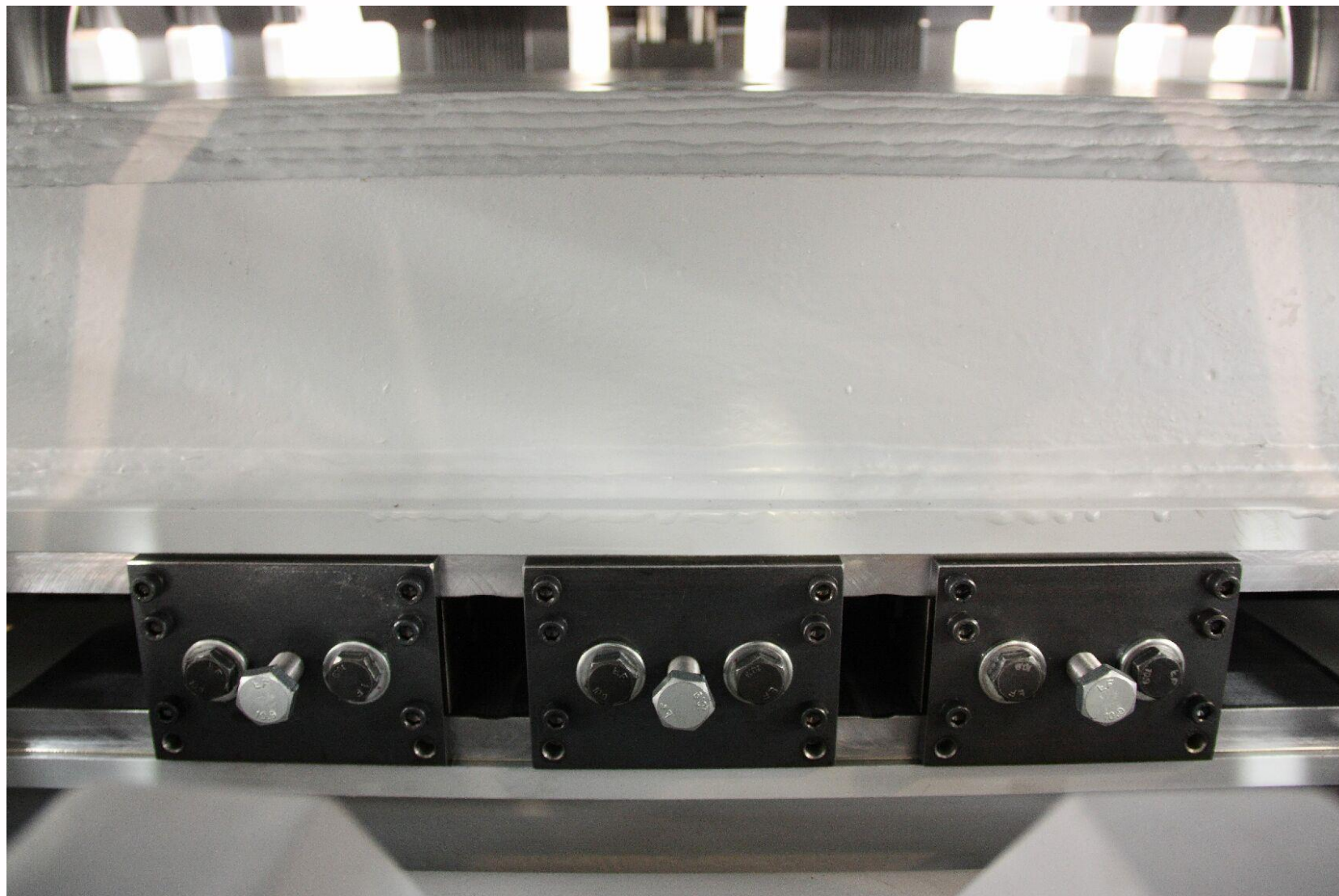
P4Xe-25/32/38 MBC-Bladeholder



P2Xe and P4Xe-2116 MBC-Bladeholder



P2Xe and P4Xe-2116 MBC-Bladeholder



P4Xe-**16

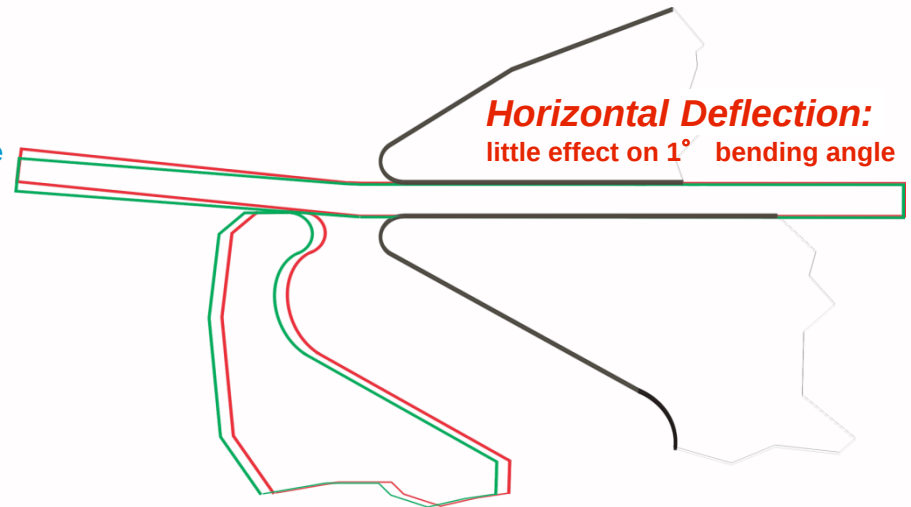
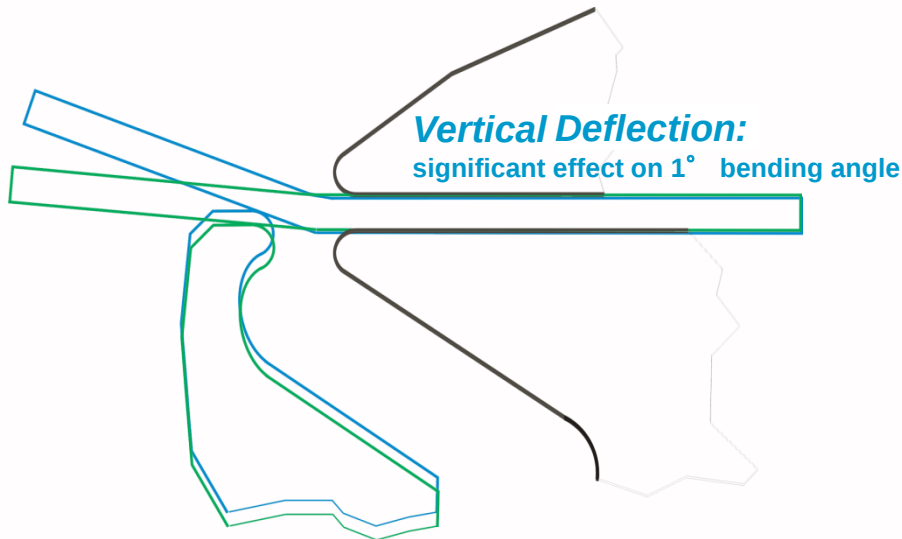
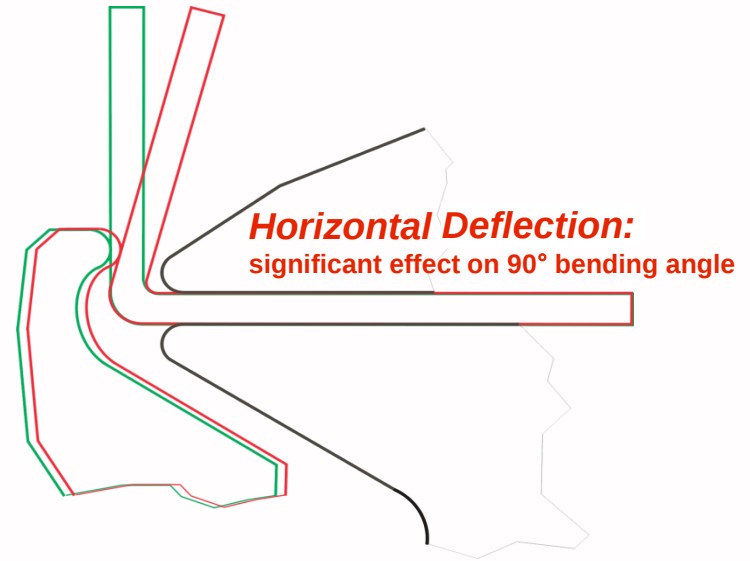
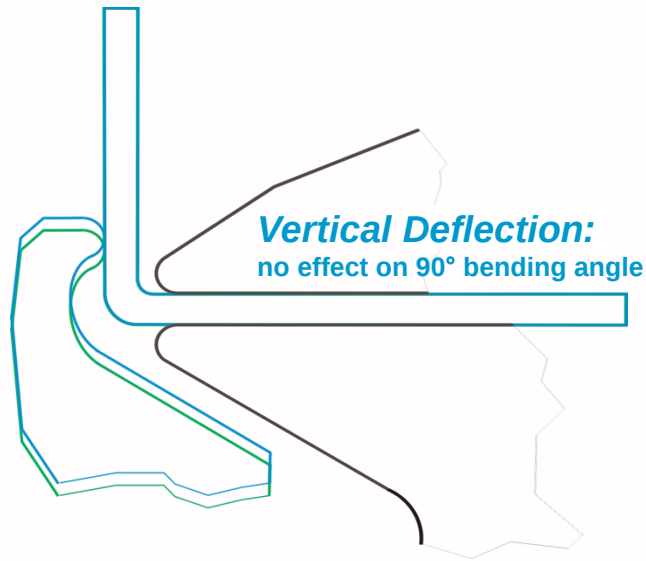
➤ New ABA

- electrically activated blankholder tools
- new footprint
- laser alloyed bend line

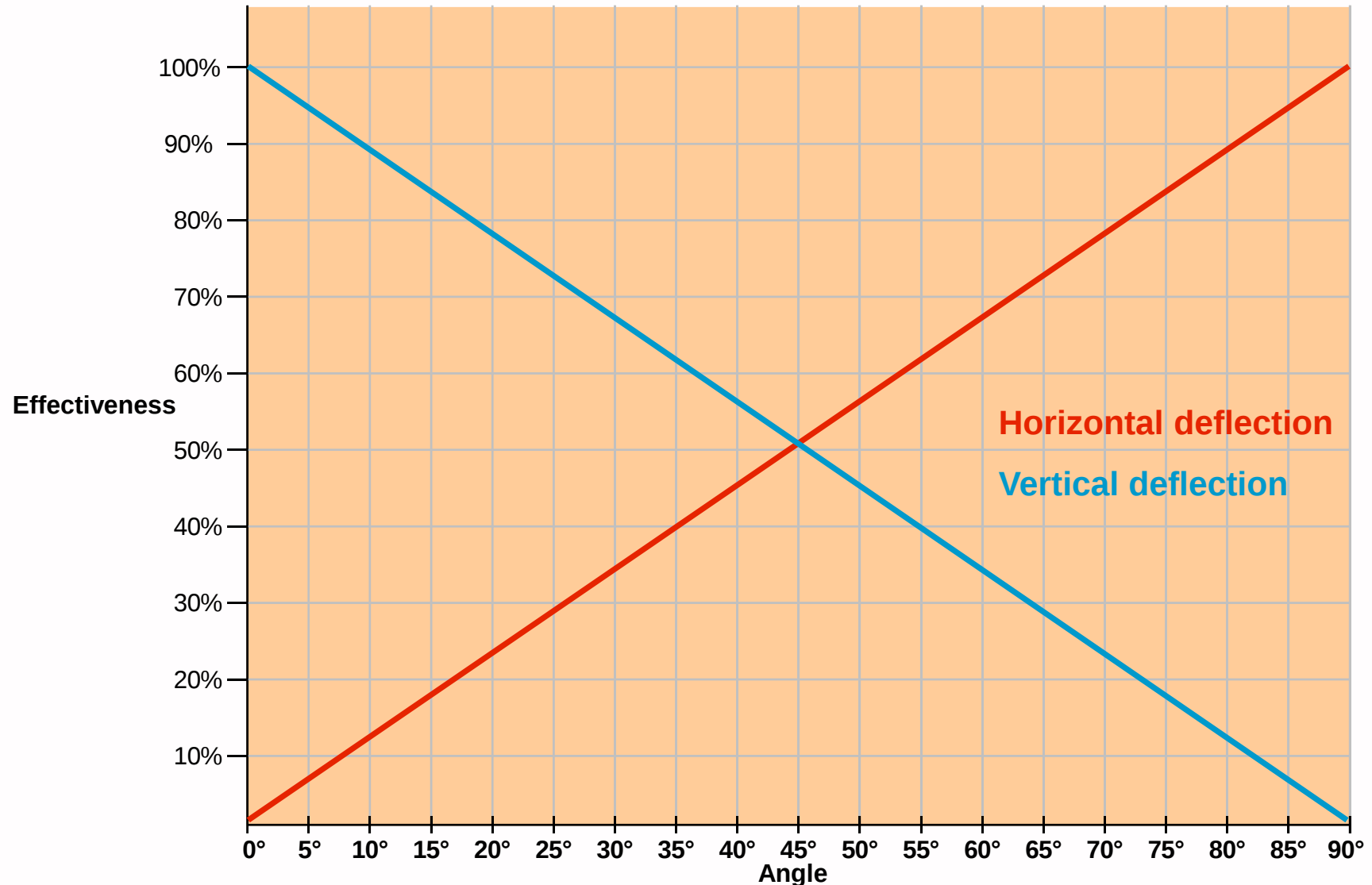
➤ New „smart“ Bladeholder

- MBC (Manual Bladeholder Crowning) for all machines for tool wear compensation
- ABC (Automatic Bladeholder Crowning) for P4Xe-25/32/38 for automatic tool wear- and deflection-compensation

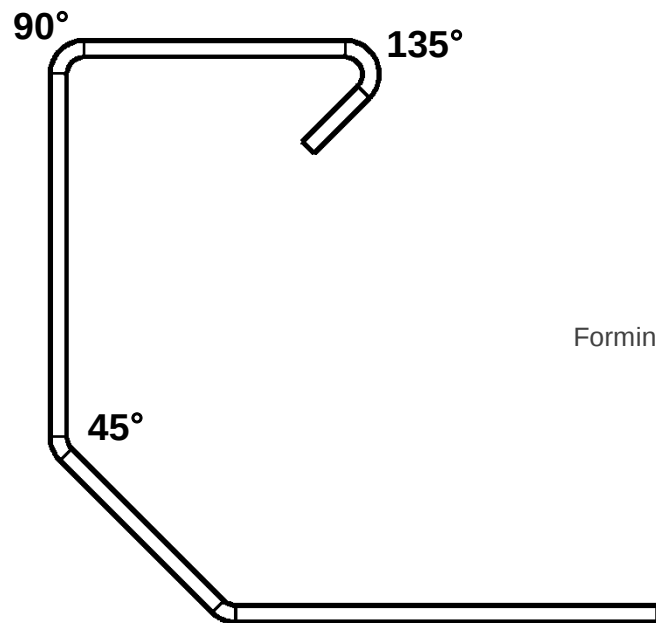
Effects on Bending Angle Due to Deflection



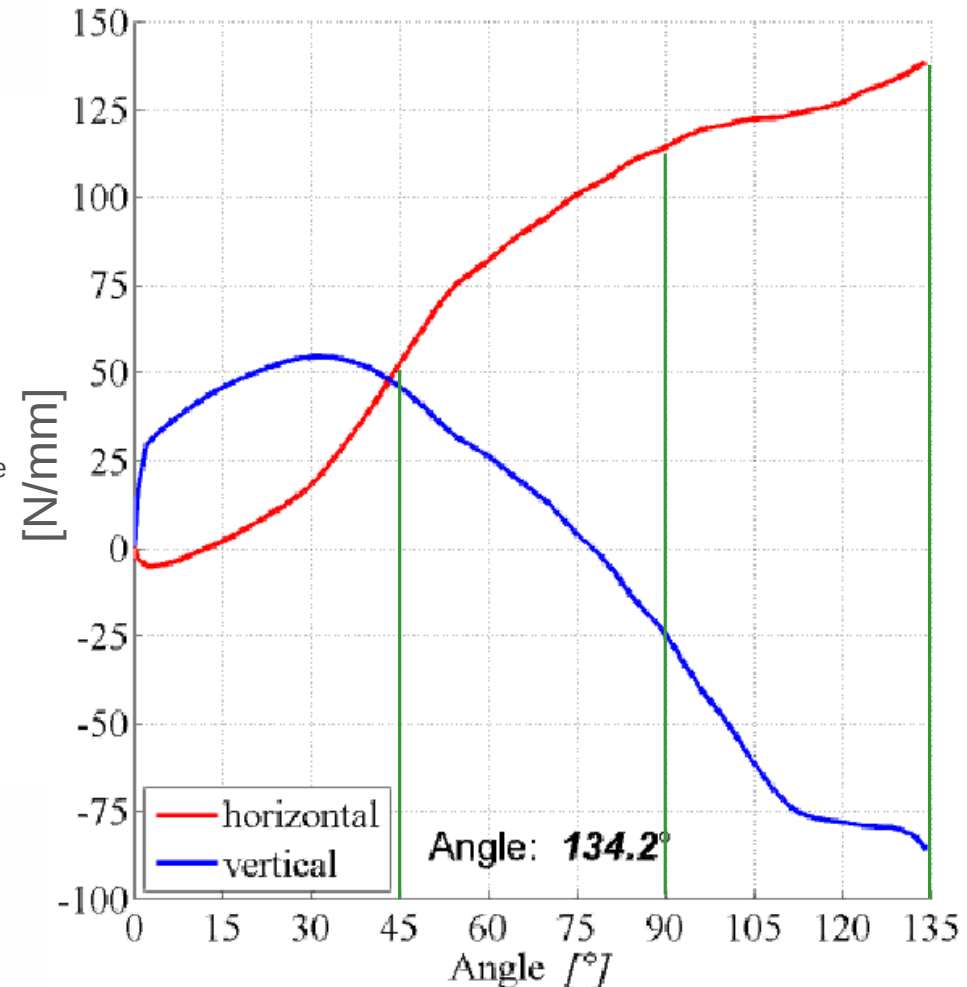
Effectiveness on Various Bending Angles



Forming Forces at Various Angles

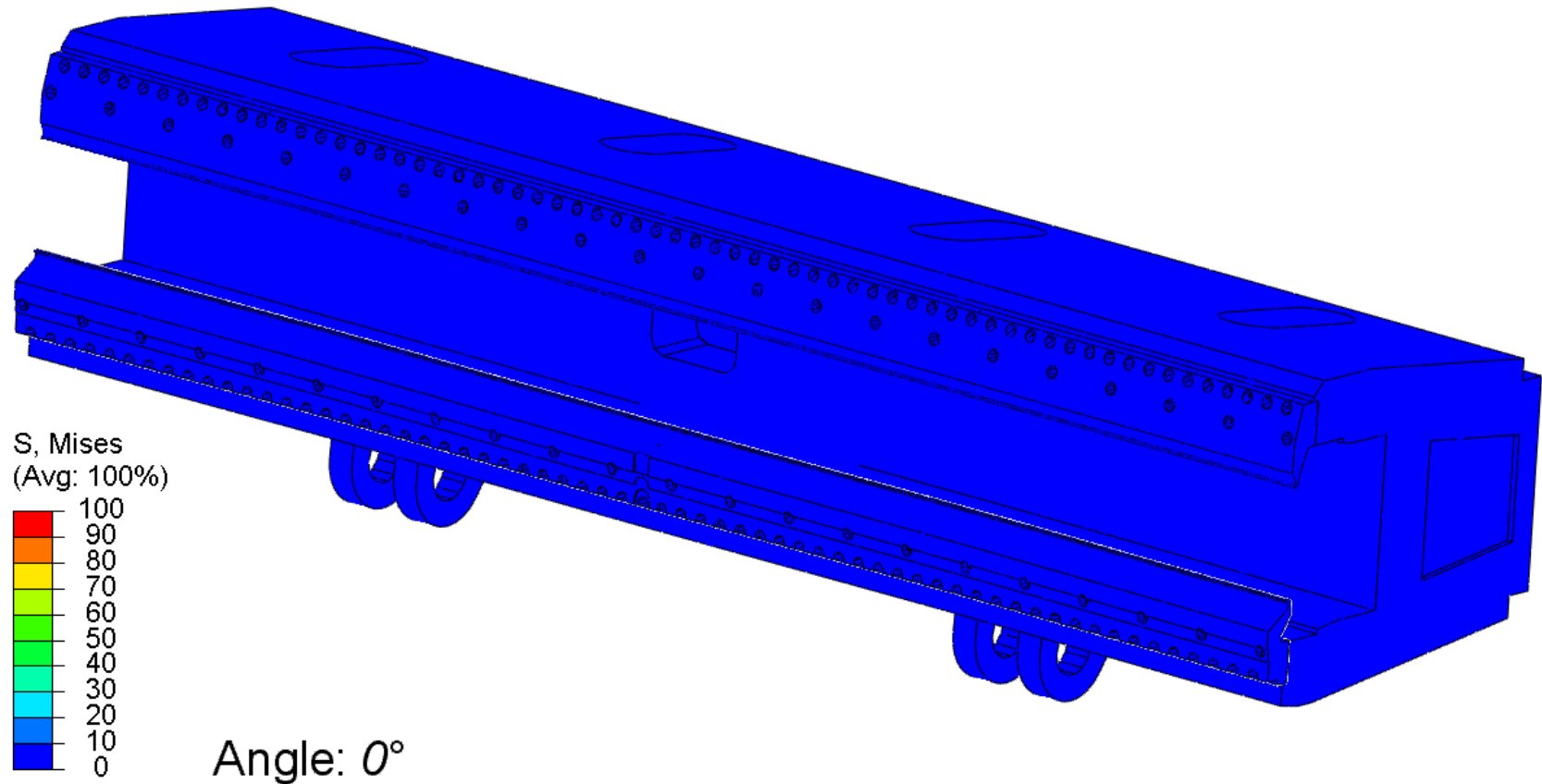


Forming force

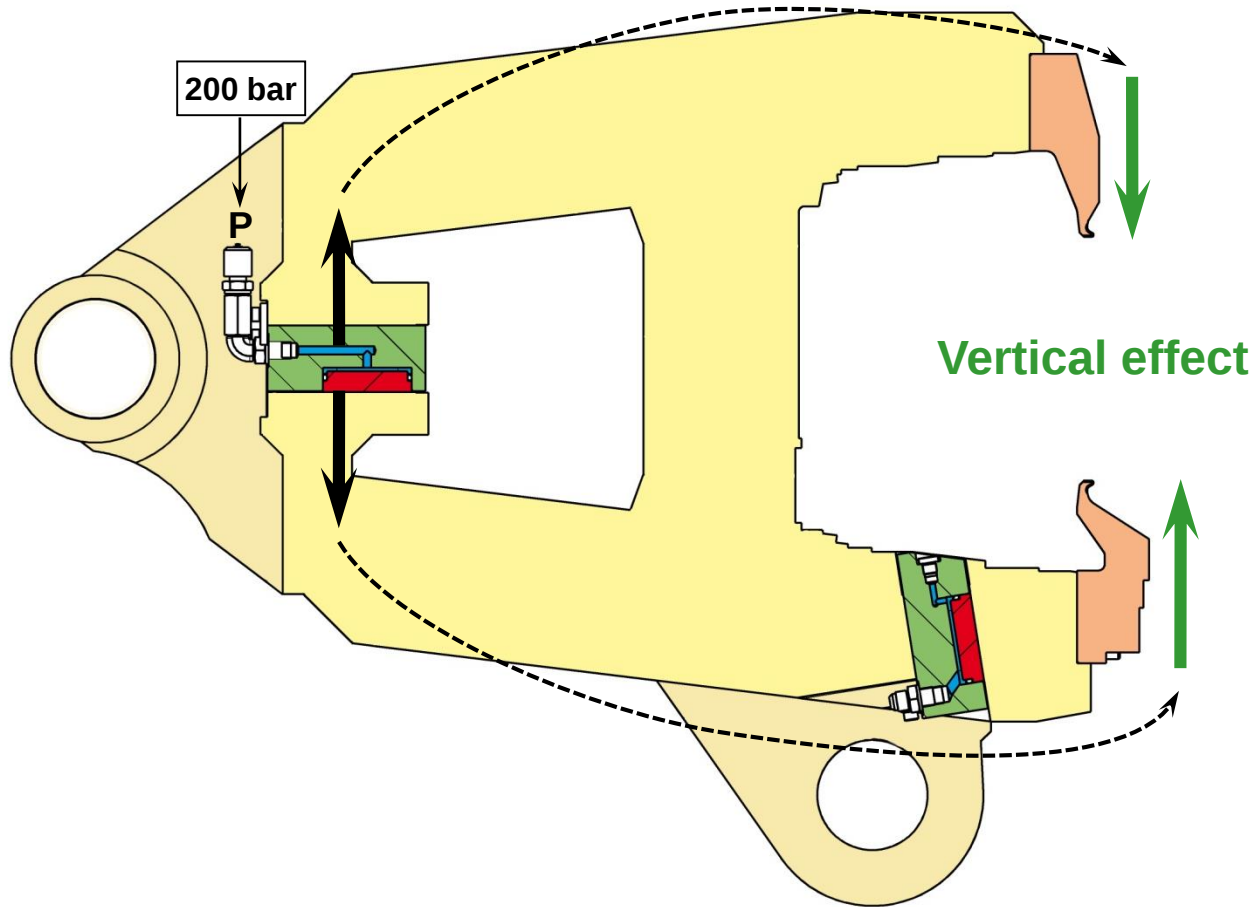


Deflection during Bending Process:

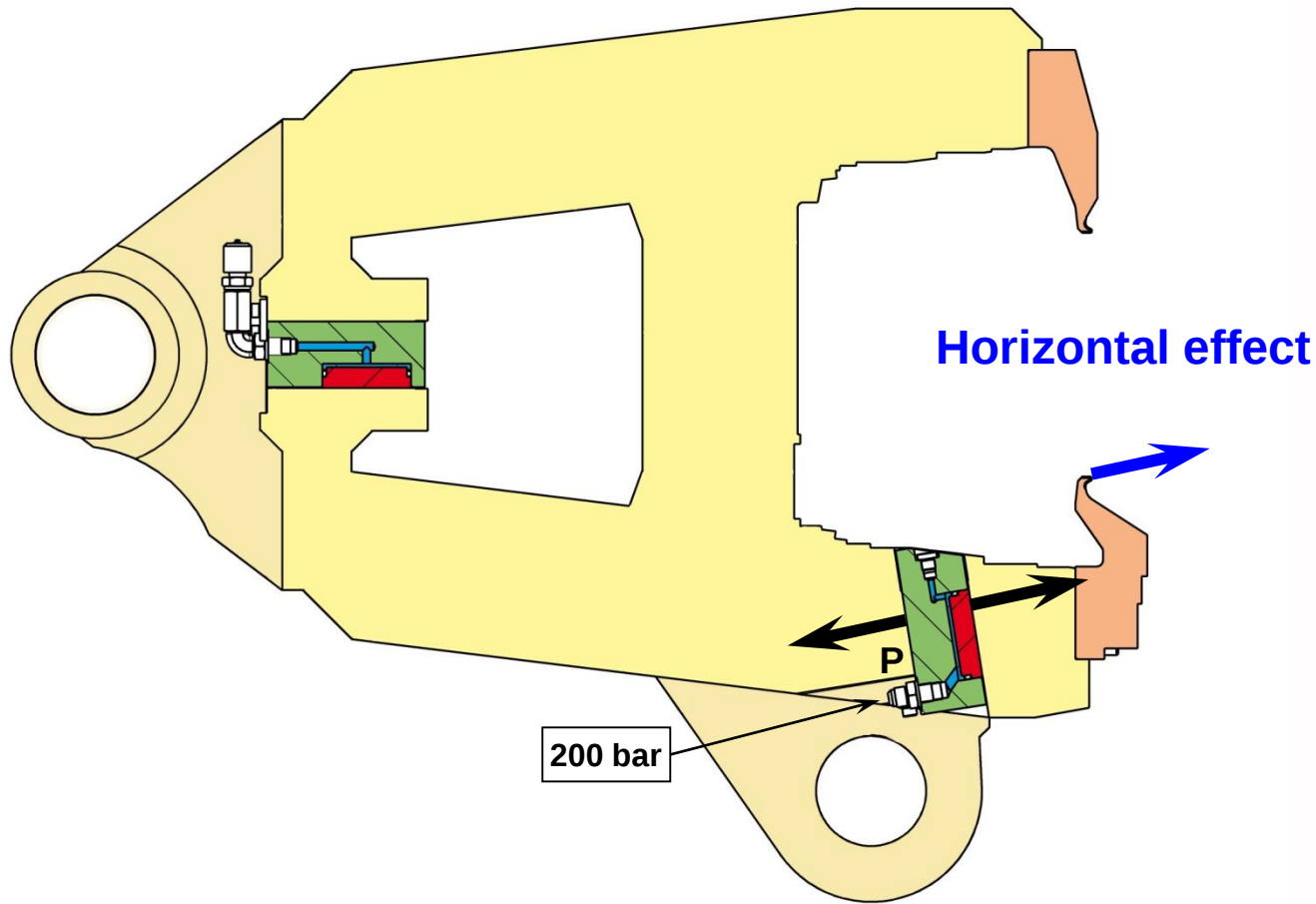
(Animation with Exaggeration Factor 300)



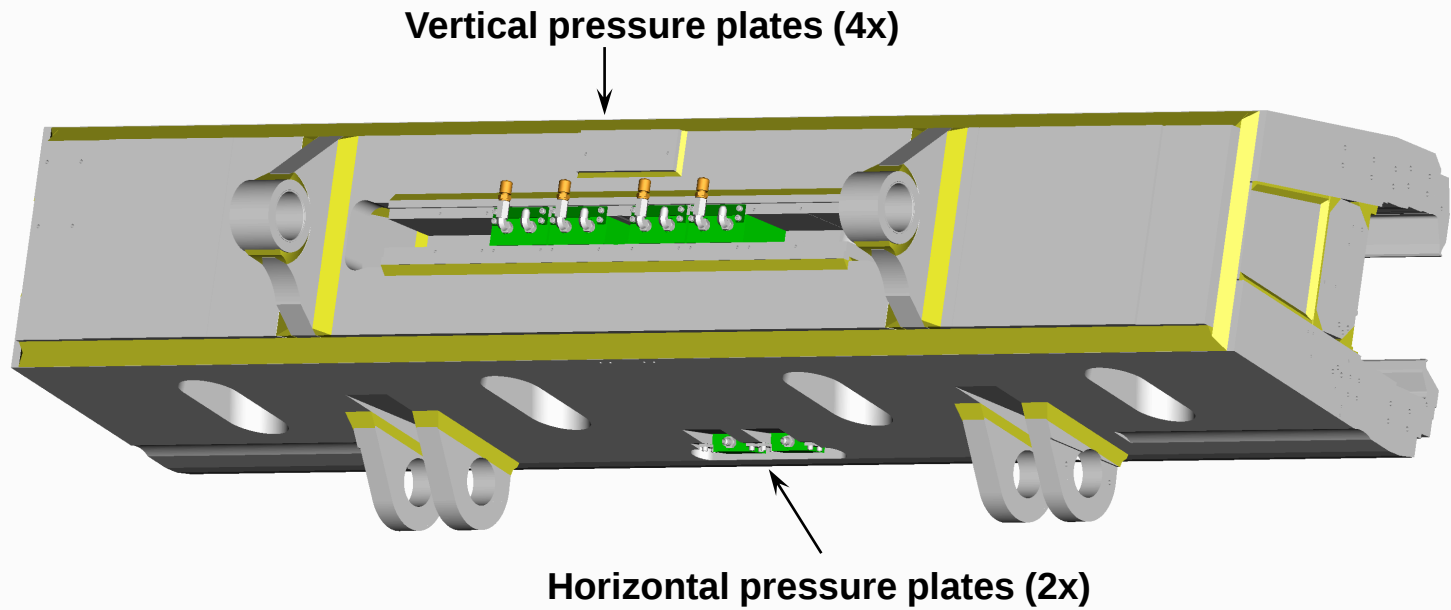
ABC Automatic Bladeholder Crowning



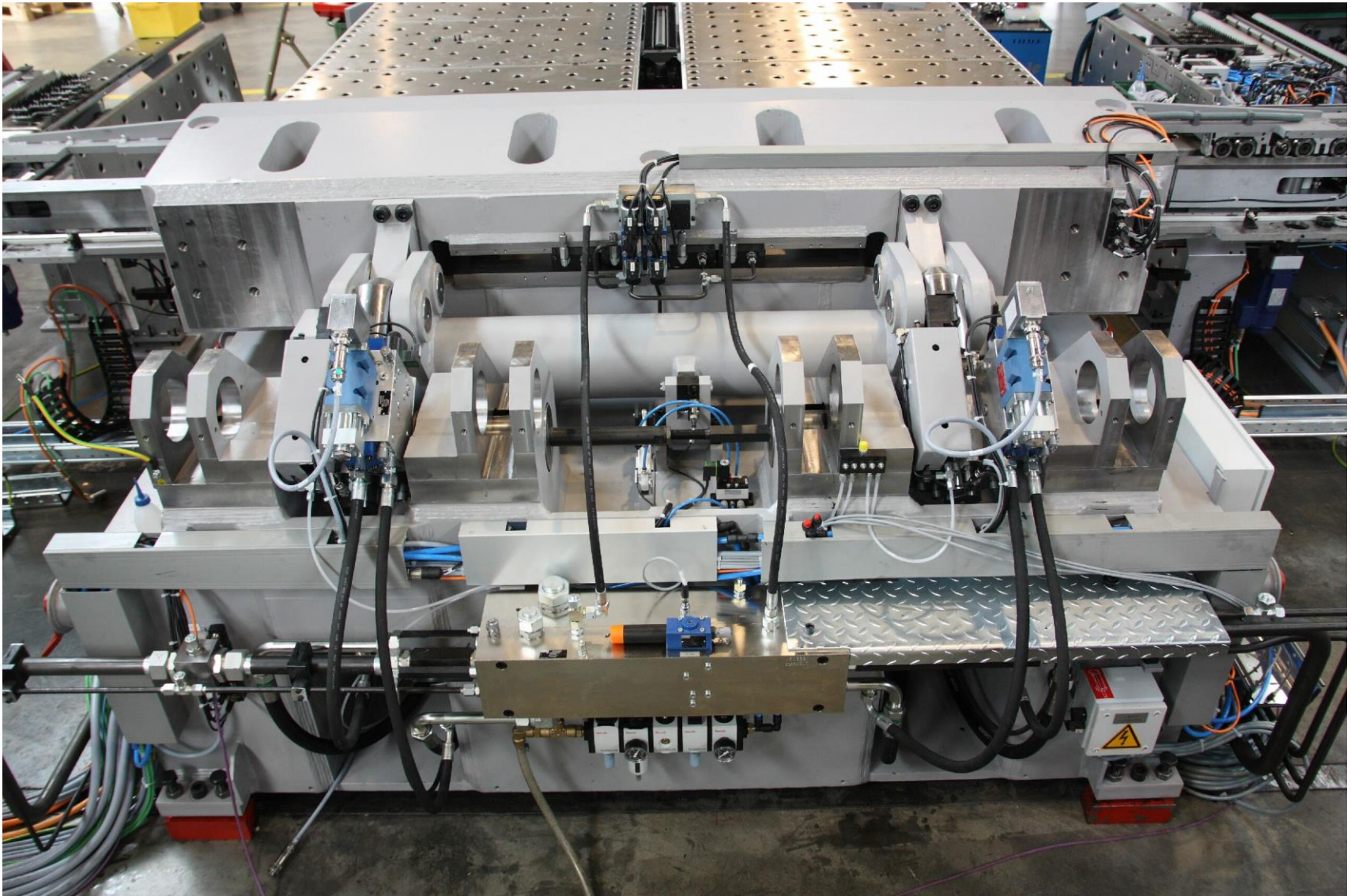
ABC Automatic Bladeholder Crowning



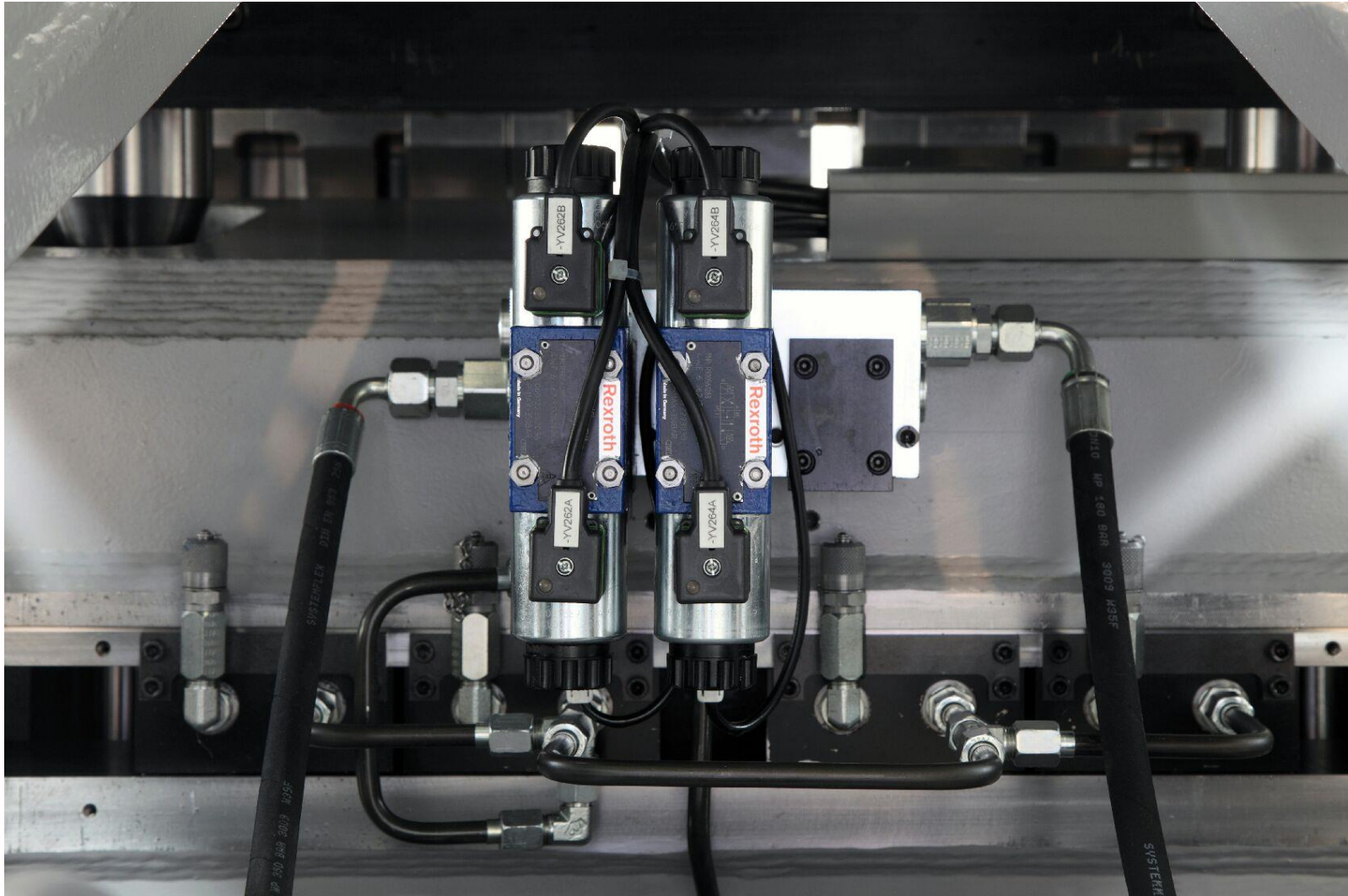
P4Xe-25/32/38 ABC-Bladeholder



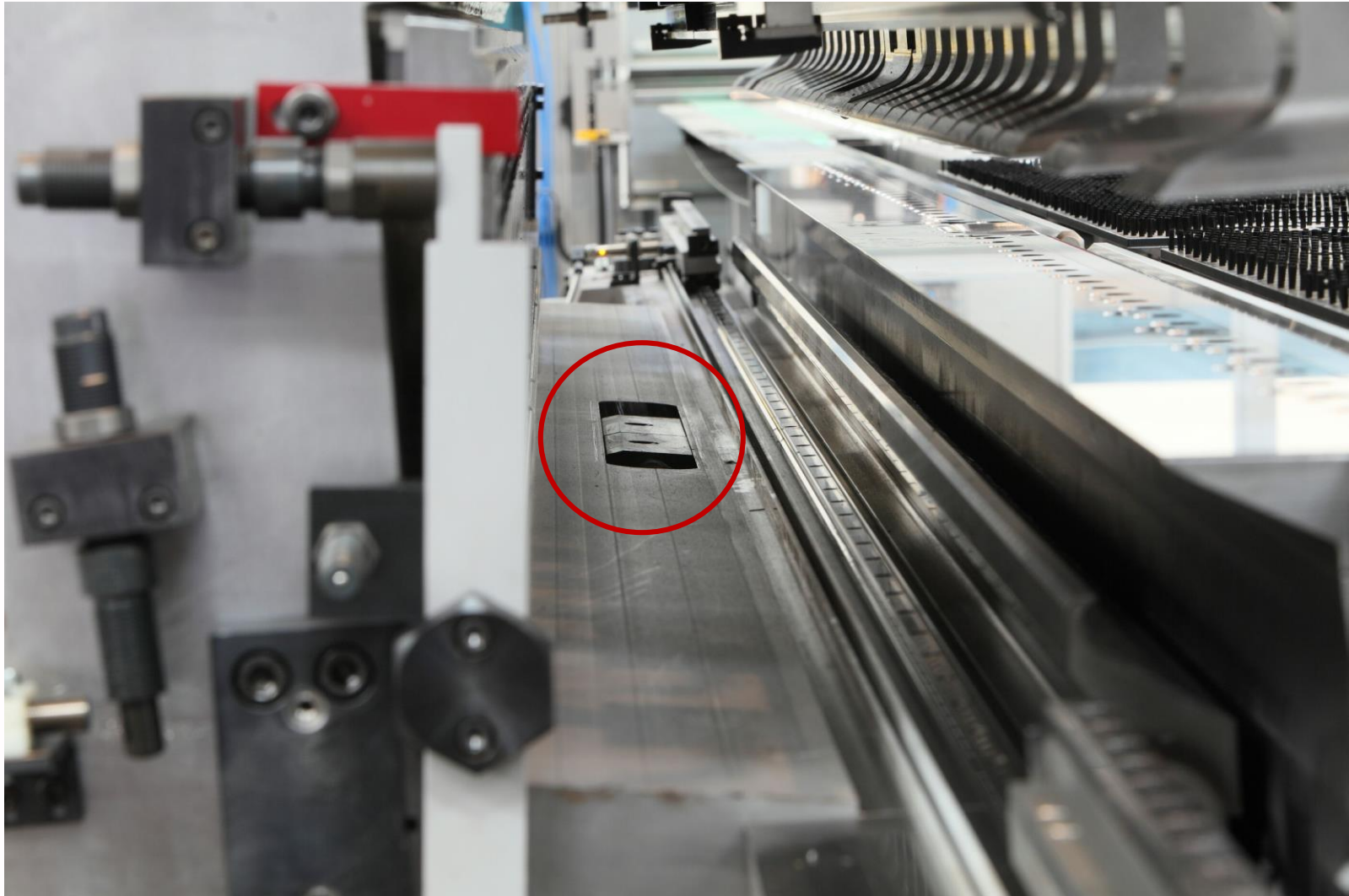
ABC Bladeholder P4Xe-2516



ABC Bladeholder Vertical Pressure Plates



ABC Bladeholder Horizontal Pressure Plates



P4Xe-**16

➤ New ABA

- electrically activated blankholder tools
- new footprint
- laser alloyed bend line

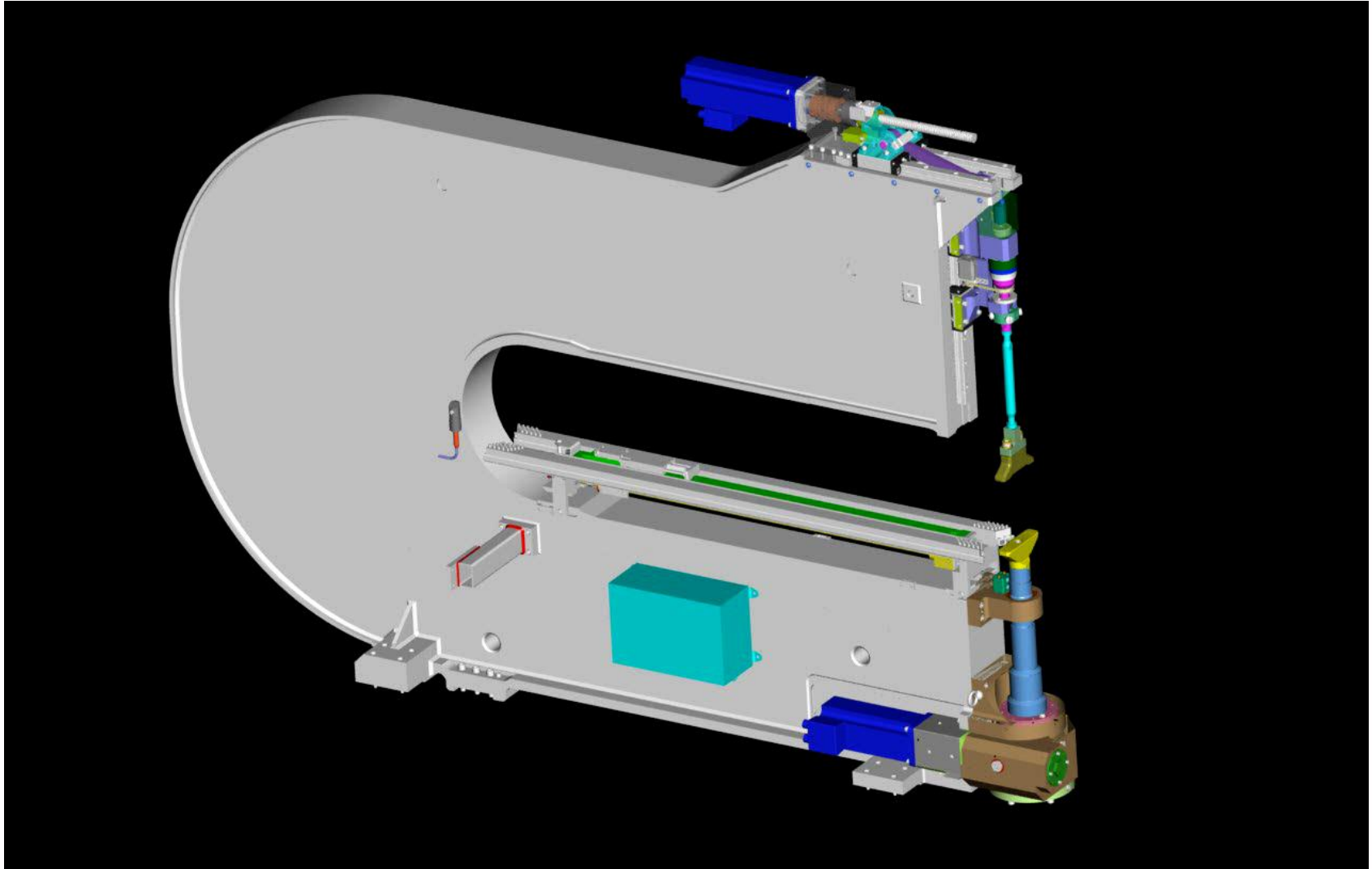
➤ New „smart“ Bladeholder

- MBC (Manual Bladeholder Crowning) for all machines for tool wear compensation
- ABC (Automatic Bladeholder Crowning) for P4Xe-25/32/38 for automatic tool wear- and deflection-compensation

➤ New Electric Clamping

- electric clamping

New Electric Clamping



New Electric Clamping



Before: Hydraulic Clamping



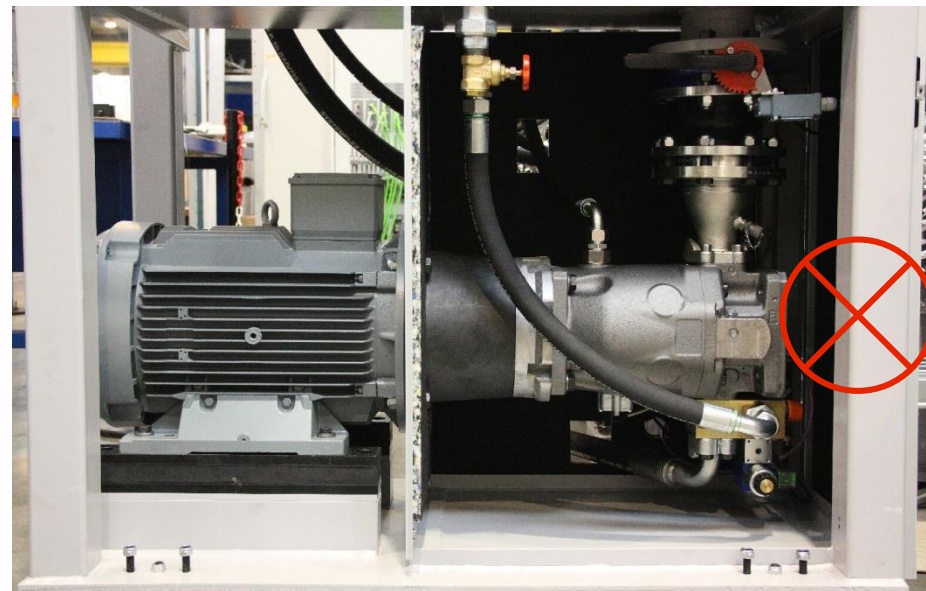
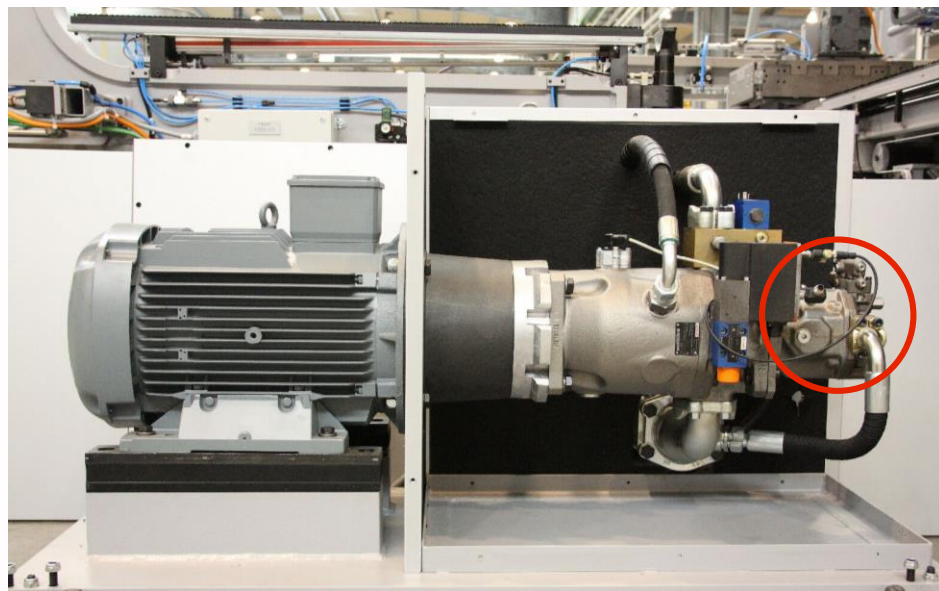
Electric Clamping: Benefits

- **Position controlled stroke**
- **Force control**
- **Double sheet control**
- **Sheet thickness measurement**
- **Soft clamping: no marks on delicate material**
- **Elimination of the pressure pump**

Elimination of the Pressure Pump

P4X 2 Pumps
22 kW

P4Xe 1 Pump
18,5 kW



P4Xe-**16

➤ New ABA

- electrically activated blankholder tools
- new footprint
- laser alloyed bend line

➤ New „smart“ Bladeholder

- MBC (Manual Bladeholder Crowning) for all machines for tool wear compensation
- ABC (Automatic Bladeholder Crowning) for P4Xe-25/32/38 for automatic tool wear- and deflection-compensation

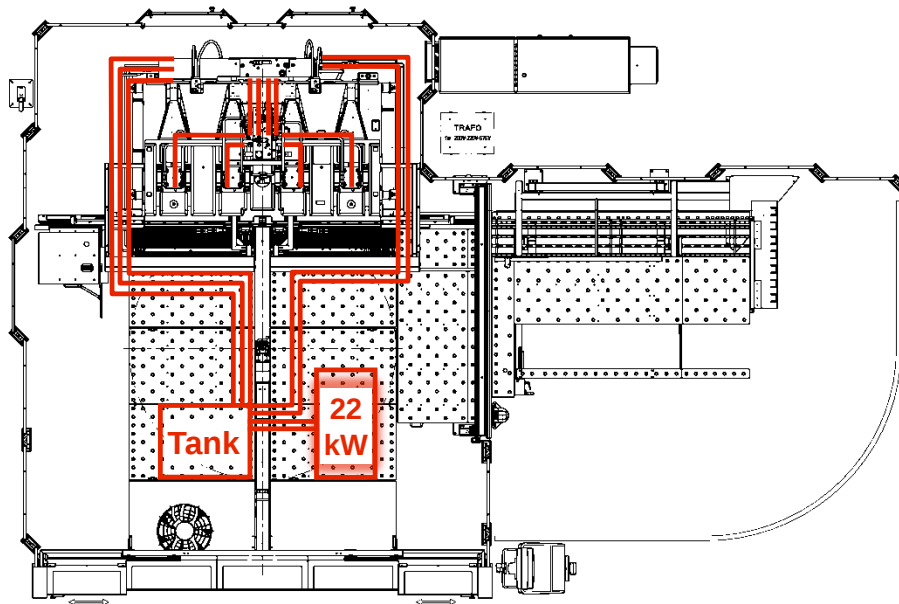
➤ New Electric Clamping

- electric clamping

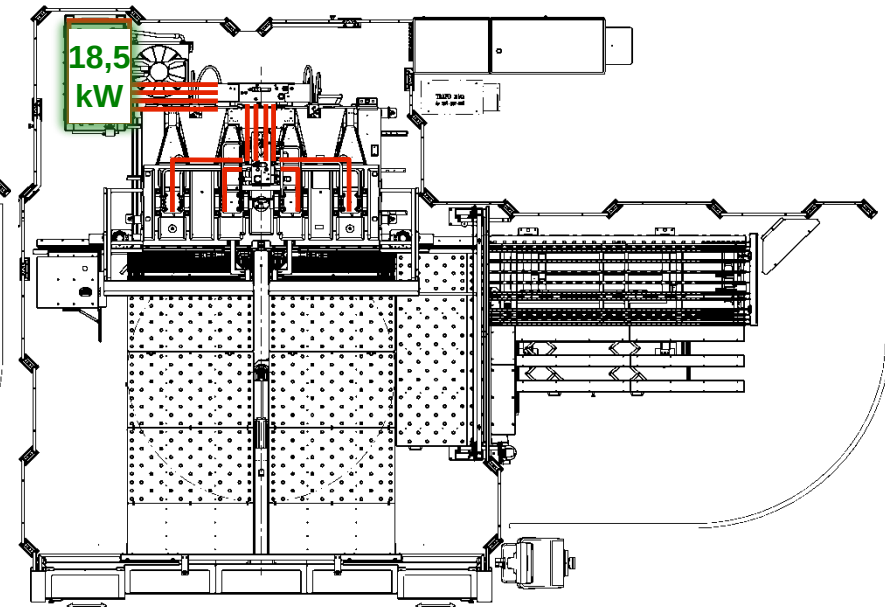
➤ New Hydraulic

- reduced installed power
- hydraulic power pack on the rear side of the machine

P4X

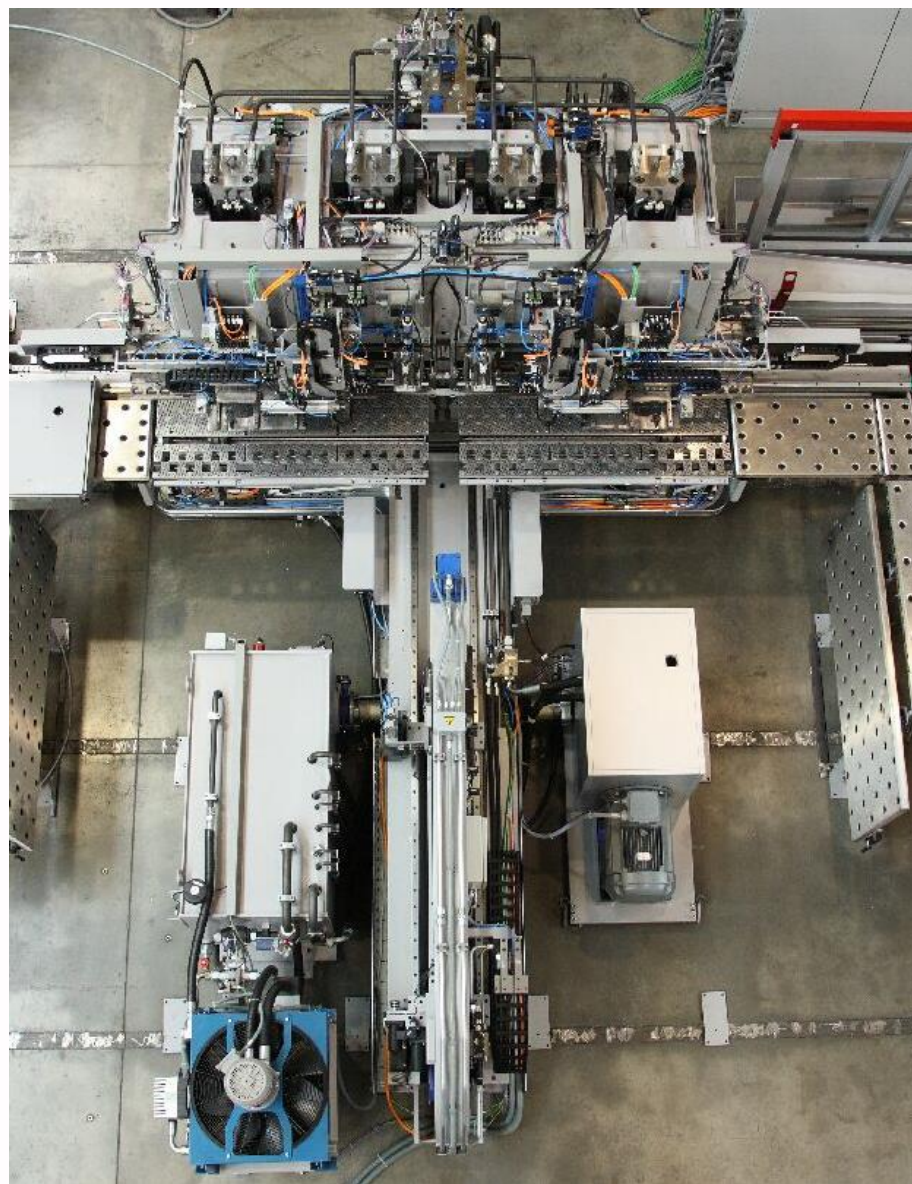


P4Xe

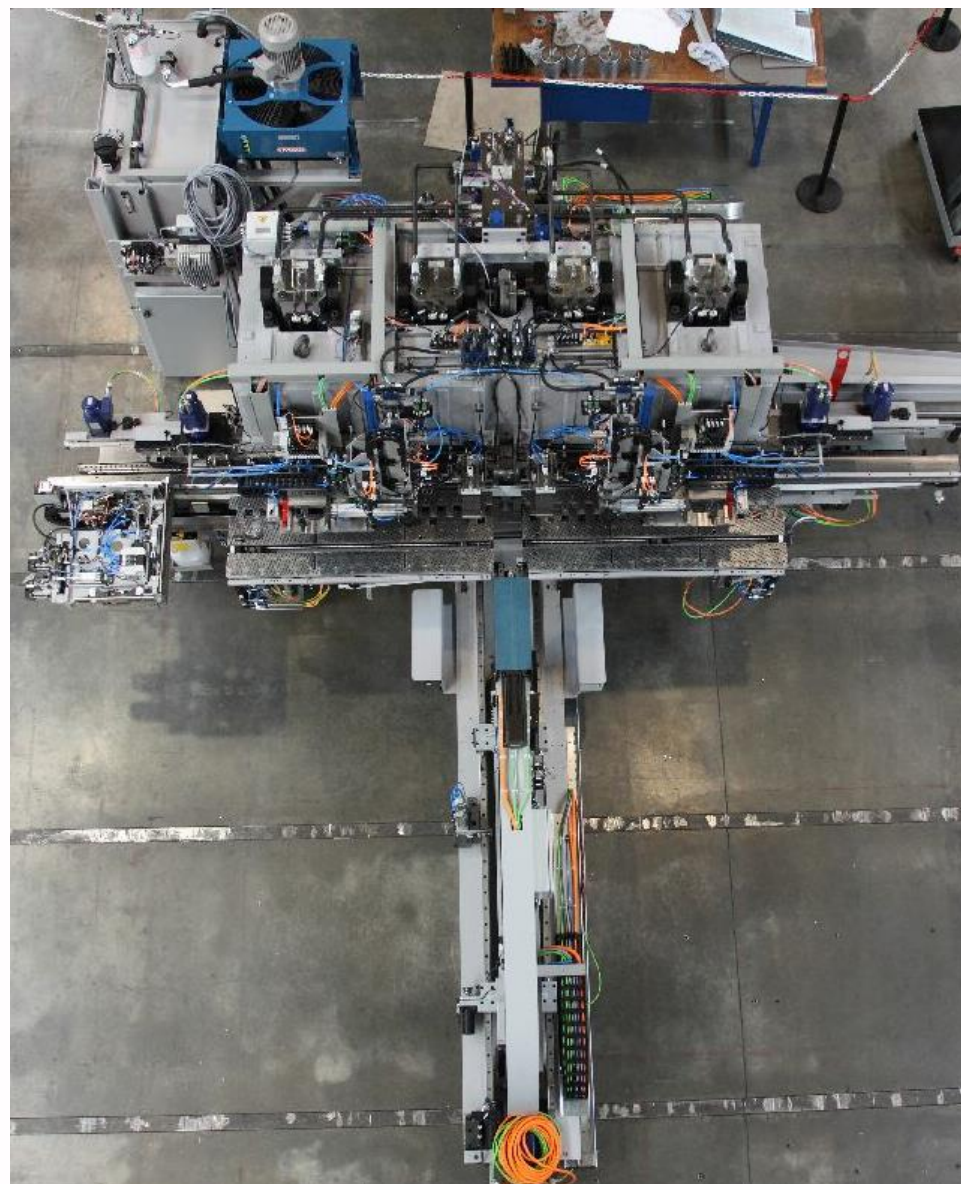


— Hydraulic pipes

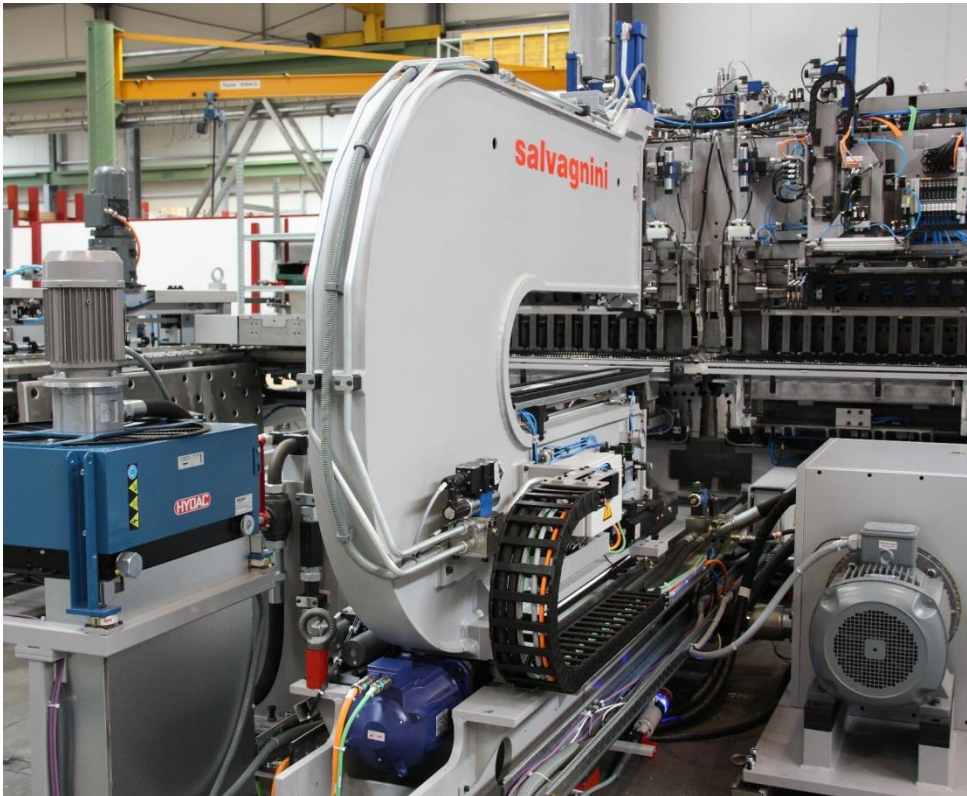
P4X



P4Xe salvagnini



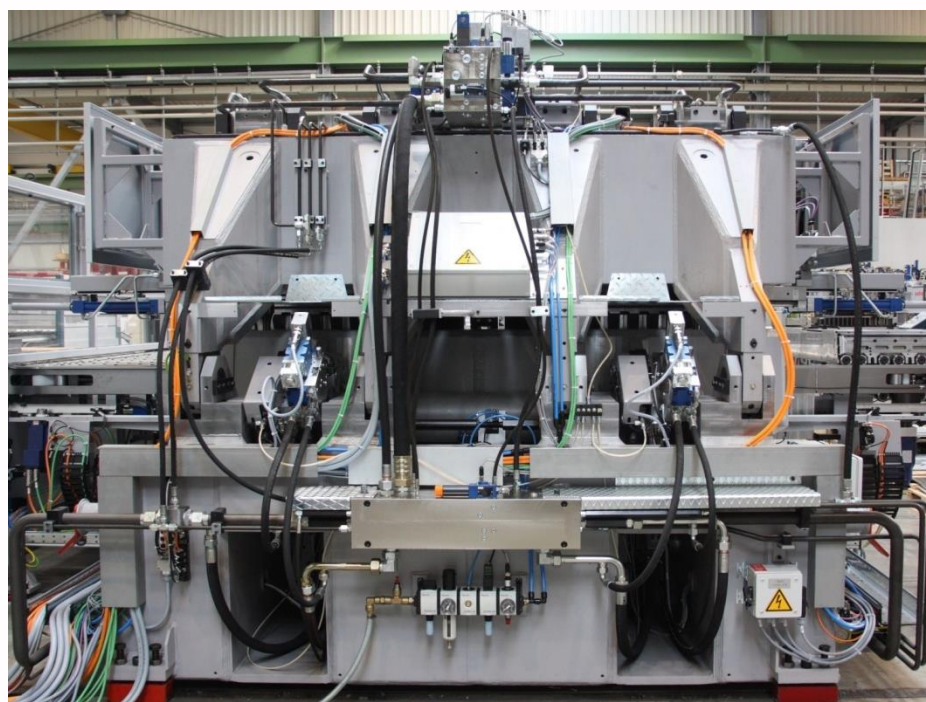
P4X



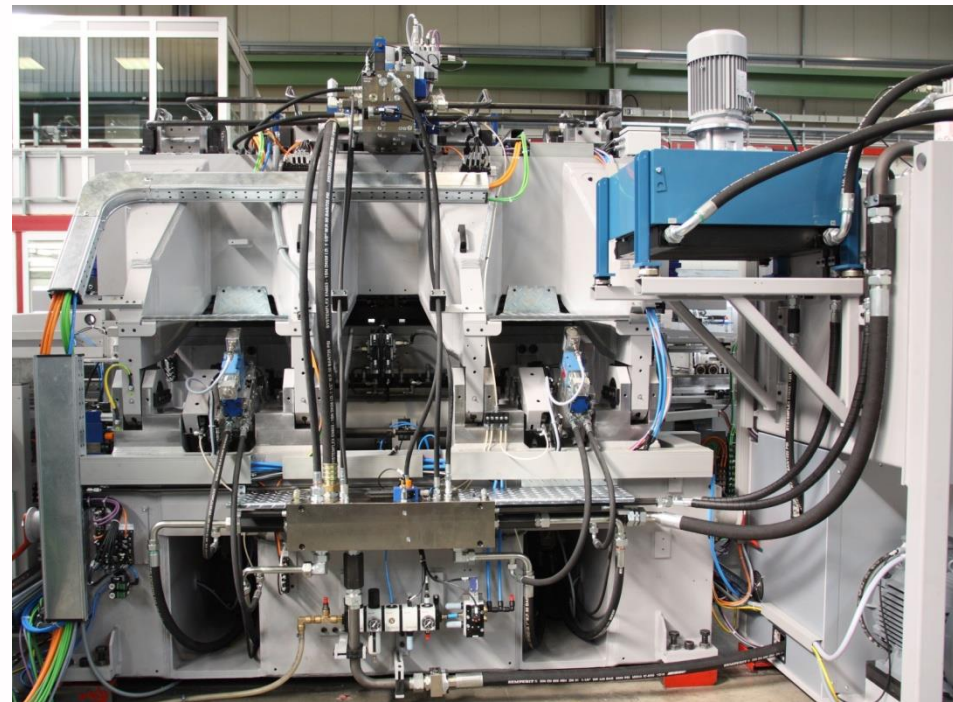
P4Xe



P4X



P4Xe



P4Xe-2516

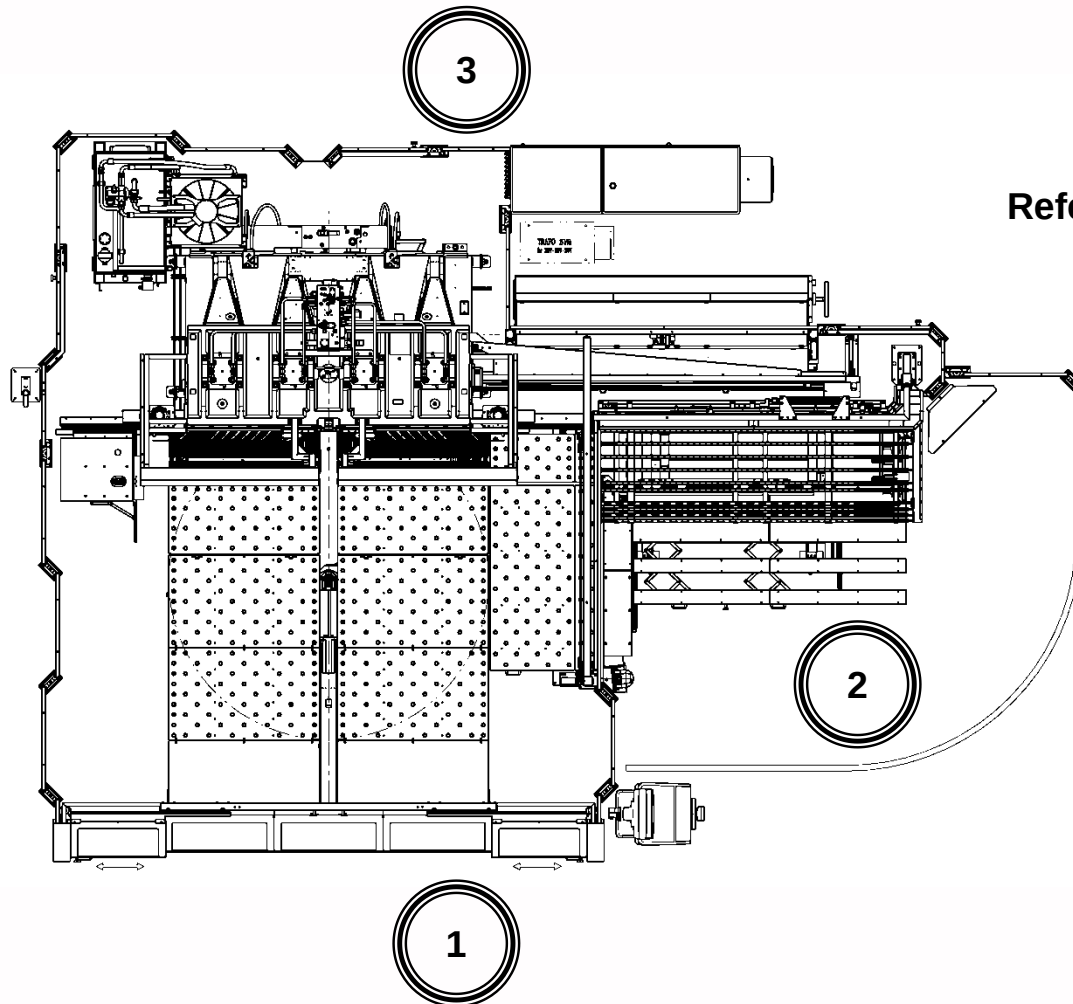


economical

P4Xe-2516



Reduced Noise Level from 79 dB to 71 dB



References: - Machine Directive 2006/42/EC

- UNI EN ISO 11202
- UNI EN ISO 12001
- UNI EN ISO 4871

	Machine bending a panel LEQ
1	65,8
2	67,7
3	70,8

New Hydraulic: Benefits

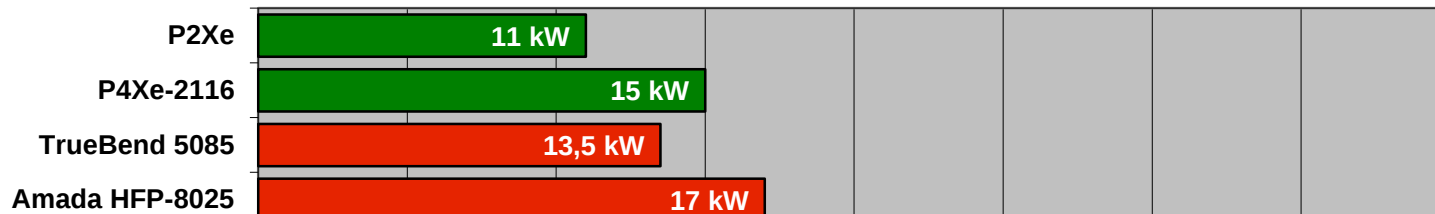
- **Elimination of the clamping cylinder**
- **Elimination of the hydraulic block manipulator**
- **Elimination of the pressure pump**
- **Reduction of several pipes**
- **Reduction of flexible tubes**
- **Reduced installed power: from 15 kW to 11 kW → minus 26%!**
- **Reduced noise level: from 79 dB to 71 dB**

eological

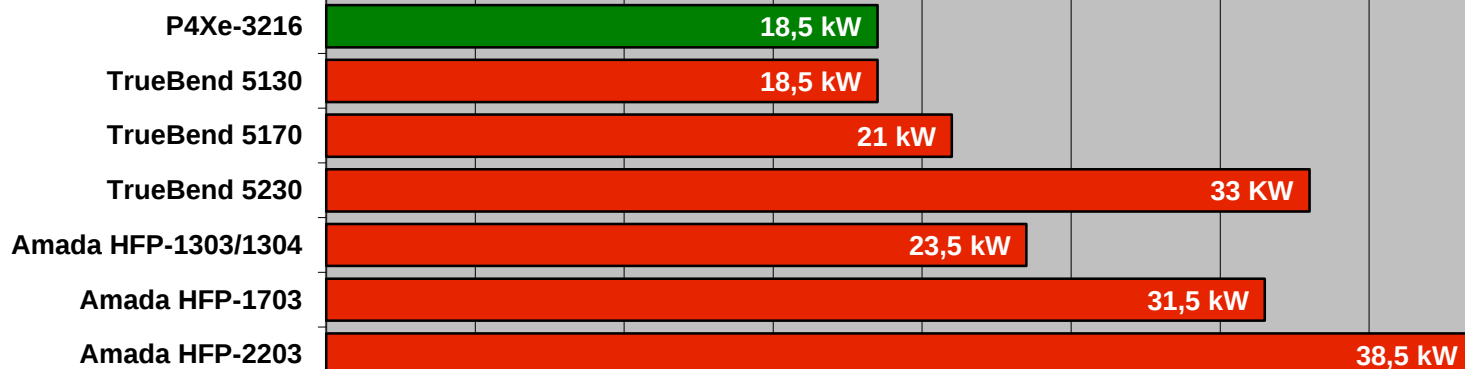
BEFORE		NEW		Difference
P2X	15 kW	P2Xe	11 kW	- 26%
P4X-2116	22 kW	P4Xe-2116	15 kW	- 32%
P4X-2516	22 kW	P4Xe-2516	18,5 kW	- 16%
P4X-3216	22 kW	P4Xe-3216	18,5 kW	- 16%
P4X-3816	22 kW	P4Xe-3816	18,5 kW	- 16%

Installed Power Basic Machine: Comparison with Press Brake

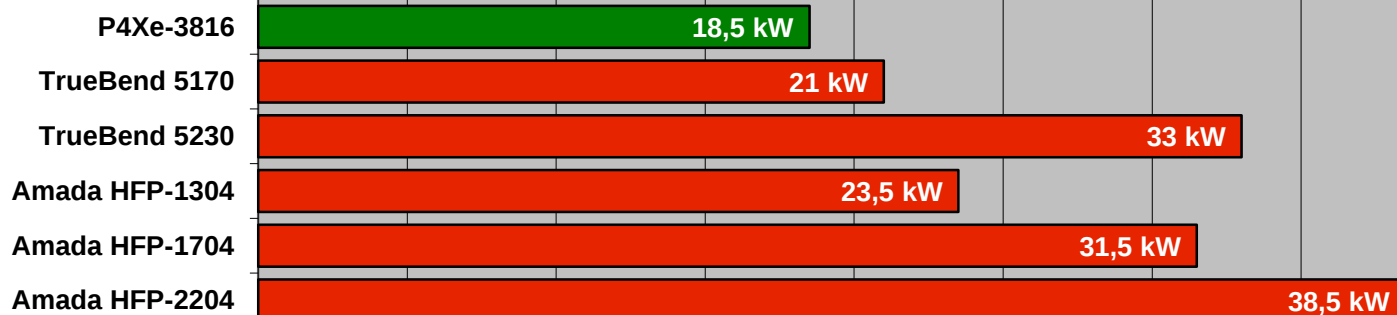
L = 2180



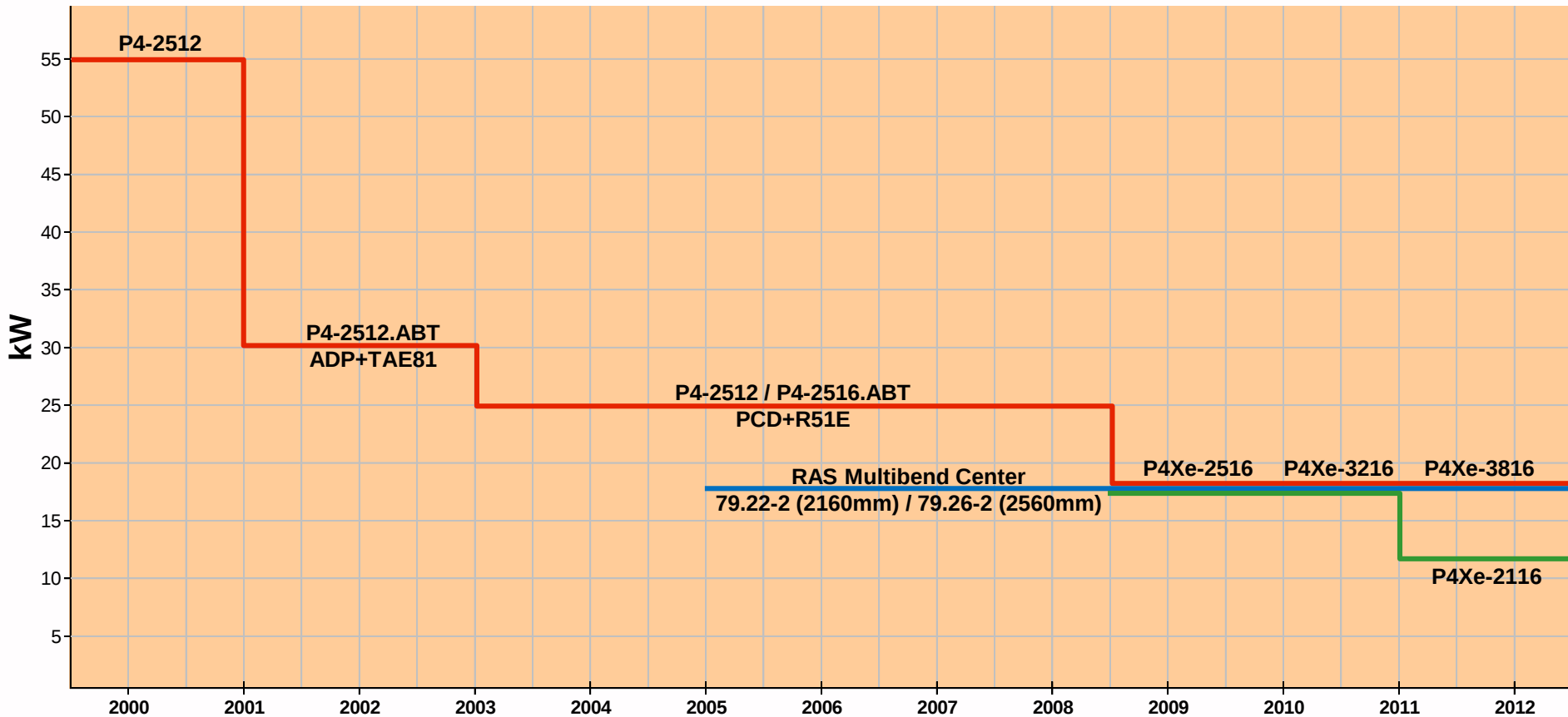
L = 3200



L = 3850

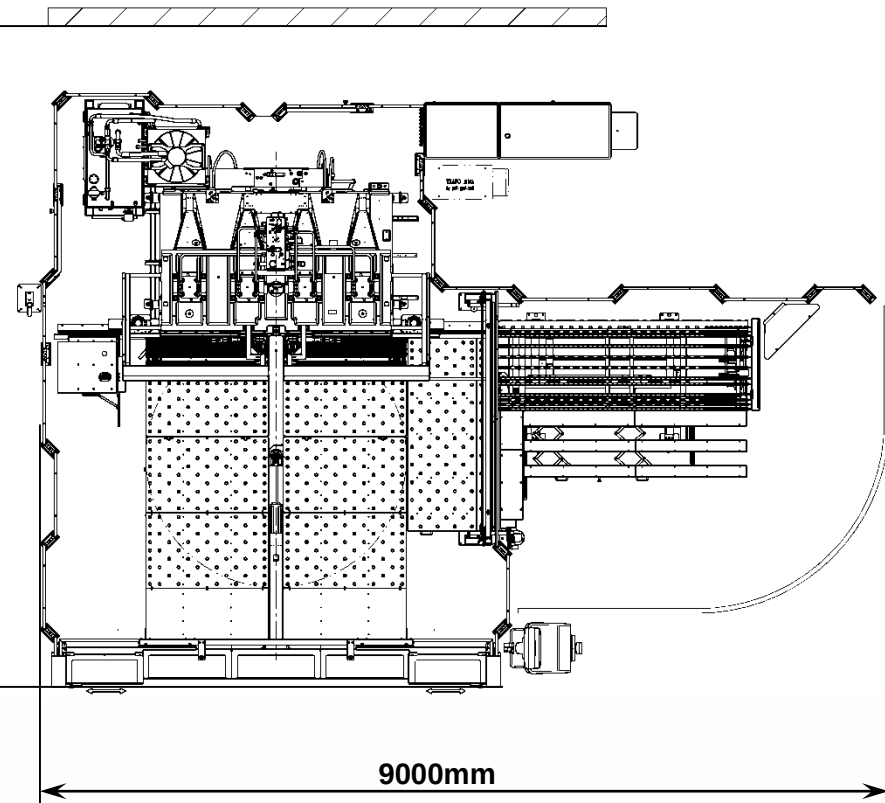
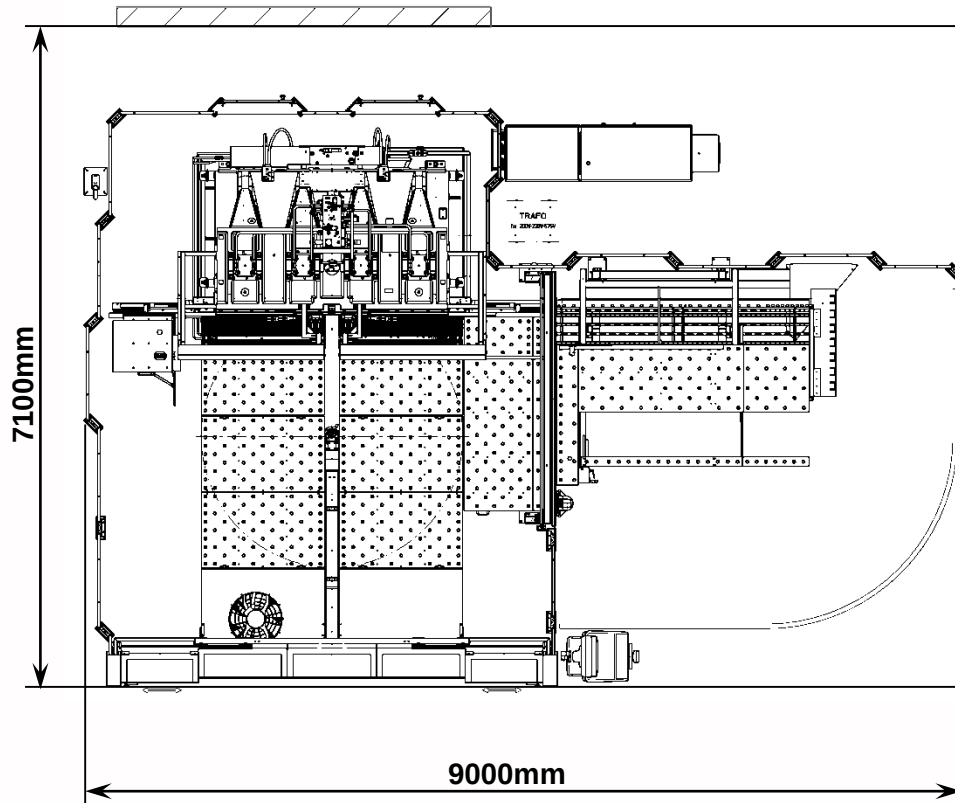


History of Average Energy Consumption



P4X-2516+HPT

P4Xe-2516+HPT

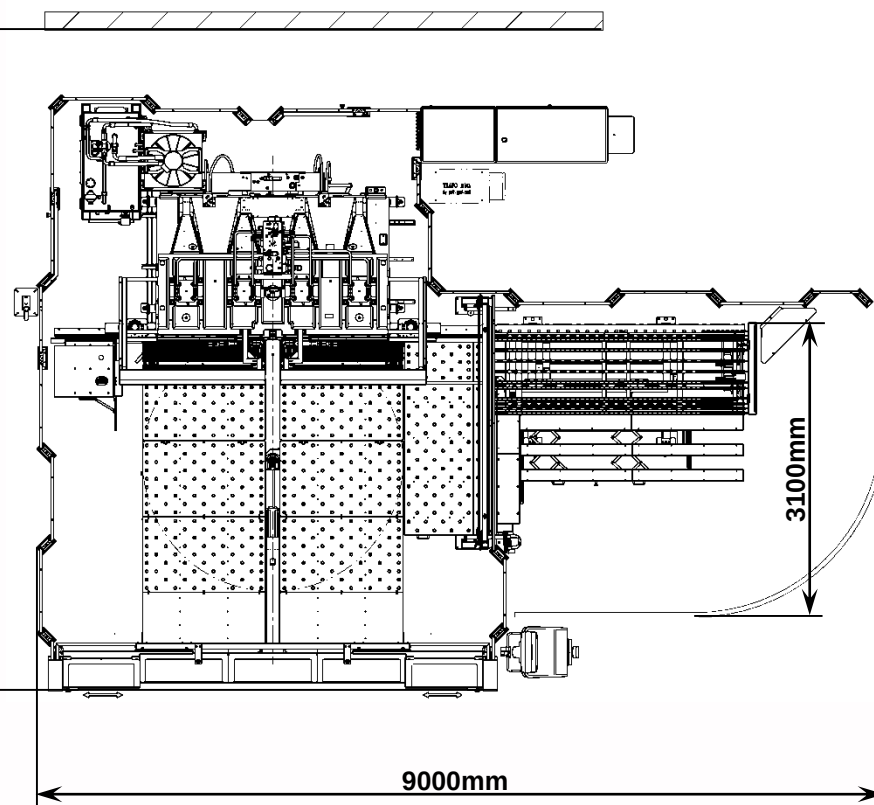
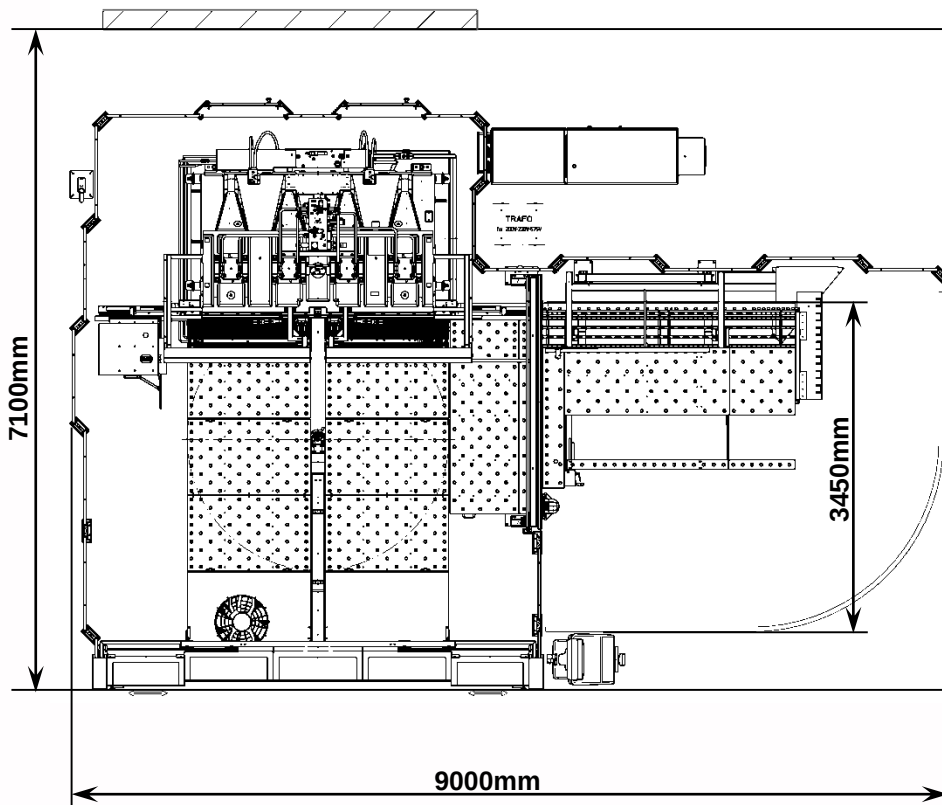


P4Xe-2516.CUT+HPT



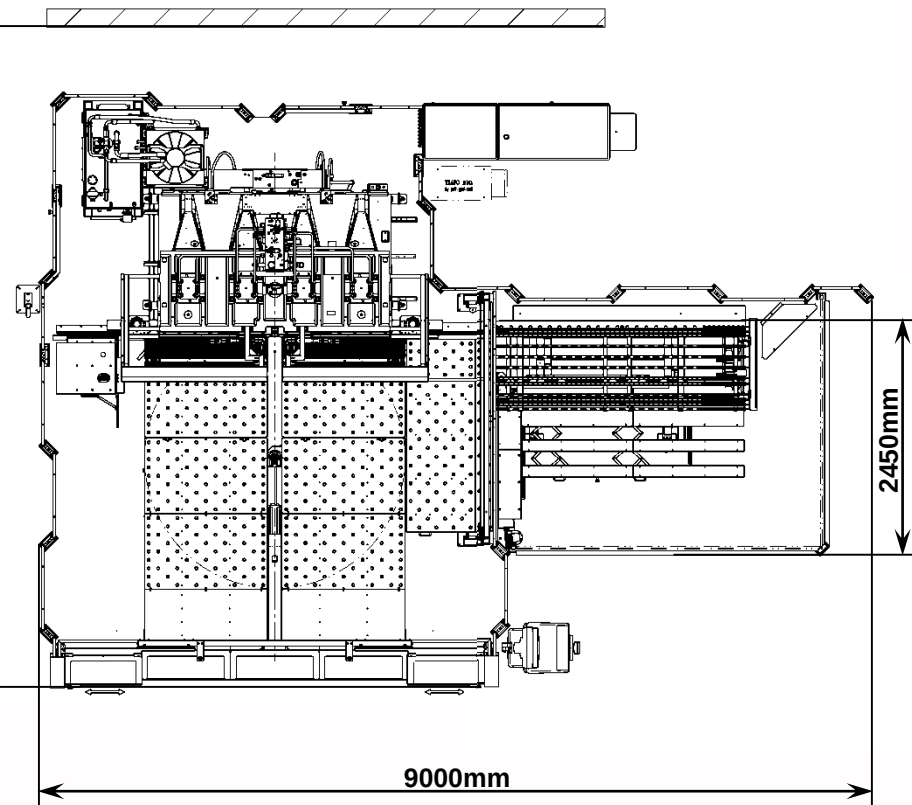
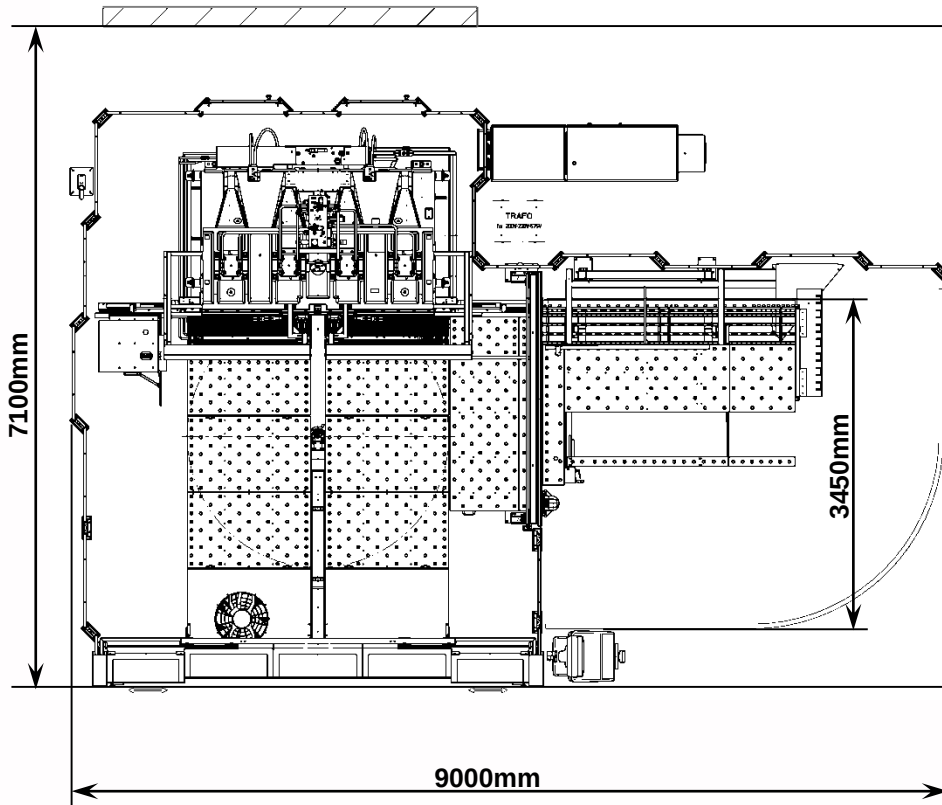
P4X-2516+HPT

P4Xe-2516+HPT/Scanner



P4X-2516+HPT

P4Xe-2516+HPT/Light Barrier



New Configuration: P4Xe-2516.CUT+HPT27



P4Xe-2516.CUT+HPT27



P4Xe-2516.CUT+HPT27



P4Xe-2516.CUT+HPT27



P4Xe-2516.CUT+HPT27



P4Xe-2516.CUT+HPT27



P4Xe-2516.CUT+HPT27



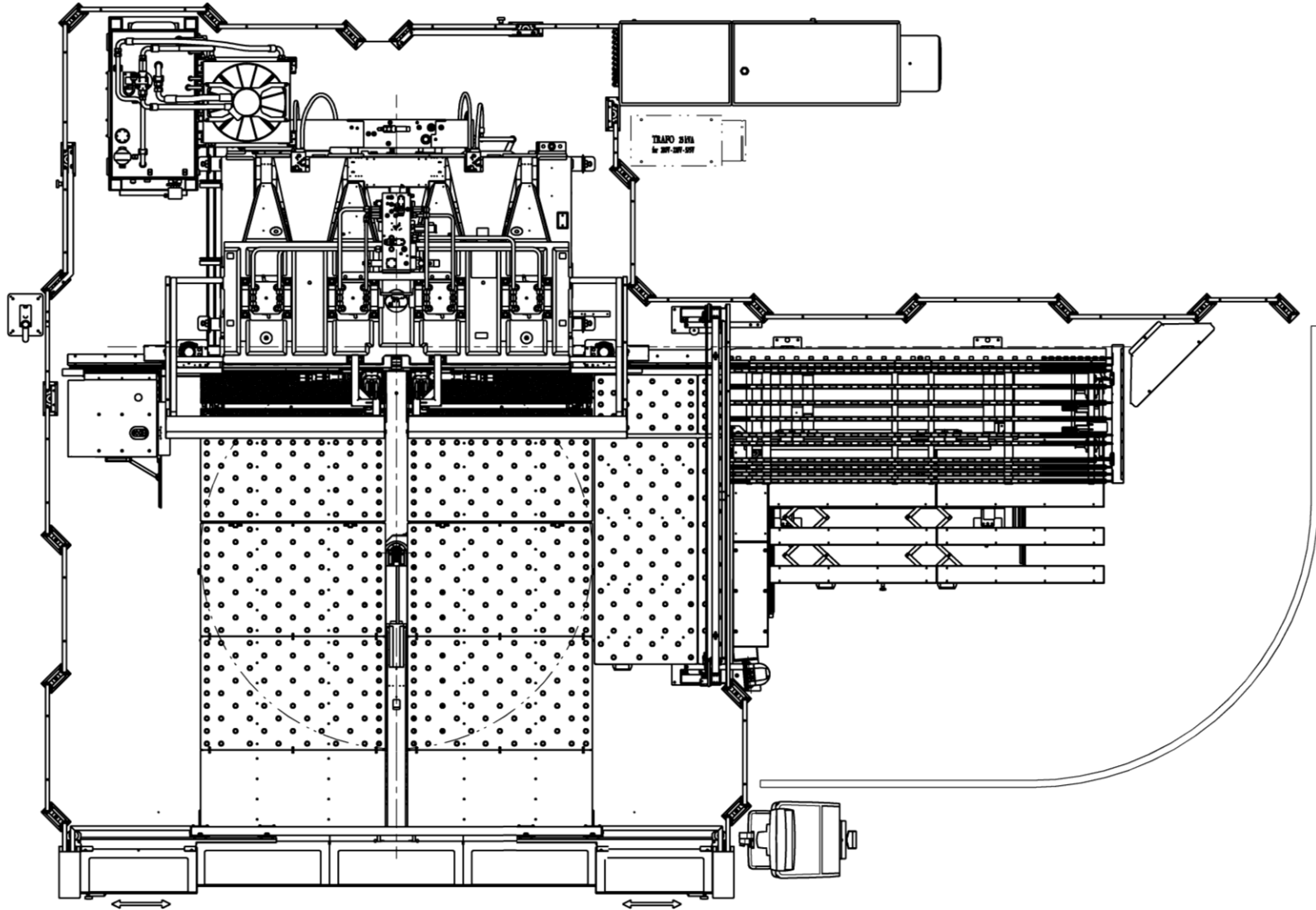
P4Xe-2516.CUT+HPT27



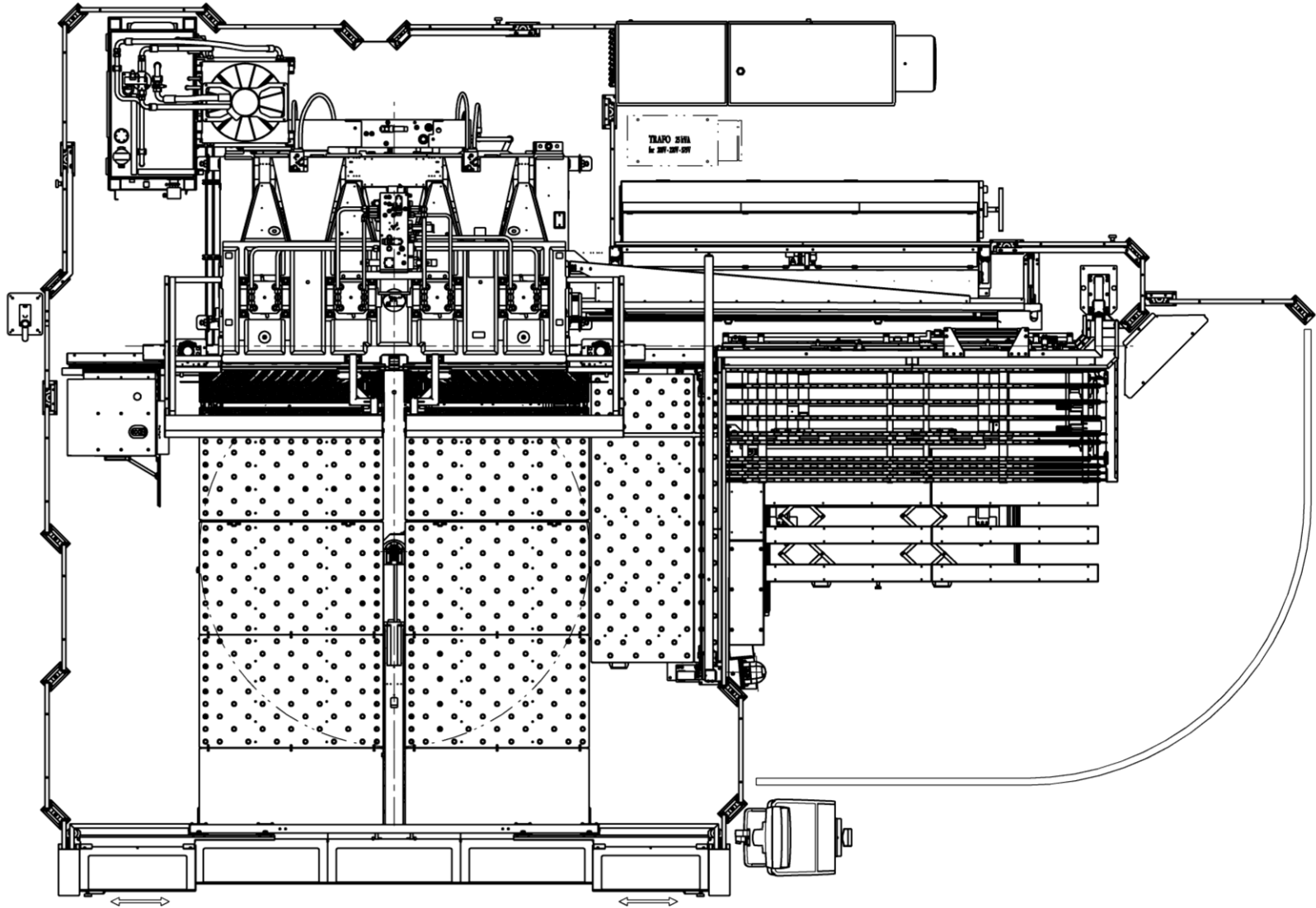
P4Xe-2516.CUT+HPT27



P4Xe-2516+HPT27



P4Xe-2516.CUT+HPT27



P4Xe-2116 New Technical Data

TECHNICAL SPECIFICATIONS		P4Xe-2116	
Max. length of incoming sheet	mm	2495	2495
Max. width of incoming sheet	mm	1524	1524
Max. diagonal that can be rotated	mm	2500	2500
Max. bend length	mm	400 - 1950	1950 - 2180
Max. bend height	mm	165	165
Min. thickness	mm	0,5	0,5
Max. thickness and angle for mild steel (410N/mm ²)	mm	2,5 (± 90°) 2,1 (±135°)	2,1 (± 90°) 1,6 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	mm	2,1 (± 90°) 1,6 (±130°)	1,6 (± 90°) 1,2 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	mm	3,2 (± 90°) 2,5 (±130°)	2,5 (± 90°) 2,1 (±130°)

The values indicated apply to a standard machine without options.
Salvagnini reserves the right to modify this data without warning.

10/2010

P4Xe-2116 New Technical Data

TECHNICAL SPECIFICATIONS		P4Xe-2116	
Max. length of incoming sheet	inch	98,23	98,23
Max. width of incoming sheet	inch	60,00	60,00
Max. diagonal that can be rotated	inch	98,43	98,43
Max. bend length	inch	15,75 - 76,77	76,77 - 85,83
Max. bend height	inch	6,50	6,50
Min. thickness	inch	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	inch	0,0984 (± 90°) 0,0827 (±135°)	0,0827 (± 90°) 0,0630 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	inch	0,0827 (± 90°) 0,0630 (±130°)	0,0630 (± 90°) 0,0472 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	inch	0,1260 (± 90°) 0,0984 (±130°)	0,0984 (± 90°) 0,0827 (±130°)

The values indicated apply to a standard machine without options.
Salvagnini reserves the right to modify this data without warning.

10/2010

P4Xe-2116 New Technical Data

TECHNICAL SPECIFICATIONS		P4Xe-2116	
Max. length of incoming sheet	inch	98,23	98,23
Max. width of incoming sheet	inch	60,00	60,00
Max. diagonal that can be rotated	inch	98,43	98,43
Max. bend length	inch	15,75 76,77	76,77 85,83
Max. bend height	inch	6,50	6,50
Min. thickness	inch	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	gage	13 (± 90°) 14 (±135°)	14 (± 90°) 16 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	gage	14 (± 90°) 16 (±130°)	16 (± 90°) 18 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	gage	11 (± 90°) 13 (±130°)	13 (± 90°) 14 (±130°)

The values indicated apply to a standard machine without options.

Salvagnini reserves the right to modify this data without warning.

10/2010

P4Xe-2516/3216 New Technical Data

TECHNICAL SPECIFICATIONS

		P4Xe-2516	P4Xe-2516/3	P4Xe-3216	P4Xe-3216/3
Max. length of incoming sheet	mm	2795	2795	3495	3495
Max. width of incoming sheet	mm	1524	1524	1524	1524
Max. diagonal that can be rotated	mm	2800	2800	3500	3500
Max. bend length	mm	2500	2500	3200	3200
Max. bend height	mm	165	165	165	165
Min. thickness	mm	0,5	0,5	0,5	0,5
Max. thickness and angle for mild steel (410N/mm ²)	mm	2,5 (± 90°) 2,1 (±135°)	3,2 (± 90°) 2,5 (±130°)	2,5 (± 90°) 2,1 (±135°)	3,2 (± 90°) 2,5 (±130°)
Max. thickness and angle for stainless steel (580 N/mm ²)	mm	2,1 (± 90°) 1,6 (±130°)	2,5 (± 90°) 2,1 (±125°)	2,1 (± 90°) 1,6 (±130°)	2,5 (± 90°) 2,1 (±125°)
Max. thickness and angle for aluminium (265 N/mm ²)	mm	3,2 (± 90°) 2,5 (±130°)	3,2 (±125°)	3,2 (± 90°) 2,5 (±130°)	3,2 (±125°)

The values indicated apply to a standard machine without options.

Salvagnini reserves the right to modify this data without warning.

10/2010

P4Xe-2516/3216 New Technical Data

TECHNICAL SPECIFICATIONS

		P4Xe-2516	P4Xe-2516/3	P4Xe-3216	P4Xe-3216/3
Max. length of incoming sheet	inch	110,04	110,04	137,60	137,60
Max. width of incoming sheet	inch	60,00	60,00	60,00	60,00
Max. diagonal that can be rotated	inch	110,24	110,24	137,80	137,80
Max. bend length	inch	98,43	98,43	125,98	125,98
Max. bend height	inch	6,50	6,50	6,50	6,50
Min. thickness	inch	0,02	0,02	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	inch	0,0984 (± 90°) 0,0827 (±135°)	0,1260 (± 90°) 0,0984 (±130°)	0,0984 (± 90°) 0,0827 (±135°)	0,1260 (± 90°) 0,0984 (±130°)
Max. thickness and angle for stainless steel (580 N/mm ²)	inch	0,0827 (± 90°) 0,0630 (±130°)	0,0984 (± 90°) 0,0827 (±125°)	0,0827 (± 90°) 0,0630 (±130°)	0,0984 (± 90°) 0,0827 (±125°)
Max. thickness and angle for aluminium (265 N/mm ²)	inch	0,1260 (± 90°) 0,0984 (±130°)	0,1260 (±125°)	0,1260 (± 90°) 0,0984 (±130°)	0,1260 (±125°)

The values indicated apply to a standard machine without options.

Salvagnini reserves the right to modify this data without warning.

10/2010

P4Xe-2516/3216 New Technical Data

TECHNICAL SPECIFICATIONS

		P4Xe-2516	P4Xe-2516/3	P4Xe-3216	P4Xe-3216/3
Max. length of incoming sheet	inch	110,04	110,04	137,60	137,60
Max. width of incoming sheet	inch	60,00	60,00	60,00	60,00
Max. diagonal that can be rotated	inch	110,24	110,24	137,80	137,80
Max. bend length	inch	98,43	98,43	125,98	125,98
Max. bend height	inch	6,50	6,50	6,50	6,50
Min. thickness	inch	0,02	0,02	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	gage	13 (± 90°) 14 (±135°)	11 (± 90°) 13 (±130°)	13 (± 90°) 14 (±135°)	11 (± 90°) 13 (±130°)
Max. thickness and angle for stainless steel (580 N/mm ²)	gage	14 (± 90°) 16 (±130°)	13 (± 90°) 14 (±125°)	14 (± 90°) 16 (±130°)	13 (± 90°) 14 (±125°)
Max. thickness and angle for aluminium (265 N/mm ²)	gage	11 (± 90°) 13 (±130°)	11 (±125°)	11 (± 90°) 13 (±130°)	11 (±125°)

The values indicated apply to a standard machine without options.

Salvagnini reserves the right to modify this data without warning.

10/2010

P4Xe-3816 New Technical Data

TECHNICAL SPECIFICATIONS		P4Xe-3816	
Max. length of incoming sheet	mm	3990	3990
Max. width of incoming sheet	mm	1524	1524
Max. diagonal that can be rotated	mm	4000	4000
Max. bend length	mm	400 - 3200	3200 - 3850
Max. bend height	mm	165	165
Min. thickness	mm	0,5	0,5
Max. thickness and angle for mild steel (410N/mm ²)	mm	2,5 (± 90°) 2,1 (±135°)	2,1 (± 90°) 1,6 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	mm	2,1 (± 90°) 1,6 (±130°)	1,6 (± 90°) 1,2 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	mm	3,2 (± 90°) 2,5 (±130°)	2,5 (± 90°) 2,1 (±130°)

The values indicated apply to a standard machine without options.
 Salvagnini reserves the right to modify this data without warning.

10/2010

P4Xe-3816 New Technical Data

TECHNICAL SPECIFICATIONS		P4Xe-3816	
Max. length of incoming sheet	inch	98,23	98,23
Max. width of incoming sheet	inch	60,00	60,00
Max. diagonal that can be rotated	inch	98,43	98,43
Max. bend length	inch	15,75 - 76,77	76,77 - 85,83
Max. bend height	inch	6,50	6,50
Min. thickness	inch	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	inch	0,0984 (± 90°) 0,0827 (±135°)	0,0827 (± 90°) 0,0630 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	inch	0,0827 (± 90°) 0,0630 (±130°)	0,0630 (± 90°) 0,0472 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	inch	0,1260 (± 90°) 0,0984 (±130°)	0,0984 (± 90°) 0,0827 (±130°)

The values indicated apply to a standard machine without options.
Salvagnini reserves the right to modify this data without warning.

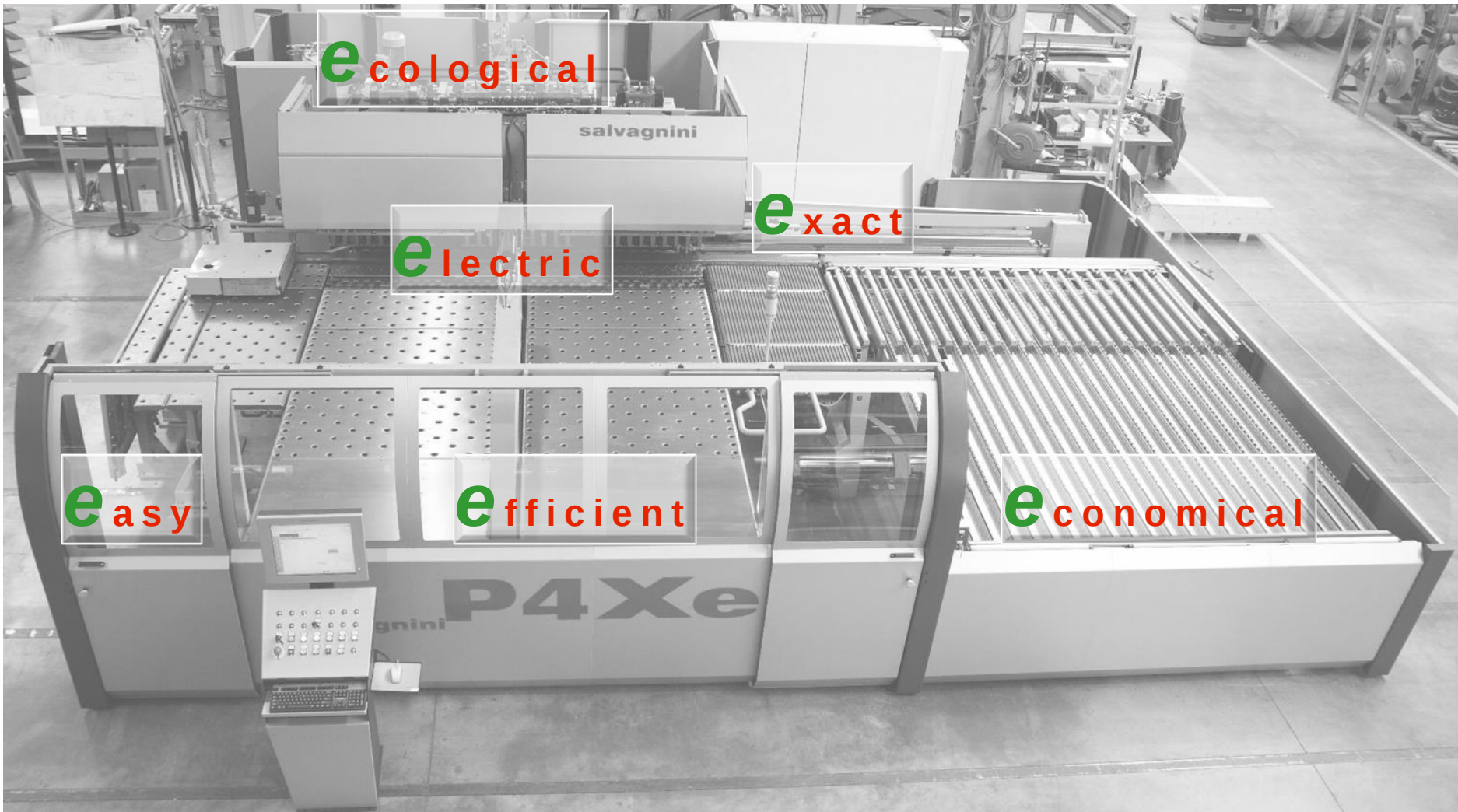
10/2010

P4Xe-3816 New Technical Data

TECHNICAL SPECIFICATIONS		P4Xe-3816	
Max. length of incoming sheet	inch	157,09	157,09
Max. width of incoming sheet	inch	60,00	60,00
Max. diagonal that can be rotated	inch	157,48	157,48
Max. bend length	inch	15,75 125,98	125,98 151,57
Max. bend height	inch	6,50	6,50
Min. thickness	inch	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	gage	13 (± 90°) 14 (±135°)	14 (± 90°) 16 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	gage	14 (± 90°) 16 (±130°)	16 (± 90°) 18 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	gage	11 (± 90°) 13 (±130°)	13 (± 90°) 14 (±130°)

The values indicated apply to a standard machine without options.
 Salvagnini reserves the right to modify this data without warning.

10/2010



[P2Xe]

Euroblech meet-IN 2010

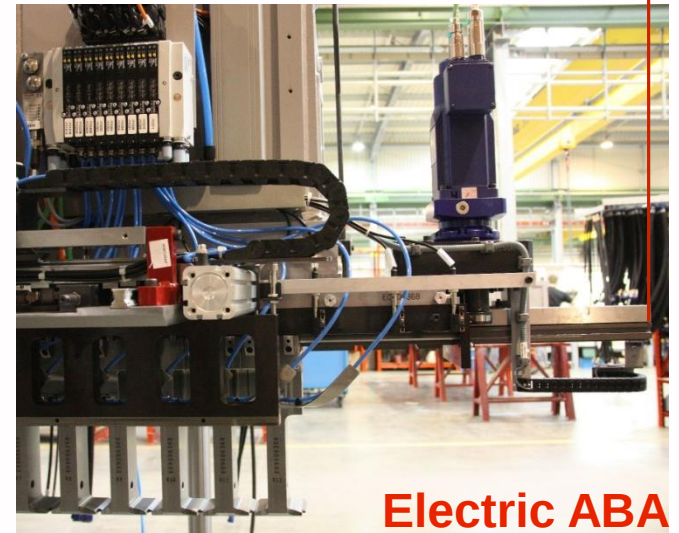
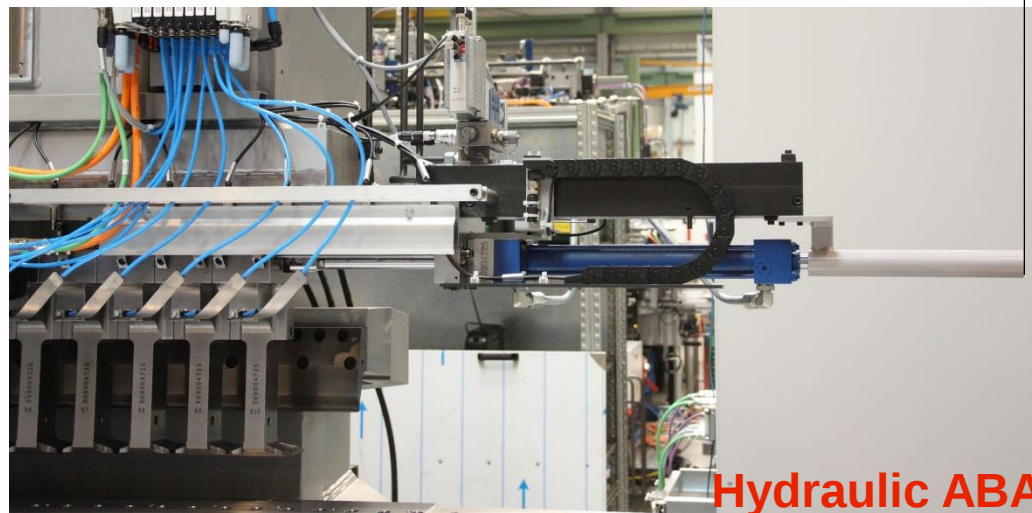
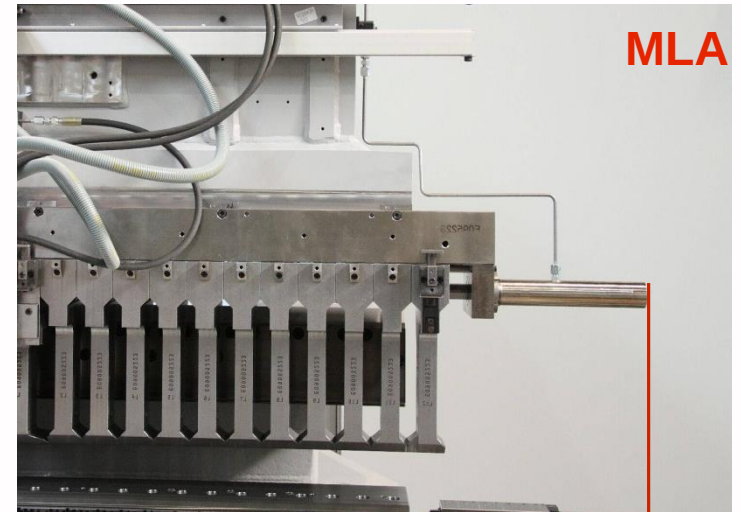
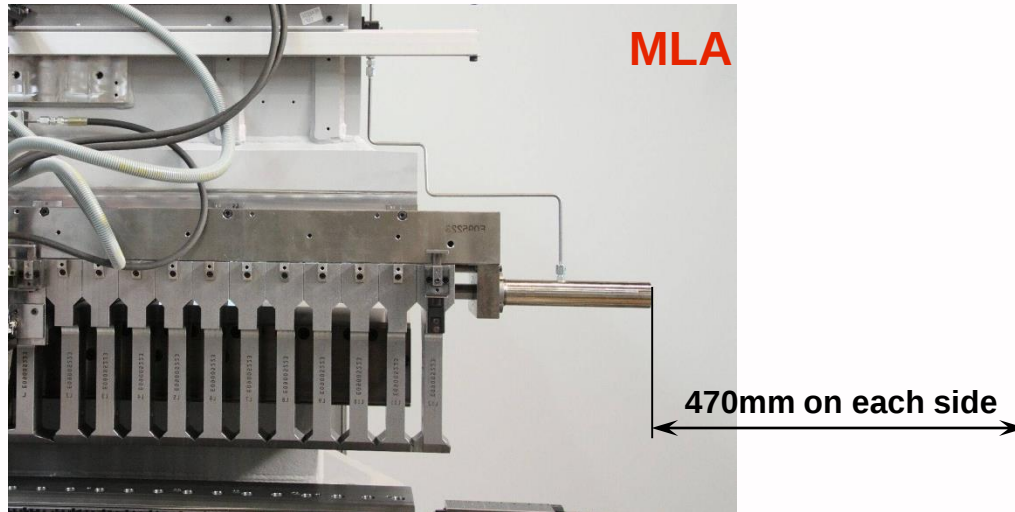


salvagnini

News on **P2Xe**

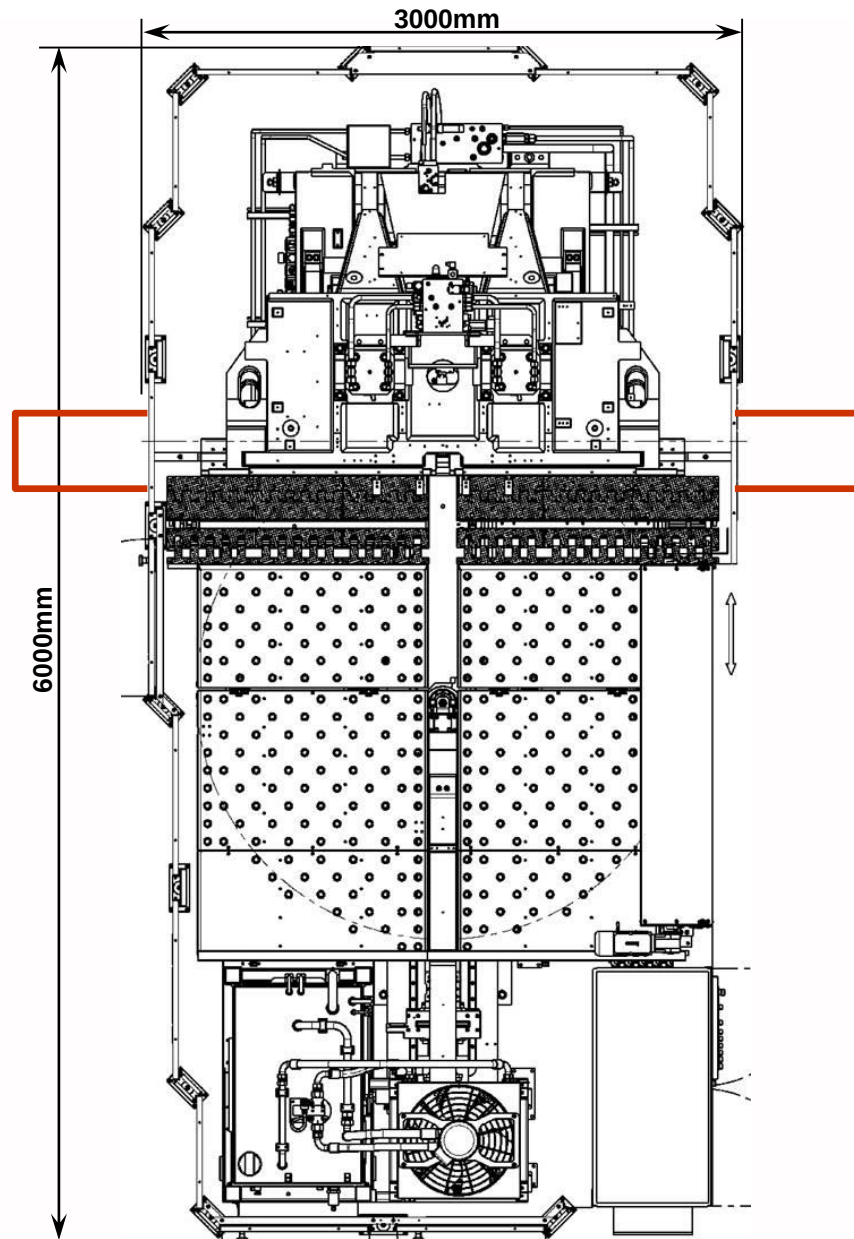
- **Option ABA**
- **New Electric Clamping**
- **New electric**
- **New hydraulic**

Compact Option ABA



P2X

Layout



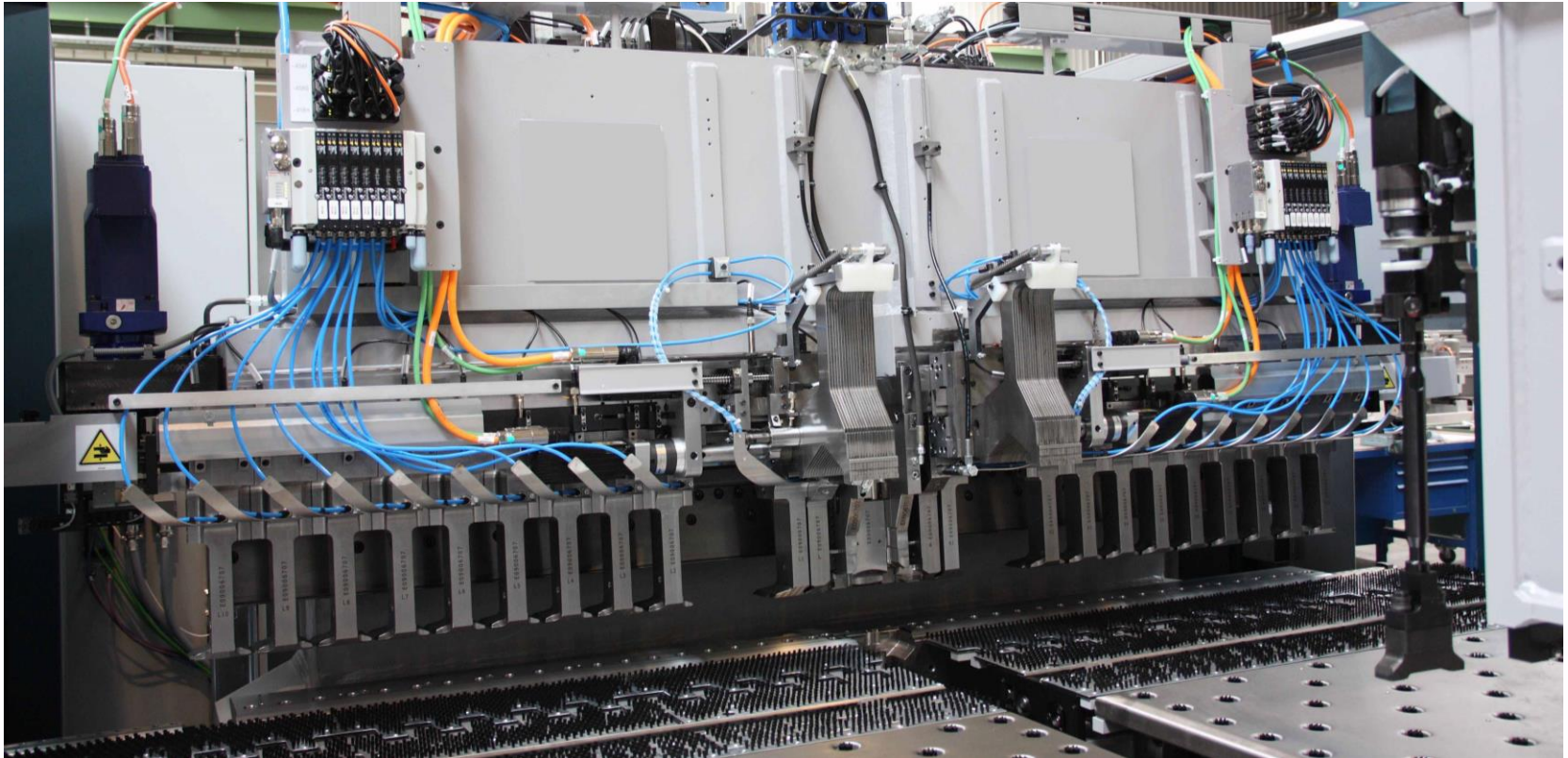
New Option ABA: Electrically Activated Blankholder Tools



New Option ABA: Electrically Activated Blankholder Tools



P2Xe with Option ABA



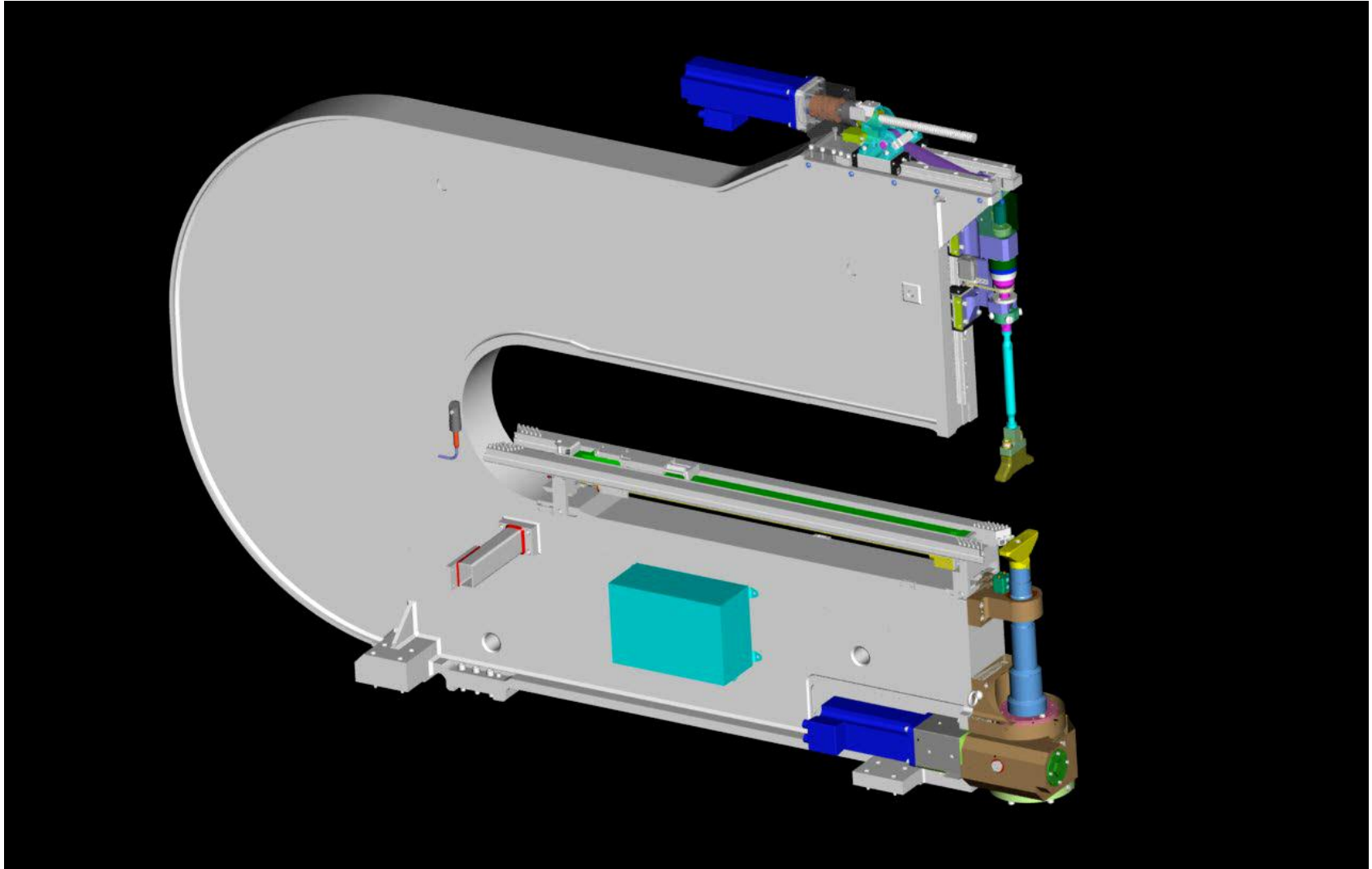
P2Xe with Option ABA



News on **P2Xe**

- Option ABA
- **New Electric Clamping**
- New electric
- New hydraulic

New Electric Clamping



New Electric Clamping



Electric Clamping: Benefits

- **Position controlled stroke**
- **Force control**
- **Double sheet control**
- **Sheet thickness measurement**
- **Soft clamping: no marks on delicate material**
- **Elimination of the pressure pump**

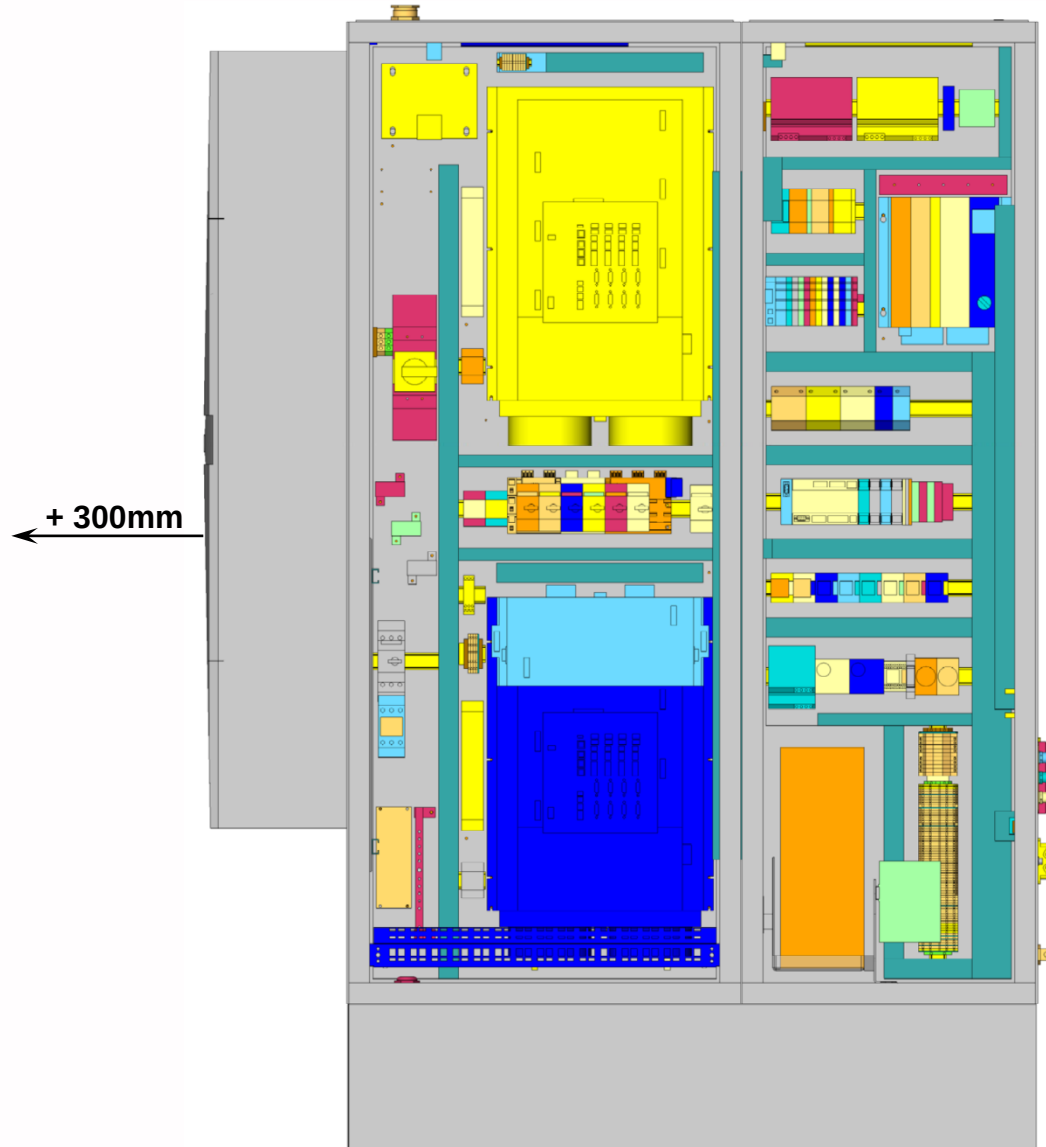
News on **P2Xe**

- Option ABA
- New Electric Clamping
- **New electric**
- New hydraulic

Number of Axes

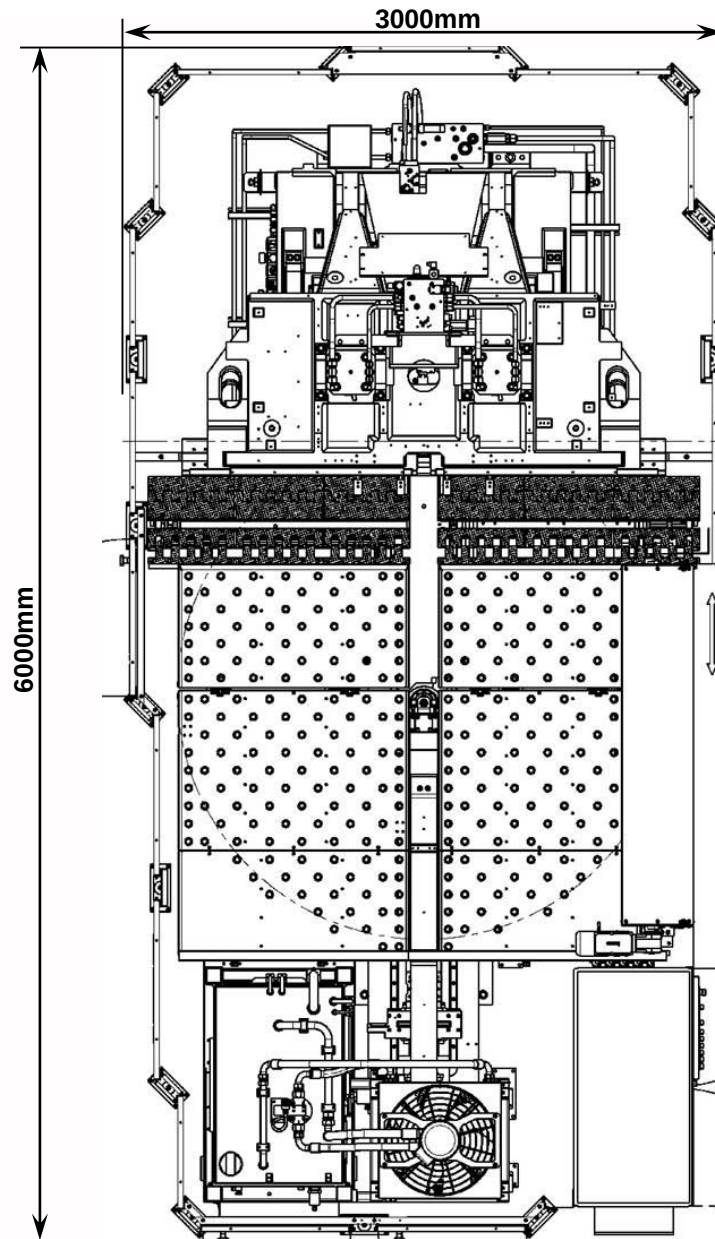
qty	Type	Description	
1	electric	rotator	MOOG 1 6+2 axes
1	electric	manipulator	
3	electric	reference tables	
2	electric	CLA, CLA/A	
1	electric	clamping device (tampone)	
2	electric	ABA outer segment	MOOG 2 6 axes
2	electric	ABA pre adjuster	
2	electric	ABA inner segment rotation	
1	electric	roller shutter	LENZE frequency inverter with MOTAX
1	electric	air cooling	
2	hydraulic	bending cylinders	MUETX
1	hydraulic	blankholder	ACV
19 axes = 16 electric + 3 hydraulic axes → e			

Electrical Cabinet

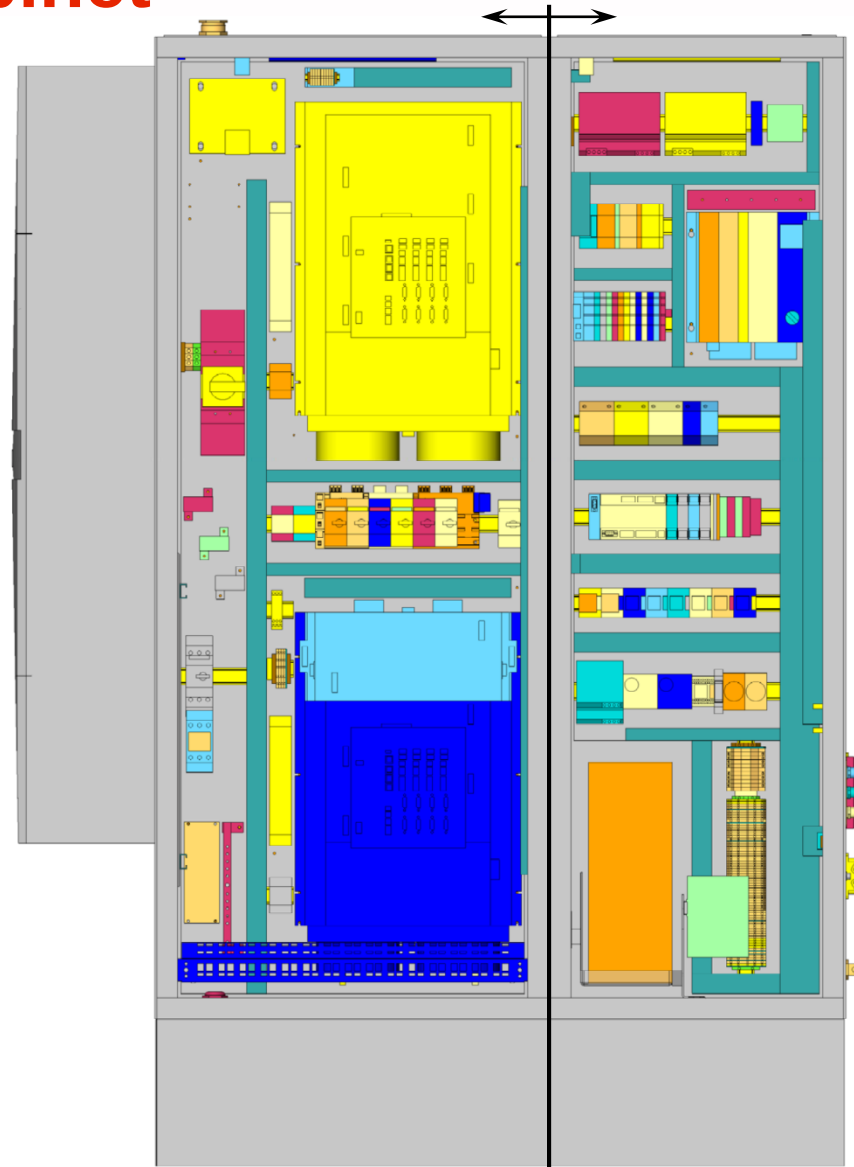


P2X

Layout



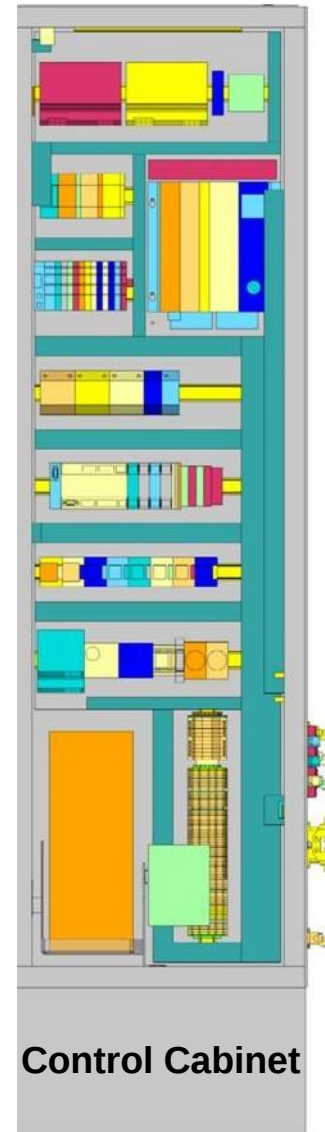
Electrical Cabinet



Electrical Cabinet

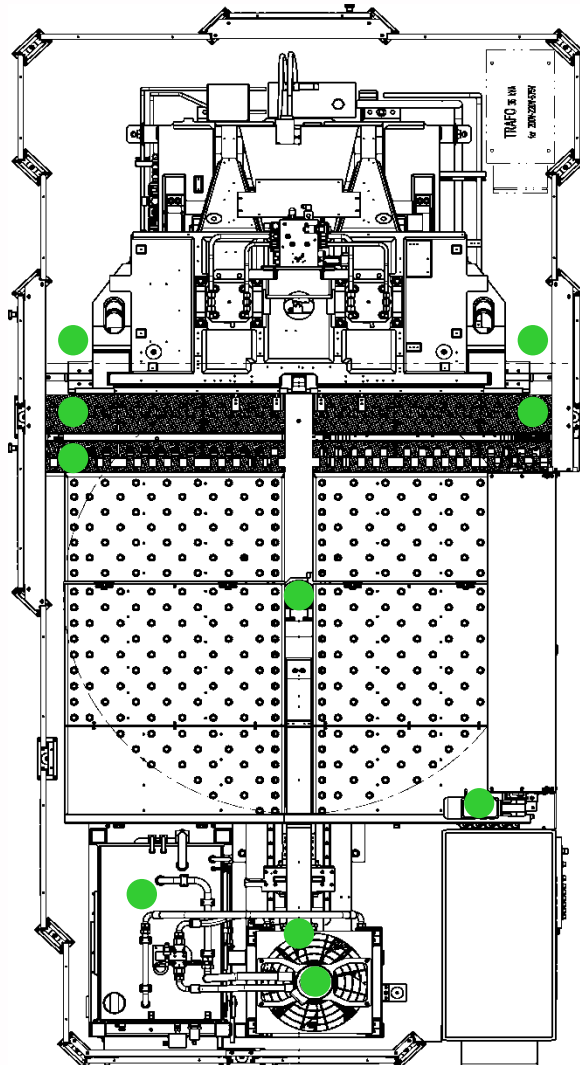


Power Cabinet

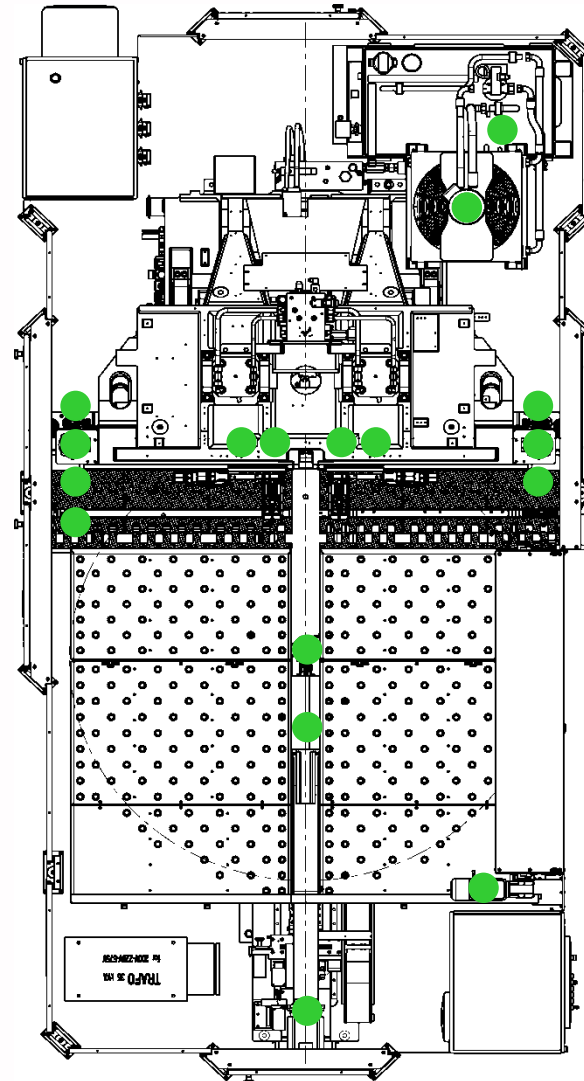


Control Cabinet

P2X



P2Xe



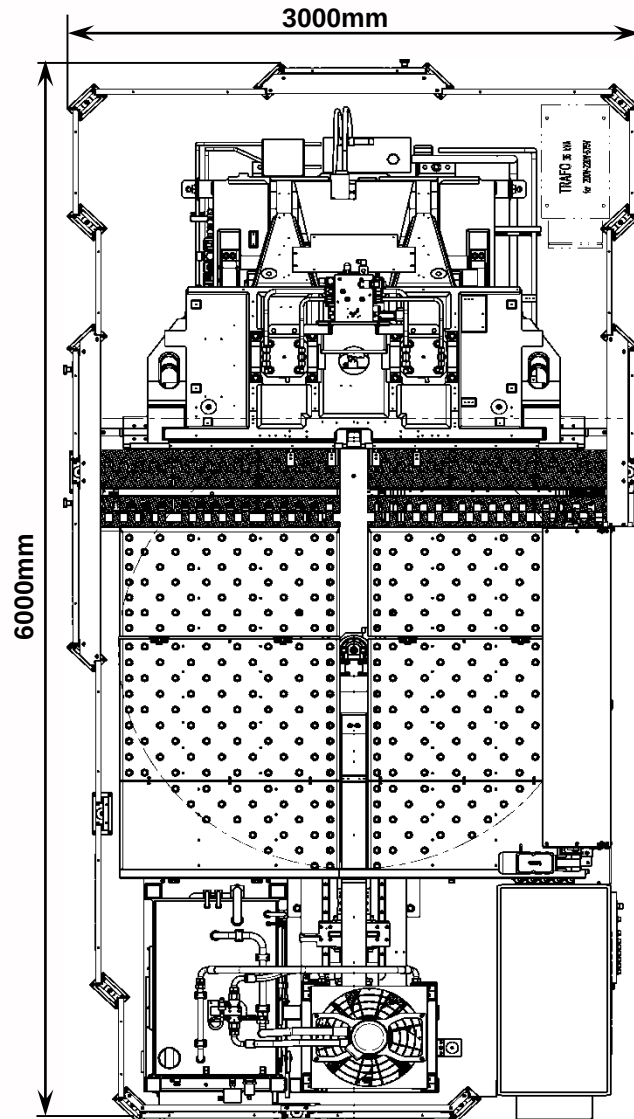
P2Xe



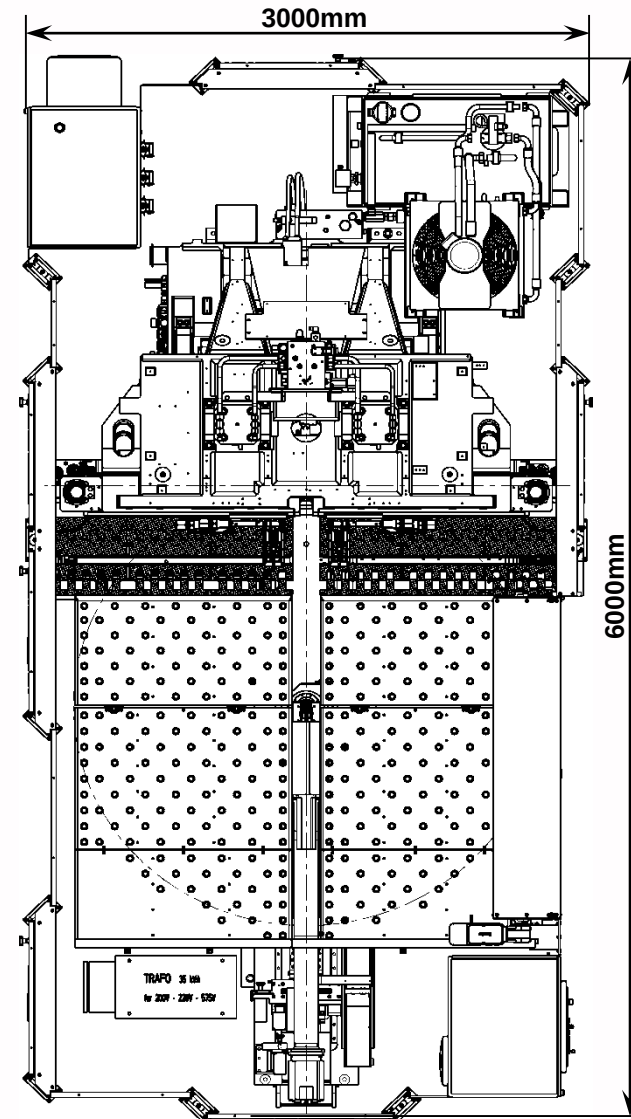
P2Xe



P2X



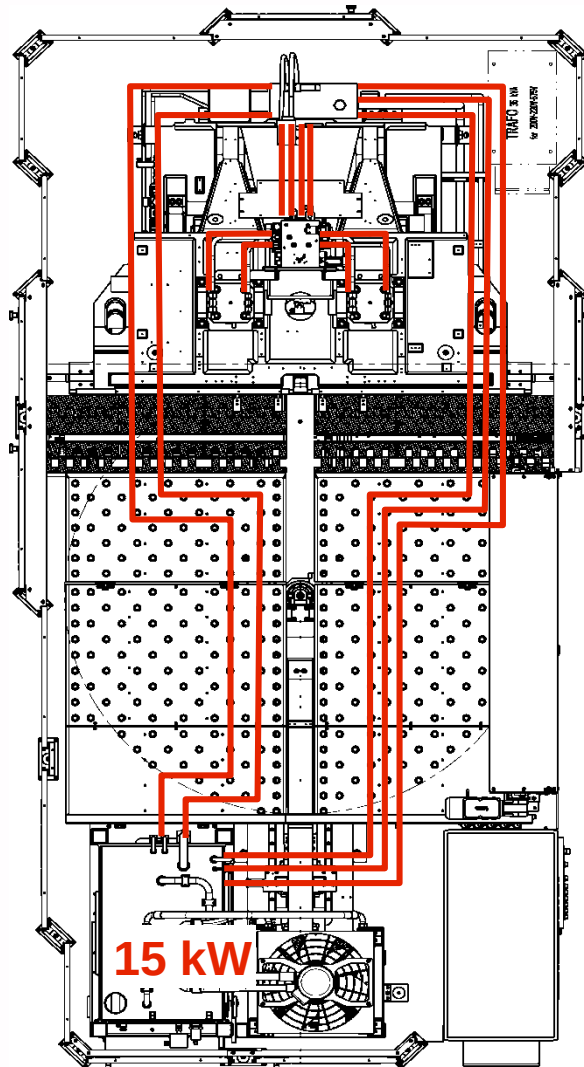
P2Xe



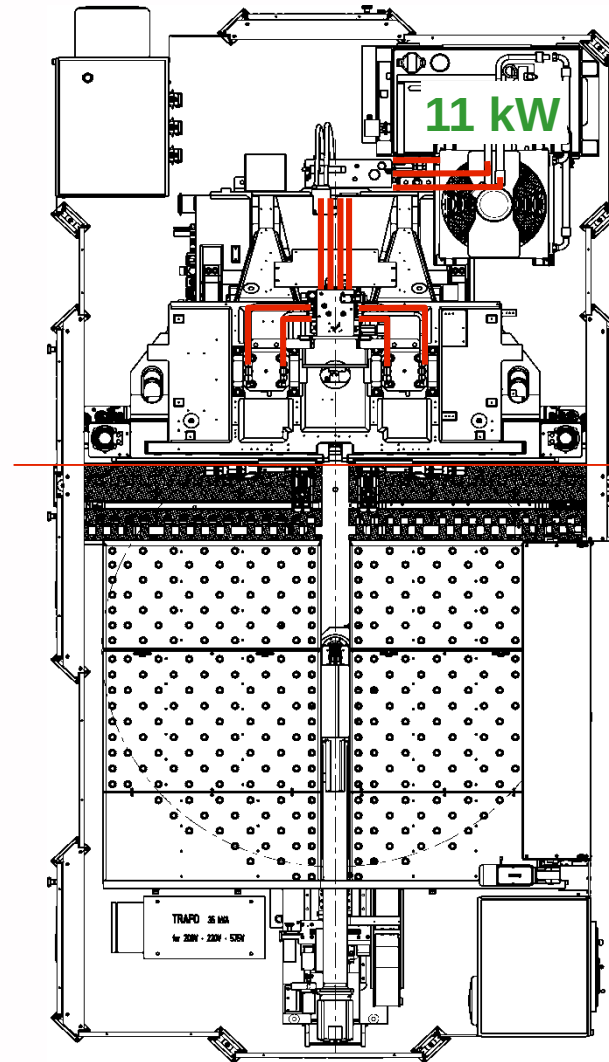
News on **P2Xe**

- Option ABA
- New Electric Clamping
- New electric
- **New hydraulic**

P2X



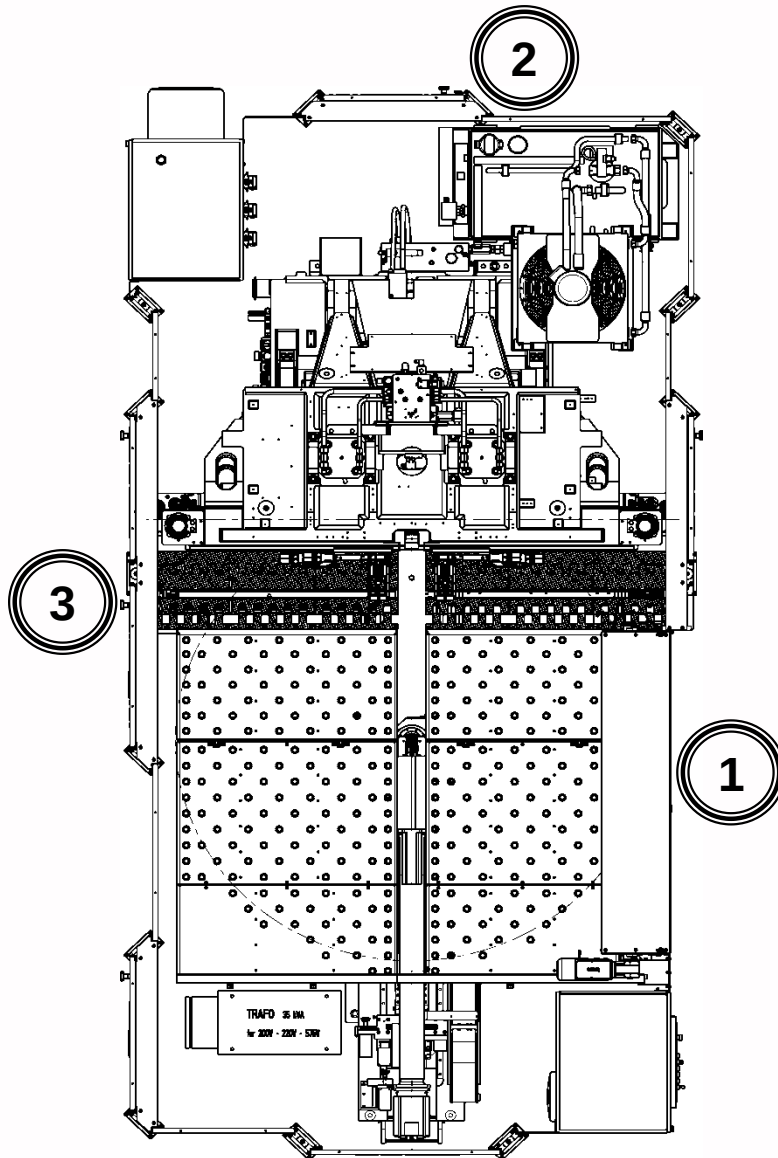
P2Xe



No hydraulic:
„out of sight -
out of mind“

— Hydraulic pipes

Reduced Noise Level from 72 dB to 69 dB



References: - Machine Directive 2006/42/EC

- UNI EN ISO 11202
- UNI EN ISO 12001
- UNI EN ISO 4871

LEQ = level of equivalent sound pressure in dB

	Machine bending a panel LEQ
1	68,8
2	67,7
3	68,5

New Hydraulic Benefits

- **Elimination of the clamping cylinder**
- **Elimination of the hydraulic block manipulator**
- **Elimination of the pressure pump**
- **Reduction of several pipes**
- **Reduction of flexible tubes**
- **Reduced installed power: from 15 kW to 11 kW → minus 26%!**
- **Reduced Noise Level: from 72 dB to 69 dB**

P2Xe New Technical Data

Max. length of incoming sheet	mm	2495	2495
Max. width of incoming sheet	mm	1524	1524
Max. diagonal that can be rotated	mm	2500	2500
Min. length of incoming sheet	mm	285	285
Min. width of incoming sheet	mm	140	140
Max. bend length	mm	400 - 1950	1950 - 2180
Max. bend height	mm	165	165
Min. thickness	mm	0,5	0,5
Max. thickness and angle for mild steel (410N/mm ²)	mm	2,5 (± 90°) 2,1 (±135°)	2,1 (± 90°) 1,6 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	mm	2,1 (± 90°) 1,6 (±130°)	1,6 (± 90°) 1,2 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	mm	3,2 (± 90°) 2,5 (±130°)	2,5 (± 90°) 2,1 (±130°)
Average power consumption	kW	9,0	9,0
Noise level	dB	69	69

The values indicated apply to a standard machine without options.
Salvagnini reserves the right to modify this data without warning.

10/2010

P2Xe New Technical Data

Max. length of incoming sheet	inch	98,23	98,23
Max. width of incoming sheet	inch	60,00	60,00
Max. diagonal that can be rotated	inch	98,43	98,43
Min. length of incoming sheet	inch	11	11
Min. width of incoming sheet	inch	6	6
Max. bend length	inch	15,75 - 76,77	76,77 - 85,83
Max. bend height	inch	6,50	6,50
Min. thickness	inch	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	inch	0,0984 (± 90°) 0,0827 (±135°)	0,0827 (± 90°) 0,0630 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	inch	0,0827 (± 90°) 0,0630 (±130°)	0,0630 (± 90°) 0,0472 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	inch	0,1260 (± 90°) 0,0984 (±130°)	0,0984 (± 90°) 0,0827 (±130°)
Average power consumption	kW	9,0	9,0
Noise level	dB	69	69

The values indicated apply to a standard machine without options.
Salvagnini reserves the right to modify this data without warning.

10/2010

P2Xe New Technical Data

Max. length of incoming sheet	inch	98,23	98,23
Max. width of incoming sheet	inch	60,00	60,00
Max. diagonal that can be rotated	inch	98,43	98,43
Min. length of incoming sheet	inch	11	11
Min. width of incoming sheet	inch	6	6
Max. bend length	inch	15,75 - 76,77	76,77 - 85,83
Max. bend height	inch	6,50	6,50
Min. thickness	inch	0,02	0,02
Max. thickness and angle for mild steel (410N/mm ²)	gage	13 (± 90°) 14 (±135°)	14 (± 90°) 16 (±135°)
Max. thickness and angle for stainless steel (580 N/mm ²)	gage	14 (± 90°) 16 (±130°)	16 (± 90°) 18 (±135°)
Max. thickness and angle for aluminium (265 N/mm ²)	gage	11 (± 90°) 13 (±130°)	13 (± 90°) 14 (±130°)
Average power consumption	kW	9,0	9,0
Noise level	dB	69	69

The values indicated apply to a standard machine without options.
Salvagnini reserves the right to modify this data without warning.

10/2010



AWAITING ORDERS!