

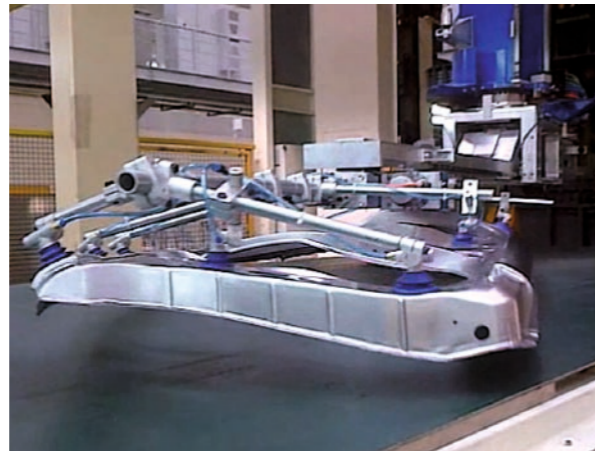
Only 1 centring robot required

Advantages for Front-of-Line:

- No centring tooling required for single workpieces
- No need for a centring robot including tooling and tooling change device
- Less programming required
- Reduced space requirements
- Increased availability

Convenient optimisation software StroCon PL

- Increased output through optimised movements
- Optimised curves available directly in the control system

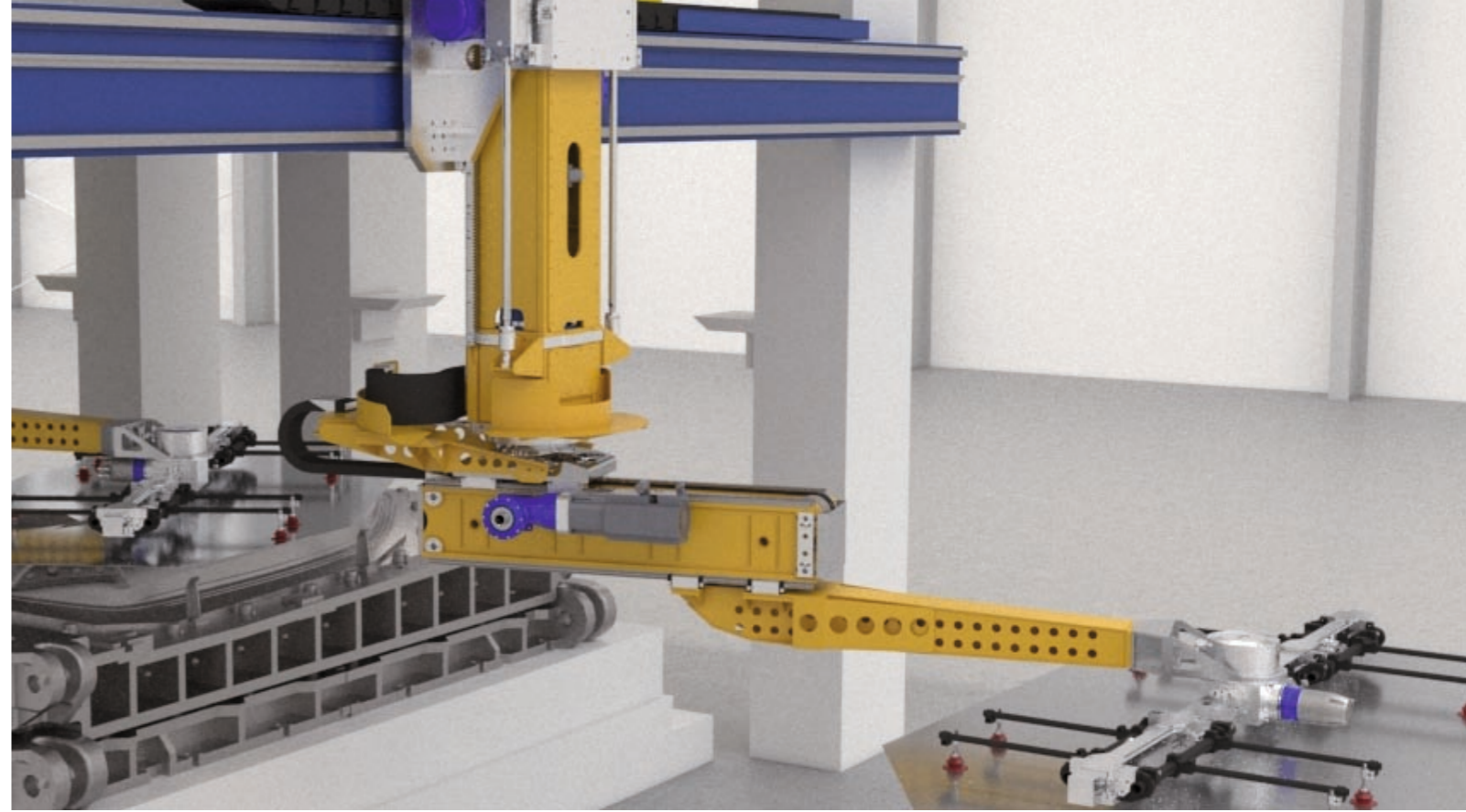


Workpiece rotation using FeederPlus6^{neo}

Advantages for End-of-Line:

- Workpiece rotation of individual pieces by FeederPlus6^{neo}
- Reduction of the required robots in the EOL possible
- Tooling requirement reduced by up to three toolings per workpiece
- Reduction of make-ready time

- Inspection of new tool designs
- Calculation basis for determining the output



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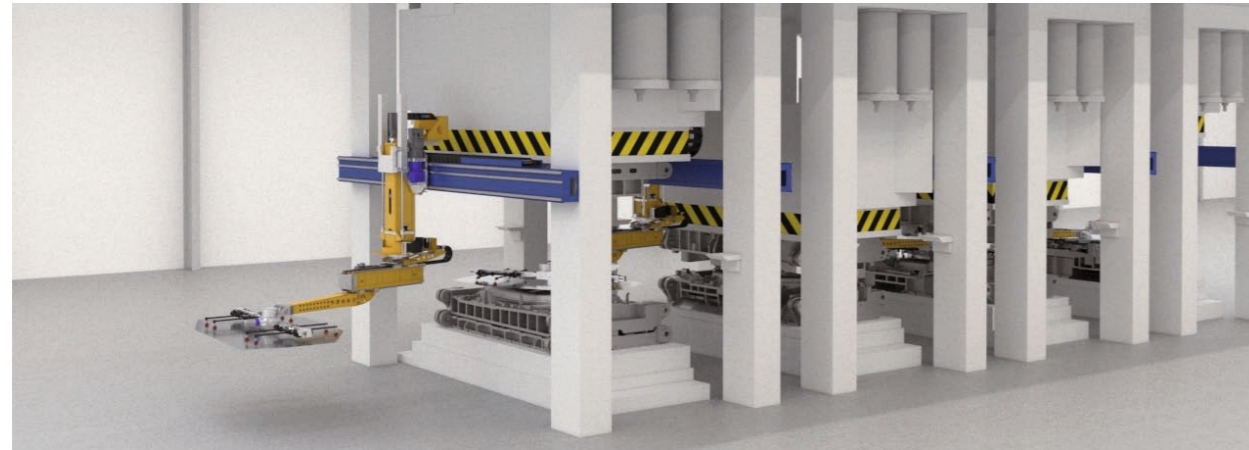
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FeederPlus6^{neo}



Information about quality and application of products does not constitute a guarantee of properties, it is only intended for information purposes. The decisive factor for the scope of our delivery is the respective contract portfolio



Press line with FeederPlus6^{neo}

The FeederPlus6^{neo} is an innovative feeder for linking press lines. It can bridge press centre gaps of 5.200 - 12.000 mm and is therefore suitable both for new press lines and for the modernisation of existing lines.

The new feeder is an evolutionary step based on the tried and tested FeederPlus6, which is already being used with great success in 11 press lines of five different automotive manufacturers.

The feeder is designed for max. 16 SPM.

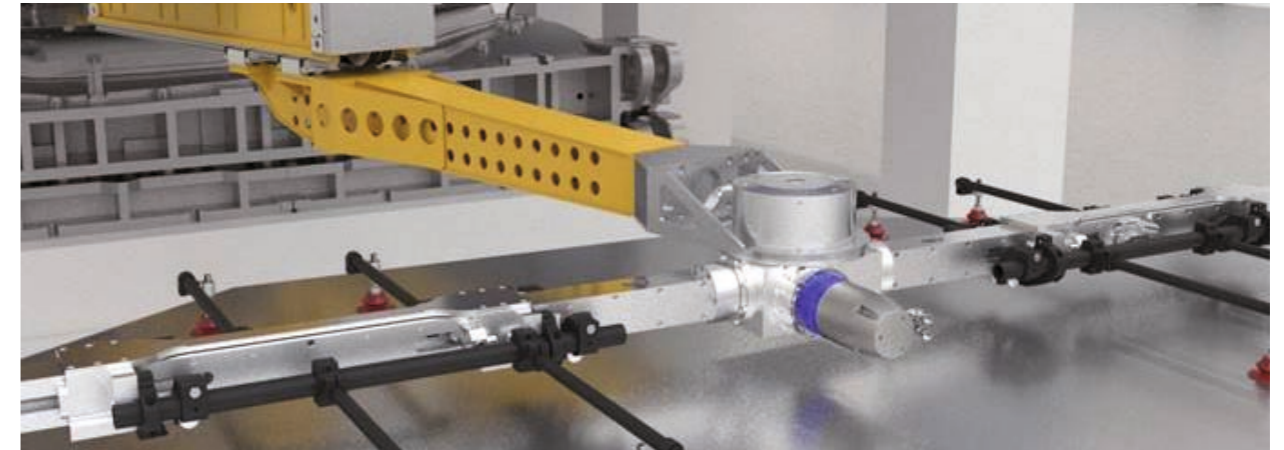
The tooling change is fully automatic using the newly developed locking mechanism in the feeder head and a tooling change carriage with a turning device, which enters the press gap. Costs and space are saved, as only one carriage is required for each press gap. It is possible to use existing toolings. This represents a crucial cost advantage.

The FeederPlus6^{neo} uses 2 counter-rotating main rotary axes, which are electronically synchronised. Both axes can also rotate independently from each other. This permits additional positioning of the blank or workpiece when the FeederPlus6^{neo} is used as a loading and unloading feeder. The FoL and EoL are simplified. Only one centring robot is required in the FoL. In the EoL, it may, under certain conditions, be possible to dispense with the shuttle and the

two orientation robots. This reduces the costs and space requirements significantly.

Special kinematics reduce the maximum accelerations of the feeder compared with other automation devices providing identical output. This lowers the stress on all mechanical components and reduces the maintenance requirements even further.

The StroCon PL software developed by STROTHMANN can be used to optimise the movement curve of the FeederPlus6 neo. The Siemens software PLS, which communicates with StroCon PL via an interface, is used for 3D visualisation. The optimised curves are transmitted directly to the feeder controls via an interface. This increases the output capacity of the press line even further.



FeederPlus6^{neo} with tooling and blank

Advantages:

- Ideal for new press lines and retrofitting projects
- Excellent accessibility of press gaps
- Lower maximum accelerations than other automation devices while maintaining the same output capacity => reduced maintenance
- Only 1 tooling change carriage required per press gap => cost- and space-saving
- Reuse of existing tooling systems
- Cost reduction through function integration of FoL and EoL in FP6^{neo}
- Consistent use of Siemens technology

Max. load-bearing capacity - (workpiece + tooling)	100 kg
Press gaps (centre - centre)	5.200 – 12.000 mm
Max. number of strokes / minute (SPM)	16
Y axes (2x)	± 150 mm per side
C1 - main rotary axis	Rotating arm (Z-axis) ± 90°
C2 - orientation axis	Rotating arm (Z-axis) ± 90°
B2 – orientation axis	Rotating arm (Y-axis) ± 20°
Repeat accuracy	± 0,25 mm
Tooling coupling	Saddle or adapter for robot tooling