

NEXT.assembly

# x-bolt

## The flexible, scalable bolting station

The x-bolt universal bolting station can be used as a single or multi-axis system within the marriage final assembly of the car. Our concept offers highest flexibility by modular construction and scalability.

The x-bolt is a fully automatic, modular and scalable NC-controlled bolting station. A large number of supplementary modules guarantee a maximum of flexibility. It can be used for bolting with extended spindles as well as for direct bolting (e.g. x-gun system).

### CUSTOMER BENEFITS



Small: low space requirement

Modular: optimal accessibility of the bolting points

Easy to maintain: reduced service and repair times

Fast: short cycle times

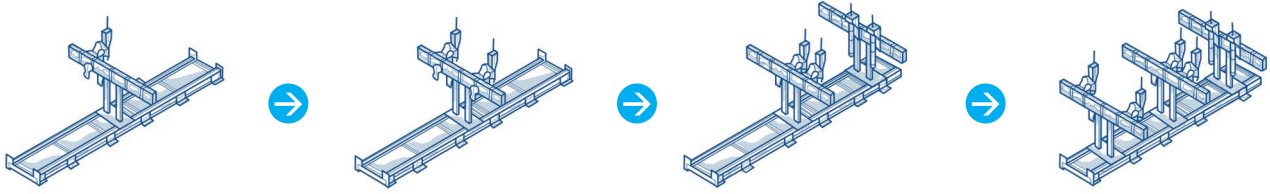
Precise: high repeatable accuracies

Scalable: various expansion stages realizable

# Technical Data

## x-bolt

### SCALABILITY



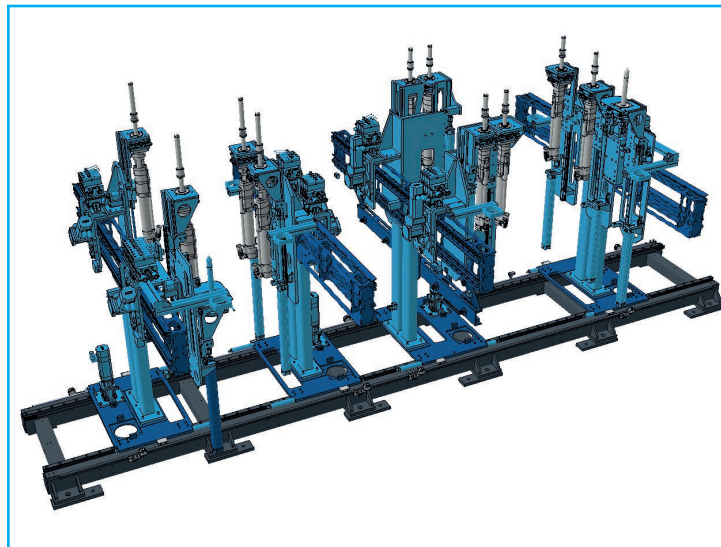
X-slide

Position measurement system

Various bolt supply systems, pneum. and as servo

Double nutrunner units

Direct bolting without and with x-gun



Y-swivelling units

X-swivelling units

Z-lifting units

Spring extensions, extended spindles

Stoppers, nutrunner floating plates

### TECHNICAL DATA

Length	Variable, standard 4 m, 5 m, 6 m
Width	Base frame: 900 mm, Y-driving bed up to 2,5 m, standard 1,5 m, 2 m, 2,2 m
Repeatable accuracy	Up to +/- 0,5 mm
Transfer speed	X: up to 1,4 m/s Y: up to 0,75 m/s
Lifting speed	Z: 0,25 m/s (pneumatics), 0,4 m/s (servo)
Acceleration	X/Y/Z: 1,2 m/s <sup>2</sup> - 3 m/s <sup>2</sup>
Max. torque	450 Nm
Availability	More than 99%