

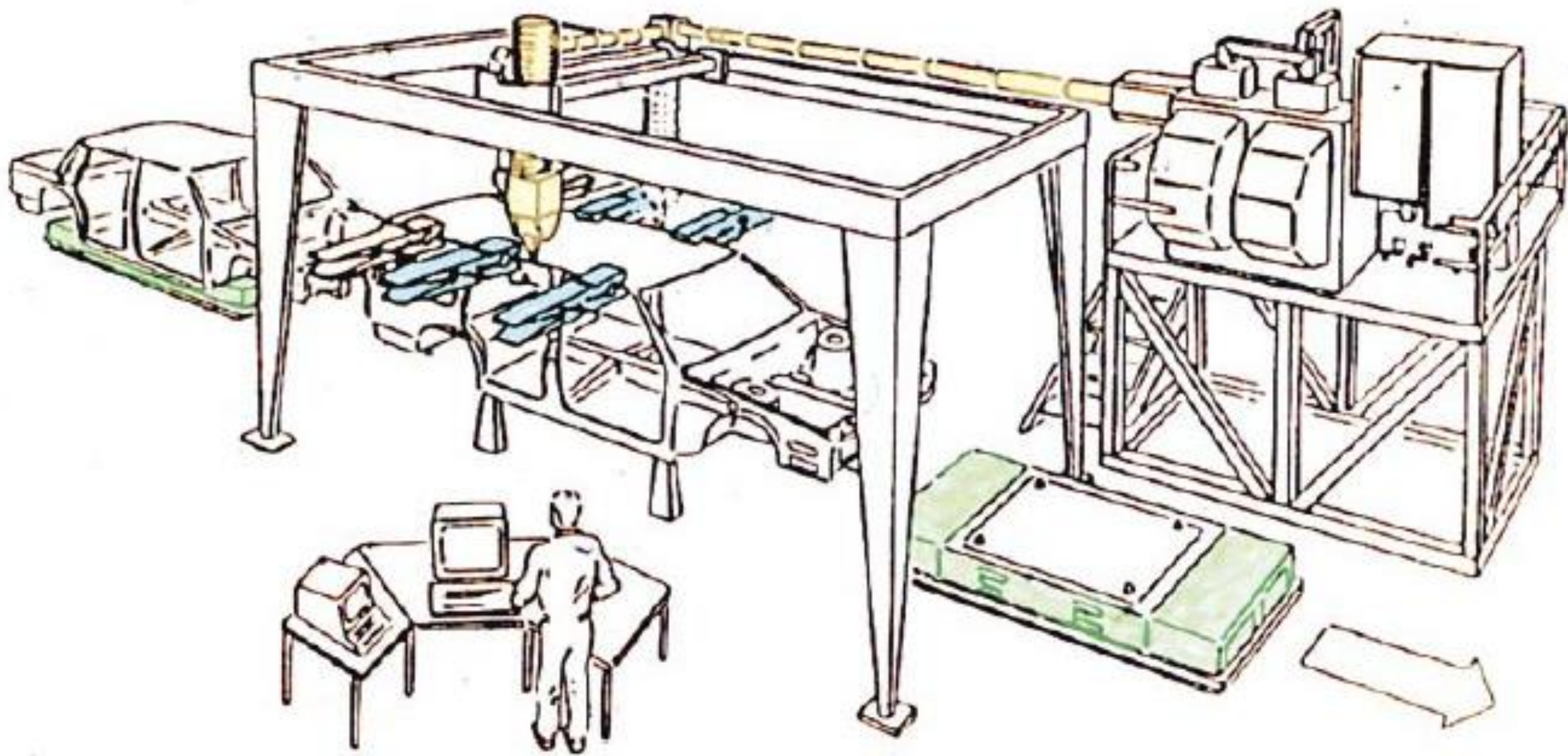
***Laser på Volvocars
igår idag imorgon***

Per Lindahl



igår





















idag



Joining method	Quantity
Laser beam welding	3312 mm
Remote laser welding	5000 mm
Laser brazing	1700 mm
Resistance spot welds	6213
MAG welding	4526 mm
Self-piercing rivets	100
Hemming	24540 mm
Adhesive bonding	116189 mm





imorgon



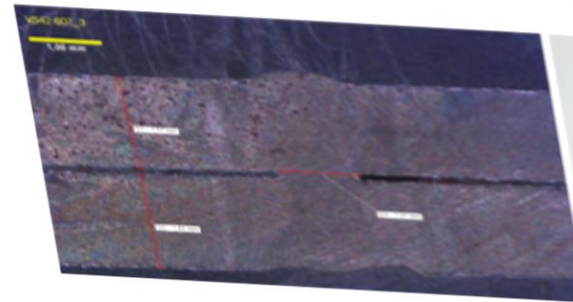
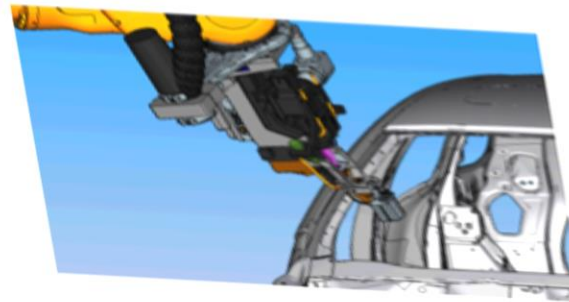




LASER MANUFACTURING CHALLENGES



- Future need for...
 - ...improved process robustness.
 - ...simplified process technology.
 - ...improved geometry and fitting.
 - ...reduced investment cost.



A close-up photograph of a laser cutting head, which is a cylindrical metal component with a black top, positioned above a dark metal plate. A bright red laser line is projected from the head onto the plate, creating a sharp point of light. The background is dark and out of focus.

Per.Lindahl@volvocars.com

Thank You