

CATALQG

Truck chassis assembly machine















KARA Truck chassis assembly machine

- 1. Suitable for assemble exact trailer chassis in various shapes and sizes with MiG/MAG welding techniques.
- 2. Possibility of MIG/MAG welding torch Installation on the leading head.
- 3. Having a robust and durable machining structure.
- 4.Using a Step Motor in Transverse and Height Travel of Welding Booms for a Precise PLC Controlled Motion.
- 5. Equipped with two servo motors and low backlash gearboxes at the two sides of machine for a constant and vibration less motion. (Gantry bridge)
- 6. possibility of transferring longitudinal motion force of welding gate using a Planetary for a fast and precise travel speed (Rack Pinion).
- 7. Possibility of linear movement of welding torch on the linear guide using a bevel gear for fast and precise movements (Rack pinion and linear guide).
- 10. Equipped with an automatic height control system for torches to prevent crashing of torch and Beam.
- 11. Using a Wire Straightener Set
- 12. Equipped with flashback arrestor for flame safety.
- 13. Equipped with robust, integrated and adjustable slide rails for weak inclined workshop bed.
- 14. Having a set of robust steel and tables and steel band stand which can be replaced easily.
- 15. Control Panels with Welding Booms.
- 16. Equipped with Two Welding Power KARA TCK 514









Main Technical Specifications

	Workpiece (mm)	MAX = 520 x 14000
1	Min, Max	Small Web Min, Max = 100 – 200 mm Large Web Min, Max = 320 – 520 mm Min, Max Flange = 120 – 150 mm
2	Welding & Assembly Torch	3 x MIG/MAG
3	Clamp Jack	Hydraulic Ø60
4	Machine Gantry Rail	Rail & Wheel
5	Holder & Stand	30 Set
6	Machine's control system	PLC
7	Maximum welding speed (mm/min)	300 - 600
8	Protection classification	IP 20
9	Machine's Electric Power Consumption	380V – 50Hz – 3PH – 63A
10	Cable protection and guidance system	Energy chain guide (Plastic)
11	KARA TCK (Welding Head)	2 x 514
12	Machine's linear movement system	Linear & Cabin- Rail Bushing
13	Machine's Driving components	Servo motors + planetary gearbox & AC Motor +Worm Gear
14	Overall Machine's Dimension (mm) (L, H, W)	W: 2000 L:17000, H:3500
15	Overall Machine's Weight (kg)	7000
16	KARA TCK (Assembly Head)	250
17	Manual Hydraulic Valve	20
18	Hydraulic pilot valve	30



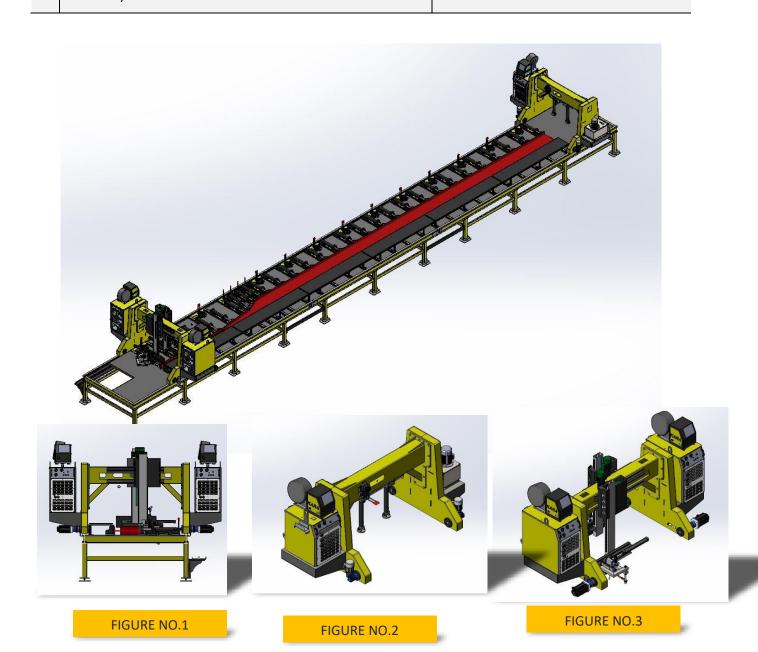


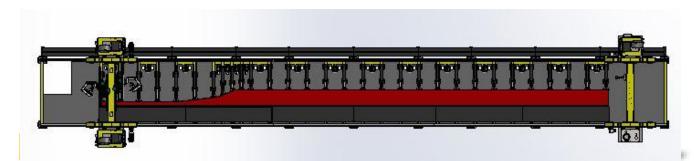




19 Manual Hydraulic Valve

16 x Liver Valve













Machine Description

In this type of machine, the work piece stands are fixed on one side and fixed on the other side by moving jacks. The fixed jaw has an adjustment screw that can be adjusted if the chassis has two steps.

After the work piece is fixed, the assembly head moves and is assembled and marked by the operator and the manual welding machine. Then the assembly head returns to the parking lot and the welding head starts moving which is fixed by two welding torches on both sides and starts to move and performs the final welding. Welding torches have an edge-reading mechanism that changes direction in the throat part of the torch in relation to the angle of the sheet. After finishing one side of the work piece, the jacks are opened and the work piece can be moved and rotated.

The height of the relevant chassis is also adjusted manually by the operator that can be used to keep the height of the chassis in a constant number by using the places where the place to close them is built.

To increase the accuracy of the movement of assembly jacks, each of the jacks has a movement guide path that is completely machined.









KARA TCK 514

Application

- √ Possibility of Welding Various Metals, Steel Alloys, Stainless Steel, Aluminum and Copper
- √ Possibility of Being Used in Industries such as Steel Structure, Ship Building, Oil, and Gas, etc.
- √ Possibility of Being Used in Gas Metal Arc Welding (CO2) and Flux Cored Arc Welding

Features:

- √ Possibility of Welding Thin-Thick Beams (Sheets) at Different Positions
- √ Having a Three-Phase Input Power Supply with a High Output Capacity for Continuous Welding in Three Shifts
- √ Equipped with Burn Back Control System to Avoid Welding Rod Sticking with Nozzle or Work-Piece
- √ Equipped with Soft Start System for Maintaining a Slow and Sustainable Arc at the Start of Welding
- √ Two Negative Junction Sockets for Providing the Most Sustainable arc and Welding Penetration Control
- √ Possibility of a Precise and Continuous Adjustment of Wire Speed (Amp)
- √ Easy Transportation Using a Crane Hood, Four Rotatory and Fixed Wheels and a Carry Handle
- \checkmark Having a Wide Range of Welding Voltage Choice Using a 4-10 State Voltage Selector and Two Selector Switches
- √ Possibility of Welding Automation with Capability for Adjusting Electric Arc Time
- √ Possibility of Separating, Moving and Transferring Wire Feeder Unit to Welding Area Using Special Cables
- √ Having Appropriate Space at the Back of Machine for Holding Gas Cylinder along with a Chain
- √ Having a 220v Output Socket for Gas Heater
- √ Possibility of Gas and Wire Movement Testing Prior to Welding Operation
- √ Rectifier Thermal Overload Protection

Advantages

- √ High Speed Production and Welding
- √ Low Electrode Waste & Consumption Costs Using Continuous Welding Rod
- \checkmark Easy Application Operations and No Need to Be Cleaned Due to Lack of Any SI.
- √ Water Circulator Unit inside the Machine for Cooling Welding Torch





