

APPROVED FOR HIGH
DYNAMIC ROBOTS

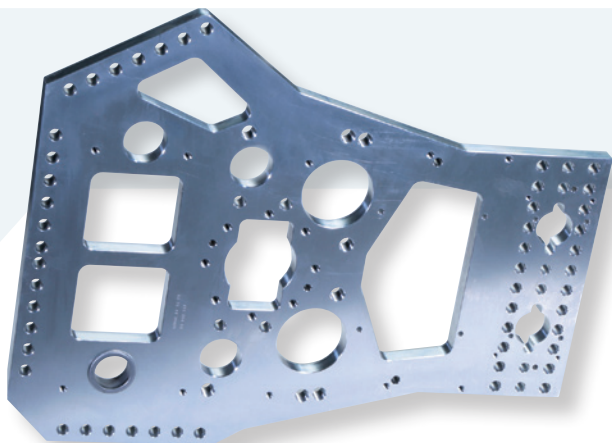


NIMAK multiframe

Next level evolution.
The modular system for welding guns.

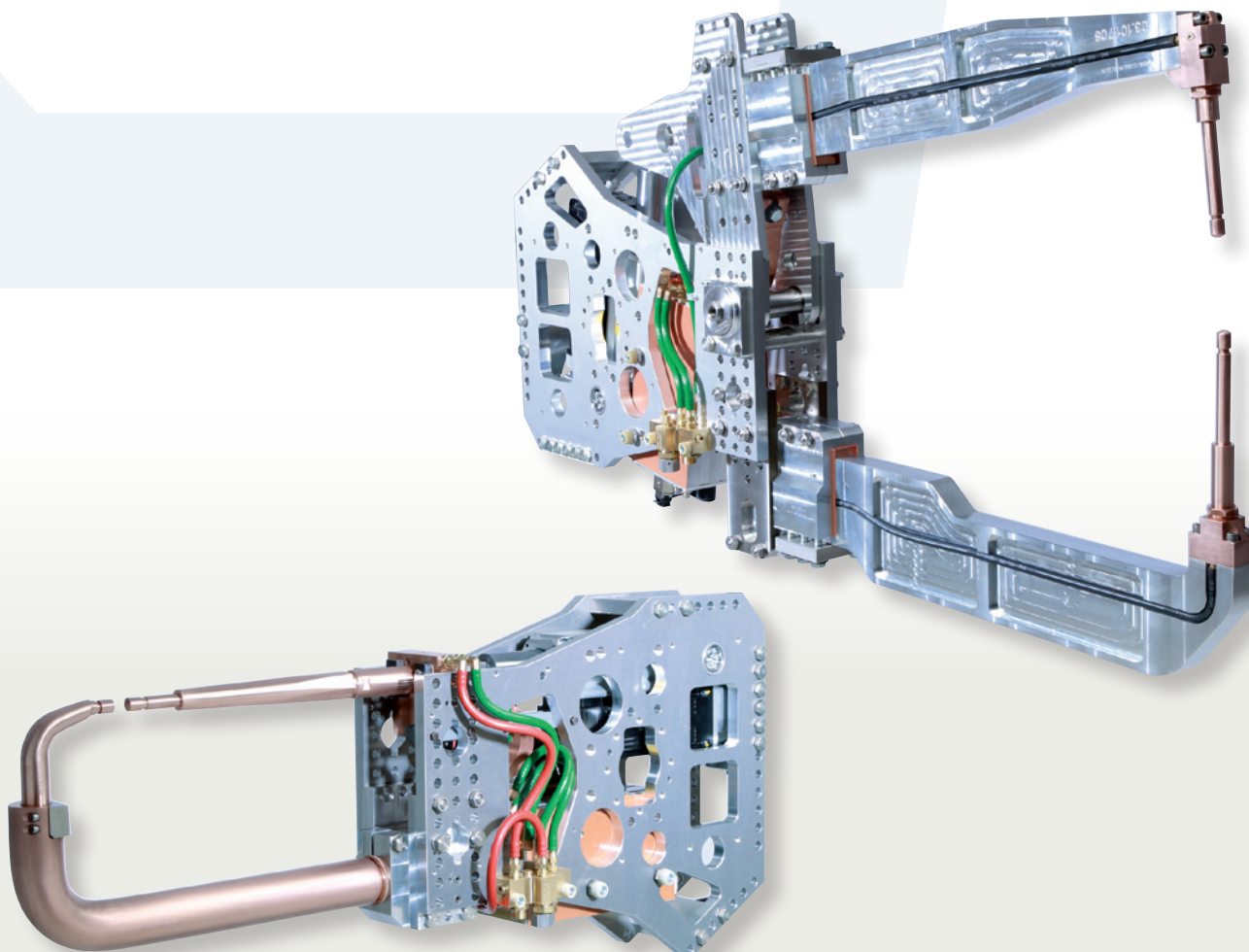
 **NIMAK**
Die perfekte Verbindung

One multifunctional plate holds the modules for all versions.



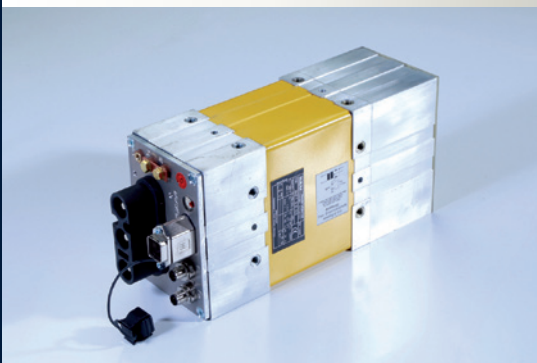
Multifunctional plate in detail:

- 20 mm rolled plate material without parallel processing
- processing from just one side, so one clamping operation is enough
- no thread in the sides
- no stepped bores



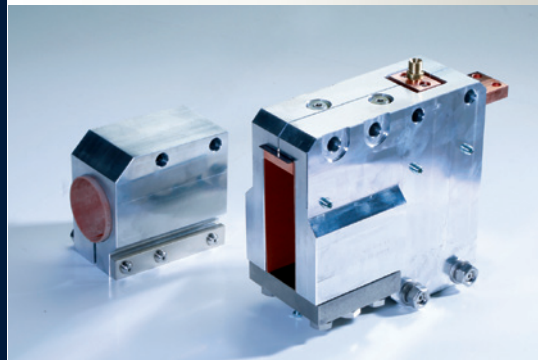
One standardized NIMAK MF light-weight transformer for all guns:

- for the next generation of Euro welding guns (Daimler, VW, Audi, BMW)
- coolant supply 6 l/min
- polarity rotatable thanks to symmetrical construction
- 6.5 kA continuous current
- 130 kVA at 20% duty cycle
- weight: 15 kg



Arm clamping for round and right-angled arms:

- socket for rounded arm: Ø 60 mm
- socket for right-angled arm: 100 mm x 40 mm to 150 mm x 40 mm
- variably interchangeable

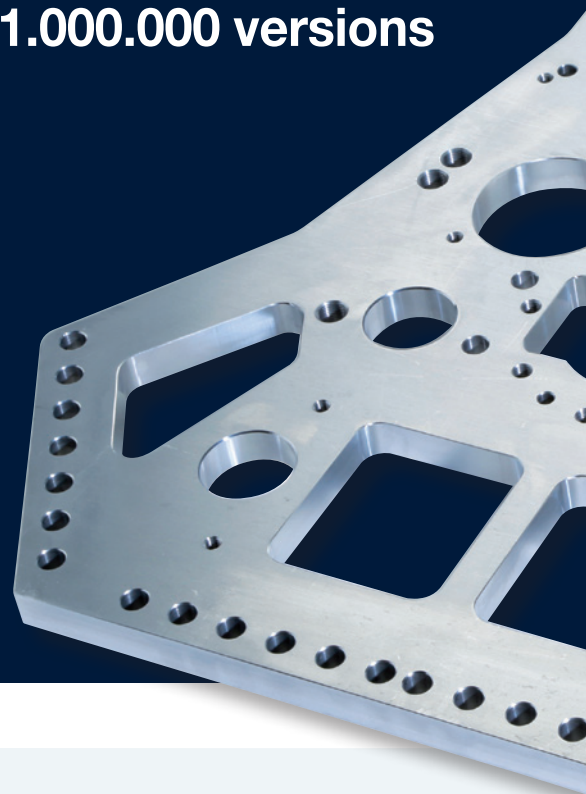


NIMAK gun drive:

- 1 drive for X and C guns
- maintenance free thanks to oil bath lubrication
- completely closed housing
- force: up to 20,000 N
- stroke: 0 mm to 162 mm
- efficiency: > 95 %
- cone bearing spindle drive
- warranty: 15,000,000 strokes
- optional: motors from any manufacturer



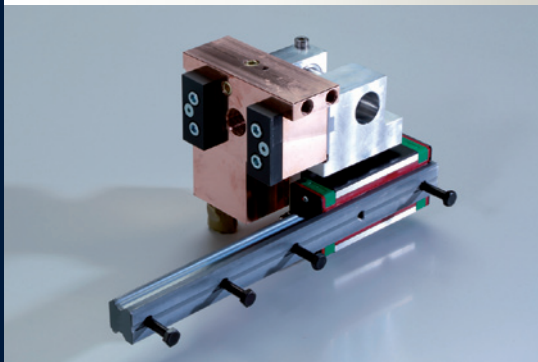
1 plate + 5 modules =
1.000.000 versions



C gun guide:

- proven ball rail system
- vertically and laterally adjustable
- stays on track
- form fits to side plate with fitting screws
- no insulation needed for guide

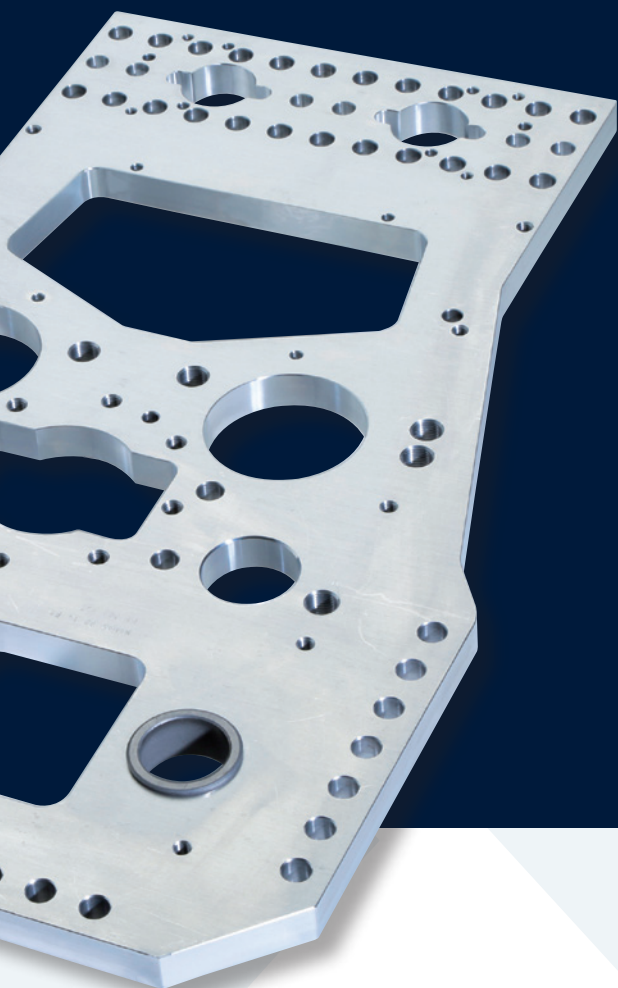
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Levers with bearings:

- stable conical roller bearing
- steel bushings in the plates protect from bumps against the axis
- one-piece side plates for continuous flow of force without redirection or separation
- form fit against axial movement
- easy bearing pretension settings

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Technical data:

- nominal output: 130 kVA / 20% duty cycle
- max. E-force: 8 kN
- C gun:
 - arm distance: 150–300 mm
 - weight: from 90 kg (incl. e-arms)
- X gun:
 - arm distance: 200–500 mm
 - weight: from 113 kg (incl. e-arms)
 - 8 kN at 700 mm projection

For special cases:

MultiframeCOMPACT:

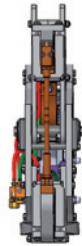
- ideal for thin sheet applications
- for welding tasks with difficult access
- for robots with limited load capacity

And what are the advantages?



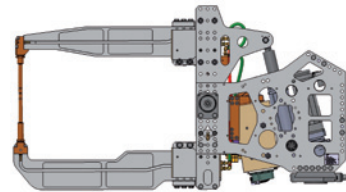
Super-slim design – for weld spots difficult to access

- transformer, power straps and servo drive completely integrated in base body – no interfering parts protruding
- allows access to difficult to reach locations also
- simplified construction planning through slimmer interfering contours
- easier simulation for designers as less model varieties



6 interfaces for connecting a robot

- no separate bracket needed
- lower construction cost
- fewer gun types
- electrode arm variants:
right-angle arm, round arm



Economical thanks to fewer and simpler parts

- cost-efficient production thanks to fewer different parts
- higher delivery capacity by NIMAK
- “lean” replacement part stock, because X and C gun parts are the same
- lower maintenance budget, because elements are easy to reach



Easy, trouble-free installation

- maintenance-free NIMAK-proprietary gun drive thanks to oil bath lubrication
- standardized MF transformer reduces errors
- high-volume components used
- predetermined installation position



Reduced gun weight

- use of smaller, space-saving robots
- faster gun movement possible
- longer lifetime of robots and guns



 **NIMAK**
Die perfekte Verbindung

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