



BOLTE

SERIE Z

CNC STUD WELDING MACHINES



STUD WELDING TECHNOLOGY BY



STUD WELDING



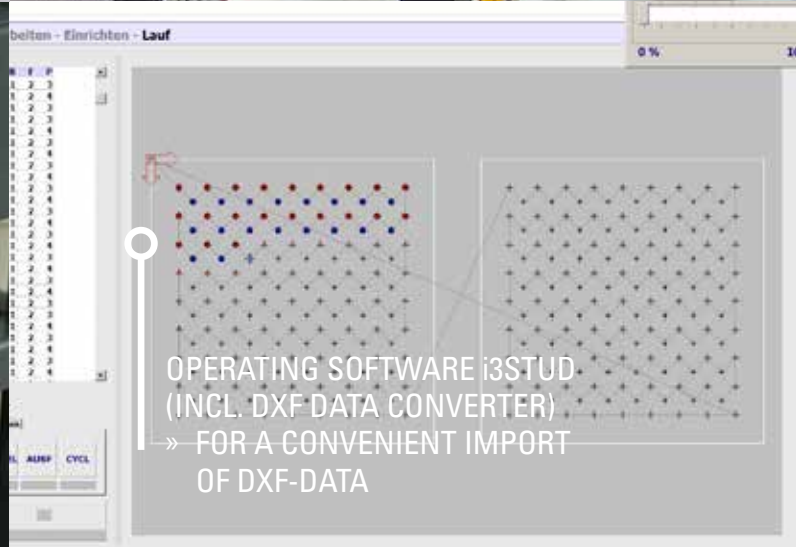
PROGRAMMING NETBOOK WITH
OPERATING SOFTWARE i3stud
» ENABLES PROGRAMMING REGARDLESS
OF LOCATION (E.G. BY PRODUCTION
PLANNING/CONSTRUCTION)



OPTIONAL:
OPERATING TERMINAL WITH
INDUSTRIAL PANEL PC WITH
OPERATING SOFTWARE i3STUD



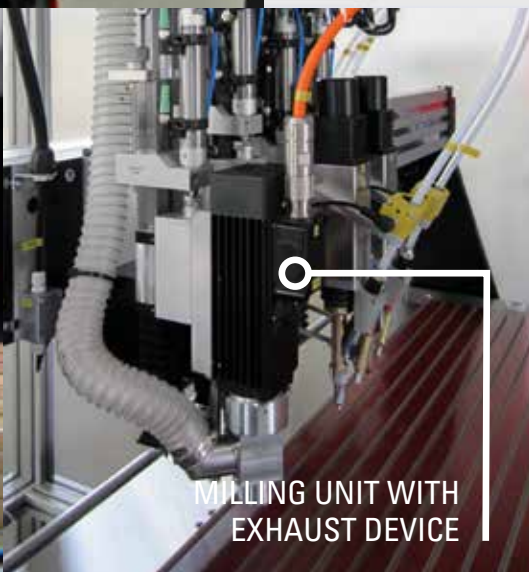
FAST AND EASY OPERATION
BY CONTROL INTEGRATED IN
THE FRAME WITH OPERATOR
CONTROL PANEL



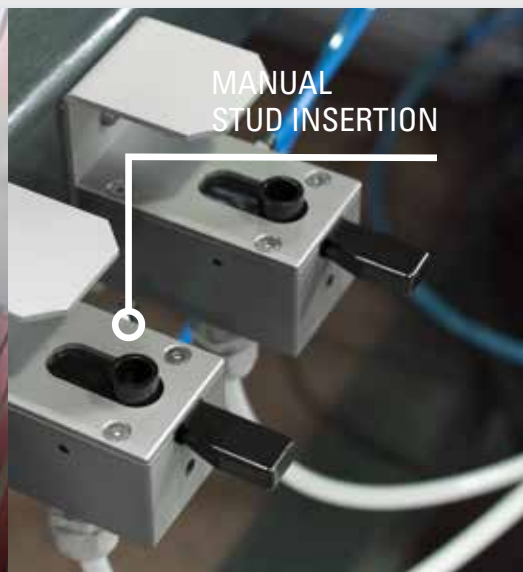
OPERATING SOFTWARE i3STUD
(INCL. DXF DATA CONVERTER)
» FOR A CONVENIENT IMPORT
OF DXF-DATA



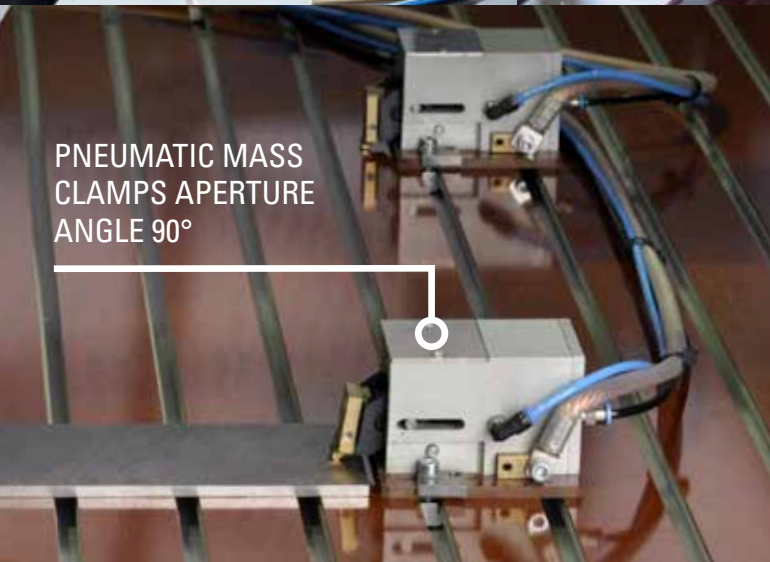
SHIELDING GAS
EQUIPMENT FOR
WELDING HEAD



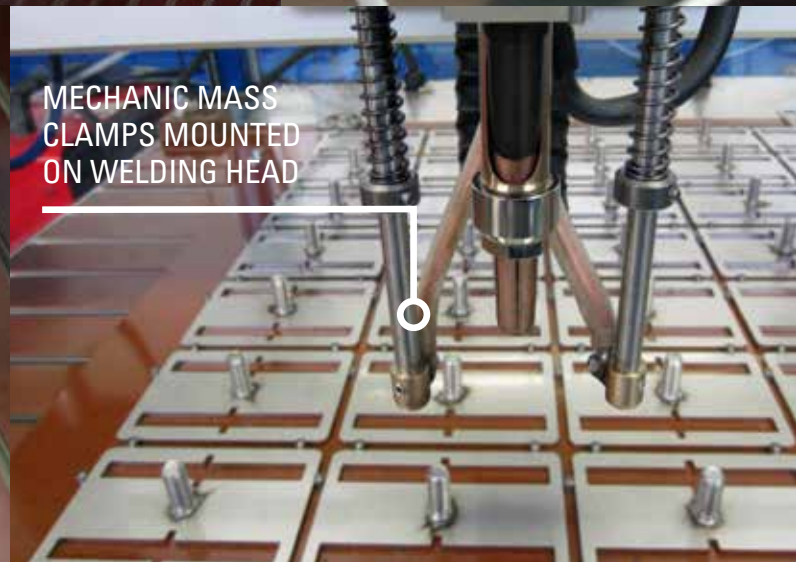
MILLING UNIT WITH
EXHAUST DEVICE



MANUAL
STUD INSERTION



PNEUMATIC MASS
CLAMPS APERTURE
ANGLE 90°



MECHANIC MASS
CLAMPS MOUNTED
ON WELDING HEAD

HOUSING WITH LIGHT CURTAIN OR DOOR

HIGH-QUALITY POSITIONING SYSTEM

ROBUST AND WARP RESISTANT WELDED STEEL MACHINE FRAME

WORKING AREA X/Y (MM):
650 X 650 OR 800 X 800

SUITABLE FOR ALL STUD WELDING METHODS

PNEUMATIC WORKING LIFT

OPTIONAL:
FLUID SPRAYING DEVICE FOR
AUTOMATIC STUD WELDING HEAD

INTEGRATED WELDING PARAMETER
MONITORING (OPTIONAL: WELDING
PARAMETER MEMORY)

TECHNICAL DATA AND CHARACTERISTICS

	ZM	ZG
Working area X/Y (mm)¹⁾ [can be reached by each welding head]	650 x 650	800 x 800
Welding range²⁾	Ø 3-8 mm	Ø 3-8 mm
Max. number of stud welding heads	3	3
Max. operating speed X-/Y-axis (m/min)	12	12
Positioning accuracy of the welded studs +/- (mm)	0,2	0,2
Operation and programming		
Compact control with operator control panel, programming netbook with operating software i1stud	x	x
Operating terminal with industrial panel PC with operating software i3stud (incl. DXF data converter)	o	o
Welding parameter monitoring³⁾		
Welding parameter monitoring	x	x
Welding parameter memory with USB-interface for data transmission to a PC	o	o
Automatic stud feeding	x	x
Options		
Fluid spraying device for every welding head	o	o
Milling unit with exhaust device ⁴⁾	o	o
Pneumatic single stud feeding, manual stud insertion	o	o
Stud switch	o	o
Pneumatic mass clamps standard	o	o
Pneumatic mass clamps aperture angle 90°	o	o
Mechanic mass clamps on welding head	o	o
Pneumatic mass clamps on welding head	o	o
Workpiece downholder for every welding head	o	o
Shielding gas equipment for every welding head	o	o
Protection devices		
Housing with light curtain	x	x
Housing with door ⁵⁾	o	o
Motor technology/drive		
Step motors	x	x



	ZM	ZG
Pneumatic working lift/welding head (mm) (mechanic adjusting range 50 mm)	80	80
Machine frame Welded steel construction	x	x
Suitable stud welding units⁶⁾ PRO-C 1000 PRO-C 1500 PRO-I 1300 PRO-I 2200 PRO-D 1200 PRO-D 1600	x x x x x x	x x x x x x
Suitable automatic stud welding heads⁶⁾ KHA-200F with integrated travel measuring system KKA-200F	x x	x x
Dimensions Width (mm) Depth (mm) Height (mm) Weight (kg)	1550 1430 2000 600	1700 1580 2000 800
Connection values electrical (mains supply, mains fuse external) pneumatical	230 V/50 Hz, 16A ≥ 6 bar unoiled, dry, clean	230 V/50 Hz, 16A ≥ 6 bar unoiled, dry, clean

x – Standard, o – Option

1) Other dimensions on request as special production.

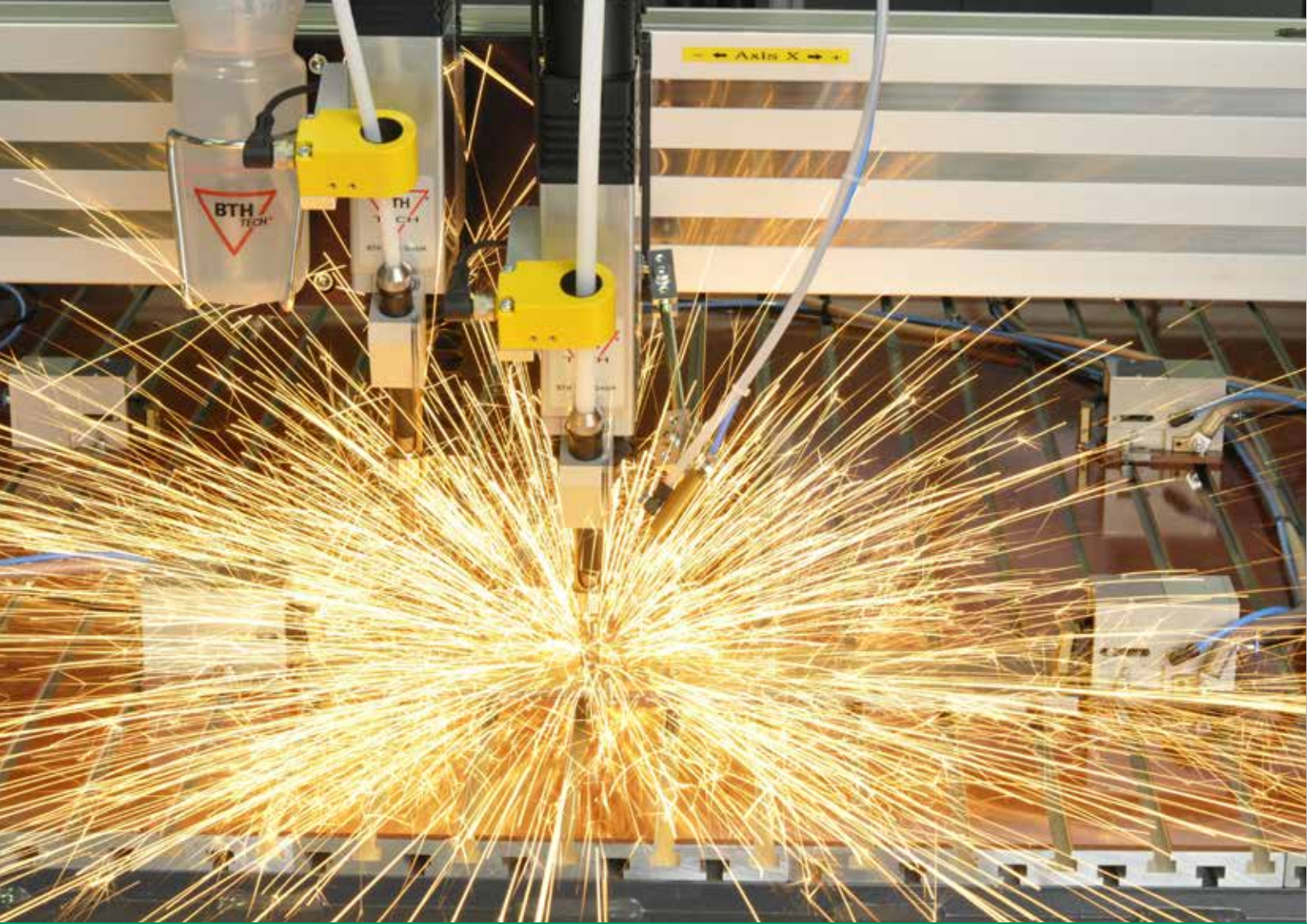
2) Other diameters as well as special welding elements on request as special production.

3) By stud welding units PRO-C/PRO-I/PRO-D. For further details see product data sheets **PRO-C**, **PRO-I** and **PRO-D**.

4) The machine concept is designed for three working stations. If a milling unit is used at the most two stud welding heads can be mounted.

5) Design as sliding, folding or lift door (if required also pneumatically).
Optional: Housing with closed top as sound insulation housing.

6) The machines are suitable for all stud welding methods. PRO-C 1000/1500 = capacitor discharge (contact and gap method), PRO-I 1300/2200 and PRO-D 1200/1600 = drawn arc and short cycle, KHA-200F = capacitor discharge (gap and contact method), drawn arc and short cycle, KKA-200F = capacitor discharge (contact method)



Bolte GmbH

Flurstraße 25
D-58285 Gevelsberg

Tel.: +49 (0)2332 55106-0
Fax: +49 (0)2332 55106-11

Ohmstraße 3
D-85221 Dachau

Tel.: +49 (0)8131 5159-0
Fax: +49 (0)8131 5159-11

E-Mail: info@bolte.gmbh



www.bolte.gmbh