



SMALLER



General Technical Characteristics

Boring Diameter	mm	22 - 70 (0,87 - 2,76)
Welding Diameter	mm	25 - 400 (0,98" - 15,75")
Tool Holder Shaft Diameter	mm	20 (0,79")
Tool Holder Shaft Length		1950 mm (2 connectable bars : 1000 x 1000)
Longitudinal Stroke		UNLIMITED WITH STEP OF 80 mm (3,15')
Rotation Motor		DC (CE COMPLIANT)
Feed Motor		DC (CE COMPLIANT)
Output Torque at the Bar		46,5 Nm (400 Rpm)
Max Rotation Speed	rpm	400
Feed Rate	mm/rpm	0-0,3 (0-0,01"/rev)
Max Feed Speed	mm/min	130
Removal Material	cm/min	18
Drive Unit Weight	kg	12

Standard Diameter Ranges

IN-LINE BORING
FROM Ø 22 MM TO OVER Ø 70 MM
OVERLAY WELDING
INTERNAL- FROM Ø 25 MM TO OVER Ø 400 MM
EXTERNAL- FROM Ø 20 MM TO OVER Ø 400 MM

Standard Equipment

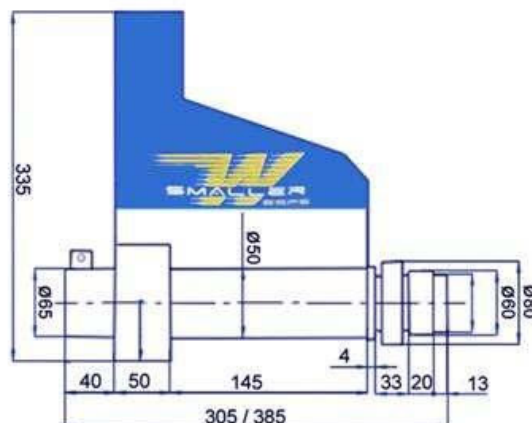
- N° 1 DRIVE UNIT - N° 1 CONTROL PANEL
- N° 1 CABLE FOR CONTROL PANEL - N° 1 CONTROL PANEL HOLDER
- N° 2 CONNECTABLE TOOL-HOLDER SHAFTS Ø 20 MM LGTH 1000 MM + 1000 MM
- N° 4 BEARING CARRIERS
- N° 12 EXTENSION BRACKETS FOR ADJUSTING DIAMETERS LGTH. MM 60
- N° 1 TOOL HOLDER EXTENSION Ø 50 MM
- N° 1 CENTERING KIT (2 RINGS - 6 BOSSES- 6 SCREWS M10 X 100 mm)
- N° 1 MICROSPAND (modular device used for internal measurements)
- N° 1 COMPARATOR 1/100
- N° 2 COMPARATOR HOLDERS 8/8
- N° 1 COMPARATOR EXTENSION
- N° 1 TORCH CABLE WITH EUR ATTACHMENT
- N° 1 WELDING TORCH SHAFT Ø 20 MM x 1000 MM LGTH
- N° 1 TORCH HEAD FOR EXTERNAL OVERLAY WELDING C/w WELDING WIRE NOZZLES AND GAS DIFFUSER (A 320 MM)
- N° 4 TORCH HEADS FOR INTERNAL OVERLAY WELDING C/w WELDING WIRE NOZZLES AND GAS DIFFUSER (M 70 MM x C 90 MM x B 125 MM x G 180 MM)
- N° 3 TORCH HEAD EXTENSIONS (D 55 MM x E 45 MM x H 135 MM)
- N° 5 CARBIDE INSERTS
- N° 1 TOOL-HOLDER 58x25 MM (COMPLETE WITH WRENCH AND TORX SCREWS)
- N° 1 LATHED WELDING WIRE NOZZLE Ø 0,8 MM
- N° 2 SHORT WELDING WIRE NOZZLES Ø 0,8 MM - Ø 1 MM
- N° 2 LONG WELDING WIRE NOZZLES Ø 0,8 MM - Ø 1 MM
- WRENCHES
- N° 1 SUPPORT-HOLDER PLATE - N° 3 SUPPORT-HOLDER PLATE BRACKETS 180 MM
- N° 1 COMPASS (device for measuring internal diameters)
- N° 3 THREADED RODS (M10x200 mm)
- FOR SUPPORT-HOLDER PLATE(M10 X 200) WITH DOUBLE NUT (6 NUTS M10)
- OPERATION MANUAL
- N° 1 TROLLEY

Accessory kits

KIT 2000 from ø 25 mm to ø 90 mm
For facing bosses, creating circlip grooves, external machining.

Certified Test

Steel C45		DIAMETERS	DIAMETERS
Diameter	mm	Ø30	Ø70
Cutting Depth	mm	6 IN THE RADIUS 12 IN THE DIAMETER	3 IN THE RADIUS 6 IN THE DIAMETER
Feed Speed	mm/min	6	3



Boring and Welding Machine Tool ...Hi Tech



FUNCTIONALITY



Overlay welding on $\varnothing 380$ mm



Reconditioning and realignment of the central articulation of a wheel loader. The work is carried out directly on site without disassembling the hydraulic tubes, thus avoiding waste of oil and respecting the environment.



Reconditioning of the steering axle housing

IMPROVE YOUR SKILL BY ENHANCING THE PRECISION
AND QUALITY OF YOUR WORK





General Technical Characteristics

Boring Diameter	mm	22 - 180 (0,87 - 7,09)
Welding Diameter	mm	25 - 250 (0,98" - 9,84")
Tool Holder Shaft Diameter	mm	35 (1,38")
Tool Holder Shaft Length		2380 mm (3 connectable bars 1000 x 1000 x 540)
Longitudinal Stroke		UNLIMITED WITH STEP OF 120 mm (4,72")
Rotation Motor		DC (CE COMPLIANT)
Feed Motor		DC (CE COMPLIANT)
Output Torque at the Bar		120 Nm (266 Rpm)
Max Rotation Speed	rpm	266
Feed Rate	mm/rpm	0-0,5 (0-0,02"/rev)
Max Feed Speed	mm/min	390
Removal Material	cm/min	23
Drive Unit Weight	kg	20

Standard Diameter Ranges

IN-LINE BORING
FROM Ø 37 MM TO OVER Ø 180 MM
OVERLAY WELDING
INTERNAL- FROM Ø 25 MM TO OVER Ø 250 MM
EXTERNAL- FROM Ø 20 MM TO OVER Ø 300 MM

Standard Equipment

- N° 1 DRIVE UNIT
- N° 1 CONTROL PANEL
- N° 1 CABLE FOR CONTROL PANEL
- N° 1 CONTROL PANEL HOLDER
- N° 3 CONNECTABLE TOOL-HOLDER SHAFTS WITH CONICAL COUPLING Ø 35 MM
 LGTH 1000 mm + 1000 mm + 540 mm
- N° 4 BEARING CARRIERS
- N° 12 EXTENSION BRACKETS FOR DIAMETER ADJUSTING LGTH. 70 mm
- N° 2 TOOL HOLDERS EXTENSIONS ø 80 mm - ø 130 mm
- N° 5 CARBIDE INSERTS
- N° 1 CENTERING KIT (2 RINGS - 6 BOSSES - 6 SCREWS M10x100 mm)
- N° 1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
- N° 1 COMPARATOR 1/100
- N° 2 COMPARATOR HOLDERS 8/8 - 10/8
- N° 1 COMPARATOR EXTENSION
- N° 1 TORCH CABLE WITH EUR ATTACHMENT
- N° 1 TELESCOPIC WELDING TORCH SHAFT Ø 35 MM LGTH. 1500 mm
- N° 3 TORCH HEADS FOR INTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER
 (B 125 mm x M 70mm x N 60 MM)
- N° 1 TORCH HEAD FOR EXTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER
 (A 320 mm)
- N° 3 TORCH HEAD EXTENSIONS (D 55 MM x E 45 MM x O 150 MM)
- N° 2 TOOL HOLDERS 510CX30 mm + 510CX50 MM (COMPLETE WITH TORX SCREWS)
- N° 1 LATHED WELDING WIRE NOZZLES Ø 0,8 - N° 2 SHORT WELDING WIRE NOZZLES Ø 0,8 - ø 1 mm
- N° 1 WRENCH FOR TOOL HOLDERS
- N° 2 LONG WELDING WIRE NOZZLES Ø 0,8 - ø 1 mm
- WRENCHES
- N° 1 SMALL HOOK (device for regulating cutting depth of tool holder)
- OPERATION MANUAL
- N° 1 TROLLEY

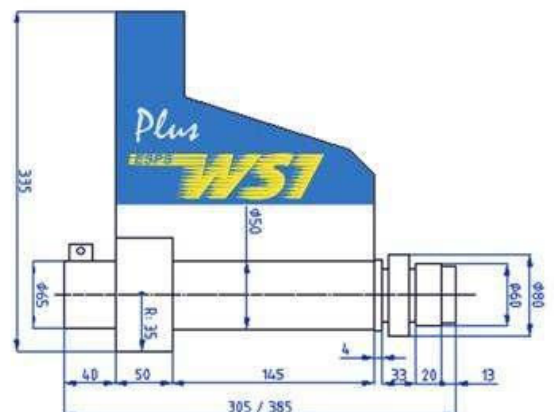
Accessory kits

KIT 20
For in line boring starting from ø 22 mm

KIT 2000 from ø 40 mm to ø 250 mm
 For facing bosses, creating circlip grooves, external machining.

Certified Test

Steel C45		DIAMETERS	DIAMETERS
Diameter	mm	Ø60	Ø180
Cutting Depth	mm	5 IN THE RADIUS 10 IN THE DIAMETER	3 IN THE RADIUS 6 IN THE DIAMETER
Feed Speed	mm/min	8	4



Boring and Welding Machine Tool ...Hi Tech



HANDINESS



Reconditioning and realignment of the chassis holes without disassembling the arm. It's evident from the pictures that the use of our machines simplifies the most difficult operations.



Machining in horizontal, vertical or any other position without compromising the performances of the machine.



REDUCE DRASTICALLY THE BURDENSOME MACHINING COSTS



WS2



STANDARD EQUIPMENT

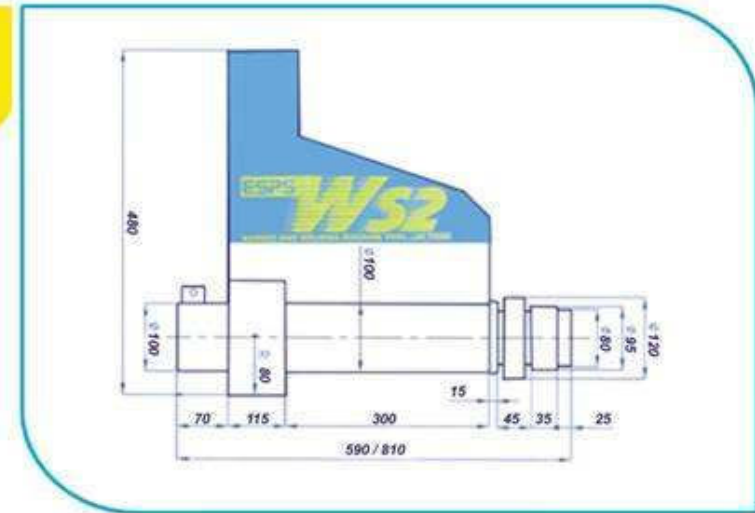
- N°1 DRIVE UNIT
- N° 1 CONTROL PANEL
- N° 1 CABLE FOR CONTROL PANEL
- N° 1 CONTROL PANEL HOLDER
- N°3 CONNECTABLE TOOL-HOLDER SHAFTS Ø 40 MM LGTH 1000 MM + 1000 MM + 730 MM:TOT.USABLE LGTH 2600 MM
- N°4 BEARING CARRIERS
- N°24 BRACKETS FOR ADJUSTING DIAMETERS (N° 12 X 50 MM, N° 6 X 100 MM, N° 6 X 180 MM)
- N° 1 CENTERING KIT (2 RINGS - 6 BOSSES - 6 SCREWS M10X60 MM)
- N°6 THREADED BARS M10X250 MM FOR THE CENTERING KIT
- N° 5 CARBIDE INSERTS
- N° 1 TOOL-HOLDER S10CX50 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N° 1 TOOL-HOLDER S12CX80 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N° 4 TOOL-HOLDER EXTENSIONS (Ø 90 MM + Ø 150 MM + Ø 230 MM + EXTENSION KNUX TYPE LGTH 100 MM),
- N° 1 SMALL HOOK Ø 35MM (DEVICE FOR REGULATING CUTTING DEPTH OF TOOL HOLDER)
- N° 1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
- N°3 MICROSPAND EXTENSIONS (N° 1) 100 MM + (N° 2) 50 MM
- N°1 COMPARATOR 1/100
- N°1 COMPARATOR EXTENSION
- N°2 COMPARATOR HOLDER 8/8 – 10/8
- N°1 WELDING TORCH CABLE WITH EUR-FITTING
- N°1 TELESCOPIC WELDING TORCH SHAFT Ø 40 MM TOT. LGTH. 1500 MM
- N° 4 TORCH HEADS FOR INTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER (B 125 MM X C 90 MM X G 180 MM X M 70 MM)
- N° 1 TORCH HEAD FOR EXTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER (A 320 MM)
- N° 3 TORCH HEAD EXTENSIONS (D 55 MM X E 45 MM X H 135 MM)
- N°1 LATHED WELDING WIRE NOZZLE Ø 0,8 MM
- N° 2 SHORT WELDING WIRE NOZZLE Ø 0.8 MM – 1 MM
- N° 2 LONG WELDING WIRE NOZZLE Ø 0.8 MM – 1 MM
- WRENCHES
- OPERATION MANUAL
- N° 1 TROLLEY (FOR CONTAINING ALL THE STANDARD KIT)

STANDARD WORKING DIAMETERS

- IN-LINE BORING**
Starting from Ø 42mm up to Ø 400mm
- ROTARY WELDING**
internal
Starting from Ø 25mm up to Ø 400mm
external
Starting from Ø 20mm up to Ø 400mm
- DRILLING** from Ø 5 mm up to Ø 45 mm
- TAPPING** from Ø 8 mm up to Ø 45 mm

ACCESSORY KITS

- KIT 20**
for in line boring starting from Ø22mm up to Ø45mm
- KIT 30**
for in line boring starting from Ø32mm up to Ø60mm
- KIT 2000** from Ø 45 mm up to Ø 400 mm
FOR FACING BOSSES, CREATING A CIRCLIP GROOVES,EXTERNAL MACHINING.



TECHNICAL CHARACTERISTICS

TOOL HOLDER SHAFT DIAM.	mm	40 (1,57")
TOOL HOLDER SHAFT LGTH.		2600 MM (N° 3 conn. bars 1000 x 1000 x 730 mm)
BORING DIAMETER	mm	22 - 400 (0,87" - 15,75")
WELDING DIAMETER	mm	25 - 400 (0,98" - 15,75")
WELDING TECHNOLOGY		SPIRAL (Continuous with variable step)
LONGITUDINAL STROKE		UNLIMITED WITH STEP OF 220 mm (8,66")
ROTATION MOTOR		CC NORMA CE
FEED MOTOR		CC NORMA CE
FEED		ELECTRIC - MECHANICAL
OUTPUT TORQUE AT THE BAR		290 Nm (266 Rpm)
MAX SPEED	rpm	266
FEED RATE	mm/rpm	0-0,5 (0-0,02 / rev)
MAX FEED SPEED <small>w/rapid button</small>	mm/min	285
REMOVAL MATRIAL	cm ³ /min	23
DRIVE UNIT WEIGHT	kg	34

CERTIFIED TEST

STEEL C45		DIAMETER	DIAMETER
VALUE	mm	Ø 100	Ø 300
CUTTING DEPT	mm	5 in the radius 10 in the diameter	3 in the radius 6 in the diameter
FEED SPEED	mm/min	20	8



WS2 Compact



General Technical Characteristics

Boring Diameter	mm	22 - 400 (0,87 - 15,75)
Welding Diameter	mm	25 - 400 (0,98" - 15,75")
Tool Holder Shaft Diameter	mm	40 (1,57")
Tool Holder Shaft Length		2600 mm (3 connectable bars: 1000 x 1000 x 730)
Longitudinal Stroke		UNLIMITED WITH STEP OF 120 mm (4,72')
Rotation Motor		DC (CE COMPLIANT)
Feed Motor		DC (CE COMPLIANT)
Output Torque at the Bar		290 Nm (266 Rpm)
Max Rotation Speed	rpm	266
Feed Rate	mm/rpm	0-0,5 (0-0,02"/rev)
Max Feed Speed	mm/min	285
Removal Material	cm/min	23
Drive Unit Weight	kg	27

Standard Diameter Ranges

IN-LINE BORING FROM Ø 42 MM TO OVER Ø 400 MM
 OVERLAY WELDING : INTERNAL - FROM Ø 25 MM TO OVER Ø 400 MM
 EXTERNAL - FROM Ø 20 MM TO OVER Ø 400 MM
 TAPPING - FROM Ø 8 MM TO MAX Ø 45 MM
 DRILLING - FROM Ø 5 MM TO MAX Ø 45 MM

Standard Equipment

- N° 1 DRIVE UNIT - N° 1 CONTROL PANEL
- N° 1 CABLE FOR CONTROL PANEL
- N° 1 CONTROL PANEL HOLDER
- N° 3 CONNECTABLE TOOL-HOLDER SHAFTS WITH CONICAL COUPLING Ø 40 MM
 lgth 1000 mm + 1000 mm + 730 mm
- N° 4 BEARING CARRIERS
- N° 24 BRACKETS FOR ADJUSTING DIAMETERS (N° 12 X 50 MM, N° 6 X 100 MM, N° 6 X 180 MM)
- N° 4 TOOL-HOLDER EXTENSIONS (Ø 90 MM + Ø 150 MM + Ø 230 MM + extension lgth 100 MM)
- N° 1 CENTERING KIT (2 RINGS - 6 BOSSES - 6 SCREWS M10x60 mm)
- N° 6 THREADED BARS M10x250 MM FOR THE CENTERING KIT
- N° 1 COMPARATOR 1/100
- N° 2 COMPARATOR HOLDER 8/8 - 10/8
- N° 1 COMPARATOR EXTENSION
- N° 1 WELDING TORCH CABLE WITH EUR-FITTING
- N° 1 TELESCOPIC WELDING TORCH SHAFT Ø 40 MM Tot. Lgth. 1500 mm
- N° 4 TORCH HEADS FOR INTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER
 (B 125 MM x C 90 MM x G 180 MM x M 70 MM)
- N° 1 TORCH HEAD FOR EXTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER
 (A 320 MM)
- N° 3 TORCH HEAD EXTENSIONS (D 55 MM x E 45 MM x H 135 MM) - N° 5 CARBIDE INSERTS
- N° 1 TOOL-HOLDER S10Cx30 mm (COMPLETE WITH TORX SCREW)
- N° 1 TOOL-HOLDER S10Cx50 mm (COMPLETE WITH TORX SCREW)
- N° 1 TOOL-HOLDER S12Cx80 mm (COMPLETE WITH TORX SCREW)
- N° 1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
- N° 3 MICROSPAND EXTENSIONS (N° 1 x 100 MM + N° 2 x 50 MM)
- N° 1 LATHED WELDING WIRE NOZZLE Ø 0,8 MM
- N° 1 WRENCH FOR TOOL HOLDERS
- N° 2 SHORT WELDING WIRE NOZZLE Ø 0,8 MM - 1 MM
- N° 2 LONG WELDING WIRE NOZZLE Ø 0,8 MM - 1 MM
- N° 1 SMALL HOOK (device for regulating cutting depth of tool holder)
- N° 1 FLANGE FOR REDUCED SPACES
- N° 1 TROLLEY - WRENCHES - OPERATION MANUAL

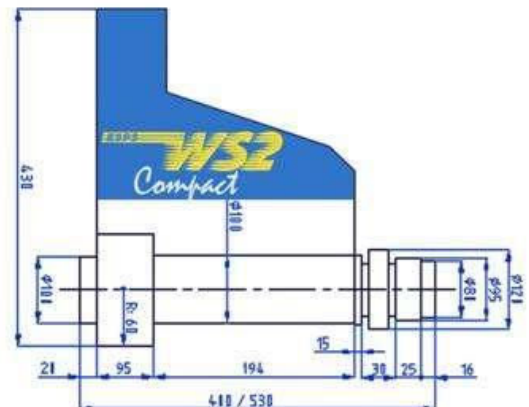
Accessory kits

KIT 20 For in line boring starting from ø 22mm
KIT 30 For in line boring starting from ø 32mm

KIT 2000 from ø 45 mm to ø 400mm
 For facing bosses, creating circlip grooves, external machining

Certified Test

Steel C45		DIAMETERS	DIAMETERS
Diameter	mm	Ø100	Ø300
Cutting Depth	mm	5 IN THE RADIUS 10 IN THE DIAMETER	3 IN THE RADIUS 6 IN THE DIAMETER
Feed Speed	mm/min	20	8



Boring and Welding Machine Tool ...Hi Tech



EFFICIENCY



Regeneration of the swing check valve of gas pipelines.



Restoring the supports of the chassis lift ram location without removing the cabin. Disassembling the cabin, on the new excavator machines, means that while reassembling it, there can be complications on the electronic and electrical apparatus.

Reconditioning of the excavator arm. On-site operation, without disassembling the stick and the hydraulic tubes, while respecting the environment.



REDUCE MACHINING TIME
OF 85% AND
ELIMINATE DOWN TIME



WS2 Plus



STANDARD EQUIPMENT

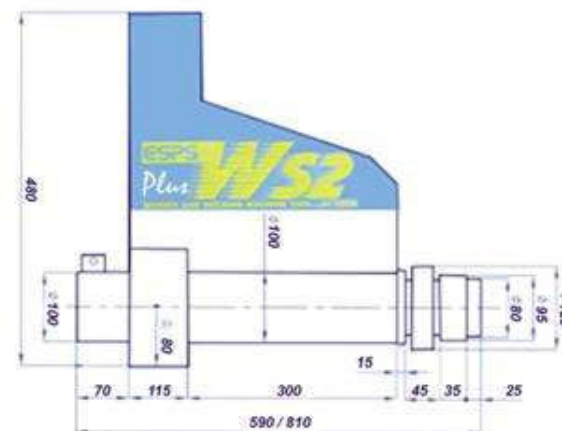
- N°1 DRIVE UNIT
- N° 1 CONTROL PANEL
- N° 1 CABLE FOR CONTROL PANEL
- N° 1 CONTROL PANEL HOLDER
- N° 3 CONNECTABLE MAIN TOOL HOLDERS Ø 50 MM LGTH. 1000MM + 1000MM + 860 MM: TOT. USABLE LGTH. 2660 MM
- N° 4 BEARING CARRIERS
- N°24 BRACKETS FOR ADJUSTING DIAMETERS (N° 12 X 50 MM, N° 6 X 100 MM, N° 6 X 230 MM)
- N° 1 CENTERING KIT (2 RINGS - 6 BOSSES - 6 SCREWS M10X60 MM)
- N° 6 THREADED BARS M10 X 250 MM FOR CENTERING KIT
- N° 5 CARBIDE INSERTS
- N° 1 TOOL HOLDER S10C X 50 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N° 1 TOOL HOLDER S12C X 80 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N° 5 TOOL-HOLDER EXTENSIONS (Ø 90 MM + Ø 150 MM + Ø 230 MM + 2 KNUX TYPE EXTENSIONS LGTH 100 MM + 150 MM),
- N° 1 SMALL HOOK Ø 35MM (DEVICE FOR REGULATING CUTTING DEPTH OF TOOL HOLDER)
- N° 1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
- N°3 MICROSPAND EXTENSIONS (N° 1) 100 MM + (N° 2) 50 MM
- N°1 COMPARATOR 1/100
- N°1 COMPARATOR EXTENSION
- N°2 COMPARATOR HOLDER 8/8 - 10/8
- N° 1 WELDING TORCH CABLE WITH EUR-FITTING,
- N° 1 TELESCOPIC WELDING TORCH SHAFT Ø 40 MM TOTAL LGTH. 1500 MM,
- N° 2 ADAPTING BUSHINGS FOR TORCH SHAFT LGTH 90 - LGTH. 150
- N° 4 TORCH-HEADS FOR INTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER (B 125 MM + C 90 MM + G 180 MM + M 70 MM),
- N° 1 TORCH-HEAD FOR EXTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER (A 320 MM),
- N° 3 TORCH-HEADS EXTENSIONS (D 55 MM + E 45 MM + H 135 MM)
- N° 1 LATHED WELDING WIRE NOZZLE Ø 0.8
- N° 2 SHORT WELDING WIRE NOZZLES Ø 0,8 MM - Ø 1 MM,
- N° 2 LONG WELDING WIRE NOZZLES Ø 0,8 MM - Ø 1 MM,
- WRENCHES
- OPERATION MANUAL
- N° 1 TROLLEY (CONTAINING MACHINE AND COMPONENTS)

STANDARD WORKING DIAMETERS

- IN-LINE BORING**
Starting from Ø 52mm up to Ø 450mm
- ROTARY WELDING**
internal
Starting from Ø 25mm do Ø 450mm
external
Starting from Ø 20mm do Ø 450mm
- DRILLING** from Ø 5 mm up to Ø 45 mm
- TAPPING** from Ø 8 mm up to Ø 45 mm

ACCESSORY KITS

- KIT 30**
for in line boring starting from Ø32mm up to Ø60mm
- KIT 2000** from Ø 55 mm up to Ø 450 mm
FOR FACING BOSSES, CREATING A CIRCLIP GROOVES,EXTERNAL MACHINING.



TECHNICAL CHARACTERISTICS

TOOL HOLDER SHAFT DIAM.	mm	50 (1,97")
TOOL HOLDER SHAFT LGTH.	mm	2660 MM (N° 3 conn. bars 1000 x 1000 x 860 mm)
BORING DIAMETER		32 - 450 (1,25" - 17,72")
WELDING DIAMETER	mm	25 - 450 (0,98" - 17,72")
WELDING TECHNOLOGY		SPIRAL (Continuous with variable step)
LONGITUDINAL STROKE		UNLIMITED WITH STEP OF 220 mm (8,66")
ROTATION MOTOR		CC NORMA CE
FEED MOTOR		CC NORMA CE
FEED		ELECTRIC - MECHANICAL
OUTPUT TORQUE AT THE BAR		290 Nm (266 Rpm)
MAX SPEED	rpm	266
FEED RATE	mm/rpm	0-0,5 (0-0,02 / rev)
MAX FEED SPEED <small>w/rapid button</small>	mm/min	285
REMOVAL MATERIAL	cm ³ /min	23
DRIVE UNIT WEIGHT	kg	35

CERTIFIED TEST



STEEL C45		DIAMETER	DIAMETER
VALUE	mm	Ø 150	Ø 400
CUTTING DEPT	mm	5 in the radius 10 in the diameter	3 in the radius 6 in the diameter
FEED SPEED	mm/min	15	10

WS3



STANDARD EQUIPMENT

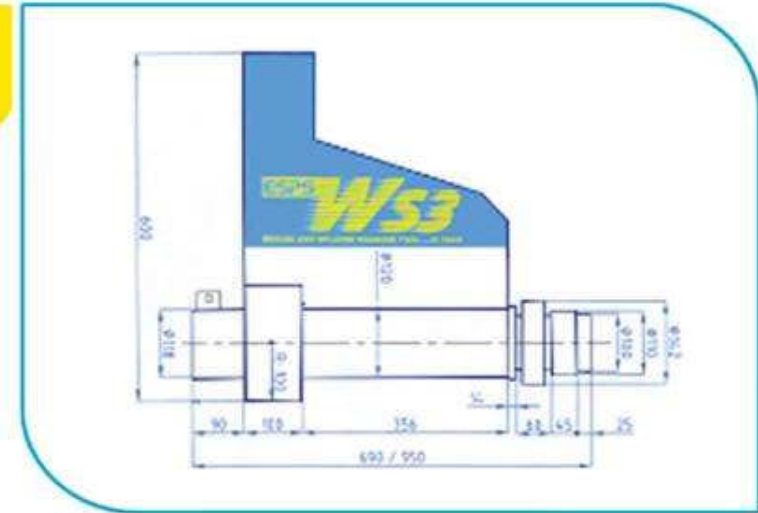
- N°1 DRIVE UNIT
- N° 1 CONTROL PANEL
- N° 1 CONTROL PANEL HOLDER
- N° 1 CABLE FOR CONTROL PANEL
- N° 4 BEARING CARRIERS,
- N° 12 NUTS M24
- N° 12 BOLTS M24 X 120 MM
- N° 5 CARBIDE INSERTS
- N° 3 CONNECTABLE TOOL HOLDER SHAFTS Ø 60 MM LGTH. 1500MM + 1500MM + 1630 MM: TOT. USABLE LGTH. 4410 MM
- N° 24 BRACKETS FOR ADJUSTING DIAMETERS (N° 12 X MM 50, N° 12 X MM 280)
- N° 1 CENTERING KIT (2 RINGS - 6 BOSSES - 6 SCREWS)
- N° 6 THREADED BARS M16X330 MM FOR CENTERING KIT
- N° 1 TOOL HOLDER S10CX30 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N° 1 TOOL HOLDER S10CX50 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N° 1 TOOL HOLDER S10CX80 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N° 6 TOOL-HOLDER EXTENSIONS (Ø 140 MM + Ø 180 MM + Ø 270 MM + Ø 450 MM + KNUX TYPE EXTENSIONS LGTH.100 MM + 150 MM)
- N° 1 SMALL HOOK Ø 35 MM (DEVICE FOR REGULATING CUTTING DEPTH OF TOOL HOLDER)
- N° 1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
- N° 4 MICROSPAND EXTENSIONS 23 MM – 50 MM – 100 MM – 150 MM
- N°1 COMPARATOR 1/100
- N°1 COMPARATOR EXTENSION
- N° 3 COMPARATOR HOLDER 8/8 – 10/8 – 12/8
- N° 1 WELDING TORCH CABLE WITH EUR-FITTING,
- N° 1 TORCH SHAFT Ø 40 MM TOTAL LGTH. 1500 MM,
- N° 2 ADAPTING BUSHINGS FOR TORCH SHAFT LUNG. 210 – LUNG. 120
- N° 5 TORCH-HEADS FOR INTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER (B 125 MM + C 90 MM + G 180 MM + M 70 MM + I 250 MM)
- N° 1 TORCH-HEAD FOR EXTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER (A 320 MM)
- N° 3 TORCH HEAD EXTENSIONS (D 55 MM + E 45 MM + H 135 MM)
- N° 1 LATHED WELDING WIRE NOZZLE Ø 0.8
- N° 2 SHORT WELDING WIRE NOZZLES Ø 0,8 MM – Ø 1 MM,
- N° 2 LONG WELDING WIRE NOZZLES Ø 0,8 MM – Ø 1 MM,
- WRENCHES
- OPERATION MANUAL
- N° 1 TROLLEY (FOR CONTAINING ALL THE STANDARD KIT)

STANDARD WORKING DIAMETERS

- IN-LINE BORING**
Starting from Ø 62mm up to Ø 600mm
- ROTARY WELDING**
internal
starting from Ø 50 mm up to Ø 600mm
external
starting from Ø 10 mm up to Ø 600 mm
- DRILLING** from Ø 5 mm up to Ø 65 mm
- TAPPING** from Ø 10 mm up to Ø 65 mm

ACCESORY KITS

- KIT 250**
for in line boring starting from Ø42mm up to Ø250mm
- KIT 800**
for in line boring starting from Ø600mm up to Ø800mm
- KIT 2000** from Ø 65 mm up to Ø 800 mm
FOR FACING BOSSES, CREATING A CIRCLIP GROOVES,EXTERNAL MACHINING.



TECHNICAL CHARACTERISTICS

TOOL HOLDER SHAFT DIAM.	mm	60 (2,36")
TOOL HOLDER SHAFT LGTH.	mm	4410 MM (N° 3 conn. bars 1500 x 1500 x 1630 mm)
BORING DIAMETER		42 - 800 (1,65" - 31,50")
WELDING DIAMETER	mm	42 - 800 (1,65" - 31,50")
WELDING TECHNOLOGY		SPIRAL (Continuous with variable step)
LONGITUDINAL STROKE		UNLIMITED WITH STEP OF 250mm (9,84")
ROTATION MOTOR		CC NORMA CE
FEED MOTOR		CC NORMA CE
FEED		ELECTRIC - MECHANICAL
OUTPUT TORQUE AT THE BAR		820 Nm (143 Rpm)
MAX SPEED	rpm	143
FEED RATE	mm/rpm	0-0,3 (0-0,01 / rev)
MAX FEED SPEED <small>wrapit button</small>	mm/min	105
REMOVAL MATERIAL	cm ³ /min	75
DRIVE UNIT WEIGHT	kg	40

CERTIFIED TEST



STEEL C45		DIAMETER	DIAMETER
VALUE	mm	Ø 200	Ø 700
CUTTING DEPT	mm	6 in the radius 12 in the diameter	3 in the radius 6 in the diameter
FEED SPEED	mm/min	14	6



General Technical Characteristics

Boring Diameter	mm	180 - 1000 (7,09 - 39,37)
Welding Diameter	mm	100 - 1000 (3,94" - 39,37")
Tool Holder Shaft Diameter	mm	80 (3,15")
Tool Holder Shaft Length		3000 mm (2000 mm + 1000 mm)
Longitudinal Stroke		UNLIMITED WITH STEP OF 260 mm (10,24")
Rotation Motor		DC (CE COMPLIANT)
Feed Motor		DC (CE COMPLIANT)
Output Torque at the Bar		1700 Nm (100 Rpm)
Max Rotation Speed	rpm	100
Feed Rate	mm/rpm	0-0,3 (0-0,01"/rev)
Max Feed Speed	mm/min	66
Removal Material	cm/min	95
Drive Unit Weight	kg	55



Standard Diameter Ranges

FROM Ø 180 MM TO OVER Ø 1000 MM
 OVERLAY WELDING : INTERNAL - FROM Ø 100 MM TO OVER Ø 1000 MM
 EXTERNAL - FROM Ø 20 MM TO OVER Ø 1000 MM

Standard Equipment

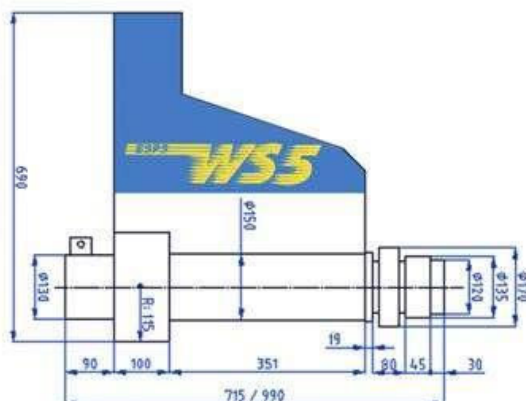
N° 1 DRIVE UNIT - N° 1 CONTROL PANEL - N° 1 CONTROL PANEL HOLDER
 N° 1 CABLE FOR CONTROL PANEL
 N° 2 TOOL HOLDER SHAFT ø 80 mm Lgth. 2000mm + 1000 mm
 N° 2 BEARING CARRIERS FOR SHAFT - N° 1 EXPANSION BEARING CARRIER COMPLETE WITH EXTENSIONS
 N° 24 BRACKETS FOR ADJUSTING DIAMETERS (n° 8 x 100 mm + n° 8 x 230 mm + n° 8 x 500 mm)
 N° 2 STAR SHAPED BEARING CARRIERS ø 450 mm - BOLTS AND NUTS FOR TIGHTENING
 N° 2 RINGS FOR INTERNAL CENTRING - N° 2 RINGS FOR EXTERNAL CENTRING - N° 6 CENTRING BOSSES
 N° 6 THREADED BARS FOR CENTRING M24X170 - N° 6 THREADED BARS FOR CENTRING M24X270
 N° 6 THREADED BARS FOR CENTRING M24X370 - N° 10 INSERTS
 N° 1 TOOL HOLDER S10Cx30 mm - N° 1 TOOL HOLDER S10Cx50 mm - N° 1 TOOL HOLDER S12Cx80 mm
 N° 3 TORX SCREWS M 2.5 - N° 1 TORX WRENCH T8 - N° 1 TOOL HOLDER EXTENSION ø 165 MM
 N° 1 DISK SHAPED TOOL HOLDER EXTENSION ø 220 MM COMPOSED OF 2 HALF DISKS
 N° 2 TOWER SHAPED TOOL HOLDER EXTENSION 100 MM - N° 2 TOWER SHAPED EXTENSION 180 MM
 N° 2 TOWER SHAPED EXTENSION 300 MM - N° 2 TOOL HOLDER KEYS
 N° 2 SUPPLEMENT FOR TOWER HEIGHT 60 MM FOR TOOL HOLDER EXTENSION
 N° 2 CHROMED BARS ø 40 X 50 MM FOR TOOL HOLDER EXTENSION
 N° 2 CHROMED BARS ø 40 X 80 MM FOR TOOL HOLDER EXTENSION
 N° 2 CHROMED BARS ø 40 X 120 MM FOR TOOL HOLDER EXTENSION
 N° 1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
 N° 3 MICROSPAND EXTENSIONS 50 mm - 100 mm - 200 mm
 N° 1 COMPARATOR 1/100 - N° 1 COMPARATOR EXTENSION - N° 2 COMPARATOR HOLDER 10/8 - 8/8
 N° 1 TORCH SHAFT ø 40 x 2000 mm - N° 2 ADAPTING BUSHINGS FOR TORCH SHAFT 230 + 130
 N° 1 WELDING TORCH CABLE WITH EUR/BINZEL FITTING,
 N° 3 TORCH-HEADS FOR INTERNAL OVERLAY WELDING B (125 mm) - (180 mm) - (250 mm)
 N° 1 TORCH-HEAD FOR EXTERNAL OVERLAY WELDING A (320 mm) C/W WELDING WIRE NOZZLES AND GAS DIFFUSER
 N° 3 TORCH HEAD EXTENSIONS (D 55 MM + E 45 MM + H 135 MM)
 N° 2 TORCH HEAD EXTENSION L (160 MM) - N° 2 LONG WELDING WIRE NOZZLES 1.2 MM
 N° 2 SHORT WELDING WIRE NOZZLES 1 MM - N° 2 LONG WELDING WIRE NOZZLES 0.8 MM
 N° 2 LONG WELDING WIRE NOZZLES 1 MM
 WRENCHES
 N° 1 TROLLEY - OPERATION MANUAL

Accessory kits

KIT 2000 from ø 100 mm to ø 1000 mm
 For facing bosses, creating circlip grooves,
 external machining.

Certified Test

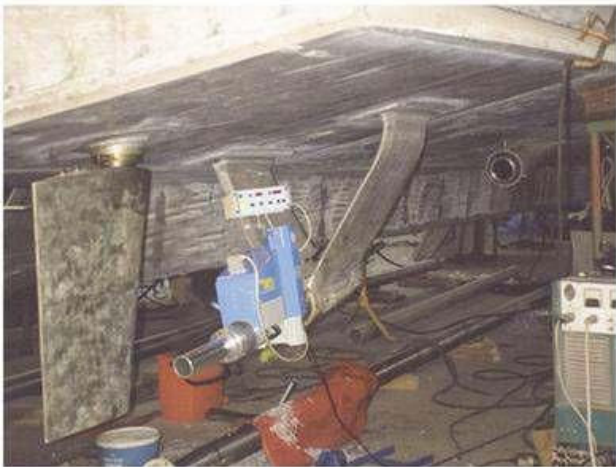
Steel C45		DIAMETERS	DIAMETERS
Diameter	mm	Ø300	Ø900
Cutting Depth	mm	4 IN THE RADIUS 8 IN THE DIAMETER	2 IN THE RADIUS 4 IN THE DIAMETER
Feed Speed	mm/min	8	4



Boring and Welding Machine Tool ...Hi Tech



EXCELLENT



The self-centring, pneumatic, shock absorbing support with axial sliding, guarantees the best finishing for every type of application in every condition even for indefinite lengths.

TO OVERCOME EVERY OPERATIONAL AND ERGONOMIC PROBLEM.



WS7 / WS7 Plus



STANDARD EQUIPMENT

- N°1 DRIVE UNIT
- N°1 CONTROL PANEL
- N°1 CABLE FOR CONTROL PANEL
- N°1 CONTROL PANEL HOLDER
- N°1 TOOL HOLDER SHAFT Ø 100 MM LGTH. 3000MM
- N°4 BEARING CARRIERS,
- N°34 BRACKETS FOR ADJUSTING DIAMETERS (N° 12 X MM 200, N° 12 X MM 300, N° 10 X MM 700 DOUBLE SPECIAL BRACKETS)
- N°2 STAR SHAPED BRACKETS Ø 700 MM
- N°20 WASHERS FOR STAR SHAPED BRACKETS FIXING
- N°10 STUD FOR BRACKET - N°10 STUD SPACERS - N°10 STUD NUTS - N°20 WASHERS 18
- COMPLETE BOLTING - N°1 CENTERING KIT (2 EXT.RINGS - 2 INT.RINGS - 6 BOSSES LGTH. 100 MM)
- N°18 THREADED BARS FOR CENTERING KIT (6 - M30X200 MM; 6 - M30X400 MM; 6 - M30X600 MM)
- N°10 CARBIDE INSERTS - N°1 TOOL HOLDER S10CX30 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N°1 TOOL HOLDER S10CX50 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N°1 TOOL HOLDER S12CX80 MM (COMPLETE WITH WRENCH AND TORX SCREW)
- N°1 MAIN DISK SHAPED TOOL HOLDER Ø 340 MM COMPOSED OF 2 HALF DISKS
- N°1 TOWER SHAPED TOOL HOLDER EXTENSION 100 MM FOR MAIN TOOL HOLDER
- N°1 SUPPLEMENT HEIGHT 50 MM FOR TOOL HOLDER EXTENSION
- N°2 SUPPLEMENTS HEIGHT 100 MM FOR TOOL HOLDER EXTENSION
- N°1 CHROMED BAR Ø 40 LGTH 50 MM FOR TOOL HOLDER EXTENSION
- N°1 CHROMED BAR Ø 40 LGTH 100 MM FOR TOOL HOLDER EXTENSION
- N°1 CHROMED BAR Ø 40 LGTH 150 MM FOR TOOL HOLDER EXTENSION
- N°24 THREADED BARS M14 (TENSION BAR) FOR TOOL HOLDER
(4 X100MM + 4 X 150 MM + 4X 200MM + 4 X 250 MM + 4 X 300 MM + 4 X 350 MM)
- N°2 TOOL HOLDER KEYS 8X8X110 - N°1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
- N°1 MICROSPAND EXTENSION 100 MM - N°1 COMPARATOR 1/100 - N°2 COMPARATOR HOLDER 8/8 - 10/8
- N°1 COMPARATOR EXTENSION - N°1 WELDING TORCH CABLE WITH EUR-FITTING
- N°1 TORCH SHAFT Ø 40 MM LGTH. TOT. 2000 MM
- N°2 ADAPTING BUSHINGS FOR TORCH SHAFT LGTH. 240 - LGTH. 130
- N°3 TORCH-HEADS FOR INTERNAL OVERLAY WELDING C/W WELDING WIRE NOZZLES AND GAS DIFFUSER
(B 125 MM + G 180 MM + I 250 MM)
- N°4 TORCH HEAD EXTENSIONS (D 55 MM + E 45 MM + H 135 MM + L 160 MM)
- N°2 SHORT WELDING WIRE NOZZLES Ø 1 MM
- N°6 LONG WELDING WIRE NOZZLES N°2 - Ø 0,8 MM; N°2 - Ø 1 MM; N°2 - Ø 1,2 MM
- WRENCHES
- OPERATION MANUAL
- N°1 TROLLEY (FOR CONTAINING ALL THE STANDARD KIT)

STANDARD WORKING DIAMETERS

IN-LINE BORING

Starting from Ø 400mm up to Ø 1200mm

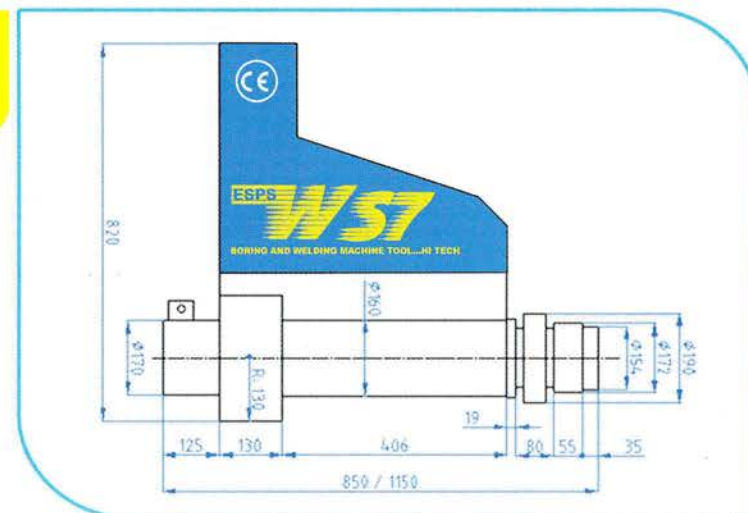
ROTARY WELDING

internal

starting from Ø 350 mm up to Ø 1200mm

external

starting from Ø 100 mm up to Ø 1200 mm



TECHNICAL CHARACTERISTICS

TOOL HOLDER SHAFT DIAM.	mm	100 (3,94")
TOOL HOLDER SHAFT LGTH.	mm	3000 MM single shaft (potentially connectable)
BORING DIAMETER		400 - 1200 (15,75" - 47,24")
WELDING DIAMETER	mm	350 - 1200 (13,78" - 47,24")
WELDING TECHNOLOGY		SPIRAL (Continuous with variable step)
LONGITUDINAL STROKE		UNLIMITED WITH STEP OF 260mm (10,24')
ROTATION MOTOR		CC NORMA CE
FEED MOTOR		CC NORMA CE
FEED		ELECTRIC - MECHANICAL
OUTPUT TORQUE AT THE BAR		4200 Nm (41 Rpm)
MAX SPEED	rpm	41
FEED RATE	mm/rpm	0-0,4 (0-0,02 / rev)
MAX FEED SPEED <small>w/rapid button</small>	mm/min	53
REMOVAL MATERIAL	cm ³ /min	172
DRIVE UNIT WEIGHT	kg	105

CERTIFIED TEST



STEEL C45		DIAMETER	DIAMETER
VALUE	mm	Ø 600	Ø 1200
CUTTING DEPT	mm	5 in the radius 10 in the diameter	2 in the radius 4 in the diameter
FEED SPEED	mm/min	5	3

ACCESORY KITS

KIT 2000 from Ø 120 mm up to Ø 1200 mm
FOR FACING BOSSES, CREATING A CIRCLIP
GROOVES, EXTERNAL MACHINING.



General Technical Characteristics

Boring Diameter	mm	400 - 1700 (15,75 - 66,93)
Welding Diameter	mm	400 - 1700 (15,75" - 66,93")
Tool Holder Shaft Diameter	mm	100 (3,94")
Tool Holder Shaft Length		3000 mm single shaft (potentially connectable)
Longitudinal Stroke		UNLIMITED WITH STEP OF 260 mm (10,24")
Rotation Motor		DC (CE COMPLIANT)
Feed Motor		DC (CE COMPLIANT)
Output Torque at the Bar		6300 Nm (41 Rpm)
Max Rotation Speed	rpm	41
Feed Rate	mm/rpm	0-0,4 (0-0,02"/rev)
Max Feed Speed	mm/min	53
Removal Material	cm ³ /min	172
Drive Unit Weight	kg	105

Standard Diameter Ranges

IN-LINE BORING FROM Ø 400 MM TO OVER Ø 1700 MM
 OVERLAY WELDING : INTERNAL - FROM Ø 400 MM TO OVER Ø 1700 MM
 EXTERNAL - FROM Ø 400 MM TO OVER Ø 1700 MM

Standard Equipment

N°1 DRIVE UNIT - N°1 CONTROL PANEL - N°1 CABLE FOR CONTROL PANEL
 N°1 CONTROL PANEL HOLDER - N°20 WASHERS FOR STAR SHAPED BRACKETS FIXING
 N°34 BRACKETS FOR ADJUSTING DIAMETERS (N°12 X mm 200, N°12 X mm 300, N°10 X mm 850 double special brackets)
 N°24 THREADED BARS FOR CENTRING KIT (5 - M30x200 mm; 6 - M30x400 mm; 6 - M30x600 mm; 6 - M30 x 800 mm)
 N°1 TOOL HOLDER SHAFT ø 100 mm Lgth. 3000mm - N°4 BEARING CARRIERS
 COMPLETE BOLTING - N°2 STAR SHAPED BRACKETS ø 920 mm
 N°68 THREADED BARS M14 (TENSION BARS) FOR TOOL HOLDER (8 X 100mm + 8 x 150 mm + 8x 200mm +
 8 x 250 mm + 8 x 300 mm + 8 x 350 mm + 8 X 400 mm + 8 x 450 mm + 8 x 500 mm + 8 x 550 mm + 8 x 600 mm)
 N°10 STUD FOR BRACKET - N°10 STUD SPACERS - N°10 STUD NUTS
 N°2 TOOL HOLDER KEYS 8X8X110 - N°20 WASHERS 18
 N°1 CENTERING KIT (2 EXT.RINGS - 2 INT.RINGS - 6 BOSSES Lgth. 100 mm)
 N°1 TOOL HOLDER S100x30 mm (COMPLETE WITH TORX SCREW)
 N°1 TOOL HOLDER S100x50 mm (COMPLETE WITH TORX SCREW)
 N°1 TOOL HOLDER S120x80 mm (COMPLETE WITH TORX SCREW)
 N°1 WRENCH FOR TOOL HOLDERS - N°10 CARBIDE INSERTS
 N°1 MAIN DISK SHAPED TOOL HOLDER ø 340 MM COMPOSED OF 2 HALF DISKS
 N°1 TELESCOPIC TORCH SHAFT ø 60 mm Lgth. Tot. 2000 mm (WATER COOLED)
 N°1 WELDING TORCH CABLE WITH EUR ATTACHMENT (WATER COOLED)
 N°2 TOWER SHAPED TOOL HOLDER EXTENSION 100 MM FOR MAIN TOOL HOLDER
 N°4 SUPPLEMENT HEIGHT 50 MM FOR TOOL HOLDER EXTENSION
 N°4 SUPPLEMENT HEIGHT 100 MM FOR TOOL HOLDER EXTENSION
 N°2 SUPPLEMENT HEIGHT 200 MM FOR TOOL HOLDER EXTENSION
 N°2 CHROMED BARS ø 40 X 50 MM FOR TOOL HOLDER EXTENSION
 N°2 CHROMED BARS ø 40 X 100 MM FOR TOOL HOLDER EXTENSION
 N°2 CHROMED BARS ø 40 X 150 MM FOR TOOL HOLDER EXTENSION
 N°1 MICROSPAND (MODULAR DEVICE USED FOR INTERNAL MEASUREMENTS)
 N°4 MICROSPAND EXTENSIONS 100 mm - N°1 COMPARATOR 1/100 - N°1 COMPARATOR EXTENSION
 N°2 COMPARATOR HOLDER 8/8 - 10/8 - N°2 LONG WELDING WIRE NOZZLES ø 1,2 mm
 N°2 LONG WELDING WIRE NOZZLES ø 1,6 mm - N°2 ADAPTING BUSHINGS FOR TORCH SHAFT
 N°1 LONG GAS DIFFUSER
 N°1 TROLLEY - WRENCHES - OPERATION MANUAL

Accessory kits

KIT 2000 from ø 400 mm to ø 1700 mm
 For facing bosses, creating circlip grooves,
 external machining.

Certified test

Steel C45		DIAMETERS	DIAMETERS
Diameter	mm	Ø800	Ø1700
Cutting Depth	mm	4 IN THE SQUARE	1,5 IN THE SQUARE
Feed Speed	mm/min	5	2

