

Your drilling and tapping specialist because of:

TRADITION

The grey of steel and the green of our valleys. Tenacity, hard work and ambition. From the Basque Country, the heart of the Spanish machine-tool industry, with over 50 years devoted to precision engineering and 40 to the manufacturing of drills, IBARMIA has a level of "know-how" which is widely recognised within the sector.

INTERNATIONALISATION

Open to the world. The competitiveness of our products and our international recognition explain why **three in every four of our machines are for export**. Their destinies are industrially developed countries such as Germany, France, Switzerland, Italy, Belgium, USA, Canada, Denmark, etc..., with machines installed in the five continents and in the world's leading industries.

LEADERSHIP:

The fact that we are the preference and reference in many national and international industries and tenders is the outcome of having fully satisfied the expectations and demands of the users of our machines.

RESEARCH AND DEVELOPMENT

Reflected in the constant capacity for innovation and adaptation in our product range to the uses and needs of the market.

TECHNOLOGY

Evolution with time and a total command of the latest technology. That's why we have our own division for the manufacturing of the latest generation of high-performance vertical Machining centres.

DESIGN

Thinking of the person at all times, in terms of the efficiency, safety and comfort of the operator. We see design as a strategic competitive tool and apply creative engineering and the most modern computer design techniques in the service of rationalisation, ergonomics and ease of use. Our efforts have been acknowledged by The National Award for Design (BIEMH'96).

QUALITY

As objective and means. The axis of all

our activity, the basis for our prestige and leadership in the market.

PROGRAMME(*)

Round and brilliant as the columns of the machines themselves. Solid and robust as their structure. Clear and concrete. Ample, sufficient and adjusted to every need ... and budget. All in one comprehensive catalogue to leave no room for doubt. No confusion, no wasting of your valuable time. We, the specialists, have already done a great deal of your thinking for you.















(*) Some models may not be available in all markets. Please check with your dealer.





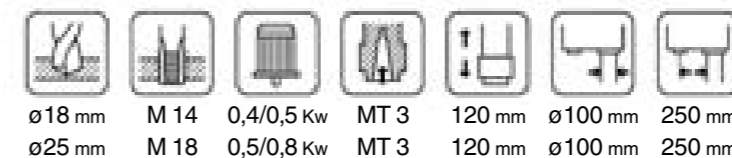
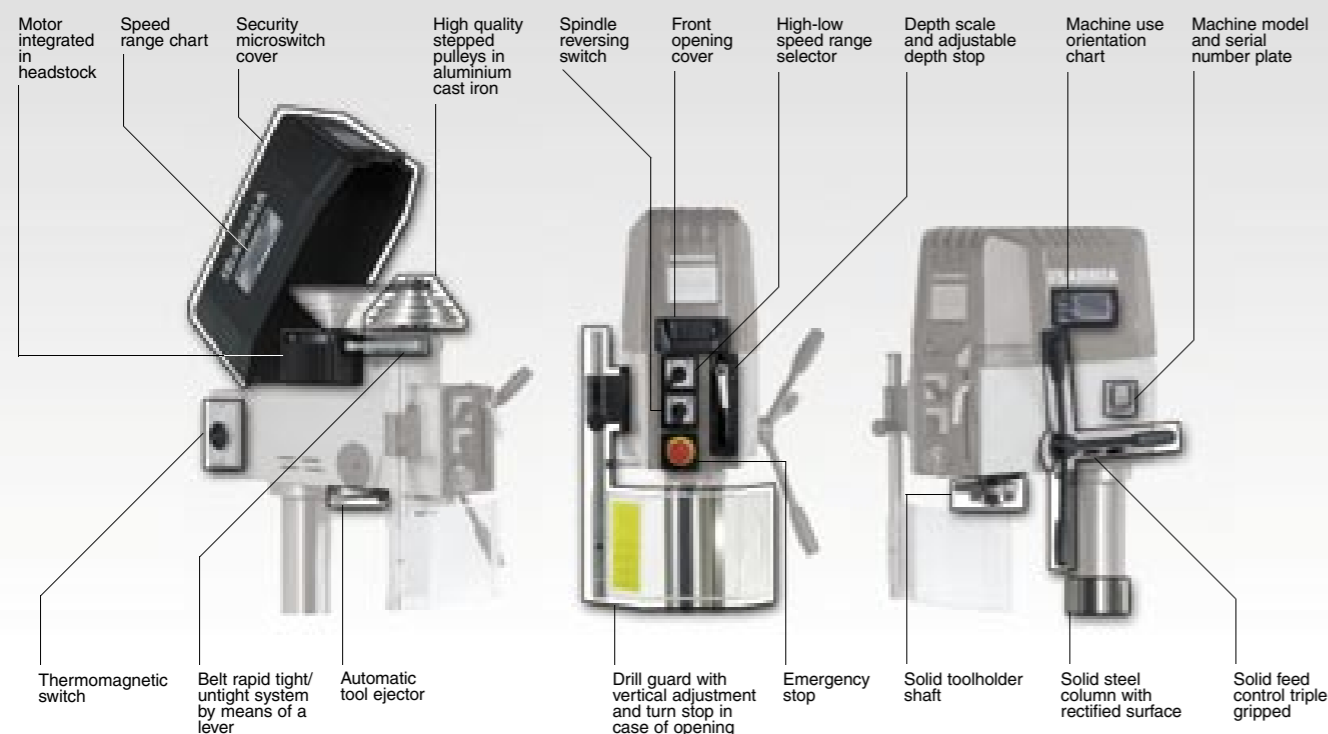
KEYS: To save time and understand our programme quickly. While the number expresses the direct drilling capacity in steel, the letters stand for:

- K:** Belt transmission
- **S:** “small”, or bench version
 - **M:** “medium”, or bench drill with intermediate worktable
 - **L:** “large”, or pillar version
- T:** Geared transmission
- **S:** “small”, or bench version
 - **M:** “medium”, or bench drill with intermediate worktable
 - **L:** “large”, or pillar version
- Z:** Belt transmission
- **S:** manual feed
 - **A:** automatic feed by mechanical clutch
 - **B:** automatic feed by electromagnetic clutch
 - **V:** mechanical speed variator
- X:** Geared transmission
- **S:** manual feed
 - **A:** automatic feed by mechanical clutch
 - **B:** automatic feed by electromagnetic clutch
- A:** Geared transmission with automatic feed by mechanical clutch
- B:** Geared transmission with automatic feed by electromagnetic clutch
- C:** Mixed transmission belt/geared
- **B:** automatic feed by electromagnetic clutch
 - **V:** mechanical speed variator
 - **VE:** electronic speed variator
- P:** Geared transmission (prismatic column drills)
- **B:** automatic feed by electromagnetic clutch
 - **L:** extralarge prismatic column
- F:** Geared transmission (prismatic column drilling/milling machines)
- **B:** automatic feed by electromagnetic clutch

| | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  K Series Pages 6-7 | Round column drills Belt transmission Drilling capacity in steel up to Ø 18/25 mm |
|  T Series Pages 8-9 | Round column drills Geared transmission Drilling capacity in steel up to Ø 18/25 mm |
|  Z Series Pages 10-13 | Round column drills Belt transmission Drilling capacity in steel up to Ø 32/34/40 mm |
|  K Series Pages 14-17 | Round column drills Geared transmission Drilling capacity in steel up to Ø 32/34/40 mm |
|  A Series Pages 18-19 | Round column drills Geared transmission Drilling capacity in steel up to Ø 35/40/45/50 mm |
|  B Series Pages 20-21 | Round column drills Geared transmission Drilling capacity in steel up to Ø 35/40/45/50/60/70 mm |
|  C Series Pages 22-23 | Round column drills Mixed transmission belt/geared Drilling capacity in steel up to Ø 40/50 mm |
|  P Series Pages 24-25 | Prismatic column drills Geared transmission Drilling capacity in steel up to Ø 40/50/70 mm |
|  F Series Pages 26-27 | Prismatic column drilling/milling machines Geared transmission Drilling capacity in steel up to Ø 35 mm Drilling capacity in steel up to 45 cm ³ /min |
|  Batteries K-T-Z-X-A-B-C Pages 28-29 | Round column drill batteries |
|  Batteries P Pages 30-31 | Prismatic column drill batteries |
|  Special Pages 32-33 | Special constructions of round column Special constructions of prismatic column |
|  Equipment Pages 34-39 | General equipment Extra equipment Accessories |
|  Dimensions Pages 40-47 | Round column drills Prismatic column drills |

K Series, your choice for:

Multi-purpose use • Unequalled robustness • Complete equipment • Speed range
Easy to run • Low maintenance • Attractive design • Value for money



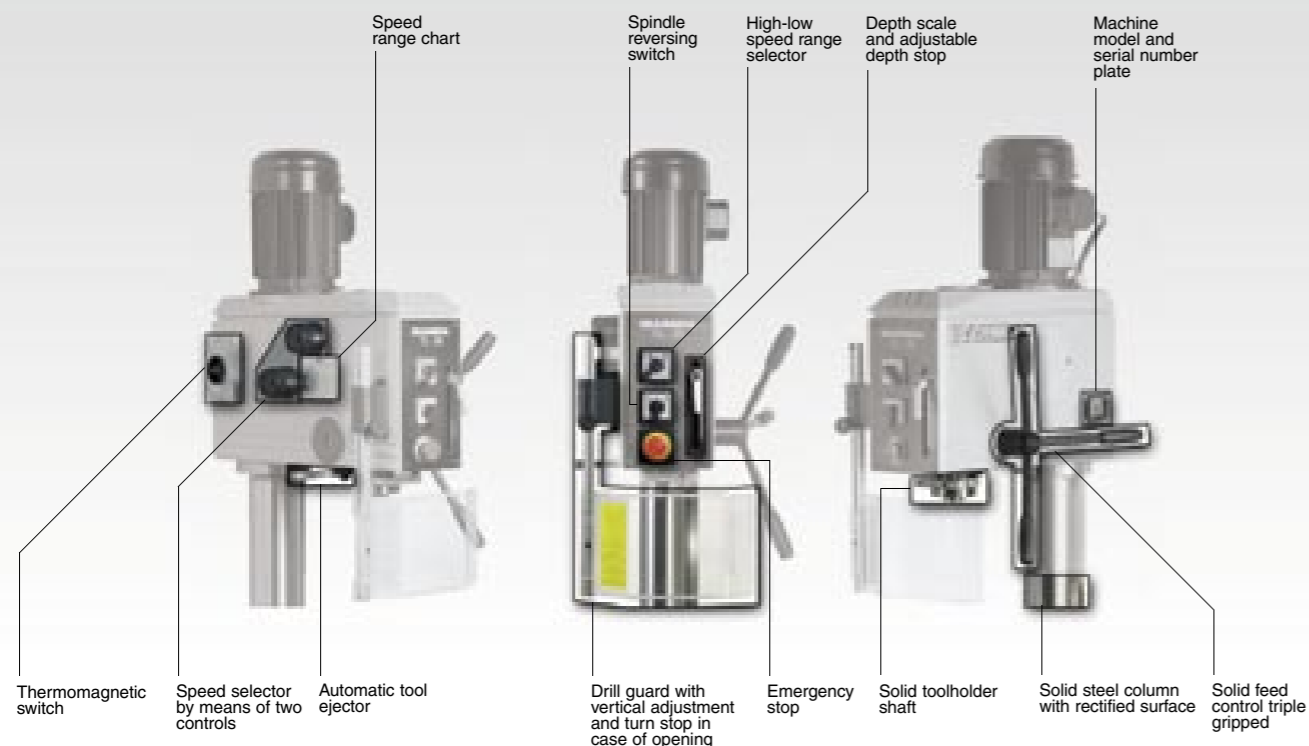
| Characteristics | KS-18 | KM-18 | KL-18 | KS-25 | KM-25 | KL-25 |
|------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------|---------|-----------------------------------------------------------------------|-------------|-------|
| Maximum drilling capacity in steel St. 60 | ø mm | 18 | | | 25 | |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 25 | | | 30 | |
| Maximum tapping capacity in steel St. 60 | mm | M 14 | | | M 18 | |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 18 | | | M 22 | |
| Morse Taper MT | Nr. | 3 | | | 3 | |
| Maximum spindle stroke (drilling depth) | mm | 120 | | | 120 | |
| Main motor power | HP(Kw) | 0,55 / 0,75 (0,40 / 0,55) | | 0,75 / 1,1 (0,55 / 0,80) | | |
| Transmission | | Belt drive | | | | |
| Number of speeds | | 10 | | | | |
| Speed range with motor at 750/1500 rpm 50 Hz 3Ph. | rpm | 200-360-400-650-720-1170-1300-2000-2340-4000 | | | | |
| Upon request: Motor at 900/1800 rpm 60 Hz 3Ph. (240-4800 rpm) | | | | | | |
| Feed | | Manual | | | | |
| Worktable dimensions (LxW) | mm | 270x270 | 300x270 | 270x270 | 300x270 | |
| Column diameter | mm | 100 | | | | |
| Distance from spindle centre to column face | mm | 250 | | | | |
| Net weight | Kg | 125 | 150 | 175 | 125 | 150 |
| Gross weight with packing | Kg | 150 | 170 | 215 | 150 | 170 |
| Packing dimensions (length x width x height) | m | 0,8x0,5x1,4 | | 2,1x0,5x0,9 | 0,8x0,5x1,4 | |
| Standard equipment | | Optional equipment (*) | | | | |
| Depth scale and adjustable depth stop | “CE” mark ■ | PKA Floor cabinet with 2 shelves | | ERC Coolant system (independent container) | | |
| Automatic tool ejector | | PKB Floor cabinet with door and drawer | | VE Electronic variator | | |
| Thermomagnetic switch | ■ Not standard in every market | MG Rotating table plate | | RS Automatic feed reversing system for tapping (only for “VE” models) | | |
| Emergency STOP | Please check with your dealer | (Only for “KM” & “KL” models) | | TAK Digital rpm counter (only for “VE” models) | | |
| Spindle reversing switch | | MFM Reversible tiltable table with vice (only for “KL” models) | | HB Hydro-pneumatic power feed unit | | |
| High/low speed range selector | | MCC Co-ordinate table over support (only for “KL” models) | | | | |
| Drill guard with microswitch | | | | | | |
| Security microswitch on cover | ■ | | | | | |

(*) On display on pages 34-39



T Series, your choice for:

State of the art technology • Geared machine head • Complete equipment
Speed range • Easy to run • Zero maintenance



| | | | | | | |
|--------|------|------------|------|--------|---------|--------|
| | | | | | | |
| ø18 mm | M 14 | 0,5/0,8 Kw | MT 3 | 120 mm | ø100 mm | 250 mm |
| ø25 mm | M 18 | 0,7/1,1 Kw | MT 3 | 120 mm | ø100 mm | 250 mm |



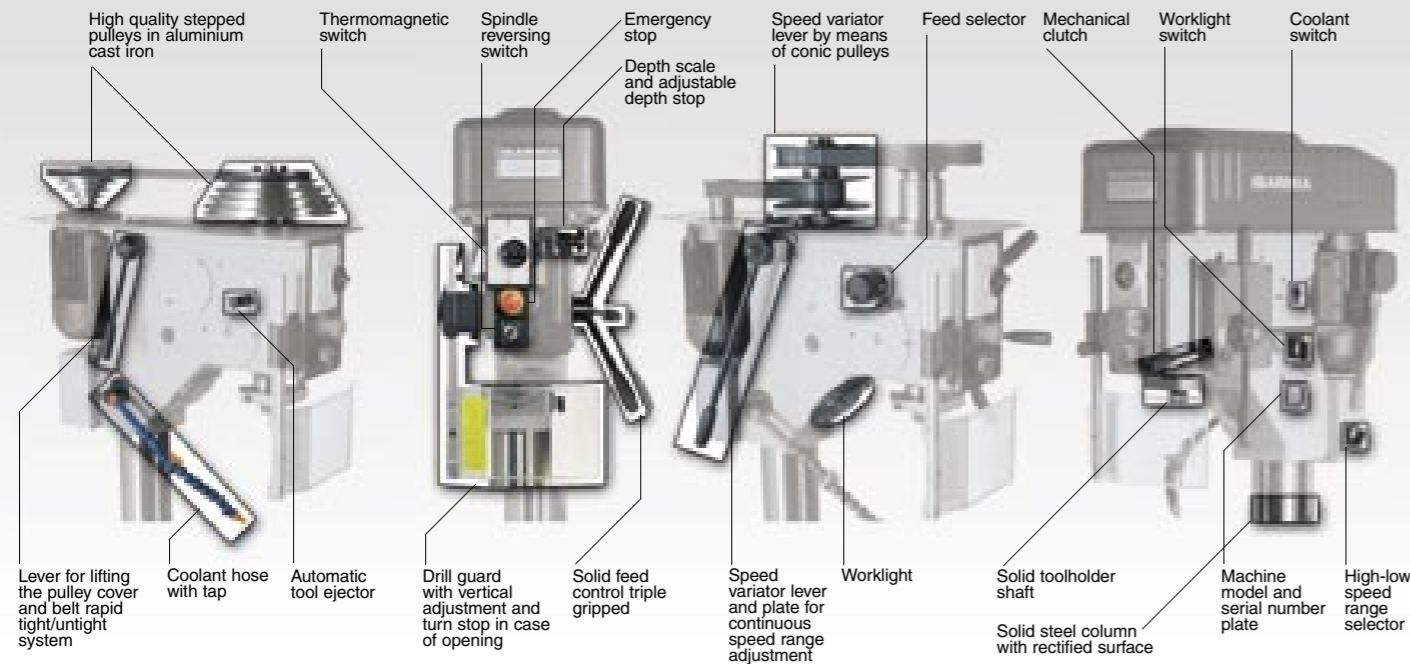
| Characteristics | | TS-18 | TM-18 | TL-18 | TS-25 | TM-25 | TL-25 |
|------------------------------------------------------------------|--------------------------------|----------------------------------------------------------|---------|-----------------------------------------------------------|-----------------------|---------|-------------|
| Maximum drilling capacity in steel St. 60 | ø mm | | 18 | | | 25 | |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | | 25 | | | 30 | |
| Maximum tapping capacity in steel St. 60 | mm | | M 14 | | | M 18 | |
| Maximum tapping capacity in cast iron 200 Brinell | mm | | M 18 | | | M 22 | |
| Morse Taper MT | Nr. | | 3 | | | 3 | |
| Maximum spindle stroke (drilling depth) | mm | | 120 | | | 120 | |
| Main motor power | HP(Kw) | 0,75 / 1,1 (0,55 / 0,80) | | | 1 / 1,5 (0,73 / 1,10) | | |
| Transmission | | Gear box | | | | | |
| Number of speeds | | 8 | | | | | |
| Speed range with motor at 1500/3000 rpm 50 Hz 3Ph. | rpm | 75-160-250-420-510-850-1450-2800 | | | | | |
| Upon request: Motor at 1800/3600 rpm 60 Hz 3Ph. (90-3360 rpm) | | | | | | | |
| Feed | | Manual | | | | | |
| Worktable dimensions (LxW) | mm | 270x270 | 300x270 | | 270x270 | 300x270 | |
| Column diameter | mm | 100 | | | | | |
| Distance from spindle centre to column face | mm | 250 | | | | | |
| Net weight | Kg | 135 | 165 | 185 | 135 | 165 | 185 |
| Gross weight with packing | Kg | 160 | 190 | 225 | 160 | 190 | 225 |
| Packing dimensions (length x width x height) | m | 0,8x0,5x1,4 | | 2,1x0,5x0,9 | 0,8x0,5x1,4 | | 2,1x0,5x0,9 |
| Standard equipment | | Optional equipment (*) | | | | | |
| Depth scale and adjustable depth stop | ■ "CE" mark | PKA Floor cabinet with 2 shelves | | MCC Co-ordinate table over support (only for "TL" models) | | | |
| Automatic tool ejector | | PKB Floor cabinet with door and drawer | | ERC Coolant system (independent container) | | | |
| Thermomagnetic switch | | MG Rotating table plate | | RS Automatic feed reversing system for tapping | | | |
| Emergency STOP | | (Only for "TM" & "TL" models) | | HB Hydro-pneumatic power feed unit | | | |
| Spindle reversing switch | | MFM Reversible tiltable with vice (only for "TL" models) | | | | | |
| High/low speed range selector | ■ Not standard in every market | | | | | | |
| Drill guard with microswitch | Please check with your dealer | | | | | | |

(*) On display on pages 34-39



Z Series, your decision for:

The silence of their belts • Speed variator • Suitable size and capacity
Easy to run • Low maintenance • Attractive price



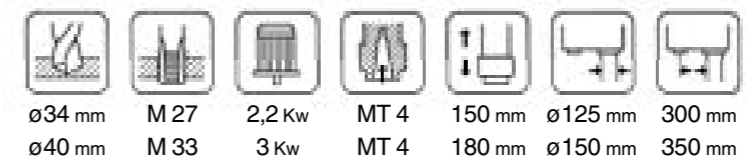
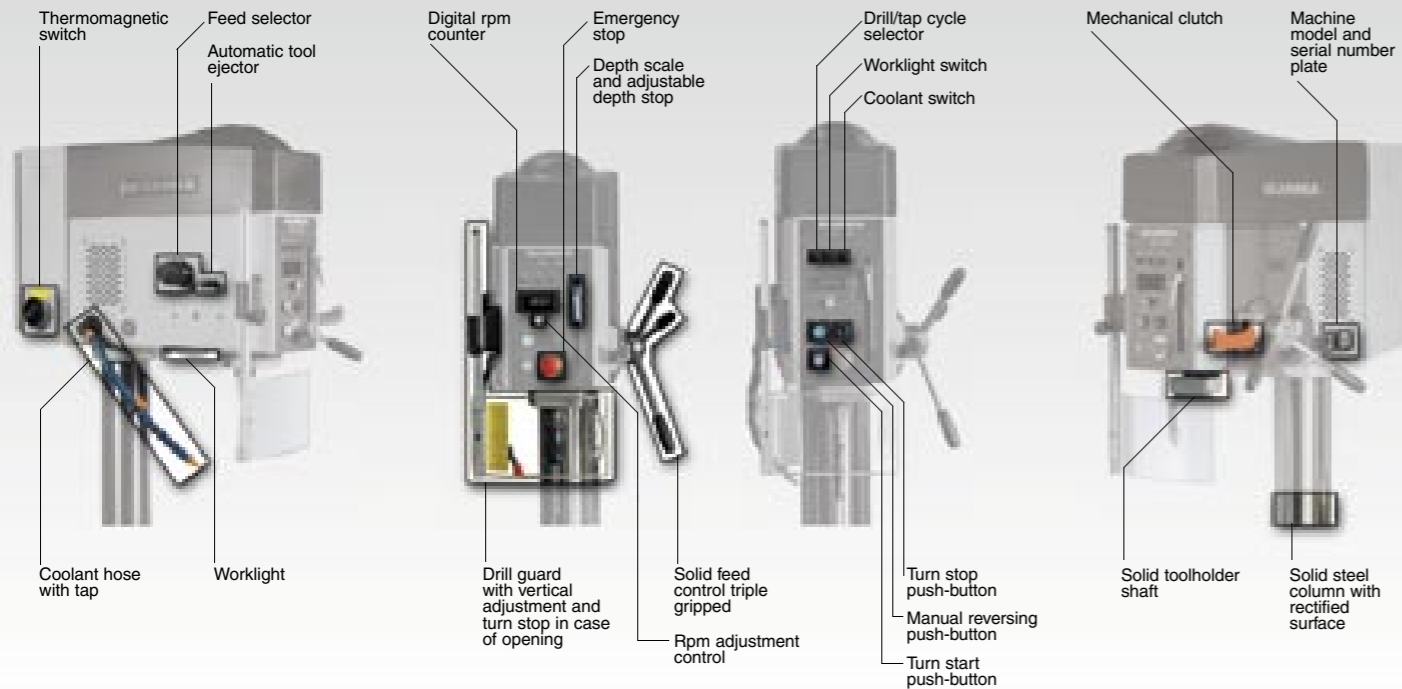
| Characteristics | | SZ-32 | AZ-32V |
|----------------------------------------------------|------------------------------------------|----------------------------------------------|------------------------------------------------|
| Maximum drilling capacity in steel St. 60 | ø mm | | 32 |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | | 35 |
| Maximum tapping capacity in steel St. 60 | mm | | M 22 |
| Maximum tapping capacity in cast iron 200 Brinell | mm | | M 30 |
| Morse Taper MT | Nr. | | 3 |
| Maximum spindle stroke (drilling depth) | mm | | 150 |
| Main motor power | HP(Kw) | 1,20 / 1,80 (0,9 / 1,3) | |
| Coolant pump motor power | HP(Kw) | 0,10 (0,07) | |
| Transmission | | Belt drive | Belt drive |
| Number of speeds | | 10 | Continuous |
| Speed range with motor at 750/1500 rpm 50 Hz Tri. | rpm | 145-220-290-345 | |
| Upon request: | | 440-540-690-860-1080-1720 | |
| Motor at 900/1800 rpm 60 Hz Tri. | | | 80-1170 |
| Feed | | Manual | Automatic |
| Nr. of automatic feeds | | - | 2 |
| Automatic feed range | mm/rev | - | 0,1-0,2 |
| Worktable dimensions (LxW) | mm | 480x400 | |
| Column diameter | mm | 125 | |
| Distance from spindle centre to column face | mm | 300 | |
| Net weight | Kg | 260 | 290 |
| Gross weight with packing | Kg | 310 | 340 |
| Packing dimensions (length x width x height) | m | 2,3x0,6x1,1 | |
| Standard equipment | | Optional equipment (*) | |
| Depth scale and adjustable depth stop | Machined base with coolant tank and pump | ERC Coolant system (independent container) | RS Automatic feed reversing system for tapping |
| Automatic tool ejector | Worklight | MG Rotating table plate | HB Hydro-pneumatic power feed unit |
| Thermomagnetic switch | Drill guard with microswitch | MGI Rotating table plate and tilting support | TAK Digital rpm counter (only for "V" models) |
| Emergency STOP | "CE" mark | MGM Reversible tiltable with vice | |
| Spindle reversing switch | Not standard in every market | MCC Co-ordinate table over support | |
| High/low speed range selector | Please check with your dealer | | |

(*) On display on pages 34-39



Z Series, your decision for:

**Innovative design • Smooth & Silent • Electronic speed variator • Digital rpm counter
Automatic feed reversing for tapping • Easy to run • Low maintenance**



| Characteristics | | SZ-34 | AZ-34 | BZ-34 | SZ-40 | AZ-40 | BZ-40 |
|----------------------------------------------------|--------|-------------|-------------|-------------|-------------|-------|-------|
| Maximum drilling capacity in steel St. 60 | ø mm | | 34 | | | 40 | |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | | 40 | | | 45 | |
| Maximum tapping capacity in steel St. 60 | mm | | M 27 | | | M 33 | |
| Maximum tapping capacity in cast iron 200 Brinell | mm | | M 33 | | | M 39 | |
| Morse Taper MT | Nr. | | 4 | | | 4 | |
| Maximum spindle stroke (drilling depth) | mm | | 150 | | | 180 | |
| Main motor power | HP(Kw) | | 3 (2,2) | | | 4 (3) | |
| Coolant pump motor power | HP(Kw) | | | 0,10 (0,07) | | | |
| Transmission | | | | Belt | | | |
| Number of speeds | | | | Continuous | | | |
| Speed variator type | | | | Electronic | | | |
| Speed range with motor at 1500 rpm 50 Hz 3Ph. | rpm | | | | | | |
| Upon request: | | | | 100-2000 | | | |
| Motor at 1800 rpm 60 Hz 3Ph. (118-2360 rpm) | | | | | | | |
| Feed | | Manual | Automatic | Manual | Automatic | | |
| Nr. of automatic feeds | | - | 3 | - | 3 | | |
| Automatic feed range | mm/rev | - | 0,1-0,2-0,3 | - | 0,1-0,2-0,3 | | |
| Worktable dimensions (LxW) | mm | 400x480 | | | 480x560 | | |
| Column diameter | mm | 125 | | | 150 | | |
| Distance from spindle centre to column face | mm | 300 | | | 350 | | |
| Net weight | Kg | 345 | 360 | 370 | 445 | 460 | 470 |
| Gross weight with packing | Kg | 395 | 410 | 420 | 495 | 510 | 520 |
| Packing dimensions (length x width x height) | m | 2,3x0,6x1,1 | | | | | |

| Standard equipment | Optional equipment (*) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electronic speed variator Potentiometer of speed selector Digital rpm counter RS Automatic feed reversing system for tapping Depth scale and adjustable depth stop Automatic tool ejector Emergency STOP Rightwards turn push button Leftwards turn push button | ERC Coolant system (independent container) MGI Rotating table plate and tilting support MGM Reversible tiltable with vice (only for "Z-34" model) MCC Co-ordinate table over support ACNL Automatic drilling cycle (only for "BZ" models) ACNL-S Automatic drilling cycle for tubes and profiles (only for "BZ" models) |
| Built-in low voltage electrical equipment in machine head Machined base with coolant tank and pump Worklight Spindle turn selection switch Drill guard with microswitch "CE" mark ■ | HB Hydro-pneumatic power feed unit UC Union, dragging cone and assembly for multi-spindle heads GM Multi-spindle head guide rod PM START/STOP/EMERGENCY control extension (only for "BZ" models) SC Column riser of 200 mm |
| ■ Not standard in every market Please check with your dealer | |

(*) On display on pages 34-39



With rotating table plate and tilting support (MGI).

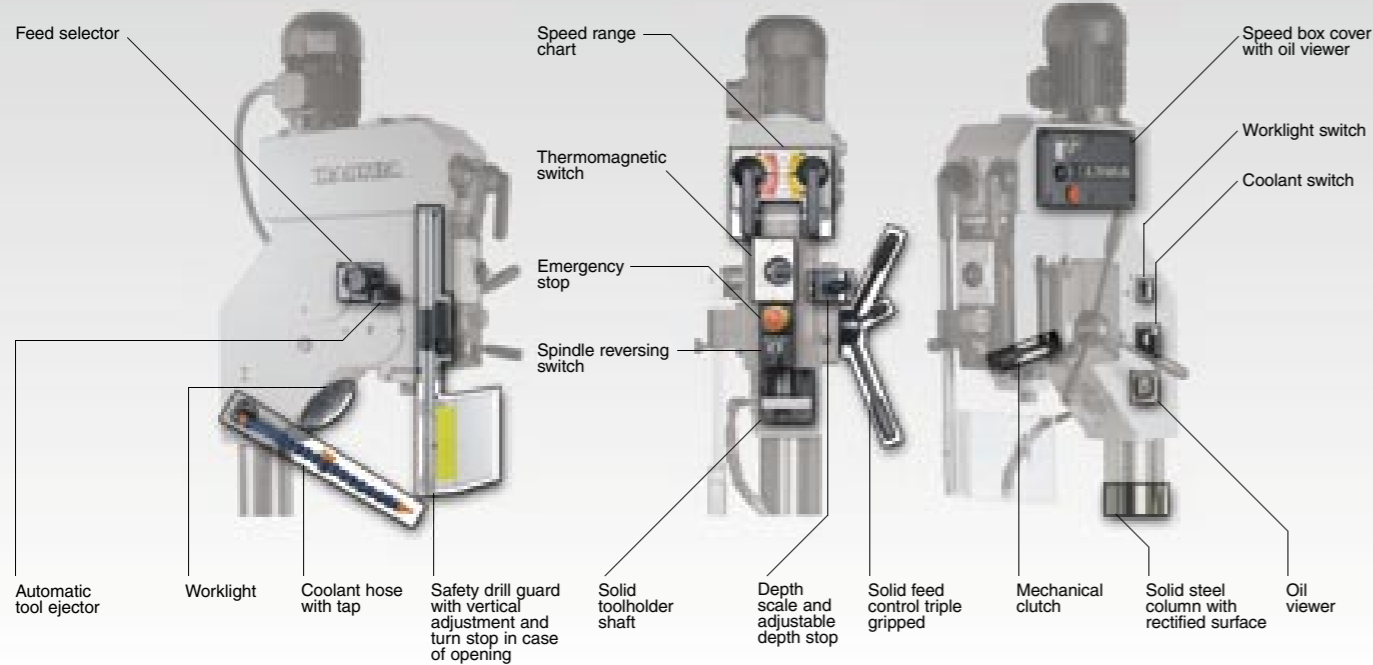
With reversible tiltable with vice (MGM).

With co-ordinate table over support (MCC).



X Series, your decision for:

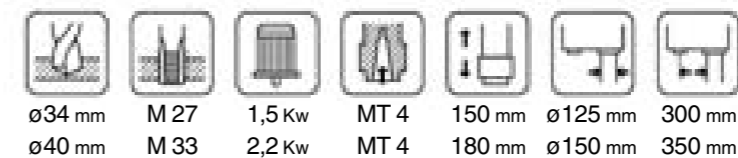
Proven success • Optimum mechanical system • Suitable size and capacity
Easy to run • Long life • Optimum value for money



| | | | | | | |
|--------|------|---------|------|--------|---------|--------|
| | | | | | | |
| ø32 mm | M 18 | 0,75 Kw | MT 3 | 150 mm | ø125 mm | 300 mm |
| ø32 mm | M 22 | 1,1 Kw | MT 3 | 150 mm | ø125 mm | 300 mm |

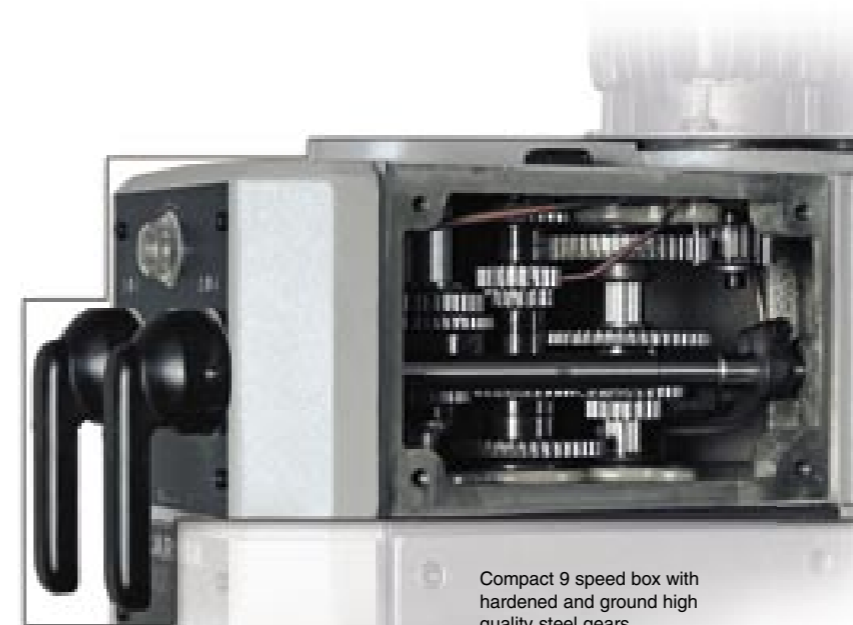
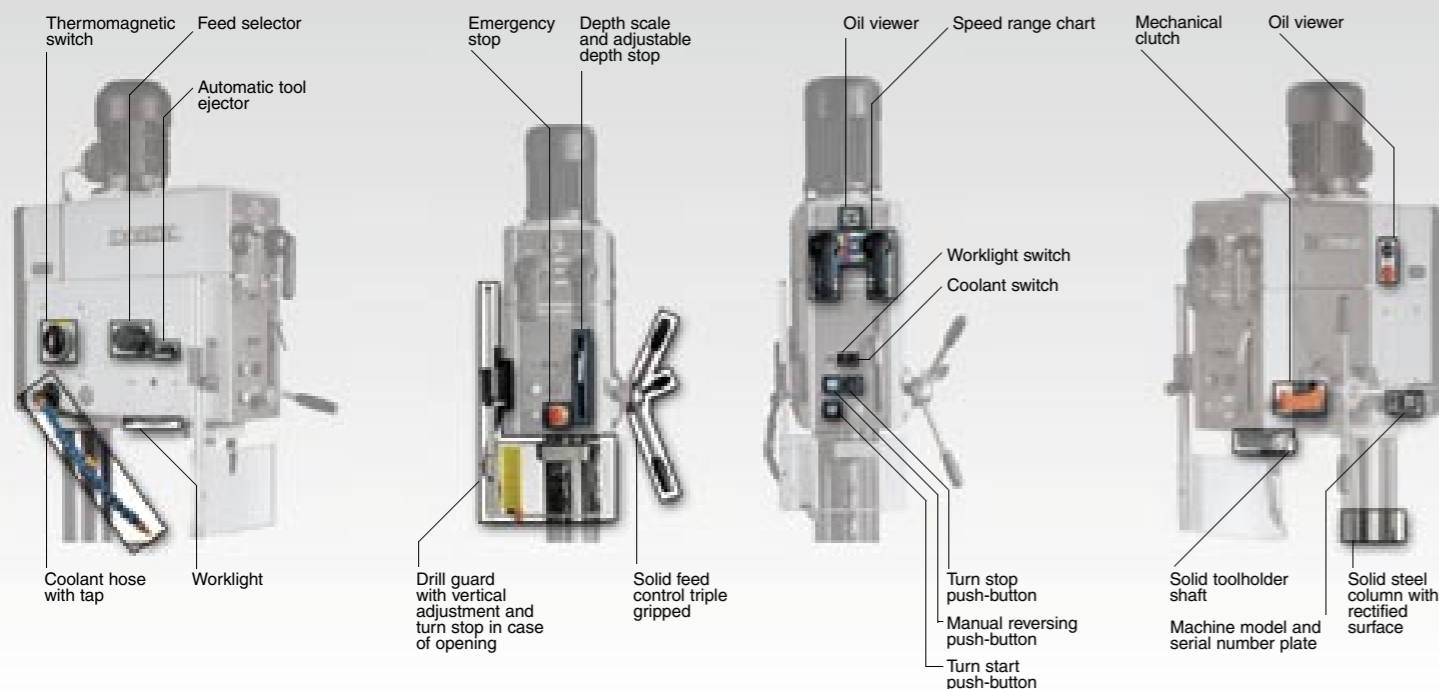
| Characteristics | | SX-32 | AX-32 | | | | | | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------|---------------------------------------|--------------------------------------------|----------------------------------------------|-------------------------|------------------------------------|----------------------------------------------|--|-----------------------------------|--|------------------------------------|--|------------------------------------------------|--|--------------------------------------------------|--|--------------------------------------------------|--|
| Maximum drilling capacity in steel St. 60 | ø mm | 32 | 32 | | | | | | | | | | | | | | | | |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 35 | 35 | | | | | | | | | | | | | | | | |
| Maximum tapping capacity in steel St. 60 | mm | M 18 | M 22 | | | | | | | | | | | | | | | | |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 22 | M 27 | | | | | | | | | | | | | | | | |
| Morse Taper MT | Nr. | 3 | 3 | | | | | | | | | | | | | | | | |
| Maximum spindle stroke (drilling depth) | mm | 150 | 150 | | | | | | | | | | | | | | | | |
| Main motor power | HP(Kw) | 1 (0,75) | 1,5 (1,1) | | | | | | | | | | | | | | | | |
| Coolant pump motor power | HP(Kw) | 0,10 (0,07) | | | | | | | | | | | | | | | | | |
| Transmission | | Gear box | | | | | | | | | | | | | | | | | |
| Number of speeds | | 9 | | | | | | | | | | | | | | | | | |
| Speed range with motor at 1500 rpm 50 Hz 3Ph. | rpm | 104-152-217-250-365-522-692-1015-1450 | | | | | | | | | | | | | | | | | |
| Upon request: Motor at 1800 rpm 60 Hz 3Ph. (125-1740 rpm) | | | | | | | | | | | | | | | | | | | |
| Feed | | Manual | Automatic | | | | | | | | | | | | | | | | |
| Number of automatic feeds | | - | 2 | | | | | | | | | | | | | | | | |
| Automatic feed range | mm/rev | - | 0,1-0,2 | | | | | | | | | | | | | | | | |
| Worktable dimensions (LxW) | mm | 480x400 | | | | | | | | | | | | | | | | | |
| Column diameter | mm | 125 | | | | | | | | | | | | | | | | | |
| Distance from spindle centre to column face | mm | 300 | | | | | | | | | | | | | | | | | |
| Net weight | Kg | 315 | 330 | | | | | | | | | | | | | | | | |
| Gross weight with packing | Kg | 360 | 375 | | | | | | | | | | | | | | | | |
| Packing dimensions (length x width x height) | m | 2,3x0,6x1,1 | | | | | | | | | | | | | | | | | |
| Standard equipment | | | | | | | | | | | | | | | | | | | |
| Hardened and ground high quality steel gears | Speed plate and selecting levers on head front | Gear box lubrication by automatic pump | Depth scale and adjustable depth stop | | | | | | | | | | | | | | | | |
| Automatic tool ejector | Thermomagnetic switch | Emergency STOP | | | | | | | | | | | | | | | | | |
| Spindle reversing switch | Machined base with coolant tank | Worklight | Drill guard with microswitch | | | | | | | | | | | | | | | | |
| CE mark | | | | | | | | | | | | | | | | | | | |
| <table border="0"> <tr> <td>ERC Coolant system (independent container)</td> <td>HGP Master guide spindle and nut set for RPF</td> </tr> <tr> <td>MG Rotating table plate</td> <td>HB Hydro-pneumatic power feed unit</td> </tr> <tr> <td>MGI Rotating table plate and tilting support</td> <td></td> </tr> <tr> <td>MGM Reversible tiltable with vice</td> <td></td> </tr> <tr> <td>MCC Co-ordinate table over support</td> <td></td> </tr> <tr> <td>RS Automatic feed reversing system for tapping</td> <td></td> </tr> <tr> <td>RPF Automatic tapping cycle by lead screw system</td> <td></td> </tr> <tr> <td>RPF-ANR RPF with 100 mm pneumatic rapid approach</td> <td></td> </tr> </table> | | | | ERC Coolant system (independent container) | HGP Master guide spindle and nut set for RPF | MG Rotating table plate | HB Hydro-pneumatic power feed unit | MGI Rotating table plate and tilting support | | MGM Reversible tiltable with vice | | MCC Co-ordinate table over support | | RS Automatic feed reversing system for tapping | | RPF Automatic tapping cycle by lead screw system | | RPF-ANR RPF with 100 mm pneumatic rapid approach | |
| ERC Coolant system (independent container) | HGP Master guide spindle and nut set for RPF | | | | | | | | | | | | | | | | | | |
| MG Rotating table plate | HB Hydro-pneumatic power feed unit | | | | | | | | | | | | | | | | | | |
| MGI Rotating table plate and tilting support | | | | | | | | | | | | | | | | | | | |
| MGM Reversible tiltable with vice | | | | | | | | | | | | | | | | | | | |
| MCC Co-ordinate table over support | | | | | | | | | | | | | | | | | | | |
| RS Automatic feed reversing system for tapping | | | | | | | | | | | | | | | | | | | |
| RPF Automatic tapping cycle by lead screw system | | | | | | | | | | | | | | | | | | | |
| RPF-ANR RPF with 100 mm pneumatic rapid approach | | | | | | | | | | | | | | | | | | | |
| (*) On display on pages 34-39 | | | | | | | | | | | | | | | | | | | |



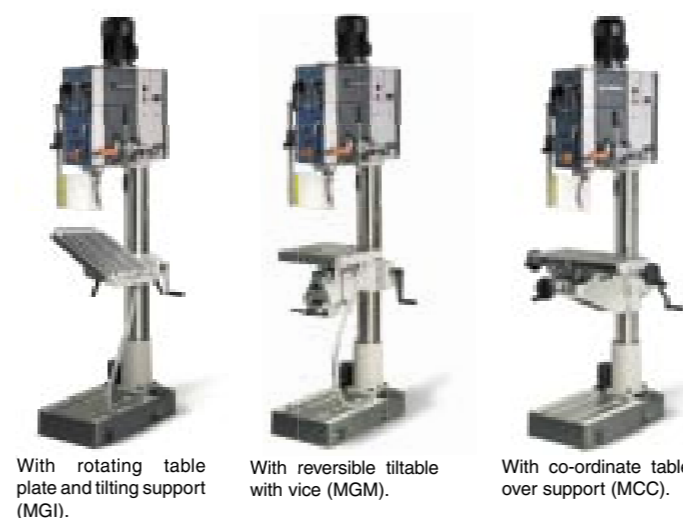


X Series, your choice for:

Innovative design • Variety of alternatives • Suitable size and capacity
Easy to run • Long life • Mechanical reliability



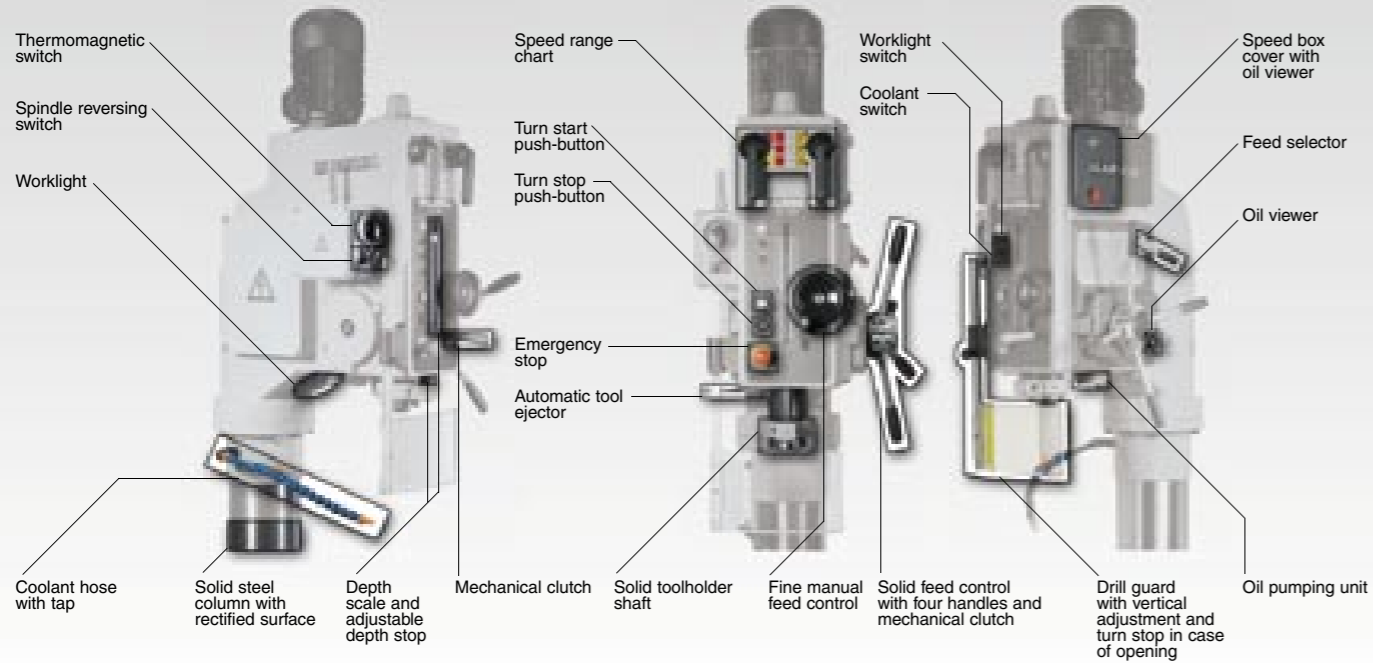
| Characteristics | SX-34 | AX-34 | BX-34 | SX-40 | AX-40 | BX-40 |
|------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------|-------------|---------|--------------------------------------------------------------------------------------|-------|
| Maximum drilling capacity in steel St. 60 | ø mm | 34 | | 40 | | |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 40 | | 45 | | |
| Maximum tapping capacity in steel St. 60 | mm | M 27 | | M 33 | | |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 33 | | M 39 | | |
| Morse Taper MT | Nr. | 4 | | 4 | | |
| Maximum spindle stroke (drilling depth) | mm | 150 | | 180 | | |
| Main motor power | HP(Kw) | 2 (1,5) | | 3 (2,2) | | |
| Coolant pump motor power | HP(Kw) | | 0,10 (0,07) | | | |
| Transmission | | Gear box | | | | |
| Number of speeds | | 9 | | | | |
| Speed range with motor at 1500 rpm 50 Hz 3Ph. | rpm | 132-194-277-319-466-666-883-1296-1852 | | | | |
| Upon request: Motor at 1800 rpm 60 Hz 3Ph. (160-2220 rpm) | | | | | | |
| Feed | | Manual | Automatic | Manual | Automatic | |
| Number of automatic feeds | | - | 3 | - | 3 | |
| Automatic feed range | mm/rev | - | 0,1-0,2-0,3 | - | 0,1-0,2-0,3 | |
| Worktable dimensions (LxW) | mm | 400x480 | | | 480x560 | |
| Column diameter | mm | 125 | | | 150 | |
| Distance from spindle centre to column face | mm | 300 | | | 350 | |
| Net weight | Kg | 385 | 400 | 410 | 475 | 490 |
| Gross weight with packing | Kg | 435 | 450 | 460 | 525 | 540 |
| Packing dimensions (length x width x height) | m | 2,3x0,6x1,1 | | | | |
| Standard equipment | | | | | | |
| Hardened and ground high quality steel gears | Machined base with coolant tank | ERC Coolant system (independent container) | | | ACNL-S Automatic drilling cycle for tubes and profiles (only for "BX" models) | |
| Speed plate and selecting levers on head front | Worklight | MGI Rotating table plate and tilting support | | | HB Hydro-pneumatic power feed unit | |
| Gear box lubrication by automatic pump | Spindle turn selection switch | MGM Reversible tiltable with vice (only for "X-34" models) | | | UC Union, dragging cone and assembly for multi-spindle heads | |
| Depth scale and adjustable depth stop | Drill guard with microswitch ■ | MCC Co-ordinate table over support | | | GM Multi-spindle head guide rod | |
| Automatic tool ejector | "CE" mark ■ | RS Automatic feed reversing system for tapping | | | PM START/STOP/EMERGENCY control extension (only for "BX" models) | |
| Emergency STOP | | RPF Automatic tapping cycle by lead screw system | | | SC Column riser of 200 mm | |
| Spindle reversing switch | | RPF-ANR RPF with 100 mm pneumatic rapid approach | | | | |
| Built-in low voltage electrical equipment in machine head | | HGP Master guide spindle and nut set for RPF | | | | |
| | | ACNL Automatic drilling cycle (only for "BX" models) | | | | |
| | ■ Not standard in every market Please check with your dealer | | | | | |



(*) On display on pages 34-39

A Series, your choice for:

Mechanical reliability • Size and ergonomics • Industrial use • Real capacity
Variety of sizes • Full equipment • Long life • Lasting value



| | | | | | | |
|--------|------|--------|------|--------|---------|--------|
| | | | | | | |
| ø35 mm | M 27 | 1,5 Kw | MT 4 | 200 mm | ø160 mm | 370 mm |
| ø40 mm | M 33 | 2,2 Kw | MT 4 | 200 mm | ø180 mm | 385 mm |
| ø45 mm | M 33 | 2,2 Kw | MT 4 | 200 mm | ø180 mm | 385 mm |
| ø50 mm | M 36 | 3 Kw | MT 4 | 230 mm | ø200 mm | 370 mm |

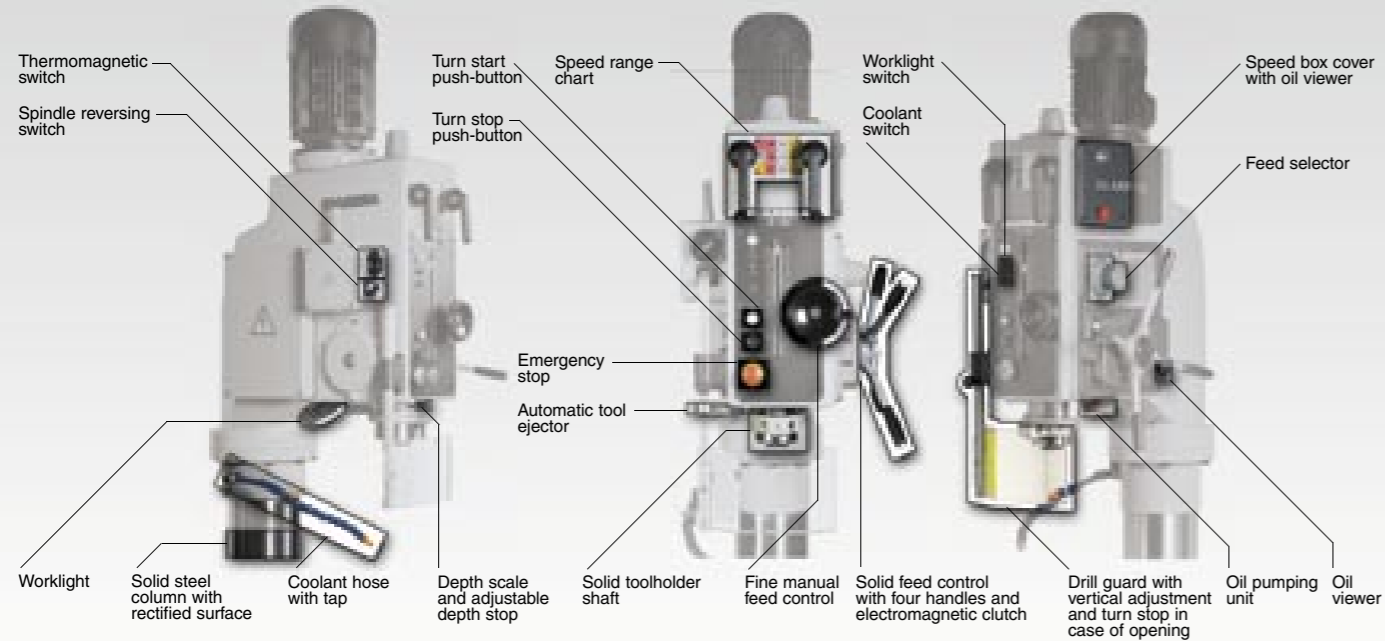
| Characteristics | | A-35 | A-40 | A-45 | A-50 |
|--------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------|-----------------|--------------|
| Maximum drilling capacity in steel St. 60 | ø mm | 35 | 40 | 45 | 50 |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 45 | 50 | 55 | 60 |
| Maximum tapping capacity in steel St. 60 | mm | M 27 | | M 33 | M 36 |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 33 | | M 40 | M 42 |
| Morse Taper MT | Nr. | | | 4 | |
| Maximum spindle stroke (drilling depth) | mm | | 200 | | 230 |
| Main motor power | HP(Kw) | 2 (1,5) | | 3 (2,2) | 4 (3) |
| Coolant pump motor power | HP(Kw) | | | 0,10 (0,07) | |
| Transmission | | | | Gear box | |
| Number of speeds | | | | 9 | |
| Speed range with motor at 1500 rpm 50 Hz 3Ph. | rpm | 81-115-162 | | 61-85-123 | 54-75-109 |
| Upon request: | | 226-321-452 | | 191-269-390 | 169-237-344 |
| Motor at 1800 rpm 60 Hz 3Ph. | | 637-904-1274 | | 574-806-1169 | 507-712-1032 |
| Feed | | Automatic by mechanical clutch | | | |
| Number of automatic feeds | | 3 | | 4 | |
| Automatic feed range | mm/rev | 0,1-0,2-0,3 | | 0,1-0,2-0,3-0,4 | |
| Worktable dimensions (LxW) | mm | 560x480 | | 620x520 | |
| Column diameter | mm | 160 | | 180 | 200 |
| Distance from spindle centre to column face | mm | 370 | | 385 | 370 |
| Net weight | Kg | 490 | 610 | 640 | 710 |
| Gross weight with packing | Kg | 570 | 695 | 725 | 795 |
| Packing dimensions (length x width x height) | m | 2,3x0,6x1,1 | | 2,5x0,6x1,2 | 2,6x0,6x1,2 |
| Standard equipment | | Optional equipment (*) | | | |
| Hardened and ground high quality steel gears | Depth scale and adjustable depth stop | MGI Rotating table plate and tilting support | UC Union, dragging cone and assembly | | |
| Speed plate and selecting levers on head front | Automatic tool ejector | RS Automatic feed reversing system for tapping | GM Multi-spindle head guide rod | | |
| Gear box lubrication by automatic pump | Built-in low voltage electrical equipment in machine head | RPF Automatic tapping cycle by lead screw system | SC Column riser of 200 mm | | |
| Machined base with coolant tank and pump | Emergency STOP | RPF-ANR RPF with 100 mm pneumatic rapid approach | | | |
| Worklight | Spindle turn selection switch | HGP Master guide spindle and nut set for RPF | | | |
| Rotating table plate | Drill guard with microswitch ■ | HB Hydro-pneumatic power feed unit | | | |
| Automatic feed and cut-off by mechanical clutch | "CE" mark ■ | AR Feed range reduced to 50% of their standard values | | | |
| Front hand wheel for fine feed work | ■ Not standard in every market Please check with your dealer | DLM Mechanical spotface device | | | |
| | | CN Pneumatic counterbalance for spindle return | | | |

(*) On display on pages 34-39



B Series, your choice for:

**Easy to run • Mechanical reliability • Technology • Size and ergonomics • Industrial use
True capacity • Variety of sizes • Full equipment • Long life • Lasting value**



| | | | | | | |
|--------|------|--------|------|--------|---------|--------|
| ø35 mm | M 27 | 1,5 Kw | MT 4 | 200 mm | ø160 mm | 370 mm |
| ø40 mm | M 33 | 2,2 Kw | MT 4 | 200 mm | ø180 mm | 385 mm |
| ø45 mm | M 33 | 2,2 Kw | MT 4 | 200 mm | ø180 mm | 385 mm |
| ø50 mm | M 36 | 3 Kw | MT 4 | 230 mm | ø200 mm | 370 mm |
| ø60 mm | M 42 | 4 Kw | MT 5 | 260 mm | ø220 mm | 400 mm |
| ø70 mm | M 50 | 5,5 Kw | MT 5 | 260 mm | ø220 mm | 400 mm |

| Characteristics | | B-35 | B-40 | B-45 | B-50 | B-60 | B-70 |
|----------------------------------------------------|--------|-------------------------------------|-----------------|--------------|-------------------------|-----------------|------|
| Maximum drilling capacity in steel St. 60 | ø mm | 35 | 40 | 45 | 50 | 60 | 70 |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 45 | 50 | 55 | 60 | 70 | 80 |
| Maximum tapping capacity in steel St. 60 | mm | M 27 | M 33 | M 33 | M 36 | M 42 | M 50 |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 33 | M 40 | M 40 | M 42 | M 50 | M 60 |
| Morse Taper MT | Nr. | 4 | | | | 5 | |
| Maximum spindle stroke (drilling depth) | mm | 200 | | | 230 | 260 | |
| Main motor power | HP(Kw) | 2 (1,5) | 3 (2,2) | 4 (3) | 5,5 (4) | 7,5 (5,5) | |
| Coolant pump motor power | HP(Kw) | 0,10 (0,07) | | | 0,12 (0,09) | | |
| Transmission | | Gear box | | | | | |
| Number of speeds | | 9 | | | | 12 | |
| Speed range with motor at 1500 rpm 50 Hz 3Ph. | rpm | 81-115-162 | 61-85-123 | 54-75-109 | 64-80-106-138 | 51-64-84-110 | |
| Upon request: | | 226-321-452 | 191-269-390 | 169-237-344 | 199-248-328-429 | 158-198-262-342 | |
| Motor at 1800 rpm 60 Hz 3Ph. | | 637-904-1274 | 574-806-1169 | 507-712-1032 | 561-701-926-1210 | 447-559-738-966 | |
| Feed | | Automatic by electromagnetic clutch | | | | | |
| Number of automatic feeds | | 3 | 4 | | 6 | | |
| Automatic feed range | mm/rev | 0,1-0,2-0,3 | 0,1-0,2-0,3-0,4 | | 0,1-0,2-0,3-0,4-0,5-0,6 | | |
| Worktable dimensions (LxW) | mm | 560x480 | | 620x520 | | 700x600 | |
| Column diameter | mm | 160 | 180 | | 200 | 220 | |
| Distance from spindle centre to column face | mm | 370 | 385 | | 370 | 400 | |
| Net weight | Kg | 490 | 610 | 640 | 720 | 820 | 840 |
| Gross weight with packing | Kg | 570 | 695 | 725 | 805 | 920 | 940 |
| Packing dimensions (length x width x height) | m | 2,3x0,6x1,1 | 2,5x0,6x1,2 | | 2,6x0,6x1,2 | 2,7x0,7x1,2 | |

| Standard equipment | | Optional equipment (*) | |
|-------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|
| Hardened and ground high quality steel gears | Depth scale and adjustable depth stop | MGI Rotating table plate and tilting support | DLM Mechanical spotface device |
| Speed plate and selecting levers on head front | Automatic tool ejector | RS Automatic feed reversing system for tapping | CN Pneumatic counterbalance for the spindle |
| Gear box lubrication by automatic pump | Built-in low voltage electrical equipment in machine head | RPF Automatic tapping cycle by lead screw system | UC Union, dragging cone and assembly for multi-spindle heads |
| Machined base with coolant tank and pump | Emergency STOP | RPF-ANR RPF with 100 mm pneumatic rapid approach | GM Multi-spindle head guide rod |
| Worklight | Spindle turn selection switch | HGP Master guide spindle and nut set for RPF | PM START/STOP/EMERGENCY control extension |
| Rotating table plate | Drill guard with microswitch ■ | ACNL Automatic drilling cycle | SC Column riser of 200 mm |
| Automatic feed and cut-off by electromagnetic clutch | "CE" mark ■ | ACNL-S Automatic drilling cycle for tubes and profiles | |
| Front hand wheel for fine feed work | | ACNL-RPF Automatic drilling and tapping cycles | |
| | ■ Not standard in every market Please check with your dealer | AR Feed range reduced to 50% of their standard values | |

(*) On display on pages 34-39



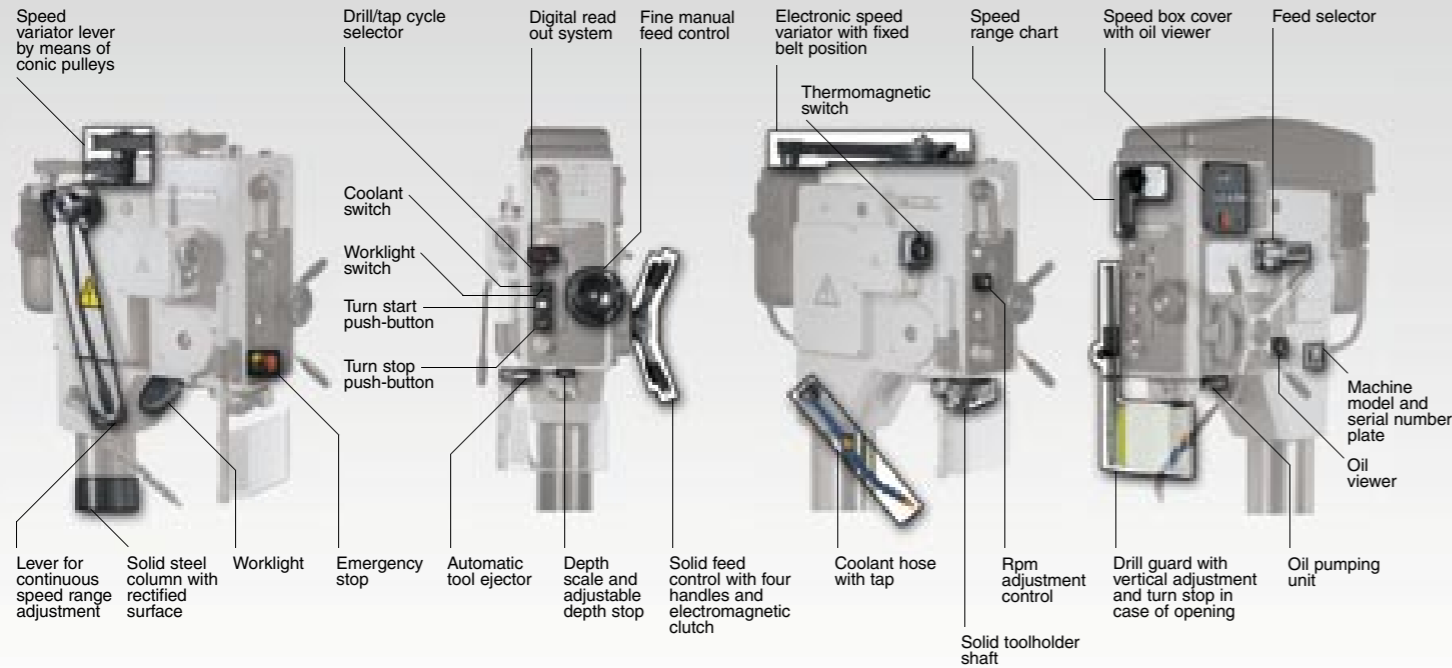
With rotating table plate and tilting support (MGI).

B-50

| | | | | | | |
|--------|------|------|------|--------|---------|--------|
| | | | | | | |
| ø40 mm | M 36 | 3 Kw | MT 4 | 200 mm | ø180 mm | 385 mm |
| ø50 mm | M 42 | 4 Kw | MT 4 | 200 mm | ø200 mm | 370 mm |

C Series, your choice for:

**Continuous speed range • Digital display of revolutions • Spindle reverse for tapping
Easy to run • State of the art technology • Industrial use • Full equipment**



| Characteristics | | BC-40V | BC-40VE | BC-50V | BC-50VE |
|----------------------------------------------------|--------|-------------------------------------|-------------|-------------|------------|
| Maximum drilling capacity in steel St. 60 | ø mm | 40 | | | 50 |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 50 | | | 60 |
| Maximum tapping capacity in steel St. 60 | mm | M 36 | | | M 42 |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 42 | | | M 50 |
| Morse Taper MT | Nr. | 4 | | | 4 |
| Maximum spindle stroke (drilling depth) | mm | 200 | | | 200 |
| Main motor power | HP(Kw) | 4 (3) | | | 5,5 (4) |
| Coolant pump motor power | HP(Kw) | | 0,10 (0,07) | | |
| Transmission | | | Belt/Gears | | |
| Number of speeds | | | Continuous | | |
| Speed variator type | | Mechanical | Electronic | Mechanical | Electronic |
| Speed range with motor at 1500 rpm 50 Hz 3Ph. | rpm | 60 a 200 | 30 a 230 | 60 a 200 | 30 a 230 |
| Speed range selection in 3 steps | | 200 a 600 | 90 a 730 | 200 a 600 | 90 a 730 |
| Upon request motor at 1800 rpm 60 Hz 3Ph. | | 600 a 1500 | 190 a 1500 | 600 a 1500 | 190 a 1500 |
| Feed | | Automatic by electromagnetic clutch | | | |
| Number of automatic feeds | | 4 | | | |
| Automatic feed range | mm/rev | 0,1-0,2-0,3-0,4 | | | |
| Worktable dimensions (LxW) | mm | 560x480 | | 620x520 | |
| Column diameter | mm | 180 | | 200 | |
| Distance from spindle centre to column face | mm | 385 | | 370 | |
| Net weight | Kg | 660 | | 760 | |
| Gross weight with packing | Kg | 750 | | 850 | |
| Packing dimensions (length x width x height) | m | 2,2x0,7x1,2 | | 2,2x0,7x1,3 | |

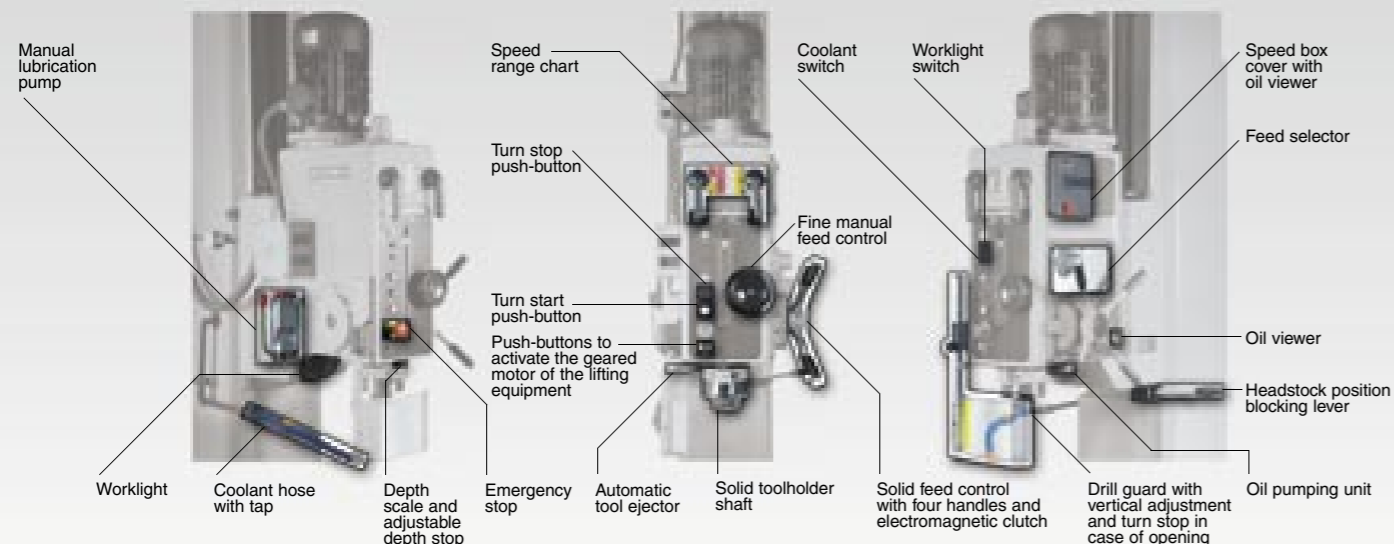
| Standard equipment | Optional equipment (*) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Wide continuous speed range in 3 steps</p> <p>Speed plate and selecting levers on head front</p> <p>Mechanical speed variator in "V" model</p> <p>Electronic speed variator in "VE" model</p> <p>Digital rpm counter in front plate</p> <p>Gear box lubrication by automatic pump</p> <p>Machined base with coolant tank and pump</p> <p>Worklight</p> | <p>MGI Rotating table plate and tilting support</p> <p>AR Feed range reduced to 50% of their standard values</p> |
| <p>Rotating table plate</p> <p>Automatic feed and cut-off by electromagnetic clutch</p> <p>Front hand wheel for fine feed work</p> <p>Depth scale and adjustable depth stop</p> <p>Automatic feed reversing system for tapping</p> <p>Automatic tool ejector</p> | <p>Built-in low voltage electrical equipment in machine head</p> <p>Emergency STOP</p> <p>Spindle turn selection switch</p> <p>Drill guard with microswitch ■</p> <p>"CE" mark ■</p> |
| <p>■ Not standard in every market Please check with your dealer</p> | <p>(*) On display on pages 34-39</p> |



| | | | | | |
|--------|------|--------|------|--------|--------|
| | | | | | |
| ø40 mm | M 33 | 2,2 Kw | MT 4 | 200 mm | 400 mm |
| ø50 mm | M 42 | 4 Kw | MT 4 | 230 mm | 475 mm |
| ø70 mm | M 64 | 7,3 Kw | MT 5 | 260 mm | 525 mm |

P Series, your purchase for:

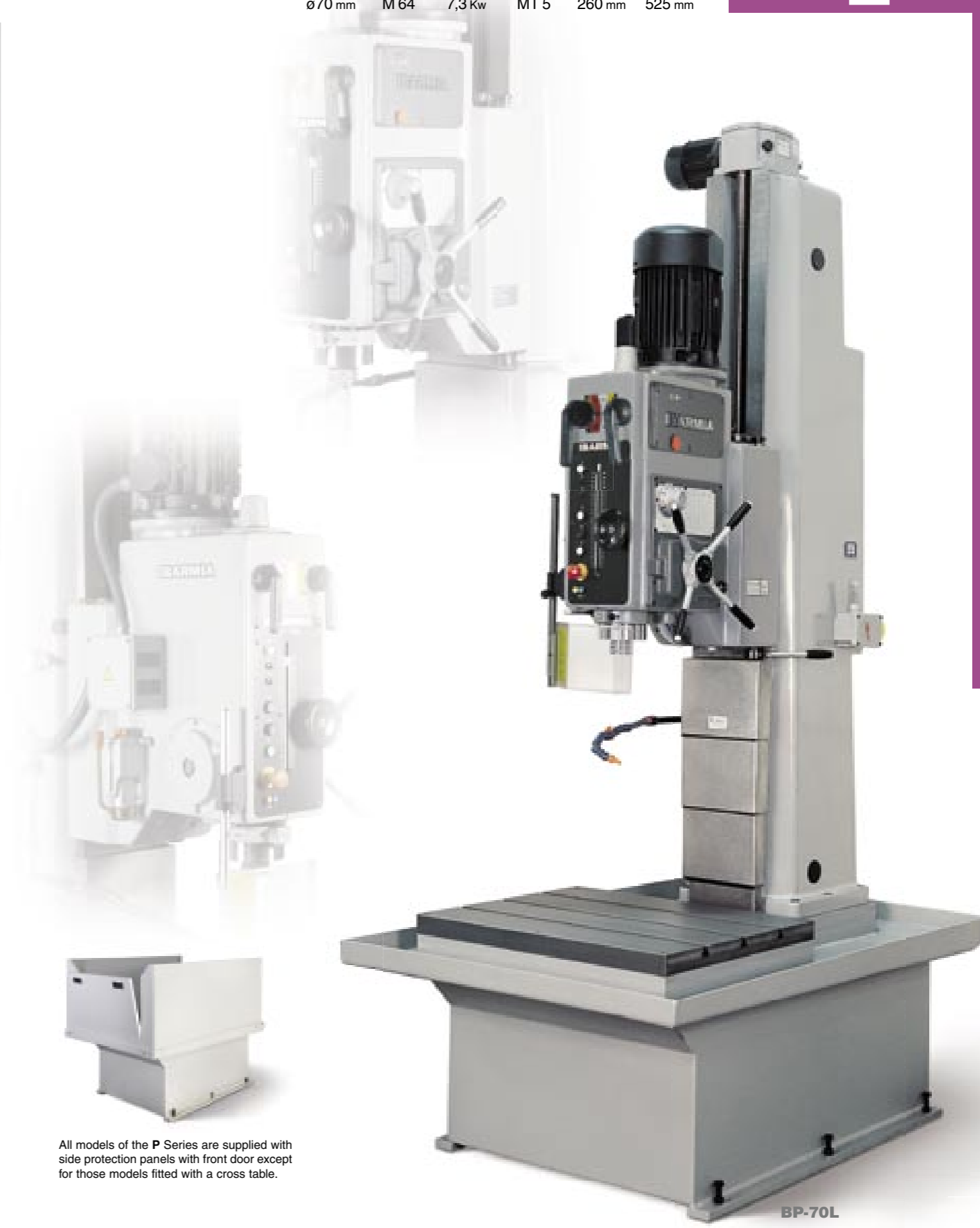
Power • Precision • Productivity • Mechanical reliability • Technology • Industrial use
True capacity • Variety of sizes • Complete equipment • Long life • Lasting value



| Characteristics | | BP-40 | BP-50 | BP-50L | BP-70 | BP-70L |
|----------------------------------------------------|--------|-------------------------------------|-------------------------|-------------|--------------|-------------|
| Maximum drilling capacity in steel St. 60 | ø mm | 40 | 50 | 50 | 70 | 70 |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 50 | 60 | 60 | 80 | 80 |
| Maximum tapping capacity in steel St. 60 | mm | mm | M 33 | M 42 | | M 64 |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 40 | | M 50 | | M 68 |
| Morse taper MT | Nr. | | 4 | | | 5 |
| ISO taper (upon request) | Nr. | 30 | 40 | 40 | 50 | 50 |
| Maximum spindle stroke (drilling depth) | mm | 200 | 230 | 230 | 260 | 260 |
| Main motor power | HP(Kw) | 3 (2,2) | 5,5 (4) | 5,5 (4) | 10 (7,3) | 10 (7,3) |
| Coolant pump motor power | HP(Kw) | | 0,12 (0,09) | 0,12 (0,09) | | |
| Rise and falling head geared-motor power | HP(Kw) | 1 (0,73) | | 1,5 (1,1) | | |
| Transmission | | Gear box | | | | |
| Number of speeds | | 9 | | | 12 | |
| Speed range with motor at 1500 rpm 50 Hz 3Ph. | rpm | 81-115-162 | 54-75-109 | | 51-64-84-110 | |
| Upon request: | | 226-321-452 | 169-237-344 | | 158-198-262 | |
| Motor at 1800 rpm 60 Hz 3Ph. | | 637-904 | 507-712 | | 342-447-559 | |
| | | 1274 | 1032 | | 738-966 | |
| Feed | | Automatic by electromagnetic clutch | | | | |
| Number of automatic feeds | | 3 | 6 | | | |
| Automatic feed range | mm/rev | 0,1-0,2-0,3 | 0,1-0,2-0,3-0,4-0,5-0,6 | | | |
| Worktable dimensions (LxW) | mm | 600x500 | 700x600 | | 900x700 | |
| Distance from spindle centre to column face | mm | 400 | 475 | | 525 | |
| Net weight | Kg | 1100 | 1400 | 1600 | 1850 | 2100 |
| Gross weight with packing | Kg | 1300 | 1600 | 1850 | 2100 | 2400 |
| Packing dimensions (length x width x height) | m | 2,2x0,9x1,3 | 2,6x1,1x1,7 | 3,2x1,1x1,9 | 2,7x1,3x1,8 | 3,2x1,3x1,8 |

| Standard equipment | Optional equipment (*) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Adjusting of the vertical position of the head by geared-motor</p> <p>Hardened and ground high quality steel gears</p> <p>Gear box lubrication by automatic pump</p> <p>Automatic guide greasing by manual pump</p> <p>Speed plate and selecting levers on head front</p> <p>Coolant tank and pump in machine base</p> <p>Worklight</p> <p>Ample fixed worktable</p> <p>Automatic feed and cut-off by electromagnetic clutch</p> <p>Front hand wheel for fine feed work</p> | <p>RS Automatic feed reversing for tapping</p> <p>RPF Automatic tapping cycle by lead</p> <p>RPF-ANR RPF with 100 mm pneumatic rapid approach</p> <p>HGP Master guide spindle and nut set for RPF</p> <p>ACNL Automatic drilling cycle</p> <p>ACNL-S Automatic drilling cycle for tubes and profiles</p> <p>ACNL-RPF Automatic drilling and tapping</p> <p>AR Feed range reduced to 50% of their standard values</p> <p>LDG Digital read-out system for table axis</p> <p>MH-4 Cross table</p> <p>DLM Mechanical spotface device</p> <p>CN Pneumatic counterbalance for the spindle</p> |
| <p>Depth scale and adjustable depth stop</p> <p>Automatic tool ejector</p> <p>Built-in low voltage electrical equipment in column rear</p> <p>Emergency STOP</p> <p>Rightwards turn push button</p> <p>Leftwards turn push button</p> <p>Drill guard with microswitch</p> <p>Side protection panels with front door</p> <p>"CE" mark</p> <p>■ Not standard in every market Please check with your dealer</p> | <p>UC Union, dragging cone and assembly multiple</p> <p>GM Multi-spindle head guide rod</p> <p>PM START/STOP/EMERGENCY control extension</p> <p>PMC Suspendel control panel (all functions)</p> <p>ISO-40 ISO-40 spindle with quick tool change nut (only for models 50)</p> <p>ISO-50 ISO-50 spindle with quick tool change nut (only for models 70)</p> |

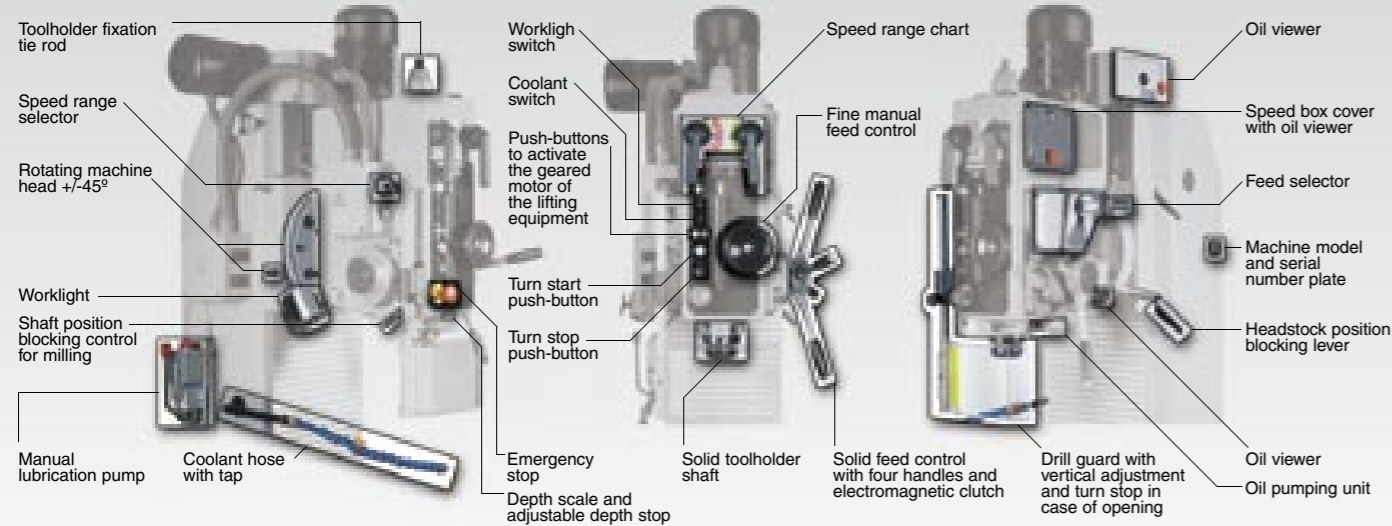
(*) On display on pages 34-39



All models of the P Series are supplied with side protection panels with front door except for those models fitted with a cross table.

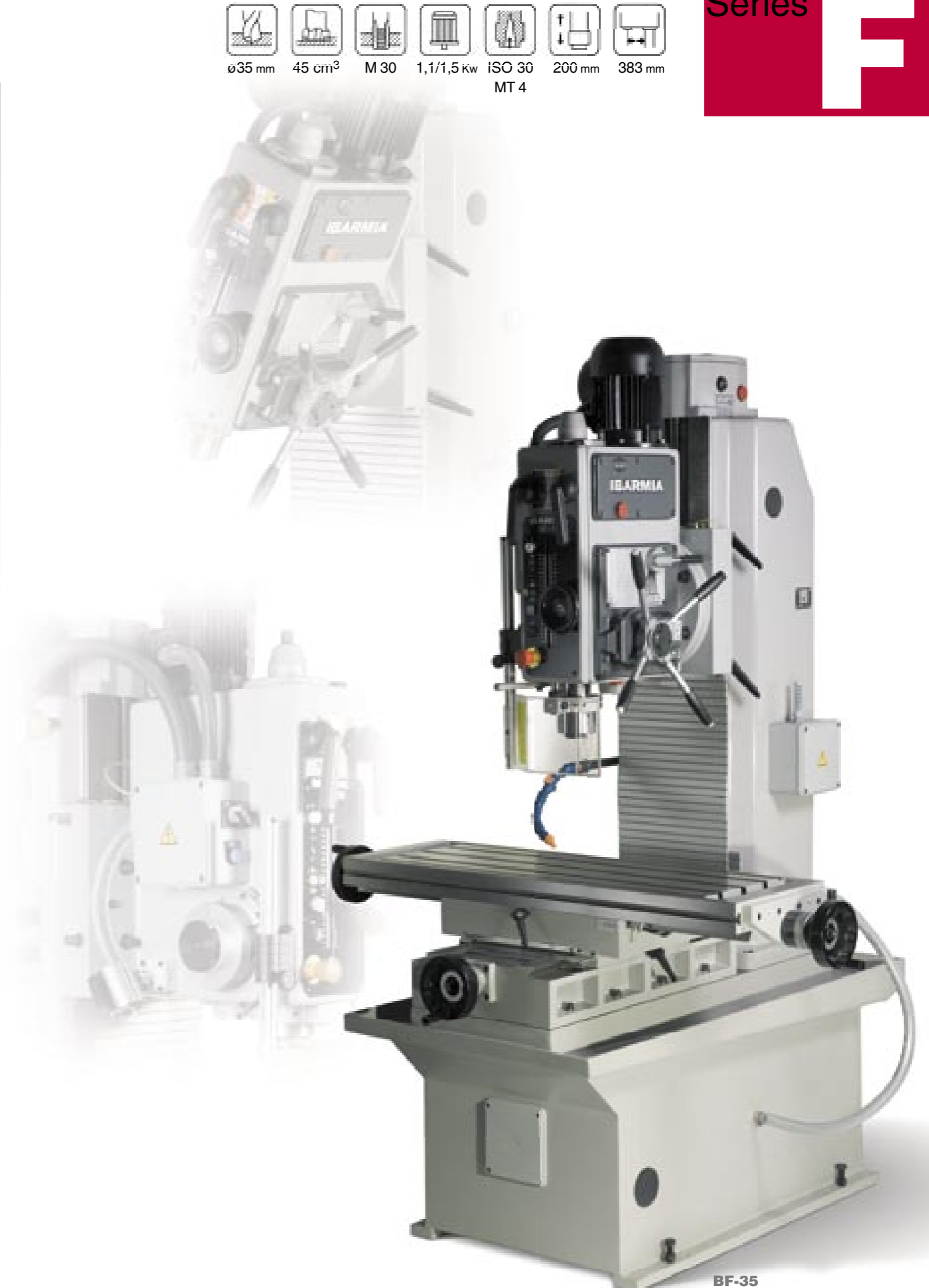
BP-70L

Mechanical skill • Creativity • Multifunctional use • Precision
Ample cross table • Complete equipment • Reliability



| Characteristics | | BF-35 |
|------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------|
| Maximum drilling capacity in steel St. 60 | ø mm | 35 |
| Maximum drilling capacity in cast iron 200 Brinell | ø mm | 40 |
| Maximum milling capacity in steel St. 60 | cm ³ /min | 45 |
| Maximum milling capacity in cast iron 200 Brinell | cm ³ /min | 80 |
| Maximum tapping capacity in steel St. 60 | mm | M 30 |
| Maximum tapping capacity in cast iron 200 Brinell | mm | M 33 |
| ISO tape | Nr. | 30 |
| Morse taper MT (upon request) | Nr. | 4 |
| Maximum spindle stroke (drilling depth) | mm | 200 |
| Main motor power | HP(Kw) | 1,5 / 2 (1,1 / 1,5) |
| Coolant pump motor power | HP(Kw) | 0,12 (0,09) |
| Rise and falling head geared-motor power | HP(Kw) | 1 (0,75) |
| Transmission | | Gear box |
| Number of speeds | | 18 |
| Speed range with motor at 1500/3000 rpm 50 Hz 3Ph. | rpm | 75 155 285 430 825 1200 |
| Upon request: | | 106 200 310 575 850 1680 |
| Motor at 1800/3600 rpm 60 Hz 3Ph. (125-2850 rpm) | | 140 220 400 600 1150 2375 |
| Feed | | Automatic by electromagnetic clutch |
| Number of automatic feeds | | 3 |
| Automatic feed range | mm/rev | 0,1 - 0,2 - 0,3 |
| Worktable dimensions (LxW) | mm | 1200x360 |
| Longitudinal movement of the table (X) | mm | 700 |
| Cross movement of the table (Y) | mm | 360 |
| Distance from spindle centre to column face | mm | 383 |
| Net weight | Kg | 1250 |
| Gross weight with packing | Kg | 1450 |
| Packing dimensions (length x width x height) | m | 1,6x1,6x2,3 |
| Standard equipment | | Optional equipment (*) |
| Adjustment of the vertical position of the head by geared-motor | Automatic feed and cut-off by electromagnetic clutch | RS Automatic feed reversing for tapping |
| 45° tilting head on both sides of the central axis | Front hand wheel for fine feed work | AR Feed range reduced to 50% of their standard values |
| Hardened and ground high quality steel gears | Depth scale and adjustable depth stop | LDG Digital read-out system for the table |
| Gear box lubrication by automatic pump | Automatic tool ejector | SERVO X Electronic feed unit for table X axis |
| Automatic guide greasing by manual pump | Built-in low voltage electrical equipment in column rear | SERVO Y Electronic feed unit for table Y axis |
| Speed plate and selecting levers on head front | Emergency STOP | HM4 MORSE taper MT4 ● |
| High/low speed range selector | Spindle turn selection switch | TCR Quick tool change nut for ISO-30 |
| Coolant tank and pump in machine base | Drill guard with microswitch ■ | |
| Worklight | "CE" mark ■ | |
| Co-ordinate cross table | ■ Not standard in every market Please check with your dealer | |

● No extra price
(*) On display on pages 34-39

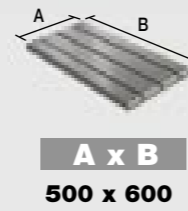
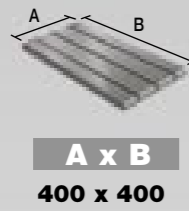


BF-35

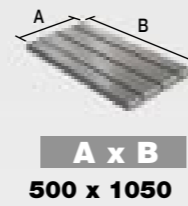
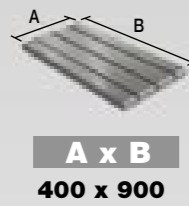


Dimensions in mm.

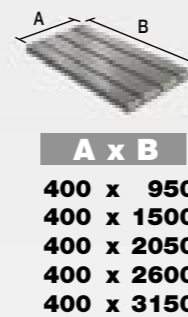
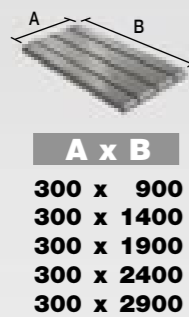
Drill with fixed table and rise and falling head



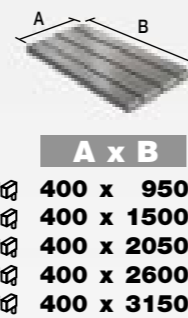
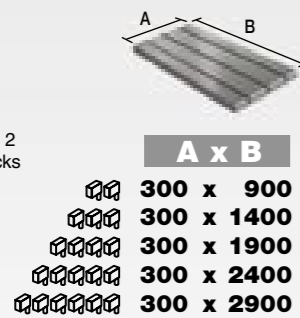
Drill with oversize table and rotating rise and falling head



Drill with extralarge fixed table and rise and falling head



Drill batteries 2 to 6 headstocks



An ample fixed work table is often interesting because:

- it offers greater convenience for the positioning of the necessary parts and elements,
- bulky or heavy pieces can be secured to the work table.

For these cases we offer our drill batteries, machines whose construction has one over-riding rule: **flexibility.**

As well as for bulky or heavy pieces, these assemblies are very interesting

for jobs in big batches where the piece must receive more than one operation as it moves from one machine head to another, receiving each operation in turn. Naturally, each machine head can be equipped differently according to the function of the operation (automatic drilling cycle, automatic tapping cycle, spotfacing, etc...).

One of the highlights of these drill batteries is that the machine heads can rotate radially extending the field of applications, allowing a

greater number of operations without having to move the piece around the worktable.

In IBARMIA we offer you an endless number of combinations so that you can set up the machine to match your needs exactly. Tables of different widths and/or lengths can be combined with one, two, three .. up to six machines heads. Detailed information on the different sizes of table and number of machine heads can be found on pages 42-43.



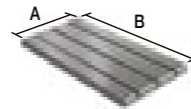


BP-70 with MH-4 cross table and PMC pendent control panel. The MH-4 table can also be optionally equipped with automatic feed (see page 35).



AVAILABLE TABLES

| BP-40 BP-50 | | BP-70 | |
|----------------|------------|------------|------------|
| A x B | A x B | A x B | A x B |
| 400 x 950 | 500 x 1050 | 500 x 1050 | 500 x 1650 |
| 400 x 1500 | 500 x 1650 | 500 x 1650 | 500 x 2250 |
| 400 x 2050 | 500 x 2250 | 500 x 2250 | 500 x 2850 |
| 400 x 2600 | 500 x 2850 | 500 x 2850 | 500 x 3450 |
| 400 x 3150 | | | |



Dimensions in mm.



BP-50 with extralarge table of 400x1500 mm. for the drilling of rods using a multi-spindle drilling head arranged in a line.



Standard version of a 4BP-40 drill battery with a 400 x 2050 mm. worktable supplied to a subcontractor of the railway industry.

These assemblies are extremely interesting in jobs of long production series where the piece undergoes more than one operation, moving from one machine head to another, receiving each operation in turn. Naturally, each machine head can be equipped differently according to the function of the operation (automatic drilling cycle, automatic tapping cycle, spotfacing, etc...). In many cases, these solutions are much more productive than machines such as machining centres and at a much lower cost.



3BP-50

Special constructions of round column



Simultaneous drilling of 76 holes in a paddle pallet.



2 Headstock drill battery (drill/tap by means of master guide spindle and nut set) for automotion hinges.



Hydraulic self-centering clamping tools for automotion hinges.



Drill with rotating head over double table base. The back lower table allows working on big pieces.

Our experience comes from the manufacturing of hundreds of machines, hand in hand with our clients, carrying out in practice projects of "shared engineering": responding to the problems and needs that the client has with solutions that our experience tells us are the most appropriate. This sharing of needs and experience has led to ingenious solutions and machines.

Numerous applications of our machines are to be found in the automobile components sector, manufacturing of valves, flanges, etc..., providing solutions for productivity and cost machine/piece which are unbeatable even by the most sophisticated numerical control machines.

Special constructions of prismatic column



Pneumatic self-centering 3 jaw chuck with synchronized open/close cycle.



4 Position rotating table for circular drill battery with synchronized hydraulic clamping tools.



2 Headstock drill battery including full guarding, automatic doors, working area division, synchronized clamping tools, automatic chip conveyor and outside control panel.



4 Position circular drill battery:
 • Position 1: loading with automatic regulation of the piece length.
 • Position 2: drilling operation.
 • Position 3: tapping operation.
 • Position 4: automatic ejection of the pieces to the basket.



Multi-spindle headstock drilling detail of car handwheels.



Multi-spindle headstock drilling of car handwheels, under strict technical and security standards.

Cabinets / Bases / Containers / Light



PKA
Floor cabinet with 2 shelves.
Available for **K/T** Series.



PKB
Floor cabinet with door and drawer.
Available for **K/T** Series.



ERC
Coolant system (independent container).
Available for **K/T/Z*/X*** Series.
* Models with flat base plate.



ERB
"T" slotted machine base with coolant pump.
Standard for **Z/X/A/B/C** Series.



PV
Safety drill guard against chips with a micro-switch.
Standard in all Series.



EL
Worklight.
Standard for **Z/X/A/B/C/P/F** series.
Optional for **K/T** series.

Tables including support



MF
Fixed table.
Standard for **K/T/Z/X(32)** series.



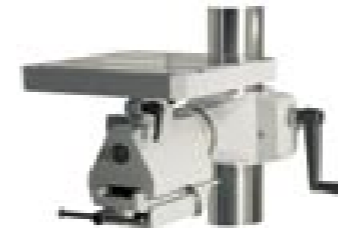
MG
Rotating table plate.
Available for **K/T/Z/X(32)** series.
Standard for **Z/X(34-40)/A/B/C** series.



MGI
Rotating table plate and tilting support.
Available for **Z/X/A/B/C** Series.



MFM
Reversible tiltable with vice.
Available for **K/T** series.



MGM
MGM Reversible rotating tiltable with vice.
Available for **Z/X (32/34)** series.



MCC-100
Cross table over support.
Available for **K/T** series.



MCC-125
Cross table over support.
Available for **Z/X (32/34)** series.



MCC-150
Cross table over support.
Available for **Z/X (40)** series.

Cross tables



MB1
Cross table.
X = 190 mm.
Y = 115 mm.
Table net weight = 33 kg.
Available for **K/T** series.



MB2D
Cross table.
X = 250 mm.
Y = 150 mm.
Table net weight = 46 kg.
Available for **Z/X** series.



MB3D
Cross table.
X = 350 mm.
Y = 150 mm.
Table net weight = 56 kg.
Available for **Z/X(32-34)** series.



MB4D
Cross table.
X = 470 mm.
Y = 230 mm.
Table net weight = 86 kg.
Available **Z/X/A/B/C** series.



MB5D
Cross table.
X = 500 mm.
Y = 320 mm.
Table net weight = 125 kg.
Available for **Z/X(40)/A/B/C** series.



MH4
Cross table.
X = 700 mm.
Y = 360 mm.
Table net weight = 300 Kg.
Available for **P** series.

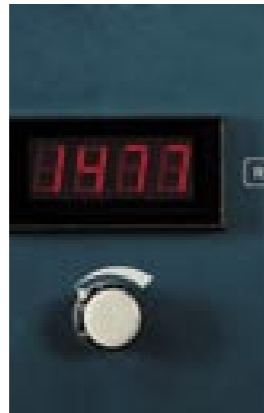


SERVO X / SERVO Y
Electronic "SERVO" feed unit for X/Y axis.
Feed range: 20 to 1000mm/min.
Available for **MH-4** cross table.

Speed control / Measure / Tapping



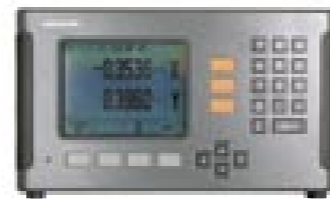
VE
Electronic speed variator.
Standard for **Z(34-40)** y **C-VE** series.
Available for other models upon request.



TAK
Digital rpm counter.
Standard for **Z(34-40)** and **C-VE** series.
Available for VE models on **K** Series and **V** models on **Z-32** Series.



LBC
Depth scale read-out system.
Available for all series.



LDG
Digital read-out system for the table.



RS
Automatic feed reversing for tapping.
Standard for **Z(34-40)** y **C** series.
Available for all series.



RPF
Automatic tapping cycle by lead screw system with brake motor for spindle reverse.
Available for **X/A/B/P** series.



RPF-ANR
RPF Automatic tapping cycle with pneumatic rapid approach of 100 mm.
Available for **X/A/B/P** series.



HGP
Master guide spindle and nut set.
Available for **X/A/B/P** series.

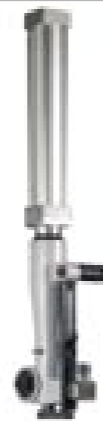
Feed devices / Multi-spindle heads / Lubrication



CN
Pneumatic counterbalance for spindle return (recommended with multi-spindle head applications).
Available for **X/A/B/P** Series.



ACNL
Automatic drilling cycle with rapid approach, working feed and rapid retract.
Available for **B** models on **Z/X/B/P** Series.



ACNL-S
Automatic drilling cycle with two rapid approaches (recommended for tube and profile drilling).
Available for **B** models on **Z/X/B/P** Series.



HB
Hydro-pneumatic power feed unit.
Available for **K/T/Z/X/A** (up to 35 mm models only) Series.



CM
Multi-spindle drilling heads with fixed or adjustable spindles.
Available for all Series.



AR
50% lowered feed rate range.
Available for **A/B/P** Series.



MQL
Microlubrication system.
Available for all Series.

Standard assembly for jobs using multi-spindle heads:

ACCESSORIES AND FUNCTIONS

ACNL
Automatic drilling cycle with rapid approach, working feed and rapid retract, with additional pneumatic counterweight function for the multi-spindle head.

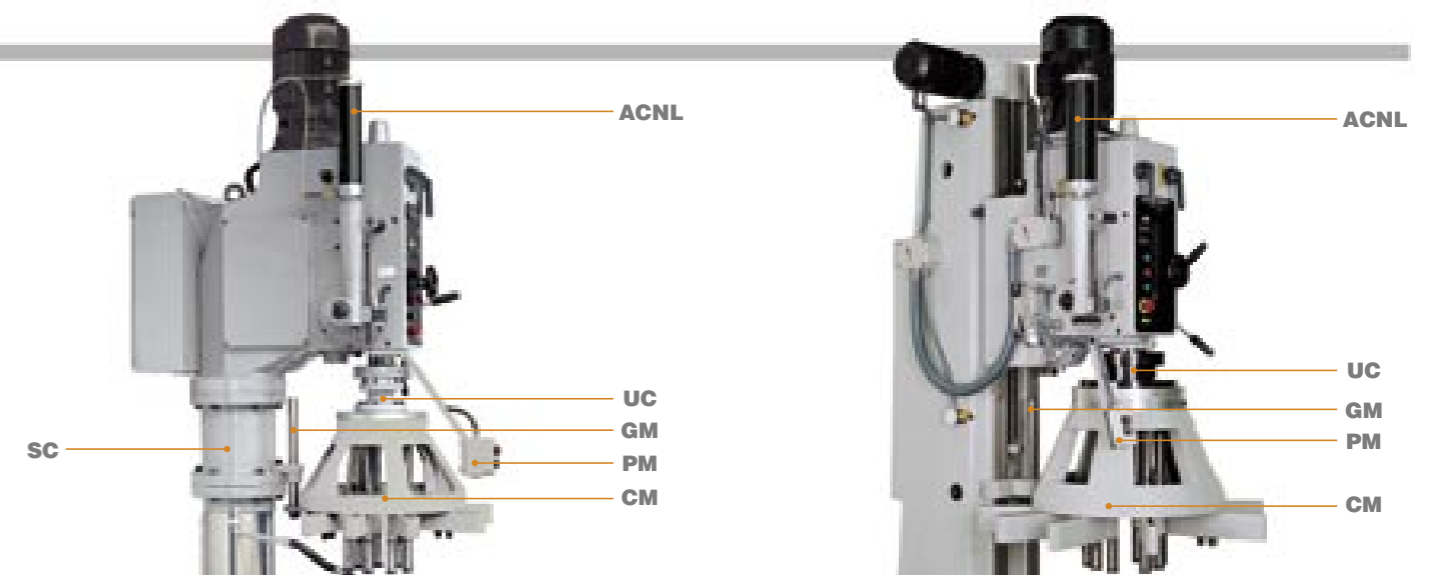
UC
Union, dragging cone and assembly of the multi-spindle head.

CM
Multi-spindle head with fixed or adjustable (see picture) spindles.

GM
Multi-spindle head guide rod.

PM
START/STOP and emergency STOP control extensión.

SC
Column riser of 200 mm for greater distance between spindle nose and worktable.



Standard vices



SL-110
Vise with fixed base (Light Series).
Maximum opening: 110 mm.
Jaw width: 120 mm.
Jaw height: 37 mm.
Net weight: 7 Kg.
Available for **K/T/Z/X/A/B/C** series.



SL-150
Vise with fixed base (Light Series).
Maximum opening: 150 mm.
Jaw width: 140 mm.
Jaw height: 37 mm.
Net weight: 12 Kg.
Available for **K/T/Z/X/A/B/C** series.



FL-116
Vise with fixed base.
Maximum opening: 116 mm.
Jaw width: 100 mm.
Jaw height: 31,5 mm.
Net weight: 9 Kg.
Available for **Z/X/A/B/C** series.



FL-157
Vise with fixed base.
Maximum opening: 157 mm.
Jaw width: 125 mm.
Jaw height: 41,5 mm.
Net weight: 15 Kg.
Available for **Z/X/A/B/C** series.



FS-150
Vise with fixed base (Heavy Series).
Maximum opening: 150 mm.
Jaw width: 150 mm.
Jaw height: 44 mm.
Net weight: 28 Kg.
Available for **A/B/C/P/F** series.



FG-150
Vise with swiveling base (Heavy Series).
Maximum opening: 150 mm.
Jaw width: 150 mm.
Jaw height: 44 mm.
Net weight: 37 Kg.
Available for **A/B/C/P/F** series.

Rapid close and self-centering vices



FR-90
Opening-cam rapid close vice.
Maximum opening: 90 mm.
Jaw width: 103 mm.
Jaw height: 20 mm.
Net weight: 9 Kg.
Available for all series.



FR-125
Opening-cam rapid close vice.
Maximum opening: 125 mm.
Jaw width: 125 mm.
Jaw height: 30 mm.
Net weight: 18 Kg.
Available for all series.



FK-103
Self-centering vice.
Maximum opening: 103 mm.
Jaw width: 103 mm.
Jaw height: 20 mm.
Net weight: 10 Kg.
Available for all series.



DRILL-CHUCKS
Self-centering drill-chuck from Ø 13 to Ø 16. Morse taper 3 & 4.
Available for all Series.



TAPHOLDER
Morse taper, tapholder and tapping collets.



REDUCING SLEEVES
Different reducing sleeves for Morse tapers.
Available for all Series.



ISO 40
Spindle with quick change nut.
Available for BP-50 models.

ISO 50
Spindle with quick change nut.
Available for BP-70 models.



Chucks, foot pedals, ...



PL
Manual jaw chuck.
Available for all Series.



PN
Pneumatic jaw chucks.
Available for all Series.



PST
Cycle or spindle turn START foot pedal.
PSR
Spindle turn reverse foot pedal (for tapping)
Available for all Series.



PEM
Emergency STOP foot pedal.
Available for all Series.



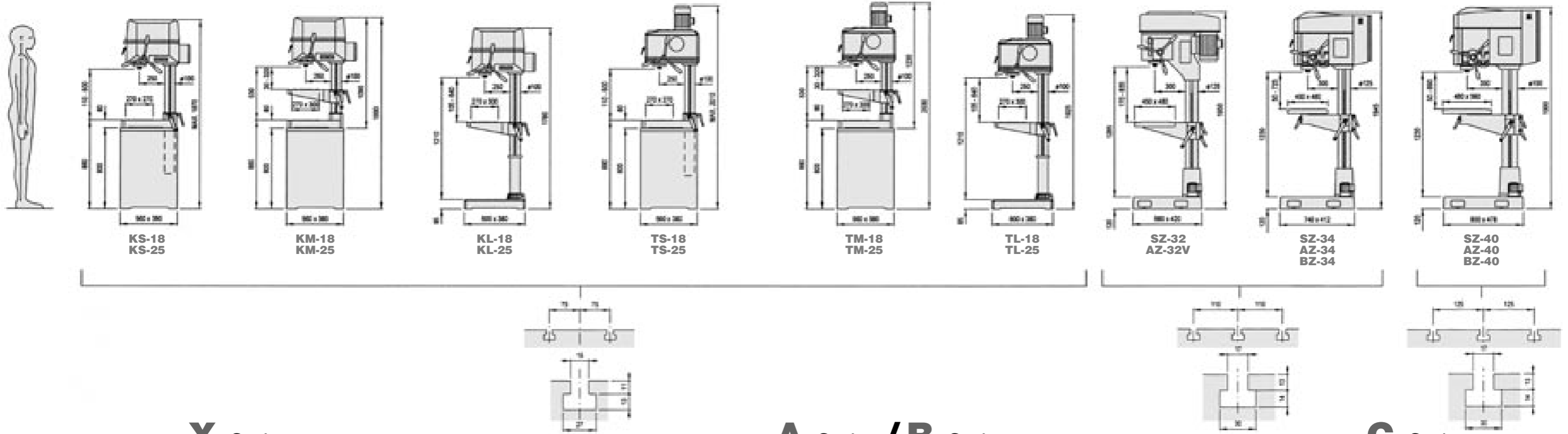
PMC
Pendant control panel (all functions).
Available for **P** series.



K Series

T Series

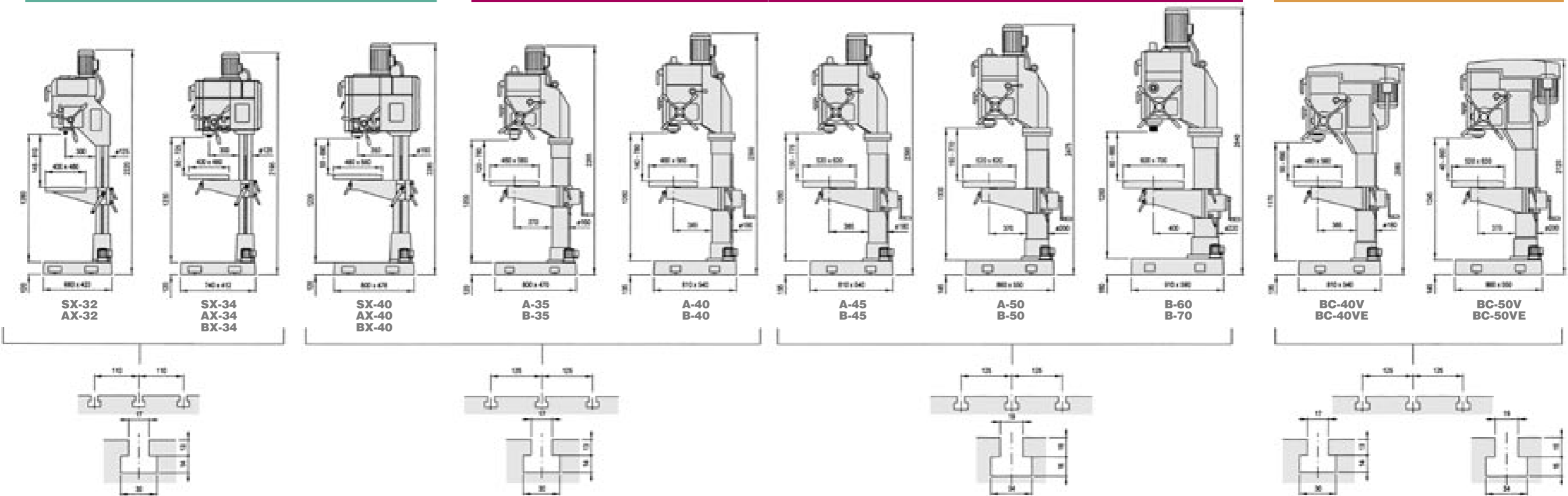
Z Series

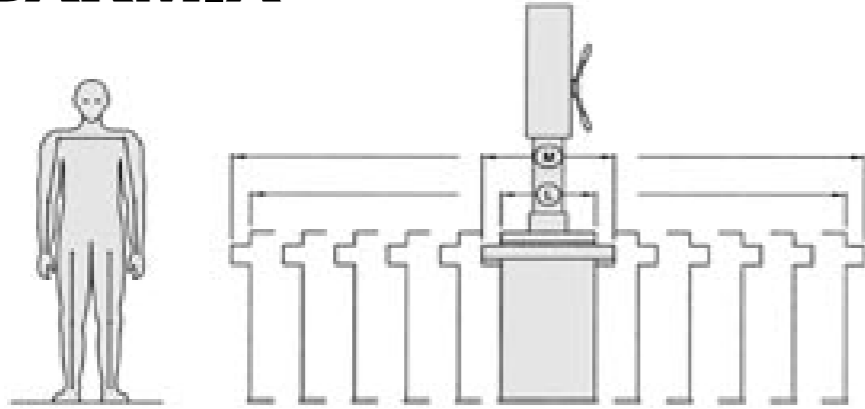


X Series

A Series / B Series

C Series





| Model | | W | L | M | E |
|----------------------|----------------------|-----|-----|------|-----|
| 1KS-18 1KS-25 | 1TS-18 1TS-25 | 400 | 400 | 600 | 125 |
| 1KS-18-G 1KS-25-G | 1TS-18-G 1TS-25-G | 400 | 950 | 1150 | 125 |

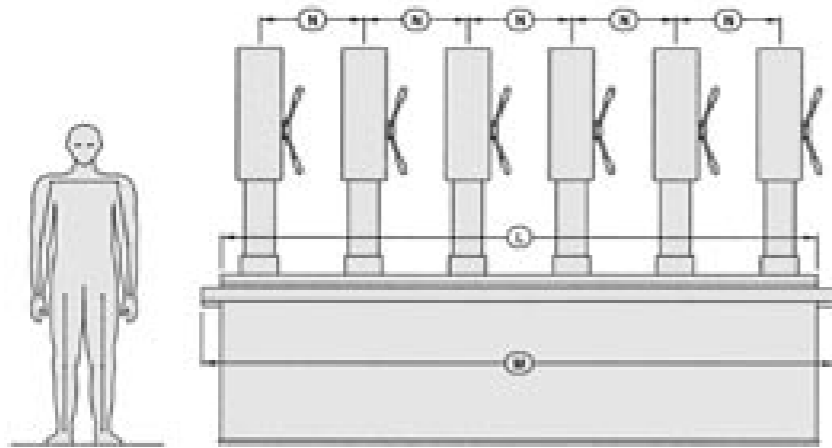
| Model | | W | L | M | E |
|----------------------------------|----------------------------------|-----|------|------|-----|
| 1SZ-40 1AZ-40 1BZ-40 | 1SX-40 1AX-40 1BX-40 | 500 | 600 | 800 | 150 |
| 1SZ-40-G 1AZ-40-G 1BZ-40-G | 1SX-40-G 1AX-40-G 1BX-40-G | 500 | 1050 | 1250 | 150 |

Optional tables

| Model | W | L | M | E |
|------------------|-----|------|------|----|
| 1KS-18 1KS-25 | 300 | 900 | 1100 | 90 |
| 1KS-18 1KS-25 | 300 | 1400 | 1600 | 90 |
| 1KS-18 1KS-25 | 300 | 1900 | 2100 | 90 |
| 1KS-18 1KS-25 | 300 | 2400 | 2600 | 90 |
| 1KS-18 1KS-25 | 300 | 2900 | 3100 | 90 |

Optional tables

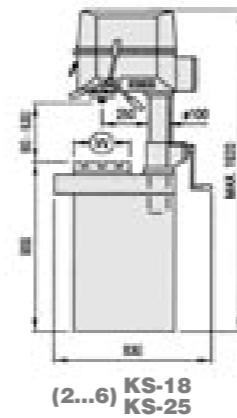
| Model | W | L | M | E |
|----------------------------|-----|------|------|-----|
| 1SZ-40 1AZ-40 1BZ-40 | 400 | 950 | 1150 | 125 |
| 1SZ-40 1AZ-40 1BZ-40 | 400 | 1500 | 1700 | 125 |
| 1SZ-40 1AZ-40 1BZ-40 | 400 | 2050 | 2250 | 125 |
| 1SZ-40 1AZ-40 1BZ-40 | 400 | 2600 | 2800 | 125 |
| 1SZ-40 1AZ-40 1BZ-40 | 400 | 3150 | 3350 | 125 |



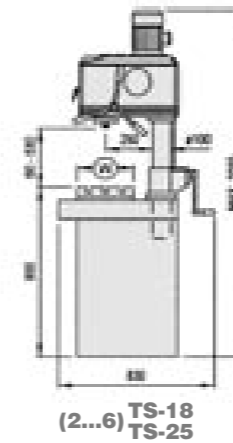
| Model | | W | L | M | N | E |
|------------------|------------------|-----|------|------|-----|----|
| 2KS-18 2KS-25 | 2TS-18 2TS-25 | 300 | 900 | 1100 | 500 | 90 |
| 3KS-18 3KS-25 | 3TS-18 3TS-25 | 300 | 1400 | 1600 | 500 | 90 |
| 4KS-18 4KS-25 | 4TS-18 4TS-25 | 300 | 1900 | 2100 | 500 | 90 |
| 5KS-18 5KS-25 | 5TS-18 5TS-25 | 300 | 2400 | 2600 | 500 | 90 |
| 6KS-18 6KS-25 | 6TS-18 6TS-25 | 300 | 2900 | 3100 | 500 | 90 |

| Model | | W | L | M | N | E |
|----------------------------|----------------------------|-----|------|------|-----|-----|
| 2SZ-40 2AZ-40 2BZ-40 | 2SX-40 2AX-40 2BX-40 | 400 | 950 | 1150 | 550 | 125 |
| 3SZ-40 3AZ-40 3BZ-40 | 3SX-40 3AX-40 3BX-40 | 400 | 1500 | 1700 | 550 | 125 |
| 4SZ-40 4AZ-40 4BZ-40 | 4SX-40 4AX-40 4BX-40 | 400 | 2050 | 2250 | 550 | 125 |
| 5SZ-40 5AZ-40 5BZ-40 | 5SX-40 5AX-40 5BX-40 | 400 | 2600 | 2800 | 550 | 125 |
| 6SZ-40 6AZ-40 6BZ-40 | 6SX-40 6AX-40 6BX-40 | 400 | 3150 | 3350 | 550 | 125 |

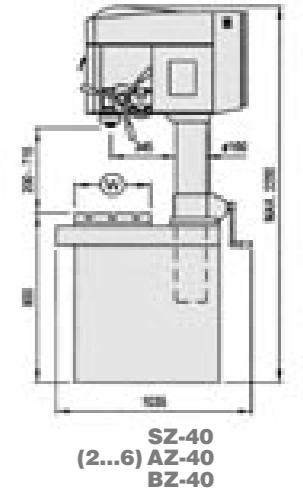
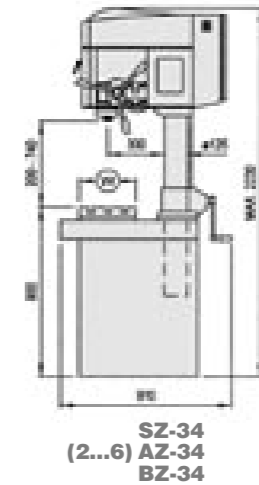
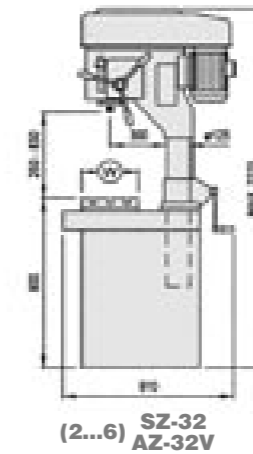
K Series



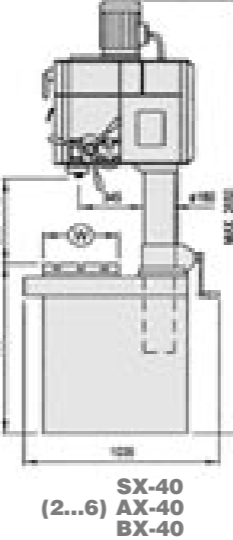
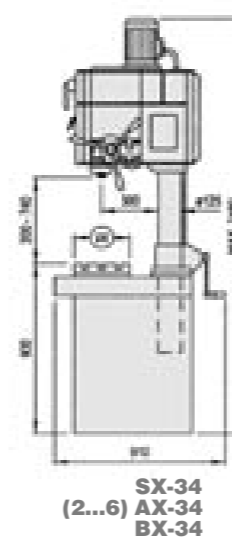
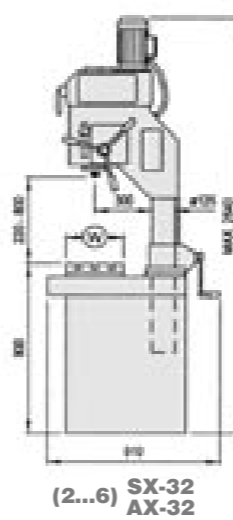
T Series



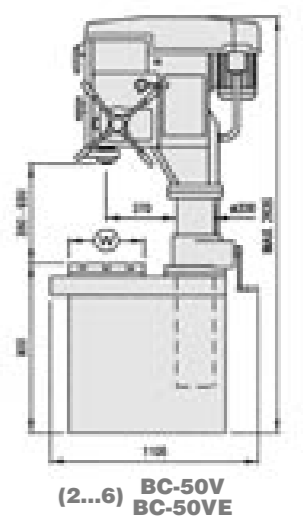
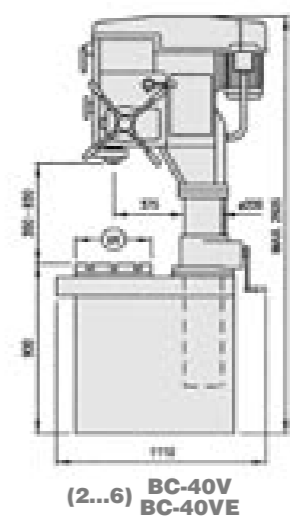
Z Series



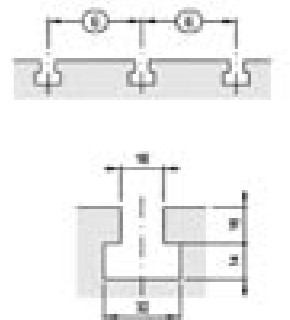
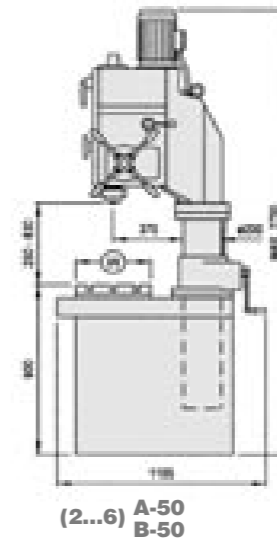
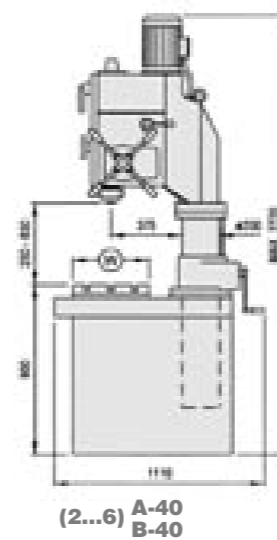
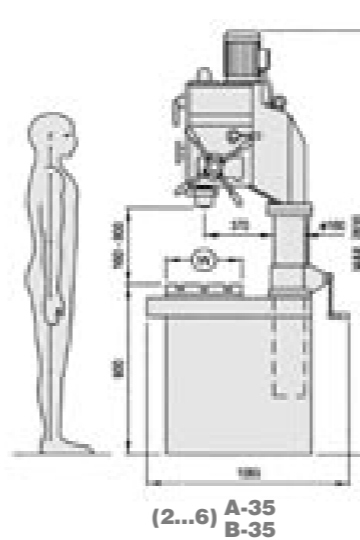
X Series



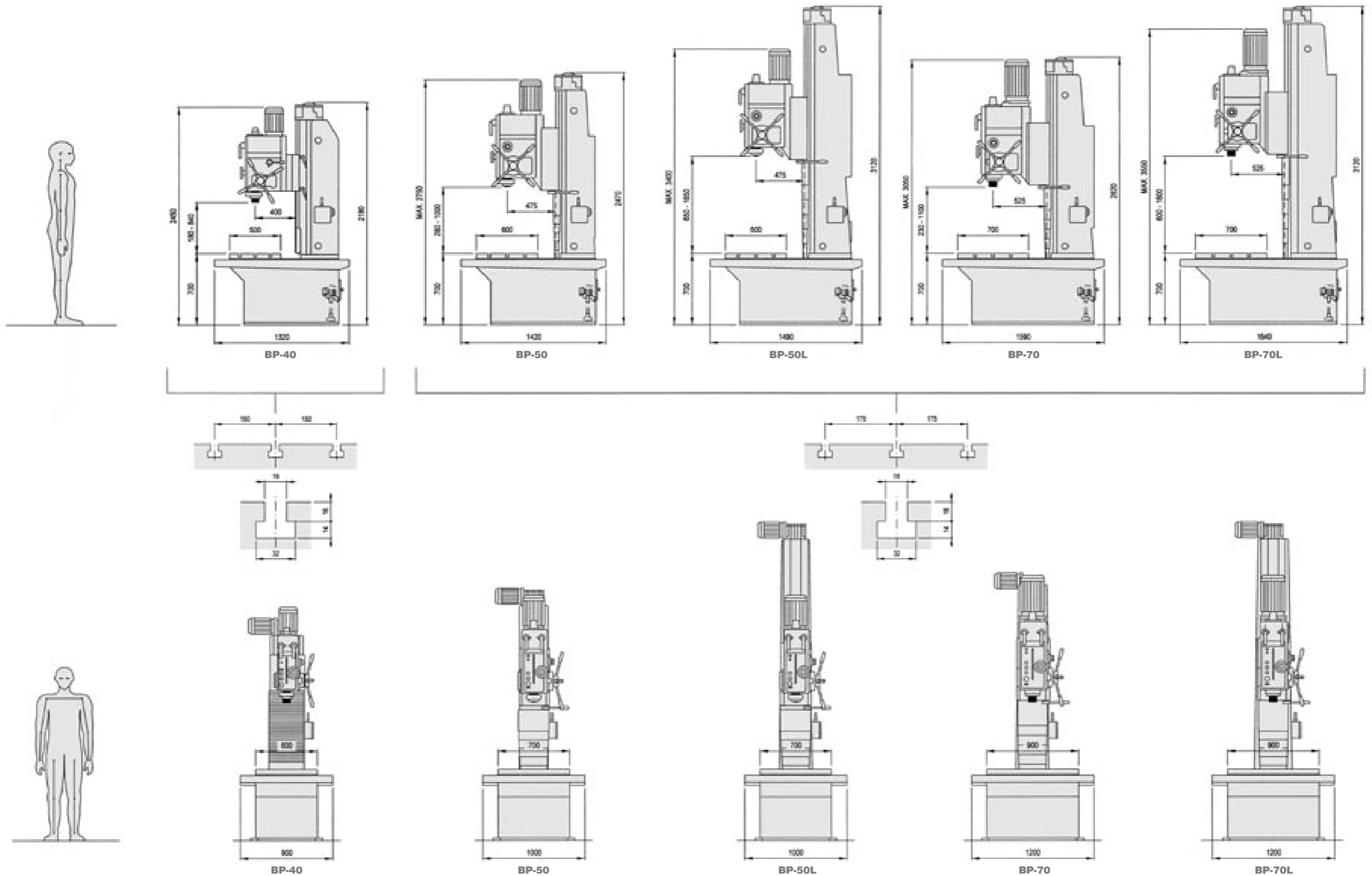
C Series



A Series / B Series



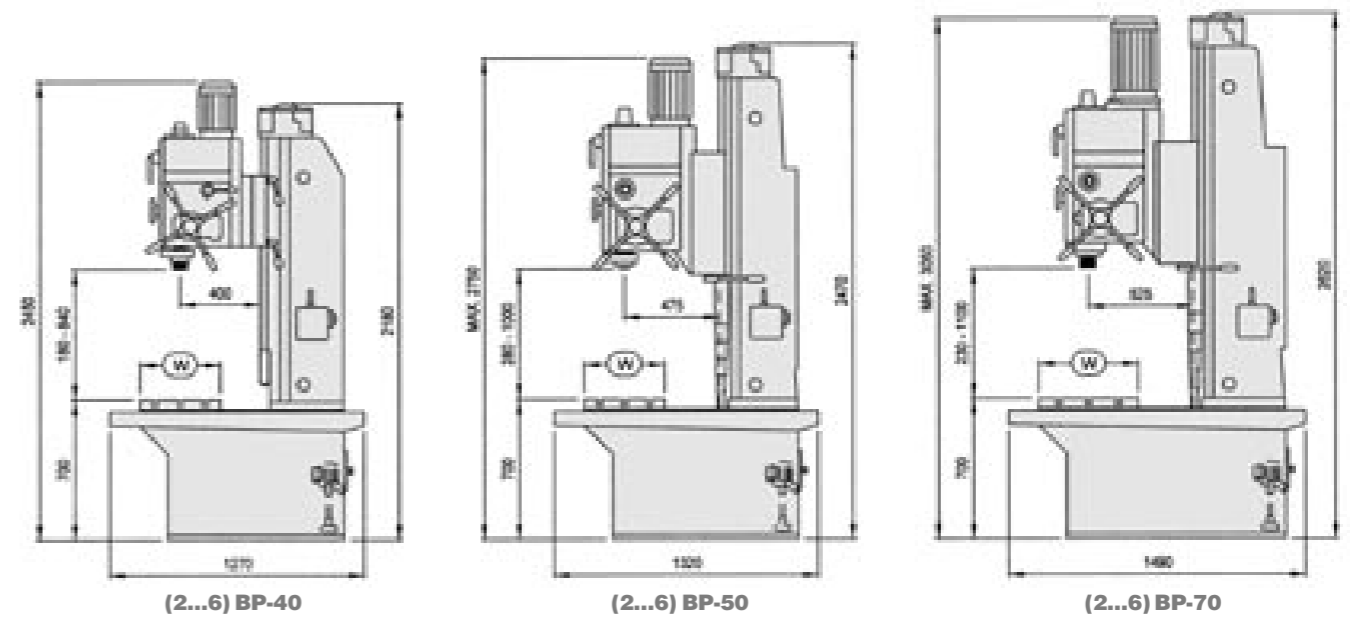
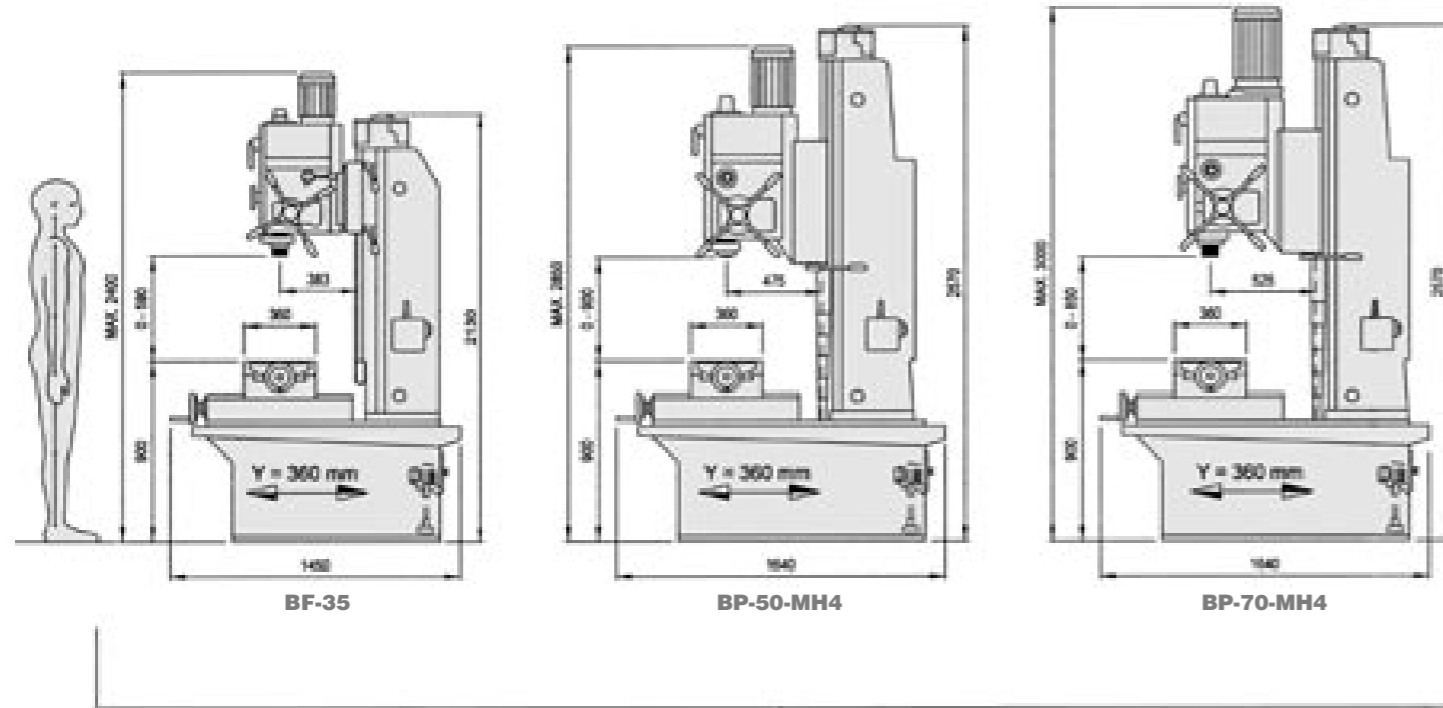
P Series



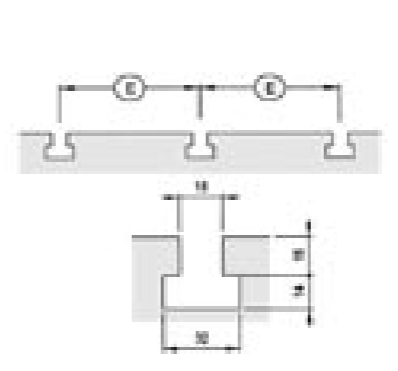
F Series

P Series + MH4

P Series drill batteries



| Model | W | L | M | N | E |
|------------------|-----|------|------|-----|-----|
| 2BP-40 2BP-50 | 400 | 950 | 1250 | 550 | 125 |
| 3BP-40 3BP-50 | 400 | 1500 | 1800 | 550 | 125 |
| 4BP-40 4BP-50 | 400 | 2050 | 2350 | 550 | 125 |
| 5BP-40 5BP-50 | 400 | 2600 | 2900 | 550 | 125 |
| 6BP-40 6BP-50 | 400 | 3150 | 3450 | 550 | 125 |



| Model | W | L | M | N | E |
|--------|-----|------|------|-------------|-----|
| 2BP-70 | 500 | 1050 | 1350 | 600 | 150 |
| 3BP-70 | 500 | 1650 | 1950 | 600 | 150 |
| 4BP-70 | 500 | 2250 | 2550 | 600 | 150 |
| 5BP-70 | 500 | 2850 | 3150 | 600 <td 150 | |
| 6BP-70 | 500 | 3450 | 3750 | 600 | 150 |

